

#01#

Artículos originales (todos) \*\*\* Original articles (all)

Urological tumors.

October / November 2013

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[1]

**TÍTULO / TITLE:** - Translating clinical trials to clinical practice: outcomes of men with metastatic castration resistant prostate cancer treated with docetaxel and prednisone in and out of clinical trials.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Oncol. 2013 Dec;24(12):2972-7. doi: 10.1093/annonc/mdt397. Epub 2013 Oct 14.

●● Enlace al texto completo (gratis o de pago) [1093/annonc/mdt397](#)

**AUTORES / AUTHORS:** - Templeton AJ; Vera-Badillo FE; Wang L; Attalla M; De Gouveia P; Leibowitz-Amit R; Knox JJ; Moore M; Sridhar SS; Joshua AM; Pond GR; Amir E; Tannock IF

**INSTITUCIÓN / INSTITUTION:** - Division of Medical Oncology and Hematology, University of Toronto, Toronto.

**RESUMEN / SUMMARY:** - BACKGROUND: Multiple factors can influence outcomes of patients receiving identical interventions in clinical trials and in routine practice. Here, we compare outcomes of men with metastatic castrate-resistant prostate cancer (mCRPC) treated with docetaxel and prednisone in routine practice and in clinical trials. PATIENTS AND METHODS: We reviewed patients with mCRPC treated with docetaxel at Princess Margaret Cancer Centre. Primary outcomes were overall survival and PSA response rate. Secondary outcomes were reasons for discontinuation and febrile neutropenia. Outcomes were compared for men treated in routine practice and in clinical trials, and with data from the TAX 327 study. RESULTS: From 2001 to 2011, 438 men were treated, of whom 357 received 3-weekly docetaxel as first-line chemotherapy: 314 in routine practice and 43 in clinical trials. Trial patients were younger and had better performance status. Median survival was 13.6 months [95%

confidence interval (95% CI) 12.1-15.1 months] in routine practice and 20.4 months (95% CI 17.4-23.4 months, P = 0.007) within clinical trials, compared with 19.3 months (95% CI 17.6-21.3 months, P < 0.001) in the TAX 327 study. PSA response rates were 45%, 54%, and 53%, respectively (P = NS). Reasons for treatment discontinuation were similar although trial patients received more cycles (median: 6 versus 8 versus 9.5, P < 0.001). Rates of febrile neutropenia were 9.6, 0, and 3% (P < 0.001) while rates of death within 30 days of last dose were 4%, 0%, and 3%, respectively (P = NS). CONCLUSIONS: Survival of patients with mCRPC treated with docetaxel in routine practice is shorter than for men included in trials and is associated with more toxicity.

[2]

**TÍTULO / TITLE:** - Adjuvant 5-fluorouracil, alpha-interferon and interleukin-2 versus observation in patients at high risk of recurrence after nephrectomy for renal cell carcinoma: Results of a Phase III randomised European Organisation for Research and Treatment of Cancer (Genito-Urinary Cancers Group)/National Cancer Research Institute trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Sep 25. pii: S0959-8049(13)00787-9. doi: 10.1016/j.ejca.2013.08.019.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.ejca.2013.08.019](#)

**AUTORES / AUTHORS:** - Aitchison M; Bray CA; Van Poppel H; Sylvester R; Graham J; Innes C; McMahon L; Vasey PA

**INSTITUCIÓN / INSTITUTION:** - The Beatson West of Scotland Cancer Centre, Glasgow, United Kingdom. Electronic address: [michael.aitchison@nhs.net](mailto:michael.aitchison@nhs.net).

**RESUMEN / SUMMARY:** - BACKGROUND: The purpose of this trial was to compare adjuvant 5-fluorouracil, alpha-interferon and interleukin-2 to observation in patients at high risk of recurrence after nephrectomy for renal cell carcinoma (RCC) in terms of disease free survival, overall survival and quality of life (QoL). PATIENTS AND METHODS: Patients 8weeks post nephrectomy for RCC, without macroscopic residual disease, with stage T3b-c,T4 or any pT and pN1 or pN2 or positive microscopic margins or microscopic vascular invasion, and no metastases were randomised to receive adjuvant treatment or observation. QoL was assessed by European Organisation for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire-30 (QLQC-30). Treatment delivery and toxicity were monitored. The trial was designed to detect an increase in 3year disease free survival (DFS) from 50% on observation to 65% on treatment (hazard ratio (HR)=0.63) with 90% power and two-sided alpha=0.05. RESULTS: From 1998 to 2007, 309 patients were randomised (155 to observation; 154 to treatment). 35% did not complete the treatment, primarily due to toxicity (92% of patients experienced grade 2, 41% grade 3). Statistically significant differences between the arms in QoL parameters at 2months disappeared by 6months although there was suggestion of a persistent deficit in fatigue and physical function. Median follow-up was 7years (maximum 12.1years). 182 patients relapsed or died. DFS at 3years was 50% with observation and 61% with treatment (HR 0.84, 95% confidence interval (CI) 0.63-1.12, p=0.233). 124 patients died. Overall survival (OS) at 5years was 63% with observation and 70% with treatment (HR 0.87, 95% CI 0.61-1.23, p=0.428). CONCLUSIONS: The treatment is associated with significant toxicity. There

is no statistically significant benefit for the regimen in terms of disease free or overall survival.

[3]

**TÍTULO / TITLE:** - TERT promoter mutations in bladder cancer affect patient survival and disease recurrence through modification by a common polymorphism.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Proc Natl Acad Sci U S A. 2013 Oct 22;110(43):17426-31. doi: 10.1073/pnas.1310522110. Epub 2013 Oct 7.

●● Enlace al texto completo (gratis o de pago) [1073/pnas.1310522110](#)

**AUTORES / AUTHORS:** - Rachakonda PS; Hosen I; de Verdier PJ; Fallah M; Heidenreich B; Ryk C; Wiklund NP; Steineck G; Schadendorf D; Hemminki K; Kumar R

**INSTITUCIÓN / INSTITUTION:** - Division of Molecular Genetic Epidemiology, German Cancer Research Center, 69120 Heidelberg, Germany.

**RESUMEN / SUMMARY:** - The telomerase reverse transcriptase (TERT) promoter, an important element of telomerase expression, has emerged as a target of cancer-specific mutations. Originally described in melanoma, the mutations in TERT promoter have been shown to be common in certain other tumor types that include glioblastoma, hepatocellular carcinoma, and bladder cancer. To fully define the occurrence and effect of the TERT promoter mutations, we investigated tumors from a well-characterized series of 327 patients with urothelial cell carcinoma of bladder. The somatic mutations, mainly at positions -124 and -146 bp from ATG start site that create binding motifs for E-twenty six/ternary complex factors (Ets/TCF), affected 65.4% of the tumors, with even distribution across different stages and grades. Our data showed that a common polymorphism rs2853669, within a preexisting Ets2 binding site in the TERT promoter, acts as a modifier of the effect of the mutations on survival and tumor recurrence. The patients with the mutations showed poor survival in the absence [hazard ratio (HR) 2.19, 95% confidence interval (CI) 1.02-4.70] but not in the presence (HR 0.42, 95% CI 0.18-1.01) of the variant allele of the polymorphism. The mutations in the absence of the variant allele were highly associated with the disease recurrence in patients with Tis, Ta, and T1 tumors (HR 1.85, 95% CI 1.11-3.08). The TERT promoter mutations are the most common somatic lesions in bladder cancer with clinical implications. The association of the mutations with patient survival and disease recurrence, subject to modification by a common polymorphism, can be a unique putative marker with individualized prognostic potential.

[4]

**TÍTULO / TITLE:** - Whole-genome and whole-exome sequencing of bladder cancer identifies frequent alterations in genes involved in sister chromatid cohesion and segregation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Genet. 2013 Dec;45(12):1459-63. doi: 10.1038/ng.2798. Epub 2013 Oct 13.

●● Enlace al texto completo (gratis o de pago) [1038/ng.2798](#)

**AUTORES / AUTHORS:** - Guo G; Sun X; Chen C; Wu S; Huang P; Li Z; Dean M; Huang Y; Jia W; Zhou Q; Tang A; Yang Z; Li X; Song P; Zhao X; Ye R; Zhang S; Lin Z; Qi M;

Wan S; Xie L; Fan F; Nickerson ML; Zou X; Hu X; Xing L; Lv Z; Mei H; Gao S; Liang C; Gao Z; Lu J; Yu Y; Liu C; Li L; Fang X; Jiang Z; Yang J; Li C; Zhao X; Chen J; Zhang F; Lai Y; Lin Z; Zhou F; Chen H; Chan HC; Tsang S; Theodorescu D; Li Y; Zhang X; Wang J; Yang H; Gui Y; Wang J; Cai Z

**INSTITUCIÓN / INSTITUTION:** - 1] Department of Urological Surgery, Shenzhen Second People's Hospital, The First Affiliated Hospital of Shenzhen University, Shenzhen, China. [2] BGI-Shenzhen, Shenzhen, China. [3].

**RESUMEN / SUMMARY:** - Bladder cancer is one of the most common cancers worldwide, with transitional cell carcinoma (TCC) being the predominant form. Here we report a genomic analysis of TCC by both whole-genome and whole-exome sequencing of 99 individuals with TCC. Beyond confirming recurrent mutations in genes previously identified as being mutated in TCC, we identified additional altered genes and pathways that were implicated in TCC. Notably, we discovered frequent alterations in STAG2 and ESPL1, two genes involved in the sister chromatid cohesion and segregation (SCCS) process. Furthermore, we also detected a recurrent fusion involving FGFR3 and TACC3, another component of SCCS, by transcriptome sequencing of 42 DNA-sequenced tumors. Overall, 32 of the 99 tumors (32%) harbored genetic alterations in the SCCS process. Our analysis provides evidence that genetic alterations affecting the SCCS process may be involved in bladder tumorigenesis and identifies a new therapeutic possibility for bladder cancer.

[5]

**TÍTULO / TITLE:** - Lifestyle Changes for Improving Disease-specific Quality of Life in Sedentary Men on Long-term Androgen-Deprivation Therapy for Advanced Prostate Cancer: A Randomised Controlled Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 4. pii: S0302-2838(13)01032-4. doi: 10.1016/j.eururo.2013.09.040.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.040](#)

**AUTORES / AUTHORS:** - Bourke L; Gilbert S; Hooper R; Steed LA; Joshi M; Catto JW; Saxton JM; Rosario DJ

**INSTITUCIÓN / INSTITUTION:** - Department of Primary Care and Public Health, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, London, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: Prostate cancer is a key driver of cancer-related global disability-adjusted life-years. Androgen-deprivation therapy (ADT) for advanced disease is linked to fatigue, reduced physical function, and quality of life (QoL). OBJECTIVE: To evaluate the effect of a lifestyle intervention on disease-specific QoL, diastolic blood pressure, and cancer-related fatigue in sedentary men receiving long-term ADT for advanced prostate cancer. DESIGN, SETTING, AND PARTICIPANTS: A total of 100 hundred sedentary men with locally advanced or metastatic prostate cancer on long-term ADT were randomised to an intervention or usual care group. INTERVENTION: A 12-wk lifestyle intervention consisting of aerobic and resistance exercise with parallel dietary advice. OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: Disease-specific QoL was measured using the Functional Assessment of Cancer Therapy-Prostate (FACT-P) and Functional Assessment of Cancer Therapy-Fatigue (FACT-F) questionnaires at 12 wk

postintervention and at 6 mo following withdrawal of support. Analysis of covariance and mixed regression were conducted. RESULTS AND LIMITATIONS: Clinically relevant improvements in FACT-P were seen at 12 wk in the intervention group compared with controls (mean difference: 8.9 points; 95% confidence interval [CI], 3.7-14.2; adjusted p=0.001). No difference was apparent at 6 mo (mean difference: 3.3 points; 95% CI, -2.6 to 9.3; adjusted p=0.27). No difference in diastolic blood pressure was seen at either follow-up (all p > 0.05). Clinically relevant improvements in FACT-F were seen at 12 wk (mean difference: 5.3 points; 95% CI, 2.7-7.9; adjusted p<0.001) and maintained following withdrawal of supervision (mean difference: 3.9 points; 95% CI, 1.1-6.8; adjusted p=0.007). Improvements in exercise tolerance and behaviour were maintained at 6 mo (adjusted p<0.001 and 0.038). CONCLUSIONS: A lifestyle intervention resulted in a clinically meaningful improvement in disease-specific QoL that was not maintained postintervention. No effect on blood pressure occurred. Durability of response was seen in fatigue and exercise behaviour. Further evaluation of support structures is essential. TRIAL REGISTRATION: ISRCTN88605738.

[6]

**TÍTULO / TITLE:** - Urologists' use of intensity-modulated radiation therapy for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - N Engl J Med. 2013 Oct 24;369(17):1629-37. doi: 10.1056/NEJMsa1201141.

●● Enlace al texto completo (gratis o de pago) [1056/NEJMsa1201141](#)

**AUTORES / AUTHORS:** - Mitchell JM

**INSTITUCIÓN / INSTITUTION:** - From Georgetown University, Washington, DC.

**RESUMEN / SUMMARY:** - BACKGROUND: Some urology groups have integrated intensity-modulated radiation therapy (IMRT), a radiation treatment with a high reimbursement rate, into their practice. This is permitted by the exception for in-office ancillary services in the federal prohibition against self-referral. I examined the association between ownership of IMRT services and use of IMRT to treat prostate cancer. METHODS: Using Medicare claims from 2005 through 2010, I constructed two samples: one comprising 35 self-referring urology groups in private practice and a matched control group comprising 35 non-self-referring urology groups in private practice, and the other comprising non-self-referring urologists employed at 11 National Comprehensive Cancer Network centers matched with 11 self-referring urology groups in private practice. I compared the use of IMRT in the periods before and during ownership and used a difference-in-differences analysis to evaluate changes in IMRT use according to self-referral status. RESULTS: The rate of IMRT use by self-referring urologists in private practice increased from 13.1 to 32.3%, an increase of 19.2 percentage points (P<0.001). Among non-self-referring urologists, the rate of IMRT use increased from 14.3 to 15.6%, an increase of 1.3 percentage points (P=0.05). The unadjusted difference-in-differences effect was 17.9 percentage points (P<0.001). The regression-adjusted increase in IMRT use associated with self-referral was 16.4 percentage points (P<0.001). The rate of IMRT use by urologists working at National Comprehensive Cancer Network centers remained stable at 8.0% but increased by 33.0 percentage points among the 11 matched self-referring urology groups. The regression-adjusted difference-in-differences effect was 29.3 percentage points

( $P < 0.001$ ). CONCLUSIONS: Urologists who acquired ownership of IMRT services increased their use of IMRT substantially more than urologists who did not own such services. Allowing urologists to self-refer for IMRT may contribute to increased use of this expensive therapy. (Funded by the American Society for Radiation Oncology.).

[7]

**TÍTULO / TITLE:** - Preliminary toxicity analysis of 3-dimensional conformal radiation therapy versus intensity modulated radiation therapy on the high-dose arm of the radiation therapy oncology group 0126 prostate cancer trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Oncol Biol Phys. 2013 Dec 1;87(5):932-8. doi: 10.1016/j.ijrobp.2013.07.041. Epub 2013 Oct 8.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.ijrobp.2013.07.041](#)

**AUTORES / AUTHORS:** - Michalski JM; Yan Y; Watkins-Bruner D; Bosch WR; Winter K; Galvin JM; Bahary JP; Morton GC; Parliament MB; Sandler HM

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology Washington University Medical Center, St. Louis, Missouri. Electronic address:

[jmichalski@radonc.wustl.edu](mailto:jmichalski@radonc.wustl.edu).

**RESUMEN / SUMMARY:** - PURPOSE: To give a preliminary report of clinical and treatment factors associated with toxicity in men receiving high-dose radiation therapy (RT) on a phase 3 dose-escalation trial. METHODS AND MATERIALS: The trial was initiated with 3-dimensional conformal RT (3D-CRT) and amended after 1 year to allow intensity modulated RT (IMRT). Patients treated with 3D-CRT received 55.8 Gy to a planning target volume that included the prostate and seminal vesicles, then 23.4 Gy to prostate only. The IMRT patients were treated to the prostate and proximal seminal vesicles to 79.2 Gy. Common Toxicity Criteria, version 2.0, and Radiation Therapy Oncology Group/European Organization for Research and Treatment of Cancer late morbidity scores were used for acute and late effects. RESULTS: Of 763 patients randomized to the 79.2-Gy arm of Radiation Therapy Oncology Group 0126 protocol, 748 were eligible and evaluable: 491 and 257 were treated with 3D-CRT and IMRT, respectively. For both bladder and rectum, the volumes receiving 65, 70, and 75 Gy were significantly lower with IMRT (all  $P < .0001$ ). For grade (G) 2+ acute gastrointestinal/genitourinary (GI/GU) toxicity, both univariate and multivariate analyses showed a statistically significant decrease in G2+ acute collective GI/GU toxicity for IMRT. There were no significant differences with 3D-CRT or IMRT for acute or late G2+ or 3+ GU toxicities. Univariate analysis showed a statistically significant decrease in late G2+ GI toxicity for IMRT ( $P = .039$ ). On multivariate analysis, IMRT showed a 26% reduction in G2+ late GI toxicity ( $P = .099$ ). Acute G2+ toxicity was associated with late G3+ toxicity ( $P = .005$ ). With dose-volume histogram data in the multivariate analysis, RT modality was not significant, whereas white race ( $P = .001$ ) and rectal V70  $\geq 15\%$  were associated with G2+ rectal toxicity ( $P = .034$ ). CONCLUSIONS: Intensity modulated RT is associated with a significant reduction in acute G2+ GI/GU toxicity. There is a trend for a clinically meaningful reduction in late G2+ GI toxicity with IMRT. The occurrence of acute GI toxicity and large ( $>15\%$ ) volumes of rectum  $>70$  Gy are associated with late rectal toxicity.

[8]

**TÍTULO / TITLE:** - Frequent truncating mutations of STAG2 in bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Genet. 2013 Dec;45(12):1428-30. doi: 10.1038/ng.2800. Epub 2013 Oct 13.

●● Enlace al texto completo (gratis o de pago) [1038/ng.2800](#)

**AUTORES / AUTHORS:** - Solomon DA; Kim JS; Bondaruk J; Shariat SF; Wang ZF; Elkahlon AG; Ozawa T; Gerard J; Zhuang D; Zhang S; Navai N; Siefker-Radtke A; Phillips JJ; Robinson BD; Rubin MA; Volkmer B; Hautmann R; Kufer R; Hogendoorn PC; Netto G; Theodorescu D; James CD; Czerniak B; Miettinen M; Waldman T

**INSTITUCIÓN / INSTITUTION:** - [1] Department of Oncology, Lombardi Comprehensive Cancer Center, Georgetown University School of Medicine, Washington, DC, USA. [2] Department of Pathology, University of California, San Francisco, San Francisco, California, USA.

**RESUMEN / SUMMARY:** - Here we report the discovery of truncating mutations of the gene encoding the cohesin subunit STAG2, which regulates sister chromatid cohesion and segregation, in 36% of papillary non-invasive urothelial carcinomas and 16% of invasive urothelial carcinomas of the bladder. Our studies suggest that STAG2 has a role in controlling chromosome number but not the proliferation of bladder cancer cells. These findings identify STAG2 as one of the most commonly mutated genes in bladder cancer.

[9]

**TÍTULO / TITLE:** - Patient-reported Outcomes in Randomised Controlled Trials of Prostate Cancer: Methodological Quality and Impact on Clinical Decision Making.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 30. pii: S0302-2838(13)01090-7. doi: 10.1016/j.eururo.2013.10.017.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.10.017](#)

**AUTORES / AUTHORS:** - Efficace F; Feuerstein M; Fayers P; Cafaro V; Eastham J; Pusic A; Blazeby J

**INSTITUCIÓN / INSTITUTION:** - Data Center and Health Outcomes Research Unit, Italian Group for Adult Hematologic Diseases (GIMEMA), Rome, Italy. Electronic address: [f.efficace@gimema.it](mailto:f.efficace@gimema.it).

**RESUMEN / SUMMARY:** - CONTEXT: Patient-reported outcomes (PRO) data from randomised controlled trials (RCTs) are increasingly used to inform patient-centred care as well as clinical and health policy decisions. OBJECTIVE: The main objective of this study was to investigate the methodological quality of PRO assessment in RCTs of prostate cancer (PCa) and to estimate the likely impact of these studies on clinical decision making. EVIDENCE ACQUISITION: A systematic literature search of studies was undertaken on main electronic databases to retrieve articles published between January 2004 and March 2012. RCTs were evaluated on a predetermined extraction form, including (1) basic trial demographics and clinical and PRO characteristics; (2) level of PRO reporting based on the recently published recommendations by the International Society for Quality of Life Research; and (3) bias, assessed using the Cochrane Risk of Bias tool. Studies were systematically analysed to evaluate their relevance for supporting clinical decision making. EVIDENCE SYNTHESIS: Sixty-five

RCTs enrolling a total of 22 071 patients were evaluated, with 31 (48%) in patients with nonmetastatic disease. When a PRO difference between treatments was found, it related in most cases to symptoms only (n=29, 58%). Although the extent of missing data was generally documented (72% of RCTs), few reported details on statistical handling of this data (18%) and reasons for dropout (35%). Improvements in key methodological aspects over time were found. Thirteen (20%) RCTs were judged as likely to be robust in informing clinical decision making. Higher-quality PRO studies were generally associated with those RCTs that had higher internal validity.

**CONCLUSIONS:** Including PRO in RCTs of PCa patients is critical for better evaluating the treatment effectiveness of new therapeutic approaches. Marked improvements in PRO quality reporting over time were found, and it is estimated that at least one-fifth of PRO RCTs have provided sufficient details to allow health policy makers and physicians to make critical appraisals of results.

**PATIENT SUMMARY:** In this report, we have investigated the methodological quality of PCa trials that have included a PRO assessment. We conclude that including PRO is critical to better evaluating the treatment effectiveness of new therapeutic approaches from the patient's perspective. Also, at least one-fifth of PRO RCTs in PCa have provided sufficient details to allow health policy makers and physicians to make a critical appraisal of results.

[10]

**TÍTULO / TITLE:** - Randomized trial to assess the impact of venlafaxine and soy protein on hot flashes and quality of life in men with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 10;31(32):4092-8. doi: 10.1200/JCO.2012.48.1432. Epub 2013 Sep 30.

●● [Enlace al texto completo \(gratis o de pago\) 1200/JCO.2012.48.1432](#)

**AUTORES / AUTHORS:** - Vitolins MZ; Griffin L; Tomlinson WV; Vuky J; Adams PT; Moose D; Frizzell B; Lesser GJ; Naughton M; Radford JE Jr; Shaw EG

**INSTITUCIÓN / INSTITUTION:** - Mara Z. Vitolins, Leah Griffin, Bart Frizzell, Glenn J. Lesser, Michelle Naughton, and Edward G. Shaw, Wake Forest School of Medicine; Dawn Moose, Novant Health, Winston-Salem; James E. Radford Jr, Hendersonville Hematology/Oncology, Hendersonville, NC; W. Vic Tomlinson, AnMed Health, Anderson, SC; Jacqueline Vuky, Virginia Mason Medical Center, Seattle, WA; and Paul T. Adams, National Surgical Adjuvant Breast and Bowel Project, Genesys Regional Medical Center, Flint, MI.

**RESUMEN / SUMMARY:** - **PURPOSE:** Hot flashes occur in approximately 80% of androgen-deprived men. Few intervention studies have been conducted to relieve hot flashes in men. **PATIENTS AND METHODS:** Eligible androgen-deprived men were randomly assigned to one of four daily regimens (2 x 2 factorial design) for 12 weeks: milk protein powder and placebo pill, venlafaxine and milk protein powder, soy protein powder and placebo pill, or venlafaxine and soy protein powder. The primary end point was hot flash symptom severity score (HFSSS), defined as number of hot flashes times severity. The secondary end point was quality of life (QoL), assessed by using the Functional Assessment of Cancer Therapy-Prostate. **RESULTS:** In all, 120 men age 46 to 91 years participated. Most were white (78%) and overweight or obese (83%). Toxicity was minimal. Neither venlafaxine nor soy protein alone or in combination had a significant effect on HFSSS. Soy protein, but not venlafaxine,

improved measures of QoL. CONCLUSION: In androgen-deprived men, neither venlafaxine nor soy proved effective in reducing hot flashes. Interventions that appear effective for decreasing hot flashes in women may not always turn out to be effective in men.

[11]

**TÍTULO / TITLE:** - The long noncoding RNA SChLAP1 promotes aggressive prostate cancer and antagonizes the SWI/SNF complex.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Genet. 2013 Nov;45(11):1392-8. doi: 10.1038/ng.2771. Epub 2013 Sep 29.

●● Enlace al texto completo (gratis o de pago) [1038/ng.2771](#)

**AUTORES / AUTHORS:** - Prensner JR; Iyer MK; Sahu A; Asangani IA; Cao Q; Patel L; Vergara IA; Davicioni E; Erho N; Ghadessi M; Jenkins RB; Triche TJ; Malik R; Bedenis R; McGregor N; Ma T; Chen W; Han S; Jing X; Cao X; Wang X; Chandler B; Yan W; Siddiqui J; Kunju LP; Dhanasekaran SM; Pienta KJ; Feng FY; Chinnaiyan AM

**INSTITUCIÓN / INSTITUTION:** - 1] Michigan Center for Translational Pathology, University of Michigan, Ann Arbor, Michigan, USA. [2].

**RESUMEN / SUMMARY:** - Prostate cancers remain indolent in the majority of individuals but behave aggressively in a minority. The molecular basis for this clinical heterogeneity remains incompletely understood. Here we characterize a long noncoding RNA termed SChLAP1 (second chromosome locus associated with prostate-1; also called LINC00913) that is overexpressed in a subset of prostate cancers. SChLAP1 levels independently predict poor outcomes, including metastasis and prostate cancer-specific mortality. In vitro and in vivo gain-of-function and loss-of-function experiments indicate that SChLAP1 is critical for cancer cell invasiveness and metastasis. Mechanistically, SChLAP1 antagonizes the genome-wide localization and regulatory functions of the SWI/SNF chromatin-modifying complex. These results suggest that SChLAP1 contributes to the development of lethal cancer at least in part by antagonizing the tumor-suppressive functions of the SWI/SNF complex.

[12]

**TÍTULO / TITLE:** - Recurrent inactivation of STAG2 in bladder cancer is not associated with aneuploidy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Genet. 2013 Dec;45(12):1464-9. doi: 10.1038/ng.2799. Epub 2013 Oct 13.

●● Enlace al texto completo (gratis o de pago) [1038/ng.2799](#)

**AUTORES / AUTHORS:** - Balbas-Martinez C; Sagrera A; Carrillo-de-Santa-Pau E; Earl J; Marquez M; Vazquez M; Lapi E; Castro-Giner F; Beltran S; Bayes M; Carrato A; Cigudosa JC; Dominguez O; Gut M; Herranz J; Juanpere N; Kogevinas M; Langa X; Lopez-Knowles E; Lorente JA; Lloreta J; Pisano DG; Richart L; Rico D; Salgado RN; Tardon A; Chanock S; Heath S; Valencia A; Losada A; Gut I; Malats N; Real FX

**INSTITUCIÓN / INSTITUTION:** - Epithelial Carcinogenesis Group, Molecular Pathology Programme, CNIO (Spanish National Cancer Research Centre), Madrid, España.

**RESUMEN / SUMMARY:** - Urothelial bladder cancer (UBC) is heterogeneous at the clinical, pathological and genetic levels. Tumor invasiveness (T) and grade (G) are the main factors associated with outcome and determine patient management. A discovery exome sequencing screen (n = 17), followed by a prevalence screen (n = 60), identified new genes mutated in this tumor coding for proteins involved in chromatin modification (MLL2, ASXL2 and BPTF), cell division (STAG2, SMC1A and SMC1B) and DNA repair (ATM, ERCC2 and FANCA). STAG2, a subunit of cohesin, was significantly and commonly mutated or lost in UBC, mainly in tumors of low stage or grade, and its loss was associated with improved outcome. Loss of expression was often observed in chromosomally stable tumors, and STAG2 knockdown in bladder cancer cells did not increase aneuploidy. STAG2 reintroduction in non-expressing cells led to reduced colony formation. Our findings indicate that STAG2 is a new UBC tumor suppressor acting through mechanisms that are different from its role in preventing aneuploidy.

[13]

**TÍTULO / TITLE:** - Linking the SWI/SNF complex to prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Genet. 2013 Nov;45(11):1268-9. doi: 10.1038/ng.2805.

●● Enlace al texto completo (gratis o de pago) [1038/ng.2805](#)

**AUTORES / AUTHORS:** - Lee RS; Roberts CW

**INSTITUCIÓN / INSTITUTION:** - Department of Pediatric Oncology, Dana-Farber Cancer Institute, the Division of Hematology-Oncology, Boston Children's Hospital and the Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, Massachusetts, USA.

**RESUMEN / SUMMARY:** - Genes encoding subunits of the SWI/SNF chromatin-remodeling complex constitute, collectively, one of the most frequently mutated targets in cancer. Although mutations in SWI/SNF genes are uncommon in prostate cancer, a new study shows that SChLAP1, a long noncoding RNA frequently expressed in aggressive prostate tumors, drives cancer by directly disrupting SNF5, a core subunit of the SWI/SNF complex.

[14]

**TÍTULO / TITLE:** - Double-blind, randomized, phase 2 trial of maintenance sunitinib versus placebo after response to chemotherapy in patients with advanced urothelial carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Nov 18. doi: 10.1002/cncr.28477.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28477](#)

**AUTORES / AUTHORS:** - Grivas PD; Daignault S; Tagawa ST; Nanus DM; Stadler WM; Dreicer R; Kohli M; Petrylak DP; Vaughn DJ; Bylow KA; Wong SG; Sottnik JL; Keller ET; Al-Hawary M; Smith DC; Hussain M

**INSTITUCIÓN / INSTITUTION:** - Department of Internal Medicine, University of Michigan Comprehensive Cancer Center, Ann Arbor, Michigan.

**RESUMEN / SUMMARY:** - BACKGROUND: Angiogenesis contributes to the progression of urothelial carcinoma (UC). In the current study, the authors investigated the role of maintenance sunitinib in patients with advanced UC. METHODS: Patients with locally

recurrent/metastatic UC and adequate organ function who achieved stable disease or a partial or complete response after 4 to 6 chemotherapy cycles were randomized to sunitinib at a dose of 50 mg/day (28 days on and 14 days off) or placebo. The primary endpoint was the 6-month progression rate. Secondary endpoints were safety, survival, change in serum vascular endothelial growth factor (VEGF)/soluble VEGF receptor-2 (sVEGFR2), and the activity of sunitinib in patients who developed disease progression while receiving placebo. A total of 38 eligible patients per treatment arm were required to select better therapy with 90% probability ( $\alpha = .05$ ). RESULTS: A total of 54 eligible patients were randomized to either the sunitinib arm (26 patients) or the placebo arm (28 patients). The median number of cycles received was 2 cycles per treatment arm. The most common grade 3 to 4 adverse events (graded according to version 3.0 of the National Cancer Institute Common Terminology Criteria for Adverse Events) among patients receiving sunitinib were thrombocytopenia, diarrhea, mucositis, fatigue, and hypertension. There were no grade 3 or 4 adverse events noted among > 5% of patients receiving placebo. The 6-month progression rate was 72% versus 64%. The median progression-free survival (PFS) was 2.9 months (range, 0.5 months-32.5 months) versus 2.7 months (range, 0.8 months -65 months) for the sunitinib versus placebo arms, respectively. Patients receiving placebo were found to have no changes in their serum VEGF/sVEGFR2 levels over time. Patients treated with sunitinib had no significant change in their VEGF level, but the sVEGFR2 level significantly decreased after cycles 1 and 2 ( $P < .0001$ ) and at the time of disease progression ( $P = .0002$ ). A baseline VEGF level that was at or greater than the median was found to be correlated with a longer PFS. Sixteen patients who were receiving placebo received sunitinib at the time of disease progression, with the best responses being 1 partial response (6.3%), 6 cases of stable disease (37.5%), and 5 cases of progressive disease (31.3%); 4 patients were not evaluable for response. The median PFS was 3.7 months (range, 0.1 months-22 months). CONCLUSIONS: The current multicenter study was limited by premature closure and a small sample size. Maintenance sunitinib did not appear to improve the 6-month progression rate. Open-label sunitinib was found to have only modest activity. The sVEGFR2 level decreased among patients receiving sunitinib. Cancer 2013. Esta es una cita bibliográfica que va por delante de la publicación en papel. La fecha indicada en la cita provista, NO corresponde con la fecha o la cita bibliográfica de la publicación en papel. La cita bibliográfica definitiva (con el volumen y su paginación) saldrá en 1 ó 2 meses a partir de la fecha de la emisión electrónica-online. \*\*\* This is a bibliographic record ahead of the paper publication. The given date in the bibliographic record does not correspond to the date or the bibliographic citation on the paper publication. The publisher will provide the final bibliographic citation (with the volume, and pagination) within 1 or 2 months from the date the record was published online. © 2013 American Cancer Society.

[15]

**TÍTULO / TITLE:** - Impact of chronic kidney disease on the risk of clinical outcomes in patients with cancer-associated venous thromboembolism during anticoagulant treatment.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Thromb Haemost. 2013 Nov;11(11):1968-76. doi: 10.1111/jth.12411.

●● Enlace al texto completo (gratis o de pago) [1111/jth.12411](http://1111/jth.12411)

**AUTORES / AUTHORS:** - Kooiman J; den Exter PL; Cannegieter SC; le Cessie S; Del Toro J; Sahuquillo JC; Pedrajas JM; Huisman MV

**INSTITUCIÓN / INSTITUTION:** - Department of Thrombosis and Hemostasis, Leiden University Medical Center, Leiden, the Netherlands.

**RESUMEN / SUMMARY:** - BACKGROUND: Information on recurrent venous thromboembolic events (VTEs) and major bleeding risks during anticoagulant treatment in patients with cancer-associated VTEs and chronic kidney disease (CKD) is scarce, although it is of relevance in establishing better tailored management strategies in these patients. OBJECTIVES: We compared risks of recurrent VTEs and major bleeds in cancer-associated VTE patients with and without CKD. METHODS: A total of 1684 patients diagnosed with a cancer-associated VTE between 2001 and 2011 were followed for 180 days after VTE diagnosis. Patients were treated mainly with low-molecular-weight heparin (LMWH) or vitamin-K antagonists (VKA). Primary outcomes were recurrent VTE and major bleeding. Secondary outcome was fatal bleeding. RESULTS: Recurrent VTEs occurred in 15.9/100 patient years (py) in patients without CKD (eGFR > 60 mL min<sup>-1</sup>), 19.5/100 py in those with CKD stage 3A (eGFR 45-60 mL min<sup>-1</sup>), 14.9/100 py in those with CKD 3B (eGFR 30-45 mL min<sup>-1</sup>), and 6.8/100 py in patients with CKD 4-5 (eGFR < 30 mL min<sup>-1</sup>). Major bleeding occurred in 11.4/100 py in patients without CKD, 18.5/100 py in those with CKD stage 3A, 16.0/100 py in those with CKD 3B, and 40.8/100 py in patients with CKD 4-5. Fatal bleeding occurred in 1.1/100 py, 3.4/100 py, 6.3/100 py and 15.7/100 py, respectively. These increased bleeding risks in CKD patients were mainly observed in those on LMWH treatment, not VKA. CONCLUSIONS: The risk of major bleeding was increased in CKD patients with VTE and cancer, and was most prominent in those treated with LMWH and an eGFR < 30 mL min<sup>-1</sup>. These results indicate that LMWH should be used with caution in this specific population.

[16]

**TÍTULO / TITLE:** - Variation among primary care physicians in prostate-specific antigen screening of older men.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - JAMA. 2013 Oct 16;310(15):1622-4. doi: 10.1001/jama.2013.277514.

●● Enlace al texto completo (gratis o de pago) [1001/jama.2013.277514](http://1001/jama.2013.277514)

**AUTORES / AUTHORS:** - Jaramillo E; Tan A; Yang L; Kuo YF; Goodwin JS

**INSTITUCIÓN / INSTITUTION:** - Sealy Center on Aging, University of Texas Medical Branch, Galveston, TX 77555-0177, USA.

[17]

**TÍTULO / TITLE:** - Tamsulosin treatment for benign prostatic hyperplasia and risk of severe hypotension in men aged 40-85 years in the United States: risk window analyses using between and within patient methodology.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BMJ. 2013 Nov 5;347:f6320. doi: 10.1136/bmj.f6320.

**AUTORES / AUTHORS:** - Bird ST; Delaney JA; Brophy JM; Etminan M; Skeldon SC; Hartzema AG

**INSTITUCIÓN / INSTITUTION:** - Food and Drug Administration, Center for Drug Evaluation and Research, Office of Surveillance and Epidemiology, Department of Epidemiology, Silver Spring, MD, USA.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To characterize risk of hypotension requiring admission to hospital in middle aged and older men treated with tamsulosin for benign prostatic hyperplasia. **DESIGN:** Population based retrospective cohort study (between patient methodology) and self controlled case series (within patient methodology). **SETTING:** Healthcare claims data from the IMS Lifelink database in the United States. **PARTICIPANTS:** Men aged 40-85 years with private US healthcare insurance entering the cohort at their first dispensing for tamsulosin or for a 5alpha reductase inhibitor (5ARI) between January 2001 and June 2011 after a minimum of six months' enrolment. **MAIN OUTCOMES MEASURES:** Hypotension requiring admission to hospital. Cox proportional hazards models estimated rate ratios at time varying intervals during follow-up: weeks 1-4, 5-8, and 9-12 after tamsulosin initiation; weeks 1-4, 5-8, and 9-12 after restarting tamsulosin (after a four week gap); and maintenance tamsulosin treatment (remaining exposed person time). Covariates included age, calendar year, demographics, antihypertensive use, healthcare use, and a Charlson comorbidity score. A self controlled case series, having implicit control for time invariant covariates, was additionally conducted. **RESULTS:** Among 383 567 new users of study drugs (tamsulosin 297 596; 5ARI 85 971), 2562 admissions to hospital for severe hypotension were identified. The incidence for hypotension was higher for tamsulosin (42.4 events per 10 000 person years) than for 5ARIs (31.3 events per 10 000 person years) or all accrued person time (29.1 events per 10 000 person years). After tamsulosin initiation, the cohort analysis identified an increased rate of hypotension during weeks 1-4 (rate ratio 2.12 (95% confidence interval 1.29 to 3.04)) and 5-8 (1.51 (1.04 to 2.18)), and no significant increase at weeks 9-12. The rate ratio for hypotension also increased at weeks 1-4 (1.84 (1.46 to 2.33)) and 5-8 (1.85 (1.45 to 2.36)) after restarting tamsulosin, as did maintenance tamsulosin treatment (1.19 (1.07 to 1.32)). The self controlled case series gave similar results as the cohort analysis. **CONCLUSIONS:** We observed a temporal association between tamsulosin use for benign prostatic hyperplasia and severe hypotension during the first eight weeks after initiating treatment and the first eight weeks after restarting treatment. This association suggests that physicians should focus on improving counseling strategies to warn patients regarding the "first dose phenomenon" with tamsulosin.

[18]

**TÍTULO / TITLE:** - Prostate-specific antigen screening trials and prostate cancer deaths: the androgen deprivation connection.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Oct 16;105(20):1534-9. doi: 10.1093/jnci/djt248. Epub 2013 Oct 3.

●● [Enlace al texto completo \(gratis o de pago\) 1093/jnci/djt248](#)

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**INSTITUCIÓN / INSTITUTION:** - Affiliations of authors: AMREP Department of Medicine, Monash University, Victoria, and Melbourne Oncology Group, Cabrini Hospital,

Malvern, Victoria, Australia (IEH); Secure Genetics Pty Ltd, Newport Beach, NSW, Australia (GLGM).

**RESUMEN / SUMMARY:** - Major clinical trials using prostate-specific antigen (PSA) as the screening test to detect localized early-stage prostate cancer and to attempt to change its natural history with early intervention have yielded conflicting interpretations. The US Prostate, Lung, Colorectal, and Ovarian (US PLCO) cancer screening trial concluded that PSA-based screening conferred no meaningful survival benefit, whereas the European Randomized Study of Screening for Prostate Cancer (ERSPC) and the GOTEBOURG clinical trial (GOTEBOURG) trials claimed statistically significant life-saving benefits. These divergent outcomes have not provided physicians with clarity on the best evidence-based treatment. To determine the extent to which these divergent outcomes are clinically meaningful, we evaluated these data and those of a long-term prospective cohort study in the context of the clinically documented harms of androgen deprivation therapy (ADT). We noted the unheralded fact that in both European trials far more patients received hormonal treatment in the control than the prostatectomy arm, whereas hormonal therapy in the US trial was balanced between arms. We examined this imbalance in ADT treatment and prostate cancer-related deaths in the contexts of contamination, stage migration, and attribution of cause of death, all of which impinge on data interpretation. The ERSPC and GOTEBOURG data are compatible with the hypothesis that ADT treatment contributes differentially to an increase in prostate cancer deaths in control patients. If so, the claim of a reduction in prostate cancer deaths in the screened cohort requires reappraisal. The conventional interpretation that PSA screening and radical treatment intervention are the major contributors to the results of these two studies needs more rigorous scientific scrutiny, as does the role of ADT treatment of nonmetastatic disease.

[19]

**TÍTULO / TITLE:** - A Multicentre Year-long Randomised Controlled Trial of Exercise Training Targeting Physical Functioning in Men with Prostate Cancer Previously Treated with Androgen Suppression and Radiation from TROG 03.04 RADAR.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 3. pii: S0302-2838(13)01033-6. doi: 10.1016/j.eururo.2013.09.041.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.041](#)

**AUTORES / AUTHORS:** - Galvao DA; Spry N; Denham J; Taaffe DR; Cormie P; Joseph D; Lamb DS; Chambers SK; Newton RU

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**RESUMEN / SUMMARY:** - BACKGROUND: Long-term prostate cancer (PCa) survivors are at increased risk for comorbidities and physical deconditioning. OBJECTIVE: To determine the effectiveness of a year-long randomised controlled trial of exercise training in PCa survivors >5 yr postdiagnosis on physical functioning. DESIGN, SETTING, AND PARTICIPANTS: Between 2010 and 2011, 100 long-term PCa survivors from Trans-Tasman Radiation Oncology Group 03.04 Randomised Androgen Deprivation and Radiotherapy previously treated with androgen-deprivation therapy and radiation therapy were randomly assigned to 6 mo of supervised exercise followed by 6 mo of a home-based maintenance programme (n=50) or printed educational

material about physical activity (n=50) for 12 mo across 13 university-affiliated exercise clinics in Australia and New Zealand. INTERVENTION: Supervised resistance and aerobic exercise or printed educational material about physical activity. OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: The primary end point was a 400-m walk as a measure of cardiovascular fitness. Secondary end points were physical function, patient-reported outcomes, muscle strength, body composition, and biomarkers. Analysis of covariance was used to compare outcomes for groups at 6 and 12 mo adjusted for baseline values. RESULTS AND LIMITATIONS: Participants undergoing supervised exercise showed improvement in cardiorespiratory fitness performance at 6 mo (-19 s [p=0.029]) and 12 mo (-13 s [p=0.028]) and better lower-body physical function across the 12-mo period (p<0.01). Supervised exercise also improved self-reported physical functioning at 6 (p=.006) and 12 mo (p=0.002), appendicular skeletal muscle at 6 mo (p=0.019), and objective measures of muscle strength at 6 and 12 mo (p<0.050). Limitations included the restricted number of participants undertaking body composition assessment, no blinding to group assignment for physical functioning measures, and inclusion of well-functioning individuals. CONCLUSIONS: Supervised exercise training in long-term PCa survivors is more effective than physical activity educational material for increasing cardiorespiratory fitness, physical function, muscle strength, and self-reported physical functioning at 6 mo. Importantly, these benefits were maintained in the long term with a home-based programme with follow-up at 12 mo. CLINICAL TRIAL REGISTRY: The effect of an exercise intervention on cardiovascular and metabolic risk factors in prostate cancer patients from the RADAR study, ACTRN: ACTRN12609000729224.

[20]

**TÍTULO / TITLE:** - TERT Promoter Mutations Occur Early in Urothelial Neoplasia and Are Biomarkers of Early Disease and Disease Recurrence in Urine.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Res. 2013 Nov 27.

●● Enlace al texto completo (gratis o de pago) [1158/0008-5472.CAN-13-2498](#)

**AUTORES / AUTHORS:** - Kinde I; Munari E; Faraj SF; Hruban RH; Schoenberg M; Bivalacqua T; Allaf M; Springer S; Wang Y; Diaz LA Jr; Kinzler KW; Vogelstein B; Papadopoulos N; Netto GJ

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: The Ludwig Center for Cancer Genetics and Therapeutics, The Swim Across America Laboratory at Johns Hopkins, and The Howard Hughes Medical Institute at Johns Hopkins Kimmel Cancer Center; Departments of Pathology, Oncology, and Urology, The Johns Hopkins Medical Institutes, Baltimore, Maryland.

**RESUMEN / SUMMARY:** - Activating mutations occur in the promoter of the telomerase reverse transcriptase (TERT) gene in 66% of muscle-invasive urothelial carcinomas. To explore their role in bladder cancer development and to assess their utility as urine markers for early detection, we sequenced the TERT promoter in 76 well-characterized papillary and flat noninvasive urothelial carcinomas, including 28 pTa low-grade transitional cell carcinomas (TCC), 31 pTa high-grade TCCs, and 17 pTis carcinoma in situ lesions. We also evaluated the sequence of the TERT promoter in a separate series of 14 early bladder neoplasms and matched follow-up urine samples to

determine whether urine TERT status was an indicator of disease recurrence. A high rate of TERT promoter mutation was observed in both papillary and flat lesions, as well as in low- and high-grade noninvasive urothelial neoplasms (mean: 74%). In addition, among patients whose tumors harbored TERT promoter mutations, the same mutations were present in follow-up urines in seven of eight patients that recurred but in none of the six patients that did not recur ( $P < 0.001$ ). TERT promoter mutations occur in both papillary and flat lesions, are the most frequent genetic alterations identified to date in noninvasive precursor lesions of the bladder, are detectable in urine, and seem to be strongly associated with bladder cancer recurrence. These provocative results suggest that TERT promoter mutations may offer a useful urinary biomarker for both early detection and monitoring of bladder neoplasia. *Cancer Res*; 73(24); 1-6. ©2013 AACR.

[21]

**TÍTULO / TITLE:** - The prostate, lung, colorectal, and ovarian cancer screening trial and its associated research resource.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *J Natl Cancer Inst*. 2013 Nov 20;105(22):1684-93. doi: 10.1093/jnci/djt281. Epub 2013 Oct 10.

●● [Enlace al texto completo \(gratis o de pago\) 1093/jnci/djt281](#)

**AUTORES / AUTHORS:** - Zhu CS; Pinsky PF; Kramer BS; Prorok PC; Purdue MP; Berg CD; Gohagan JK

**INSTITUCIÓN / INSTITUTION:** - Affiliations of authors: Early Detection Research Group, Division of Cancer Prevention (CSZ, PFP, BSK, PCP, CDB) and Occupational and Environmental Epidemiology Branch, Division of Cancer Epidemiology & Genetics, National Cancer Institute (MPP), and Office of Disease Prevention, National Institutes of Health, Bethesda, MD (JKG).

**RESUMEN / SUMMARY:** - The Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial is a large-scale research effort conducted by the National Cancer Institute. PLCO offers an example of coordinated research by both the extramural and intramural communities of the National Institutes of Health. The purpose of this article is to describe the PLCO research resource and how it is managed and to assess the productivity and the costs associated with this resource. Such an in-depth analysis of a single large-scale project can shed light on questions such as how large-scale projects should be managed, what metrics should be used to assess productivity, and how costs can be compared with productivity metrics. A comprehensive publication analysis identified 335 primary research publications resulting from research using PLCO data and biospecimens from 2000 to 2012. By the end of 2012, a total of 9679 citations (excluding self-citations) have resulted from this body of research publications, with an average of 29.7 citations per article, and an h index of 45, which is comparable with other large-scale studies, such as the Nurses' Health Study. In terms of impact on public health, PLCO trial results have been used by the US Preventive Services Task Force in making recommendations concerning prostate and ovarian cancer screening. The overall cost of PLCO was \$454 million over 20 years, adjusted to 2011 dollars, with approximately \$37 million for the collection, processing, and storage of biospecimens, including blood samples, buccal cells, and pathology tissues.

[22]

**TÍTULO / TITLE:** - Abiraterone acetate plus prednisone versus prednisone alone in chemotherapy-naive men with metastatic castration-resistant prostate cancer: patient-reported outcome results of a randomised phase 3 trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Lancet Oncol. 2013 Nov;14(12):1193-9. doi: 10.1016/S1470-2045(13)70424-8. Epub 2013 Sep 25.

●● Enlace al texto completo (gratis o de pago) [1016/S1470-2045\(13\)70424-8](#)

**AUTORES / AUTHORS:** - Basch E; Autio K; Ryan CJ; Mulders P; Shore N; Kheoh T; Fizazi K; Logothetis CJ; Rathkopf D; Smith MR; Mainwaring PN; Hao Y; Griffin T; Li S; Meyers ML; Molina A; Cleeland C

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA. Electronic address: [ebasch@med.unc.edu](mailto:ebasch@med.unc.edu).

**RESUMEN / SUMMARY:** - BACKGROUND: Abiraterone acetate plus prednisone significantly improves radiographic progression-free survival in asymptomatic or mildly symptomatic, chemotherapy-naive patients with metastatic castration-resistant prostate cancer compared with prednisone alone. We describe analyses of data for patient-reported pain and functional status in a preplanned interim analysis of a phase 3 trial. METHODS: Between April 28, 2009, and June 23, 2010, patients with progressive, metastatic castration-resistant prostate cancer were enrolled into a multinational, double-blind, placebo-controlled trial. Patients were eligible if they were asymptomatic (score of 0 or 1 on item three of the Brief Pain Inventory Short Form [BPI-SF] questionnaire) or mildly symptomatic (score of 2 or 3) and had not previously received chemotherapy. Patients were randomly assigned (1:1) to receive oral abiraterone (1 g daily) plus prednisone (5 mg twice daily) or placebo plus prednisone in continuous 4-week cycles. Pain was assessed with the BPI-SF questionnaire, and health-related quality of life (HRQoL) with the Functional Assessment of Cancer Therapy-Prostate (FACT-P) questionnaire. We analysed data with prespecified criteria for clinically meaningful pain progression and deterioration in HRQoL. All patients who underwent randomisation were included in analyses. This study is registered with ClinicalTrials.gov, number NCT00887198. FINDINGS: 1088 patients underwent randomisation: 546 were assigned to abiraterone plus prednisone and 542 to placebo plus prednisone. At the time of the second prespecified interim analysis, median follow-up was 22.2 months (IQR 20.2-24.8). Median time to progression of mean pain intensity was longer in patients assigned to abiraterone plus prednisone (26.7 months [95% CI 19.3-not estimable]) than in those assigned to placebo plus prednisone (18.4 months [14.9-not estimable]; hazard ratio [HR] 0.82, 95% CI 0.67-1.00; p=0.0490), as was median time to progression of pain interference with daily activities (10.3 months [95% CI 9.3-13.0] vs 7.4 months [6.4-8.6]; HR 0.79, 95% CI 0.67-0.93; p=0.005). Median time to progression of worst pain was also longer with abiraterone plus prednisone (26.7 months [95% CI 19.4-not estimable]) than with placebo plus prednisone (19.4 months [16.6-not estimable]), but the difference was not significant (HR 0.85, 95% CI 0.69-1.04; p=0.109). Median time to HRQoL deterioration was longer in patients assigned to abiraterone plus prednisone than in those assigned to placebo plus prednisone as assessed by the FACT-P total score (12.7 months [95% CI 11.1-14.0] vs 8.3 months [7.4-10.6]; HR 0.78, 95% CI 0.66-0.92; p=0.003) and by the

score on its prostate-cancer-specific subscale (11.1 months [8.6-13.8] vs 5.8 months [5.5-8.3]; HR 0.70, 95% CI 0.60-0.83;  $p < 0.0001$ ). INTERPRETATION: Abiraterone plus prednisone delays patient-reported pain progression and HRQoL deterioration in chemotherapy-naive patients with metastatic castration-resistant prostate cancer. These results provide further support for the efficacy of abiraterone in this population. FUNDING: Janssen Research & Development.

[23]

**TÍTULO / TITLE:** - Axitinib versus sorafenib as first-line therapy in patients with metastatic renal-cell carcinoma: a randomised open-label phase 3 trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Lancet Oncol. 2013 Dec;14(13):1287-94. doi: 10.1016/S1470-2045(13)70465-0. Epub 2013 Oct 25.

●● Enlace al texto completo (gratis o de pago) [1016/S1470-2045\(13\)70465-0](#)

**AUTORES / AUTHORS:** - Hutson TE; Lesovoy V; Al-Shukri S; Stus VP; Lipatov ON; Bair AH; Rosbrook B; Chen C; Kim S; Vogelzang NJ

**INSTITUCIÓN / INSTITUTION:** - Baylor Sammons Cancer Center, Dallas, TX, USA; US Oncology Research, Houston, TX, USA. Electronic address: [thomas.hutson@usonology.com](mailto:thomas.hutson@usonology.com).

**RESUMEN / SUMMARY:** - BACKGROUND: In previous clinical trials of patients with metastatic renal-cell carcinoma, patients treated with axitinib as second-line therapy had longer median progression-free survival than those treated with sorafenib. We therefore undertook a phase 3 trial comparing axitinib with sorafenib in patients with treatment-naive metastatic renal-cell carcinoma. METHODS: In this randomised, open-label, phase 3 trial, patients with treatment-naive, measurable, clear-cell metastatic renal-cell carcinoma from 13 countries were stratified by Eastern Cooperative Oncology Group performance status, and then randomly assigned (2:1) by a centralised registration system to receive axitinib 5 mg twice daily, or sorafenib 400 mg twice daily. The primary endpoint was progression-free survival, assessed by masked independent review committee in the intention-to-treat population. This ongoing trial is registered at ClinicalTrials.gov, NCT00920816. FINDINGS: Between June 14, 2010, and April 21, 2011, we randomly assigned 192 patients to receive axitinib, and 96 patients to receive sorafenib. The cutoff date for this analysis was July 27, 2012, when 171 (59%) of 288 patients died or had disease progression, as assessed by the independent review committee. There was no significant difference in median progression-free survival between patients treated with axitinib or sorafenib (10.1 months [95% CI 7.2-12.1] vs 6.5 months [4.7-8.3], respectively; stratified hazard ratio 0.77, 95% CI 0.56-1.05). Any-grade adverse events that were more common ( $\geq 10\%$  difference) with axitinib than with sorafenib were diarrhoea (94 [50%] of 189 patients vs 38 [40%] of 96 patients), hypertension (92 [49%] vs 28 [29%]), weight decrease (69 [37%] vs 23 [24%]), decreased appetite (54 [29%] vs 18 [19%]), dysphonia (44 [23%] vs ten [10%]), hypothyroidism (39 [21%] vs seven [7%]), and upper abdominal pain (31 [16%] vs six [6%]); those more common with sorafenib than with axitinib included palmar-plantar erythrodysesthesia (PPE; 37 [39%] of 96 patients vs 50 [26%] of 189), rash (19 [20%] vs 18 [10%]), alopecia (18 [19%] vs eight [4%]), and erythema (18 [19%] vs five [3%]). The most common grade 3 or 4 adverse events in patients treated with axitinib included hypertension (26 [14%] of 189 patients), diarrhoea (17 [9%]),

asthenia (16 [8%]), weight decrease (16 [8%]), and PPE (14 [7%]); common grade 3 or 4 adverse events in patients treated with sorafenib included PPE (15 [16%] of 96 patients), diarrhoea (five [5%]), and asthenia (five [5%]). Serious adverse events were reported in 64 (34%) of 189 patients receiving axitinib, and 24 (25%) of 96 patients receiving sorafenib. INTERPRETATION: Axitinib did not significantly increase progression-free survival in patients with treatment-naive metastatic renal-cell carcinoma compared with those treated with sorafenib, but did demonstrate clinical activity and an acceptable safety profile. FUNDING: Pfizer Inc.

[24]

**TÍTULO / TITLE:** - Randomized trial of hypofractionated external-beam radiotherapy for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 1;31(31):3860-8. doi: 10.1200/JCO.2013.51.1972. Epub 2013 Oct 7.

●● [Enlace al texto completo \(gratis o de pago\) 1200/JCO.2013.51.1972](#)

**AUTORES / AUTHORS:** - Pollack A; Walker G; Horwitz EM; Price R; Feigenberg S; Konski AA; Stoyanova R; Movsas B; Greenberg RE; Uzzo RG; Ma C; Buyyounouski MK

**INSTITUCIÓN / INSTITUTION:** - Alan Pollack, Gail Walker, and Radka Stoyanova, University of Miami Miller School of Medicine, Miami, FL; Eric M. Horwitz, Robert Price, Richard E. Greenberg, Robert G. Uzzo, Charlie Ma, and Mark K. Buyyounouski, Fox Chase Cancer Center, Philadelphia, PA; Steven Feigenberg, University of Maryland, Baltimore, MD; Andre A. Konski, Wayne State University Medical Center; and Benjamin Movsas, Henry Ford Hospital, Detroit, MI.

**RESUMEN / SUMMARY:** - PURPOSE: To determine if escalated radiation dose using hypofractionation significantly reduces biochemical and/or clinical disease failure (BCDF) in men treated primarily for prostate cancer. PATIENTS AND METHODS: Between June 2002 and May 2006, men with favorable- to high-risk prostate cancer were randomly allocated to receive 76 Gy in 38 fractions at 2.0 Gy per fraction (conventional fractionation intensity-modulated radiation therapy [CIMRT]) versus 70.2 Gy in 26 fractions at 2.7 Gy per fraction (hypofractionated IMRT [HIMRT]); the latter was estimated to be equivalent to 84.4 Gy in 2.0 Gy fractions. High-risk patients received long-term androgen deprivation therapy (ADT), and some intermediate-risk patients received short-term ADT. The primary end point was the cumulative incidence of BCDF. Secondarily, toxicity was assessed. RESULTS: There were 303 assessable patients with a median follow-up of 68.4 months. No significant differences were seen between the treatment arms in terms of the distribution of patients by clinicopathologic or treatment-related (ADT use and length) factors. The 5-year rates of BCDF were 21.4% (95% CI, 14.8% to 28.7%) for CIMRT and 23.3% (95% CI, 16.4% to 31.0%) for HIMRT (P = .745). There were no statistically significant differences in late toxicity between the arms; however, in subgroup analysis, patients with compromised urinary function before enrollment had significantly worse urinary function after HIMRT. CONCLUSION: The hypofractionation regimen did not result in a significant reduction in BCDF; however, it is delivered in 2.5 fewer weeks. Men with compromised urinary function before treatment may not be ideal candidates for this approach.

[25]

**TÍTULO / TITLE:** - Long-term results of the Dutch randomized prostate cancer trial: Impact of dose-escalation on local, biochemical, clinical failure, and survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Nov 15. pii: S0167-8140(13)00518-5. doi: 10.1016/j.radonc.2013.09.026.

●● Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.09.026](#)

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**RESUMEN / SUMMARY:** - PURPOSE: Nowadays, advanced irradiation techniques make it possible to escalate safely the dose in prostate cancer. We studied the effect of a higher dose on tumor control in a randomized trial with a median follow-up of 110 months. PATIENTS AND METHODS: Patients with T1b-T4N0 prostate cancer (n=664) were randomized between 78Gy and 68Gy. Primary endpoint was biochemical and/or clinical failure (BCF) according to the American Society for Therapeutic Radiology and Oncology (ASTRO) guidelines (3 consecutive rises), and to Phoenix (nadir plus 2µg/L). Secondary endpoints were clinical failure (CF), local failure (LF), prostate cancer death (PCD), and overall survival (OS). Exploratory subgroup analyses were performed. RESULTS: BCF rate (HR=0.8; 20% less events) and LF rate (HR=0.5; 50% less events) were significantly lower in the 78Gy arm (p<0.05). CF, PCD and OS were similar in both arms. A significant heterogeneity of treatment effect was found for PSA cutoffs between 7 and 10µg/L. CONCLUSION: We observed significantly less BCF and LF in the high-dose arm. This suggests improvement of the therapeutic ratio. However, we observed similar rates of CF and PCD at the current update. More follow-up is needed to investigate which patients benefit in terms of prolonged OS.

[26]

**TÍTULO / TITLE:** - Larotaxel with Cisplatin in the First-Line Treatment of Locally Advanced/Metastatic Urothelial Tract or Bladder Cancer: A Randomized, Active-Controlled, Phase III Trial (CILAB).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncology. 2013;85(4):208-15. doi: 10.1159/000354085. Epub 2013 Sep 24.

●● Enlace al texto completo (gratis o de pago) [1159/000354085](#)

**AUTORES / AUTHORS:** - Sternberg CN; Skoneczna IA; Castellano D; Theodore C; Blais N; Voog E; Bellmunt J; Peters F; Le-Guennec S; Cerbone L; Risse ML; Machiels JP

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology, San Camillo and Forlanini Hospitals, Rome, Italy.

**RESUMEN / SUMMARY:** - Background: This open-label, randomized phase III trial evaluated larotaxel/cisplatin versus gemcitabine/cisplatin as first-line treatment for locally advanced (T4b) or metastatic urothelial tract or bladder cancer. Methods: Patients were randomized to larotaxel 50 mg/m<sup>2</sup> with cisplatin 75 mg/m<sup>2</sup> every 3

weeks (larotaxel/cisplatin) or gemcitabine 1,000 mg/m<sup>2</sup> on days 1, 8, and 15 with cisplatin 70 mg/m<sup>2</sup> on day 1 every 4 weeks (gemcitabine/cisplatin). The primary endpoint was overall survival (OS). Results: The trial was prematurely closed following the sponsor's decision to stop clinical development of larotaxel (n = 337 randomized). The larotaxel dose was reduced to 40 mg/m<sup>2</sup> and cisplatin to 60 mg/m<sup>2</sup> following a data monitoring committee safety review of the first 97 patients. At the time of analysis, the median OS was 13.7 months [95% confidence interval (CI) 11.2-17.1] with larotaxel/cisplatin and 14.3 months (95% CI 10.5 to not reached) with gemcitabine/cisplatin [hazard ratio (HR) 1.21; 95% CI 0.83-1.76; p = 0.33]. The median progression-free survival (PFS) was 5.6 months (95% CI 4.1-6.2) with larotaxel/cisplatin and 7.6 months (95% CI 6.6-9.1) with gemcitabine/cisplatin (HR 1.67; 95% CI 1.24-2.25). More myelosuppression was observed with gemcitabine/cisplatin. Conclusion: There was no difference in OS. Although the trial was closed prematurely, PFS appeared worse with larotaxel/cisplatin, suggesting that larotaxel/cisplatin does not improve outcomes versus cisplatin/gemcitabine. © 2013 S. Karger AG, Basel.

[27]

**TÍTULO / TITLE:** - Prognostic factors of patients with metastatic renal cell carcinoma with removed metastases: a multicenter study of 556 patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct;82(4):846-51. doi: 10.1016/j.urology.2013.06.035.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.06.035](#)

**AUTORES / AUTHORS:** - Naito S; Kinoshita H; Kondo T; Shinohara N; Kasahara T; Saito K; Takayama T; Masumori N; Takahashi W; Takahashi M; Terachi T; Ozono S; Naito S; Tomita Y

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Yamagata University Faculty of Medicine, Yamagata, Japan.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To investigate the prognosis and prognostic factors of patients with metastatic renal cell carcinoma who underwent metastasectomy. **METHODS:** We sent questionnaires to Japanese hospitals. The questionnaires included data of patients with metastatic renal cell carcinoma who had their metastatic lesions removed between January 1988 and December 2009. We collected them and retrospectively analyzed these data and calculated the overall survival from the first metastasectomy until death or last follow-up. We also analyzed the relationship between survival and clinico-pathologic features and determined adverse prognostic factors. Furthermore, we identified a poor prognostic group by counting the number of prognostic factors. **RESULTS:** A sample size of 556 patients from 48 institutions was studied. The median overall survival was 80 months. Four adverse prognostic factors were detected: incomplete resection by metastasectomy (hazard ratio [HR], 2.15), brain metastasis (HR, 3.73), >1.0 mg/dL C-reactive protein (HR, 2.45), and the highest histologic grade in Japanese classification (nuclei of tumor cells are larger than nuclei of normal tubular cells; HR, 1.88). The median overall survivals of patients with 3 or 4 prognostic factors, 2 factors, and 0 and 1 factors were 10 months, 42 months, and 105 months, respectively. **CONCLUSION:** Four adverse prognostic factors for predicting the survival of patients with removed metastases were

identified. Patients with 3 or 4 of these adverse prognostic factors had a worse prognosis.

[28]

**TÍTULO / TITLE:** - Prognostic model predicting metastatic castration-resistant prostate cancer survival in men treated with second-line chemotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Nov 20;105(22):1729-37. doi: 10.1093/jnci/djt280. Epub 2013 Oct 17.

●● [Enlace al texto completo \(gratis o de pago\) 1093/jnci/djt280](#)

**AUTORES / AUTHORS:** - Halabi S; Lin CY; Small EJ; Armstrong AJ; Kaplan EB; Petrylak D; Sternberg CN; Shen L; Oudard S; de Bono J; Sartor O

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**RESUMEN / SUMMARY:** - **BACKGROUND:** Several prognostic models for overall survival (OS) have been developed and validated in men with metastatic castration-resistant prostate cancer (mCRPC) who receive first-line chemotherapy. We sought to develop and validate a prognostic model to predict OS in men who had progressed after first-line chemotherapy and were selected to receive second-line chemotherapy. **METHODS:** Data from a phase III trial in men with mCRPC who had developed progressive disease after first-line chemotherapy (TROPIC trial) were used. The TROPIC was randomly split into training (n = 507) and testing (n = 248) sets. Another dataset consisting of 488 men previously treated with docetaxel (SPARC trial) was used for external validation. Adaptive least absolute shrinkage and selection operator selected nine prognostic factors of OS. A prognostic score was computed from the regression coefficients. The model was assessed on the testing and validation sets for its predictive accuracy using the time-dependent area under the curve (tAUC). **RESULTS:** The nine prognostic variables in the final model were Eastern Cooperative Oncology Group performance status, time since last docetaxel use, measurable disease, presence of visceral disease, pain, duration of hormonal use, hemoglobin, prostate specific antigen, and alkaline phosphatase. The tAUCs for this model were 0.73 (95% confidence interval [CI] = 0.72 to 0.74) and 0.70 (95% CI = 0.68 to 0.72) for the testing and validation sets, respectively. **CONCLUSIONS:** A prognostic model of OS in the postdocetaxel, second-line chemotherapy, mCRPC setting was developed and externally validated. This model incorporates novel prognostic factors and can be used to provide predicted probabilities for individual patients and to select patients to participate in clinical trials on the basis of their prognosis. Prospective validation is needed.

[29]

**TÍTULO / TITLE:** - Single- vs multiple-fraction radiotherapy for bone metastases from prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - JAMA. 2013 Oct 9;310(14):1501-2. doi: 10.1001/jama.2013.277081.

●● Enlace al texto completo (gratis o de pago) [1001/jama.2013.277081](http://1001/jama.2013.277081)

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[30]

**TÍTULO / TITLE:** - Effect of preoperative pelvic floor muscle therapy with biofeedback versus standard care on stress urinary incontinence and quality of life in men undergoing laparoscopic radical prostatectomy: A randomised control trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Neurourol Urodyn. 2013 Nov 19. doi: 10.1002/nau.22523.

●● Enlace al texto completo (gratis o de pago) [1002/nau.22523](http://1002/nau.22523)

**AUTORES / AUTHORS:** - Dijkstra-Eshuis J; Van den Bos TW; Splinter R; Bevers RF; Zonneveld WC; Putter H; Pelger RC; Voorham-van der Zalm PJ

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Leiden University Medical Center, Leiden, The Netherlands.

**RESUMEN / SUMMARY:** - AIMS: Laparoscopic radical prostatectomy (LARP) may cause stress urinary incontinence (SUI). This study reports the effects of preoperative pelvic floor muscle therapy (PFMT) on SUI and quality of life (QoL) in men undergoing LARP. MATERIALS AND METHODS: In this single-center randomized controlled trial, 122 patients undergoing LARP were assigned to an intervention group of PFMT with biofeedback once a week preoperatively, with 4 weeks' follow-up or to a control group receiving standard care. Randomization and allocation to the trial group were carried out by a central computer system. The primary analysis was based on 121 (n = 65; n = 56), comparing SUI rates and QoL in the two groups in a 1-year follow-up. Validated questionnaires, the Pelvic Floor Inventories (PeLFIs), the King's Health Questionnaire (KHQ), the International Prostate Symptom Score (IPSS), a bladder diary, a 24-hr pad test and pelvic floor examination were used. Continence was defined as no leakage at all. All analyses were performed according to intention-to-treat. RESULTS: One hundred twenty-two patients were randomized, 19 patients were excluded from analysis because of early drop-out. There were no significant differences between both groups in the incidence of SUI and QoL based on the KHQ, IPSS, and pad tests (P >= 0.05). In all patients continence was achieved in 77.2% at 1 year postoperatively. CONCLUSIONS: Preoperative PFMT does not appear to be effective in the prevention of SUI and QoL following LARP. Neurourol. Urodynam. © 2013 Wiley Periodicals, Inc.

[31]

**TÍTULO / TITLE:** - Outcome of patients with micropapillary urothelial carcinoma following radical cystectomy: ERBB2 (HER2) amplification identifies patients with poor outcome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mod Pathol. 2013 Nov 1. doi: 10.1038/modpathol.2013.201.

●● Enlace al texto completo (gratis o de pago) [1038/modpathol.2013.201](#)

**AUTORES / AUTHORS:** - Schneider SA; Sukov WR; Frank I; Boorjian SA; Costello BA; Tarrell RF; Thapa P; Houston Thompson R; Tollefson MK; Jeffrey Karnes R; Chevillie JC

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Mayo Clinic, Rochester, MN, USA.

**RESUMEN / SUMMARY:** - Micropapillary urothelial carcinoma exhibits amplification of the human epidermal growth factor receptor, ERBB2(HER2), and overexpression of the ERBB2 protein product. The clinical significance of this has yet to be established. The objective of this study was to examine ERBB2 amplification and protein expression in micropapillary urothelial carcinoma and stage-matched typical urothelial carcinoma treated by radical cystectomy to assess the frequency of amplification and protein expression, and to determine the association with cancer-specific survival. Pathologic material and data from patients undergoing cystectomy at Mayo Clinic between 1980 and 2008 were reviewed. ERBB2 amplification by fluorescence in situ hybridization (FISH) and protein expression by immunohistochemistry were assessed. Univariate and multivariate Cox proportional hazards regression models were used to evaluate for associations of ERBB2 amplification and protein expression with survival. ERBB2 amplification was identified in 9 (15%) of 61 micropapillary carcinomas compared with 9 (9%) of 100 urothelial carcinomas. In patients with micropapillary carcinoma, ERBB2 amplification was associated with a nearly threefold increased risk of cancer death. ERBB2 amplification (hazard ratio 4.3; P=0.0008) remained associated with an increased risk of death from bladder cancer among patients with micropapillary urothelial carcinoma on multivariate analysis. The association of cancer-specific survival and ERBB2 amplification was not seen in patients with urothelial carcinoma. ERBB2 immunohistochemistry correlated with ERBB2 amplification but there was no association of ERBB2 protein expression and survival. ERBB2 amplification is more frequent in micropapillary urothelial carcinoma than typical urothelial carcinoma, and patients with micropapillary carcinoma who have ERBB2 amplification have worse cancer-specific survival than those who do not. Identification of ERBB2 amplification in micropapillary carcinoma could provide important prognostic information and possibly provide a role for ERBB2 targeted therapy. Modern Pathology advance online publication, 1 November 2013; doi:10.1038/modpathol.2013.201.

[32]

**TÍTULO / TITLE:** - Re: Impact of Cabazitaxel on 2-Year Survival and Palliation of Tumour-Related Pain in Men with Metastatic Castration-Resistant Prostate Cancer Treated in the TROPIC Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2094. doi: 10.1016/j.juro.2013.08.103. Epub 2013 Sep 7.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.103](#)

**AUTORES / AUTHORS:** - Taneja SS

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[33]

**TÍTULO / TITLE:** - Predicting Risk of Bladder Cancer Using Clinical and Demographic Information from Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial Participants.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov 27.

●● [Enlace al texto completo \(gratis o de pago\) 1158/1055-9965.EPI-13-0632](#)

**AUTORES / AUTHORS:** - Mir MC; Stephenson AJ; Grubb RL 3<sup>rd</sup>; Black A; Kibel AS; Izmirlian G

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Center for Urologic Oncology, Glickman Urological & Kidney Institute, Cleveland Clinic, Cleveland, Ohio; Division of Urologic Surgery, Washington University School of Medicine, St. Louis, Missouri; Divisions of Cancer Epidemiology and Genetics and Cancer Prevention, National Cancer Institute, Bethesda, Maryland; and Division of Urology, Brigham and Women's Hospital, Harvard University Medical School, Boston, Massachusetts.

**RESUMEN / SUMMARY:** - BACKGROUND: Effective screening and prevention strategies for bladder cancer require accurate risk stratification models. We developed models to predict the risk of bladder cancer based on clinical and sociodemographic data on participants in the Prostate, Lung, Colorectal, and Ovarian Cancer (PLCO) screening trial. METHODS: Baseline clinical and sociodemographic data were obtained from 149,542 PLCO participants, ages 55 to 74 years, without a prior history of bladder cancer. Cox proportional hazards models were used to predict the risk of all bladder cancers (ABC) and of high-grade bladder cancers (HGBC) from baseline information. We used the HGBC risk model to design a hypothetical bladder cancer mortality prevention trial. RESULTS: Over a median follow-up of 12 years, 1,124 men and 259 women developed bladder cancer (including 392 and 72 with HGBC, respectively). The incidence in men and in women was 133.6 and 29.6 cases per 100,000 person-years, respectively. Nomograms constructed for predicting the risk of ABC and HGBC had c-indices of 0.746 and 0.759, respectively. Age, race, education, smoking (intensity and duration), comorbidity, prostatitis, syphilis, and hormone replacement therapy use were statistically significant predictors in the models. We show that our risk model can be used to design a bladder cancer mortality prevention trial half the size of a trial designed without risk stratification. CONCLUSION: Models to predict the risk of ABC and HGBC have been developed and validated. IMPACT: Using the upper 40<sup>th</sup> percentile from the HGBC model, a suitable cohort for a screening or chemoprevention trial could be identified, although the size and follow-up of such a trial would be costly. Cancer Epidemiol Biomarkers Prev; 22(12); 1-9. ©2013 AACR.

[34]

**TÍTULO / TITLE:** - Prostate cancer originating in basal cells progresses to adenocarcinoma propagated by luminal-like cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Proc Natl Acad Sci U S A. 2013 Nov 26.

●● [Enlace al texto completo \(gratis o de pago\) 1073/pnas.1320565110](#)

**AUTORES / AUTHORS:** - Stoyanova T; Cooper AR; Drake JM; Liu X; Armstrong AJ; Pienta KJ; Zhang H; Kohn DB; Huang J; Witte ON; Goldstein AS

**INSTITUCIÓN / INSTITUTION:** - Microbiology, Immunology and Molecular Genetics, Molecular Biology Interdepartmental Ph.D. Program, Departments of Molecular and Medical Pharmacology, Pathology and Laboratory Medicine, Jonsson Comprehensive Cancer Center, David Geffen School of Medicine, Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research, Howard Hughes Medical Institute, and Department of Urology, University of California, Los Angeles, CA 90095.

**RESUMEN / SUMMARY:** - The relationship between the cells that initiate cancer and the cancer stem-like cells that propagate tumors has been poorly defined. In a human prostate tissue transformation model, basal cells expressing the oncogenes Myc and myristoylated AKT can initiate heterogeneous tumors. Tumors contain features of acinar-type adenocarcinoma with elevated eIF4E-driven protein translation and squamous cell carcinoma marked by activated beta-catenin. Lentiviral integration site analysis revealed that alternative histological phenotypes can be clonally derived from a common cell of origin. In advanced disease, adenocarcinoma can be propagated by self-renewing tumor cells with an androgen receptor-low immature luminal phenotype in the absence of basal-like cells. These data indicate that advanced prostate adenocarcinoma initiated in basal cells can be maintained by luminal-like tumor-propagating cells. Determining the cells that maintain human prostate adenocarcinoma and the signaling pathways characterizing these tumor-propagating cells is critical for developing effective therapeutic strategies against this population.

[35]

**TÍTULO / TITLE:** - Use of Statins and the Risk of Death in Patients With Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 4.

- [Enlace al texto completo \(gratis o de pago\) 1200/JCO.2013.49.4757](#)

**AUTORES / AUTHORS:** - Yu O; Eberg M; Benayoun S; Aprikian A; Batist G; Suissa S; Azoulay L

**INSTITUCIÓN / INSTITUTION:** - Oriana Yu, Maria Eberg, Samy Suissa, and Laurent Azoulay, Centre for Clinical Epidemiology, Lady Davis Institute, Jewish General Hospital; Oriana Yu, Jewish General Hospital; Oriana Yu, Armen Aprikian, Gerald Batist, Samy Suissa, and Laurent Azoulay, McGill University; Serge Benayoun, University of Montreal; Armen Aprikian, McGill University Health Centre, McGill University; Gerald Batist and Laurent Azoulay, Segal Cancer Centre, Jewish General Hospital, Montreal, Quebec, Canada.

**RESUMEN / SUMMARY:** - **PURPOSE:** To determine whether the use of statins after prostate cancer diagnosis is associated with a decreased risk of cancer-related mortality and all-cause mortality and to assess whether this association is modified by pre-diagnostic use of statins. **PATIENTS AND METHODS:** A cohort of 11,772 men newly diagnosed with nonmetastatic prostate cancer between April 1, 1998, and December 31, 2009, followed until October 1, 2012, was identified using a large population-based electronic database from the United Kingdom. Time-dependent Cox proportional hazards models were used to estimate adjusted hazard ratios (HRs) with 95% CIs of mortality outcomes associated with postdiagnostic use of statins, lagged by

1 year to account for latency considerations and to minimize reverse causality, and considering effect modification by prediagnostic use of statins. RESULTS: During a mean follow-up time of 4.4 years (standard deviation, 2.9 years), 3,499 deaths occurred, including 1,791 from prostate cancer. Postdiagnostic use of statins was associated with a decreased risk of prostate cancer mortality (HR, 0.76; 95% CI, 0.66 to 0.88) and all-cause mortality (HR, 0.86; 95% CI, 0.78 to 0.95). These decreased risks of prostate cancer mortality and all-cause mortality were more pronounced in patients who also used statins before diagnosis (HR, 0.55; 95% CI, 0.41 to 0.74; and HR, 0.66; 95% CI, 0.53 to 0.81, respectively), with weaker effects in patients who initiated the treatment only after diagnosis (HR, 0.82; 95% CI, 0.71 to 0.96; and HR, 0.91; 95% CI, 0.82 to 1.01, respectively). CONCLUSION: Overall, the use of statins after diagnosis was associated with a decreased risk in prostate cancer mortality. However, this effect was stronger in patients who also used statins before diagnosis.

[36]

**TÍTULO / TITLE:** - A phase 1b clinical trial of the multi-targeted tyrosine kinase inhibitor lenvatinib (E7080) in combination with everolimus for treatment of metastatic renal cell carcinoma (RCC).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Chemother Pharmacol. 2013 Nov 5.

●● Enlace al texto completo (gratis o de pago) [1007/s00280-013-2339-y](#)

**AUTORES / AUTHORS:** - Molina AM; Hutson TE; Larkin J; Gold AM; Wood K; Carter D; Motzer R; Michaelson MD

**INSTITUCIÓN / INSTITUTION:** - Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY, 10065, USA, [molinaa@mskcc.org](mailto:molinaa@mskcc.org).

**RESUMEN / SUMMARY:** - PURPOSE: Lenvatinib is an oral multi-targeted tyrosine kinase inhibitor of VEGFR1-3, FGFR1-4, PDGFRbeta, RET, and KIT. Everolimus is an oral mammalian target of rapamycin inhibitor approved for advanced renal cell carcinoma (RCC). This phase 1b study assessed safety, maximum tolerated dose (MTD), and preliminary antitumor activity of lenvatinib plus everolimus in metastatic RCC (mRCC) patients. METHODS: Patients with advanced unresectable or mRCC and Eastern Cooperative Oncology Group performance status 0-1 were eligible (number of prior treatments not restricted). Starting dose was lenvatinib 12 mg once daily with everolimus 5 mg once daily administered continuously in 28-day cycles using a conventional 3 + 3 dose-escalation design. At the MTD, additional patients were enrolled in an expansion cohort. RESULTS: Twenty patients (mean 58.4 years) received lenvatinib [12 mg (n = 7); 18 mg (n = 11); 24 mg (n = 2)] plus everolimus 5 mg. MTD was established as once daily lenvatinib 18 mg plus everolimus 5 mg. The most common treatment-related treatment-emergent adverse events (all dosing cohorts) were fatigue 60 % (Grade  $\geq$ 3: 10 %), mucosal inflammation 50 %, proteinuria (Grade  $\geq$ 3: 15 %), diarrhea (Grade  $\geq$ 3: 10 %), vomiting (Grade  $\geq$ 3: 5 %), hypertension, and nausea, each 40 %. In MTD and lowest-dose cohorts (n = 18), best responses of partial response and stable disease were achieved in 6 (33 %) and 9 (50 %) patients, respectively. CONCLUSIONS: Lenvatinib 18 mg combined with everolimus 5 mg was associated with manageable toxicity consistent with individual agents and no new safety signals. Observed activity warrants further evaluation of the combination in advanced RCC patients.

[37]

**TÍTULO / TITLE:** - Rapidly Growing Hepatic Lesion in a Patient With Renal Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Gastroenterology. 2013 Nov 21. pii: S0016-5085(13)01146-3. doi: 10.1053/j.gastro.2013.08.005.

●● Enlace al texto completo (gratis o de pago) [1053/j.gastro.2013.08.005](#)

**AUTORES / AUTHORS:** - Huang HC; Liao JY; Chang CC

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Imaging, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei, Taiwan.

[38]

**TÍTULO / TITLE:** - CX3CR1-dependent renal macrophage survival promotes Candida control and host survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Invest. 2013 Dec 2;123(12):5035-51. doi: 10.1172/JCI71307. Epub 2013 Nov 1.

●● Enlace al texto completo (gratis o de pago) [1172/JCI71307](#)

**AUTORES / AUTHORS:** - Lionakis MS; Swamydas M; Fischer BG; Plantinga TS; Johnson MD; Jaeger M; Green NM; Masedunskas A; Weigert R; Mikelis C; Wan W; Lee CC; Lim JK; Rivollier A; Yang JC; Laird GM; Wheeler RT; Alexander BD; Perfect JR; Gao JL; Kullberg BJ; Netea MG; Murphy PM

**RESUMEN / SUMMARY:** - Systemic Candida albicans infection causes high morbidity and mortality and is associated with neutropenia; however, the roles of other innate immune cells in pathogenesis are poorly defined. Here, using a mouse model of systemic candidiasis, we found that resident macrophages accumulated in the kidney, the main target organ of infection, and formed direct contacts with the fungus in vivo mainly within the first few hours after infection. Macrophage accumulation and contact with Candida were both markedly reduced in mice lacking chemokine receptor CX3CR1, which was found almost exclusively on resident macrophages in uninfected kidneys. Infected Cx3cr1<sup>-/-</sup> mice uniformly succumbed to Candida-induced renal failure, but exhibited clearance of the fungus in all other organs tested. Renal macrophage deficiency in infected Cx3cr1<sup>-/-</sup> mice was due to reduced macrophage survival, not impaired proliferation, trafficking, or differentiation. In humans, the dysfunctional CX3CR1 allele CX3CR1-M280 was associated with increased risk of systemic candidiasis. Together, these data indicate that CX3CR1-mediated renal resident macrophage survival is a critical innate mechanism of early fungal control that influences host survival in systemic candidiasis.

[39]

**TÍTULO / TITLE:** - Re: A Randomised, Double-Blind Phase III Study of Pazopanib in Patients with Advanced and/or Metastatic Renal Cell Carcinoma: Final Overall Survival Results and Safety Update.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2017-8. doi: 10.1016/j.juro.2013.08.043. Epub 2013 Aug 23.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.043](#)

**AUTORES / AUTHORS:** - Laguna MP

[40]

**TÍTULO / TITLE:** - Similar relationship between the time course of bone mineral density improvement and vertebral fracture risk reduction with denosumab treatment in postmenopausal osteoporosis and prostate cancer patients on androgen deprivation therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Pharmacol. 2013 Nov 11. doi: 10.1002/jcph.228.

●● Enlace al texto completo (gratis o de pago) [1002/jcph.228](#)

**AUTORES / AUTHORS:** - Perez Ruixo JJ; Zheng J; Mandema JW

**INSTITUCIÓN / INSTITUTION:** - Amgen Inc., Thousand Oaks, California, USA.

**RESUMEN / SUMMARY:** - Denosumab has received approval in many countries and indications include treating women with postmenopausal osteoporosis (PMO) at increased or high risk for fracture and men at high risk for fracture receiving androgen deprivation therapy (ADT) for non-metastatic prostate cancer. Increases in total hip bone mineral density (BMD) with denosumab explained a large percentage of new vertebral fracture risk reduction in women with PMO; however, this effect has not been studied in men with prostate cancer receiving ADT. We compared the relationship between the time course of BMD changes and new vertebral fracture risk reduction with denosumab in women with PMO and men with prostate cancer. After adjusting for different baseline hazards, a significant and similar relationship between time course of total hip and lumbar spine BMD changes and new vertebral fracture risk was observed in both patient populations. Time course of total hip BMD changes with denosumab was the best predictor for changes in fracture risk and explained 88% of the new vertebral fracture risk reduction in women with PMO and 91% in men with prostate cancer. Therefore, total hip BMD is a useful surrogate to measure the clinical impact of denosumab on fracture risk reduction in both patient populations.

[41]

**TÍTULO / TITLE:** - Re: Androgen-Deprivation Therapy Alone or with Docetaxel in Non-Castrate Metastatic Prostate Cancer (GETUG-AFU 15): A Randomised, Open-Label, Phase 3 Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2094. doi: 10.1016/j.juro.2013.08.104. Epub 2013 Sep 7.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.104](#)

**AUTORES / AUTHORS:** - Taneja SS

[42]

**TÍTULO / TITLE:** - Validation of the MSKCC and Heng Risk Criteria Models for Predicting Survival in Patients with Metastatic Renal Cell Carcinoma Treated with Sunitinib.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg Oncol. 2013 Dec;20(13):4397-404. doi: 10.1245/s10434-013-3290-1. Epub 2013 Oct 1.

●● Enlace al texto completo (gratis o de pago) [1245/s10434-013-3290-1](#)

**AUTORES / AUTHORS:** - Kwon WA; Cho IC; Yu A; Nam BH; Joung JY; Seo HK; Lee KH; Chung J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Wonkwang University College of Medicine, Iksan, Republic of Korea.

**RESUMEN / SUMMARY:** - PURPOSE: To validate the Memorial Sloan-Kettering Cancer Center (MSKCC) and Heng models with metastatic renal cell carcinoma treated with sunitinib, and to investigate prognostic factors in these patients. METHODS: This study included 106 patients with metastatic renal cell carcinoma who were treated with sunitinib from April 2007 to July 2012 including 35 patients who received systemic treatment before sunitinib and 71 that were naive to systemic treatment. Patients were evaluated using the MSKCC and Heng models, and the significance of several prognostic factors were evaluated. RESULTS: The application of the MSKCC and Heng risk criteria resulted in stratification into 3 groups (favorable, intermediate, and poor risk) with distinctly different overall survival (OS) curves ( $P < 0.001$  and  $P < 0.001$ , respectively), for the pretreated patients ( $P < 0.001$  and  $P < 0.001$ , respectively). The Heng model had slightly better discriminatory ability (chi (2) = 30.82, Harrell's C = 0.6895) than the MSKCC model (chi (2) = 25.13, Harrell's C = 0.6532). Multivariate analysis revealed that the absence of nephrectomy and no hypertension at baseline, along with elevated C-reactive protein levels, were independent risk factors for poorer OS. CONCLUSIONS: The MSKCC and Heng model were both valid models for predicting OS. The no nephrectomy, no hypertension at baseline, and high C-reactive protein levels were independently associated with poorer OS.

[43]

**TÍTULO / TITLE:** - Prevalence of baseline chronic kidney disease in 2,769 Chinese patients with renal cancer: Nephron-sparing treatment is still underutilized.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 13.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1178-0](#)

**AUTORES / AUTHORS:** - Yang KW; Xiong GY; Li XS; Tang Y; Tang Q; Zhang CJ; He ZS; Zhou LQ

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Peking University First Hospital, Institute of Urology, Peking University, National Urological Cancer Center, No. 8 Xishiku St, Xicheng District, Beijing, 100034, China.

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the prevalence of baseline chronic kidney disease (CKD) in a large cohort of patients with renal masses in a single Chinese institution. Estimated glomerular filtration rate (eGFR) and CKD stage are more clinically relevant to predict the risk of morbidity and mortality in patients after nephrectomy. But, sCr reflects renal function poorly. METHODS: We retrospectively identified patients undergoing kidney surgery between January 2002 and June 2012.

eGFR was calculated using the modification of diet in renal disease formulas modified based on Chinese people. CKD stages I-V were defined using the National Kidney Foundation definitions. RESULTS: A total of 2769 patients had adequate data available to calculate a preoperative eGFR (mL/min/1.73m<sup>2</sup>) with renal cancer confirmed by pathology. Of all patients, 97.7 % awaiting surgery at our institution had a “normal” baseline sCr (<=1.4 mg/dL), and 3.2 % of patients had CKD stage III or worse. Of the 401 patients >=70 years old, 16.7 % (67/401) had CKD stage III. CONCLUSION: Many patients with a seemingly normal sCr have CKD stage III or worse, especially in patients over 70 years old. Given the high prevalence of baseline CKD in patients with renal cancer, it is important to preserve renal parenchyma when treating them surgically.

[44]

**TÍTULO / TITLE:** - Opioid requirement, opioid receptor expression, and clinical outcomes in patients with advanced prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Dec 1;119(23):4103-10. doi: 10.1002/cncr.28345. Epub 2013 Sep 16.

●● [Enlace al texto completo \(gratis o de pago\) 1002/cncr.28345](#)

**AUTORES / AUTHORS:** - Zylla D; Gourley BL; Vang D; Jackson S; Boatman S; Lindgren B; Kuskowski MA; Le C; Gupta K; Gupta P

**INSTITUCIÓN / INSTITUTION:** - Division of Hematology/Oncology/Transplantation, Department of Medicine, University of Minnesota, Minneapolis, Minnesota; Hematology/Oncology Section, Department of Medicine, Minneapolis VA Health Care System, Minneapolis, Minnesota.

**RESUMEN / SUMMARY:** - BACKGROUND: Preclinical studies show that opioids stimulate angiogenesis and tumor progression through the mu opioid receptor (MOR). Although MOR is overexpressed in several human malignancies, the effect of chronic opioid requirement on cancer progression or survival has not been examined in humans. METHODS: We performed a retrospective analysis on 113 patients identified in the Minneapolis VA Tumor Registry (test cohort) and 480 patients from the national VA Central Cancer Registry (validation cohort) who had been diagnosed with stage IV prostate cancer between 1995 and 2010 to examine whether MOR expression or opioid requirement is associated with disease progression and survival. All opioids were converted to oral morphine equivalents for comparison. Laser scanning confocal microscopy was used to analyze MOR immunoreactivity in prostate cancer biopsies. The effects of variables on outcomes were analyzed in univariable and multivariable models. RESULTS: In patients with metastatic prostate cancer, MOR expression and opioid requirement were independently associated with inferior progression-free survival (hazard ratio [HR] 1.65, 95% confidence interval [CI] 1.33-2.07, P<.001 and HR 1.08, 95% CI 1.03-1.13, P<.001, respectively) and overall survival (HR 1.55, 95% CI 1.20-1.99, P<.001 and HR 1.05, 95% CI 1.00-1.10, P = .031, respectively). The validation cohort confirmed that increasing opioid requirement was associated with worse overall survival (HR 1.005, 95% CI 1.002-1.008, P = .001). CONCLUSION: Higher MOR expression and greater opioid requirement are associated with shorter progression-free survival and overall survival in patients with metastatic prostate cancer. Nevertheless, clinical practice should not be changed until prospective

randomized trials show that opioid use is associated with inferior clinical outcomes, and that abrogation of the peripheral activities of opioids ameliorates this effect. Cancer 2013;119:4103-4110. ©2013 American Cancer Society.

[45]

**TÍTULO / TITLE:** - Health-Related Quality of Life After Stereotactic Body Radiation Therapy for Localized Prostate Cancer: Results From a Multi-institutional Consortium of Prospective Trials.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Oncol Biol Phys. 2013 Dec 1;87(5):939-45. doi: 10.1016/j.ijrobp.2013.08.019. Epub 2013 Oct 9.

●● Enlace al texto completo (gratis o de pago) [1016/j.ijrobp.2013.08.019](#)

**AUTORES / AUTHORS:** - King CR; Collins S; Fuller D; Wang PC; Kupelian P; Steinberg M; Katz A

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, University of California, Los Angeles, California. Electronic address: [crking@mednet.ucla.edu](mailto:crking@mednet.ucla.edu).

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the early and late health-related quality of life (QOL) outcomes among prostate cancer patients following stereotactic body radiation therapy (SBRT). METHODS AND MATERIALS: Patient self-reported QOL was prospectively measured among 864 patients from phase 2 clinical trials of SBRT for localized prostate cancer. Data from the Expanded Prostate Cancer Index Composite (EPIC) instrument were obtained at baseline and at regular intervals up to 6 years. SBRT delivered a median dose of 36.25 Gy in 4 or 5 fractions. A short course of androgen deprivation therapy was given to 14% of patients. RESULTS: Median follow-up was 3 years and 194 patients remained evaluable at 5 years. A transient decline in the urinary and bowel domains was observed within the first 3 months after SBRT which returned to baseline status or better within 6 months and remained so beyond 5 years. The same pattern was observed among patients with good versus poor baseline function and was independent of the degree of early toxicities. Sexual QOL decline was predominantly observed within the first 9 months, a pattern not altered by the use of androgen deprivation therapy or patient age. CONCLUSION: Long-term outcome demonstrates that prostate SBRT is well tolerated and has little lasting impact on health-related QOL. A transient and modest decline in urinary and bowel QOL during the first few months after SBRT quickly recovers to baseline levels. With a large number of patients evaluable up to 5 years following SBRT, it is unlikely that unexpected late adverse effects will manifest themselves.

[46]

**TÍTULO / TITLE:** - Iron indices and survival in maintenance hemodialysis patients with and without polycystic kidney disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Nov;28(11):2889-98. doi: 10.1093/ndt/gft411.

●● Enlace al texto completo (gratis o de pago) [1093/ndt/gft411](#)

**AUTORES / AUTHORS:** - Hatamizadeh P; Ravel V; Lukowsky LR; Molnar MZ; Moradi H; Harley K; Pahl M; Kovcsdy CP; Kalantar-Zadeh K

**INSTITUCIÓN / INSTITUTION:** - Harold Simmons Center for Kidney Disease Research and Epidemiology, Division of Nephrology and Hypertension, UC Irvine Medical Center, Orange, CA, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Anemia is less prominent in patients with polycystic kidney disease (PKD). Such iron indices as ferritin and transferrin saturation (TSAT) values are used to guide management of anemia in individuals on maintenance hemodialysis (MHD). Optimal levels of correction of anemia and optimal levels of TSAT and ferritin are unclear in chronic kidney disease patients and have not been studied specifically in PKD. METHODS: We studied 2969 MHD patients with and 128 054 patients without PKD from 580 outpatient hemodialysis facilities between July 2001 and June 2006. Using baseline, time-dependent and time-averaged values with unadjusted and multivariable adjusted analysis models, the survival predictabilities of TSAT and ferritin were studied. RESULTS: PKD patients were 58 +/- 13 years old and included 46% women, whereas non-PKD patients were 62 +/- 15 years old and 45% women. In both PKD and non-PKD patients, a time-averaged TSAT between 30 and 40% was associated with the lowest mortality. Time-averaged ferritin between 100 and <800 ng/mL was associated with the lowest mortality in PKD patients, although this range was 500 to <800 ng/mL in non-PKD patients. CONCLUSIONS: In MHD patients with and without PKD, there was a U-shaped relationship between the average TSAT and mortality, and a TSAT of 30-40% was associated with the best survival. However, an average ferritin of 100-800 ng/mL was associated with the best survival in PKD patients, whereas that of non-PKD patients was 500-800 ng/mL. Further studies in PKD and non-PKD patients are necessary to determine whether or not therapeutic attempts to keep TSAT and ferritin levels in these ranges will improve survival.

[47]

**TÍTULO / TITLE:** - Impact of Charlson Comorbidity Index Varies by Age in Patients with Prostate Cancer Treated by Radical Prostatectomy: A Competing Risk Regression Analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg Oncol. 2013 Oct 22.

●● [Enlace al texto completo \(gratis o de pago\) 1245/s10434-013-3326-6](#)

**AUTORES / AUTHORS:** - Lee JY; Lee DH; Cho NH; Rha KH; Choi YD; Hong SJ; Yang SC; Cho KS

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Severance Hospital, Urological Science Institute, Yonsei University College of Medicine, Seoul, Korea.

**RESUMEN / SUMMARY:** - PURPOSE: To investigate the prognostic impact of the Charlson comorbidity index (CCI) on either cancer-specific mortality (CSM) or other-cause mortality (OCM) according to age in patients with prostate cancer (PC) who underwent radical prostatectomy (RP). METHODS: Data from 336 patients who underwent RP for PC between 1992 and 2005 were analyzed. Variables, including the preoperative prostate-specific antigen (PSA), prostate volume, clinical stage, and pathologic stage, were compared across age groups (<65 or >=65 years old). Preexisting comorbidities were evaluated by the CCI, and patients were classified into two CCI score categories (0 or >=1). RESULTS: The median (interquartile range) follow-up period was 96 (85-121) months. Subjects were divided into two subgroups according to age: <65 years (n = 151) or >=65 years (n = 185). There was no

significant difference in PSA, biopsy Gleason sum, body mass index, pathologic stage, or CCI between the two age groups. OCM was significantly associated with the CCI score ( $P = 0.011$ ). Cumulative incidence estimates obtained from competing risk regression analysis indicated that CCI was not associated with CSM ( $P = 0.795$ ) or OCM ( $P = 0.123$ ) in the  $\geq 65$ -year group. However, in men  $< 65$  years, cumulative incidence estimates for OCM were significantly associated with CCI ( $P = 0.036$ ). CONCLUSIONS: CCI was independently associated with OCM after RP, but only in men  $< 65$  years old. CCI was not associated with CSM in either age group. Accordingly, a thorough evaluation of patient's comorbidities is mandatory when considering aggressive surgical treatment, especially in relatively young patients.

[48]

**TÍTULO / TITLE:** - Re: Long-Term Results of Maintenance Treatment of Mitomycin C or Alternating Mitomycin C and Bacillus Calmette-Guerin Instillation Therapy of Patients with Carcinoma In Situ of the Bladder: A Subgroup Analysis of the Prospective Finnbladder 2 Study with a 17-Year Follow-up.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2019. doi: 10.1016/j.juro.2013.08.070. Epub 2013 Aug 30.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.070](http://1016/j.juro.2013.08.070)

**AUTORES / AUTHORS:** - Wood DP

[49]

**TÍTULO / TITLE:** - Primary Retroperitoneal Lymph Node Dissection in Low-stage Testicular Germ Cell Tumors: A Detailed Pathologic Study With Clinical Outcome Analysis With Special Emphasis on Patients Who Did Not Receive Adjuvant Therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Dec;82(6):1341-7. doi: 10.1016/j.urology.2013.04.082. Epub 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.04.082](http://1016/j.urology.2013.04.082)

**AUTORES / AUTHORS:** - Al-Ahmadie HA; Carver BS; Cronin AM; Olgac S; Tickoo SK; Fine SW; Gopalan A; Stasi J; Rabbani F; Bosl GJ; Sheinfeld J; Reuter VE

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Memorial Sloan-Kettering Cancer Center, New York, NY.

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate, in detail, the histopathologic features of metastatic testicular germ cell tumors to retroperitoneal lymph nodes treated with primary retroperitoneal lymph node dissection (RPLND) and correlate the findings with patients' outcomes. MATERIALS AND METHODS: We studied 183 patients with documented pathologic stage II disease with or without elevated serum tumor markers, selected from 453 patients who underwent primary RPLND at our institution from 1989 to 2002. Tumor type(s), size and extent of disease, and amount of tumor necrosis were assessed and correlated with outcome. RESULTS: Embryonal carcinoma was the most common tumor type, present as the only component in 99 cases (54%) and the predominant tumor type ( $> 50\%$ ) in 142 (78%). The number of positive lymph nodes ranged from 1 to 40 from a total of 2-80 lymph nodes examined (median, 28). Extranodal extension (ENE) was identified in 120 cases (66%). Among

73 patients followed up expectantly and with normal serum tumor markers, 19 experienced relapse, the probability of which was higher in patients with more positive nodes, larger metastases, and presence of ENE. However, none of these differences was statistically significant (all  $P > .2$ ). The predominance of embryonal carcinoma and the presence of tumor necrosis were not significantly associated with outcome. CONCLUSION: In this cohort, most patients treated with primary RPLND and with positive lymph nodes also had ENE. We did not identify any variables to be significantly associated with relapse after RPLND in patients managed expectantly. Additional studies with more patients are needed to validate our findings.

[50]

**TÍTULO / TITLE:** - Prostate-specific antigen changes as surrogate for overall survival in men with metastatic castration-resistant prostate cancer treated with second-line chemotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 1;31(31):3944-50. doi: 10.1200/JCO.2013.50.3201. Epub 2013 Oct 7.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2013.50.3201](#)

**AUTORES / AUTHORS:** - Halabi S; Armstrong AJ; Sartor O; de Bono J; Kaplan E; Lin CY; Solomon NC; Small EJ

**INSTITUCIÓN / INSTITUTION:** - Susan Halabi, Andrew J. Armstrong, Ellen Kaplan, Chen-Yen Lin, and Nicole C. Solomon, Duke University, Durham, NC; Oliver Sartor, Tulane University, New Orleans, LA; Johann de Bono, Royal Marsden Hospital, Sutton, United Kingdom; and Eric J. Small, University of California at San Francisco, San Francisco, CA.

**RESUMEN / SUMMARY:** - PURPOSE: Prostate-specific antigen (PSA) kinetics, and more specifically a  $\geq 30\%$  decline in PSA within 3 months after initiation of first-line chemotherapy with docetaxel, are associated with improvement in overall survival (OS) in men with metastatic castration-resistant prostate cancer (mCRPC). The objective of this analysis was to evaluate post-treatment PSA kinetics as surrogates for OS in patients receiving second-line chemotherapy. PATIENTS AND METHODS: Data from a phase III trial of patients with mCRPC randomly assigned to cabazitaxel plus prednisone (C + P) or mitoxantrone plus prednisone were used. PSA decline ( $\geq 30\%$  and  $\geq 50\%$ ), velocity, and rise within the first 3 months of treatment were evaluated as surrogates for OS. The Prentice criteria, proportion of treatment explained (PTE), and meta-analytic approaches were used as measures of surrogacy. RESULTS: The observed hazard ratio (HR) for death for patients treated with C + P was 0.66 (95% CI, 0.55 to 0.79;  $P < .001$ ). Furthermore, a  $\geq 30\%$  decline in PSA was a statistically significant predictor of OS (HR for death, 0.52; 95% CI, 0.43 to 0.64;  $P < .001$ ). Adjusting for treatment effect, the HR for a  $\geq 30\%$  PSA decline was 0.50 (95% CI, 0.40 to 0.62;  $P < .001$ ), but treatment remained statistically significant, thus failing the third Prentice criterion. The PTE for a  $\geq 30\%$  decline in PSA was 0.34 (95% CI, 0.11 to 0.56), indicating a lack of surrogacy for OS. The values of  $R^2$  were  $< 1$ , suggesting that PSA decline was not surrogate for OS. CONCLUSION: Surrogacy for any PSA-based end point could not be demonstrated in this analysis. Thus, the benefits of cabazitaxel in mediating a survival benefit are not fully captured by early PSA changes.

[51]

**TÍTULO / TITLE:** - Advances in prostate cancer treatment.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Rev Drug Discov. 2013 Oct 31;12(11):823-4. doi: 10.1038/nrd4068.

●● Enlace al texto completo (gratis o de pago) [1038/nrd4068](#)

**AUTORES / AUTHORS:** - Trewartha D; Carter K

**INSTITUCIÓN / INSTITUTION:** - GBI Research, Bolton, BL1 2AH, UK.

[52]

**TÍTULO / TITLE:** - Does genotyping of risk-associated single nucleotide polymorphisms improve patient selection for prostate biopsy when combined with a prostate cancer risk calculator?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Nov 22. doi: 10.1002/pros.22757.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22757](#)

**AUTORES / AUTHORS:** - Butoescu V; Ambroise J; Stainier A; Dekairelle AF; Gala JL; Tombal B

**INSTITUCIÓN / INSTITUTION:** - Service d'Urologie, Institut de Recherche Experimentale et Clinique (IREC), Cliniques universitaires Saint Luc, Université catholique de Louvain, Brussels, Belgium.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Genome-wide association studies have identified single nucleotide polymorphisms (SNPs) associated with higher risk of prostate cancer (PCa). This study aimed to evaluate whether published SNPs improve the performance of a clinical risk-calculator in predicting prostate biopsy result. **METHODS:** Three hundred forty-six patients with a previous prostate biopsy (191 positive, 155 negative) were enrolled. After literature search, nine SNPs were selected for their statistically significant association with increased PCa risk. Allelic odds ratios were computed and a new logistic regression model was built integrating the clinical risk score (i.e., prior biopsy results, PSA level, prostate volume, transrectal ultrasound, and digital rectal examination) and a multilocus genetic risk score (MGRS). Areas under the receiver operating characteristic (ROC) curves (AUC) of the clinical score alone versus the integrated clinic-genetic model were compared. The added value of the MGRS was assessed using the Integrated Discrimination Improvement (IDI) and Net Reclassification Improvement (NRI) statistics. **RESULTS:** Predictive performance of the integrated clinico-genetic model (AUC = 0.781) was slightly higher than predictive performance of the clinical score alone (AUC = 0.770). The prediction of PCa was significantly improved with an IDI of 0.015 (P-value = 0.035) and a continuous NRI of 0.403 (P-value < 0.001). **CONCLUSIONS:** The predictive performance of the clinical model was only slightly improved by adding MGRS questioning the real clinical added value with regards to the cost of genetic testing and performance of current inexpensive clinical risk-calculators. Prostate © 2013 Wiley Periodicals, Inc.

[53]

**TÍTULO / TITLE:** - Diagnostic and Predictive Value of Urine PCA3 Gene Expression for the Clinical Management of Patients with Altered Prostatic Specific Antigen.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 4. pii: S0210-4806(13)00302-1. doi: 10.1016/j.acuro.2013.07.009.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.07.009](#)

**AUTORES / AUTHORS:** - Rodon N; Trias I; Verdu M; Roman R; Dominguez A; Calvo M; Banus JM; Ballesta AM; Maestro ML; Puig X

**INSTITUCIÓN / INSTITUTION:** - BIOPAT, Biopatología Molecular, S.L., Grup Assistencia, Barcelona, España. Electronic address: [nrodon@biopat.es](mailto:nrodon@biopat.es).

**RESUMEN / SUMMARY:** - OBJECTIVE: Analyze the impact of the introduction of the study of PCA3 gene in post-prostatic massage urine in the clinical management of patients with PSA altered, evaluating its diagnostic ability and predictive value of tumor aggressiveness. METHODS: Observational, prospective, multicenter study of patients with suspected prostate cancer (PC) candidates for biopsy. We present a series of 670 consecutive samples of urine collected post-prostatic massage for three years in which we determined the <<PCA3 score>> (s-PCA3). Biopsy was only indicated in cases with s-positive PCA3. RESULTS: The s-PCA3 was positive in 43.7% of samples. In the 124 biopsies performed, the incidence of PC or atypical small acinar proliferation was 54%, reaching 68,6% in s-PCA3>=100. Statistically significant relationship between the s-PCA3 and tumor grade was demonstrated. In cases with s-PCA3 between 35 and 50 only 23% of PC were high grade (Gleason>=7), compared to 76.7% in cases with s-PCA3 over 50. There was a statistically significant correlation between s-PCA3 and cylinders affected. Both relationships were confirmed by applying a log-linear model. CONCLUSIONS: The incorporation of PCA3 can avoid the need for biopsies in 54% of patients. s-PCA3 positivity increases the likelihood of a positive biopsy, especially in higher s-PCA3 100 (68.6%). s-PCA3 is also an indicator of tumor aggressiveness and provides essential information in making treatment decisions.

[54]

**TÍTULO / TITLE:** - Re: a phase 2 clinical trial of sequential neoadjuvant chemotherapy with Ifosfamide, Doxorubicin, and gemcitabine followed by Cisplatin, gemcitabine, and Ifosfamide in locally advanced urothelial cancer: final results.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2019. doi: 10.1016/j.juro.2013.08.071. Epub 2013 Aug 30.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.071](#)

**AUTORES / AUTHORS:** - Wood DP

[55]

**TÍTULO / TITLE:** - Renal cell carcinoma in patients with acquired cystic disease of the kidney: Assessment using a combination of T2-weighted, diffusion-weighted, and chemical-shift MRI without the use of contrast material.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Magn Reson Imaging. 2013 Sep 30. doi: 10.1002/jmri.24226.

●● Enlace al texto completo (gratis o de pago) [1002/jmri.24226](#)

**AUTORES / AUTHORS:** - Akita H; Jinzaki M; Akita A; Mikami S; Oya M; Kuribayashi S  
**INSTITUCIÓN / INSTITUTION:** - Department of Diagnostic Radiology, Keio University School of Medicine, Tokyo, Japan.

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the MRI findings of renal cell carcinoma (RCC), including findings on diffusion-weighted images (DWIs) and chemical shift images (CSIs), in patients with acquired cystic disease of the kidney (ACDK) in relation to the histopathologic findings. MATERIALS AND METHODS: Two radiologists retrospectively reviewed the MRI findings of 10 RCCs in seven consecutive patients with ACDK. They evaluated the signal intensities (SIs) and signal homogeneity of the lesions on T2-weighted images, DWIs, and T1-weighted images. Thereafter, they evaluated the cytoplasmic fat in the lesions by CSIs. After image analyses, the MRI findings were correlated with the histopathologic findings. RESULTS: The RCCs tended to show heterogeneous high SIs on T2-weighted images and DWIs. The high SIs on DWIs were mainly attributable to the viable parts, and the heterogeneity was due to the various SIs arising from the intratumoral degenerative components. Unlike the reported findings for hemorrhagic cysts, the RCCs did not show homogeneous high SIs or fluid-iron levels on T1-weighted images. The four lesions, in which the presence of cytoplasmic fat was suggested on CSIs, were clear cell RCCs. CONCLUSION: The MRI findings, including findings on DWIs and CSIs, well reflected the histopathologic findings of RCC in patients with ACDK. J. Magn. Reson. Imaging 2013. © 2013 Wiley Periodicals, Inc.

[56]

**TÍTULO / TITLE:** - Categories of response to first line vascular endothelial growth factor receptor targeted therapy and overall survival in patients with metastatic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Nov 13. pii: S0959-8049(13)00955-6. doi: 10.1016/j.ejca.2013.10.017.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejca.2013.10.017](#)

**AUTORES / AUTHORS:** - Busch J; Seidel C; Goranova I; Erber B; Peters R; Friedersdorff F; Magheli A; Miller K; Grunwald V; Weikert S

**INSTITUCIÓN / INSTITUTION:** - Charite University Medicine Berlin, Department of Urology, Berlin, Germany. Electronic address: [jonas.busch@charite.de](mailto:jonas.busch@charite.de).

**RESUMEN / SUMMARY:** - INTRODUCTION: Sequential use of targeted therapy (TT) has improved overall survival (OS) of patients with metastatic renal cell carcinoma (mRCC). The value of objective response (OR) as compared to stable disease (SD) is unclear. We aimed to investigate OR of first-line TT and its impact on OS. MATERIAL AND METHODS: Retrospective analysis of OS among 331 mRCC patients with a first-line assessment according to RECIST 1.0. Characteristics between objective responders (complete response [CR] or partial remission [PR]), patients with SD and non-responders (progressive disease [PD] and toxicity [Tox]) were compared with the Chi-square test and the Kruskal-Wallis test. Kaplan-Meier analysis of OS and progression-free survival (PFS). Cox model analysis of Predictors of OS. RESULTS: Best response was CR, PR, SD, PD and Tox in 9 (2.7%), 61 (18.4%), 167 (50.5%), 80 (24.2%) and 14 (4.2%) patients respectively resulting in an OR rate of 21%. Median OS in months: CR 63.2; PR 37.6; SD 35.9; PD 14.6; TOX 22.5 (p<0.0001). Median PFS for

responders was 14.8, 11.5 for patients with SD and 2.5 for non-responders ( $p < 0.0001$ ). Similarly median OS was 38.7, 35.9 and 15.5 ( $p < 0.00001$ ). Primary resistance and a first-line PFS  $< 6$  months were the strongest independent predictors of OS. The achievement of OR as compared to SD did not impact OS. CONCLUSIONS: In our cohort of unselected patients OR was not associated with superior OS as compared to SD.

[57]

**TÍTULO / TITLE:** - Urothelial tumors of the urinary bladder in young patients: a clinicopathologic study of 59 cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Pathol Lab Med. 2013 Oct;137(10):1337-41. doi: 10.5858/arpa.2012-0322-OA.

●● Enlace al texto completo (gratis o de pago) [5858/arpa.2012-0322-OA](#)

**AUTORES / AUTHORS:** - Stanton ML; Xiao L; Czerniak BA; Guo CC

**INSTITUCIÓN / INSTITUTION:** - From the Department of Pathology, University of Texas M. D. Anderson Cancer Center, Houston.

**RESUMEN / SUMMARY:** - CONTEXT: Urothelial tumors are rare in young patients. Because of their rarity, the natural history of the disease in young patients remains poorly understood. OBJECTIVE: To understand the pathologic and clinical features of urothelial tumors of the urinary bladder in young patients. DESIGN: We identified 59 young patients with urothelial tumors of the urinary bladder treated at our institution and analyzed the tumors' pathologic features and the patients' clinical outcomes. RESULTS: All patients were 30 years or younger, with a mean age of 23.5 years (range, 4-30). Thirty-eight patients (64%) were male, and 21 (36%) were female. Most tumors were noninvasive, papillary urothelial tumors (49 of 59; 83%), including papillary urothelial neoplasms of low malignant potential (7 of 49; 14%), low-grade papillary urothelial carcinomas (38 of 49; 78%), and high-grade papillary urothelial carcinomas (4 of 49; 8%). Only a few ( $n=10$ ) of the urothelial tumors were invasive, invading the lamina propria ( $n=5$ ; 50%), muscularis propria ( $n=4$ ; 40%), or perivesical soft tissue ( $n=1$ ; 10%). Clinical follow-up information was available for 41 patients (69%), with a mean follow-up time of 77 months. Of 31 patients with noninvasive papillary urothelial tumors, only 1 patient (3%) later developed an invasive urothelial carcinoma and died of the disease, and 30 of these patients (97%) were alive at the end of follow-up, although 10 (32%) had local tumor recurrences. In the 10 patients with invasive urothelial carcinomas, 3 patients (30%) died of the disease and 5 others (50%) were alive with metastases (the other 2 [20%] were alive with no recurrence). CONCLUSION: Urothelial tumors in young patients are mostly noninvasive, papillary carcinomas and have an excellent prognosis; however, a small subset of patients may present with high-grade invasive urothelial carcinomas that result in poor clinical outcomes.

[58]

**TÍTULO / TITLE:** - Anti-3-[18F]FACBC PET-CT and 111In-capromab-pendetide SPECT-CT in Recurrent Prostate Carcinoma: Results of a Prospective Clinical Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 18. pii: S0022-5347(13)05682-6. doi: 10.1016/j.juro.2013.10.065.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.065](http://1016/j.juro.2013.10.065)

**AUTORES / AUTHORS:** - Schuster DM; Nieh PT; Jani AB; Amzat R; Bowman FD; Halkar RK; Master VA; Nye JA; Odewole OA; Osunkoya AO; Savir-Baruch B; Alaei-Taleghani P; Goodman MM

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology and Imaging Sciences, Emory University. Electronic address: [dschust@emory.edu](mailto:dschust@emory.edu).

**RESUMEN / SUMMARY:** - PURPOSE: We prospectively evaluated the amino acid analogue PET radiotracer anti-1-amino-3-[18F]fluorocyclobutane-1-carboxylic acid (anti-3-[18F]FACBC) compared to 111In-capromab-pendetide SPECT-CT in the detection of recurrent prostate carcinoma. MATERIALS AND METHODS: 93 patients met inclusion criteria for this analysis who underwent both anti-3-[18F]FACBC PET-CT and 111In-capromab-pendetide SPECT-CT for suspected recurrent prostate carcinoma within 90 days. Reference standards were applied by a multidisciplinary board and diagnostic performance for the detection of disease was calculated. RESULTS: In the 91/93 patients in whom there was sufficient data for consensus as to presence or absence of prostate/bed disease, the sensitivity of anti-3-[18F]FACBC is 90.2%, specificity 40.0% , accuracy 73.6%, PPV 75.3% and NPV 66.7%, compared to 111In-capromab-pendetide sensitivity of 67.2%, specificity 56.7%, accuracy 63.7%, PPV 75.9% and NPV 45.9%. In the 70/93 patients with consensus as to presence or absence of extraprostatic disease, the sensitivity of anti-3-[18F]FACBC is 55.0%, specificity 96.7%, accuracy 72.9%, PPV 95.7%, and NPV 61.7%, compared with 111In-capromab-pendetide sensitivity of 10.0%, specificity 86.7%, accuracy 42.9%, PPV 50.0%, and NPV 41.9%. Out of 77 index lesions used to prove true positivity, histologic proof was obtained in 74 lesions (96.1%). anti-3-[18F]FACBC identified 14 more true positive prostate bed recurrences (55 vs 41), and 18 more patients with extraprostatic involvement (22 vs 4). anti-3-[18F]FACBC PET-CT correctly upstaged 25.7% (18/70) in whom there was consensus for presence or absence of extraprostatic involvement. CONCLUSIONS: anti-3-[18F]FACBC PET-CT demonstrates better diagnostic performance than 111In-capromab-pendetide SPECT-CT for prostate carcinoma recurrence, detecting significantly more prostatic and extraprostatic disease.

[59]

**TÍTULO / TITLE:** - The Percentage of Core Involved by Cancer Is the Best Predictor of Insignificant Prostate Cancer, According to an Updated Definition (Tumor Volume up to 2.5 cm): Analysis of a Cohort of 210 Consecutive Patients With Low-risk Disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct 23. pii: S0090-4295(13)01082-0. doi: 10.1016/j.urology.2013.07.056.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.07.056](http://1016/j.urology.2013.07.056)

**AUTORES / AUTHORS:** - Antonelli A; Vismara Fugini A; Tardanico R; Giovanessi L; Zambolin T; Simeone C

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Spedali Civili Hospital and University of Brescia, Brescia, Italy. Electronic address: [alxanto@hotmail.com](mailto:alxanto@hotmail.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: To find out which factors could predict the diagnosis of insignificant prostate cancer (ins-PCa) according to a recently updated

definition (overall tumor volume up to 2.5 cm<sup>3</sup>; final Gleason score  $\leq 6$ ; organ-confined disease) on a prostatic biopsy specimen. METHODS: This was a retrospective analysis of 210 patients undergoing radical prostatectomy for a cT1c prostate neoplasm with a biopsy specimen Gleason score of  $\leq 6$ . A logistic regression model was used to assess the differences in the distribution of some possibly predictive factors between the ins-PCa patients, according to the updated definition, and the remaining patients. RESULTS: By applying an updated definition of ins-PCa, the prevalence of this condition increased from 13.3% to 49.5% (104 of 210 patients). The univariate analysis showed a statistically different distribution of the following factors: prostate-specific antigen density, prostate volume, number of cancer-involved cores, and maximum percentage of core involvement by cancer. At the multivariable analysis, the maximum percentage of involvement of the core retained its relevance (27.0% in ins-PCa patients and 43.8% in the remaining patients; hazard ratio, 0.972; P = .046), and a 20% cutoff was detected. CONCLUSION: In a cohort of patients with PCa cT1c and a biopsy specimen Gleason score of  $\leq 6$ , the ins-PCa rate, according to the updated definition, is close to 50%, and the percentage of cancer involvement of the core is the single factor that best predicts this diagnosis.

[60]

**TÍTULO / TITLE:** - African American Men's and Women's Perceptions of Clinical Trials Research: Focusing on Prostate Cancer among a High-Risk Population in the South.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Health Care Poor Underserved. 2013;24(4):1784-800. doi: 10.1353/hpu.2013.0187.

●● Enlace al texto completo (gratis o de pago) [1353/hpu.2013.0187](#)

**AUTORES / AUTHORS:** - Owens OL; Jackson AD; Thomas TL; Friedman DB; Hebert JR

**RESUMEN / SUMMARY:** - While African Americans are at a significantly higher risk for developing certain cancers, they also have low rates of participation in cancer research, particularly clinical trials. This study assessed both African American men's and African American women's (1) knowledge of and participation in cancer-related clinical research and (2) barriers to and motivations for participating in clinical research. Data were collected from a total of 81 participants. Phase I of this research consisted of qualitative focus groups (all 81 participants). Phase II included quantitative pre/post survey data from an education program (56 participants). Findings from the study revealed that African American men and women had poor knowledge about clinical trials and the informed consent process, limited experience in participating in clinical trials, and they feared and mistrusted cancer research. Participants identified incentives, assurance of safety, knowledge and awareness, and benefiting others as motivators to participate in clinical trials research.

[61]

**TÍTULO / TITLE:** - The Effect of VEGF-Targeted Therapy on Biomarker Expression in Sequential Tissue from Patients with Metastatic Clear Cell Renal Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 13.

- Enlace al texto completo (gratuito o de pago) [1158/1078-0432.CCR-13-](#)

1631

**AUTORES / AUTHORS:** - Sharpe K; Stewart GD; Mackay A; Van Neste C; Rofe C; Berney D; Kayani I; Bex A; Wan E; O'Mahony FC; O'Donnell M; Chowdhury S; Doshi R; Ho-Yen C; Gerlinger M; Baker D; Smith N; Davies B; Sahdev A; Boleti E; De Meyer T; Van Criekinge W; Beltran L; Lu YJ; Harrison DJ; Reynolds AR; Powles T

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Barts Cancer Institute, Queen Mary University of London; Experimental Cancer Medicine Centre, University College; The Institute of Cancer Research; Guys and St Thomas' Hospital; The Royal Free Hospital London, London; Edinburgh Urological Cancer Group, University of Edinburgh, Edinburgh; Astra Zeneca, Manchester; School of Medicine, University of St Andrews, Fife, United Kingdom; National Cancer Institute, Amsterdam, the Netherlands; and University of Ghent, Ghent, Belgium.

**RESUMEN / SUMMARY:** - **PURPOSE:** To investigate how biologically relevant markers change in response to antiangiogenic therapy in metastatic clear cell renal cancer (mRCC) and correlate these changes with outcome. **EXPERIMENTAL DESIGN:** The study used sequential tumor tissue and functional imaging (taken at baseline and 12-16 weeks) obtained from three similar phase II studies. All three studies investigated the role of VEGF tyrosine kinase inhibitors (TKI) before planned nephrectomy in untreated mRCC (n = 85). The effect of targeted therapy on ten biomarkers was measured from sequential tissue. Comparative genomic hybridization (CGH) array and DNA methylation profiling (MethylCap-seq) was performed in matched frozen pairs. Biomarker expression was correlated with early progression (progression as best response) and delayed progression (between 12-16 weeks). **RESULTS:** VEGF TKI treatment caused a significant reduction in vessel density (CD31), phospho-S6K expression, PDL-1 expression, and FOXP3 expression (P < 0.05 for each). It also caused a significant increase in cytoplasmic FGF-2, MET receptor expression in vessels, Fuhrman tumor grade, and Ki-67 (P < 0.05 for each). Higher levels of Ki-67 and CD31 were associated with delayed progression (P < 0.05). Multiple samples (n = 5) from the same tumor showed marked heterogeneity of tumor grade, which increased significantly with treatment. Array CGH showed extensive inpatient variability, which did not occur in DNA methylation analysis. **CONCLUSION:** TKI treatment is associated with dynamic changes in relevant biomarkers, despite significant heterogeneity in chromosomal and protein, but not epigenetic expression. Changes to Ki-67 expression and tumor grade indicate that treatment is associated with an increase in the aggressive phenotype of the tumor. Clin Cancer Res; 1-11. ©2013 AACR.

[62]

**TÍTULO / TITLE:** - Health-related quality of life among breast, prostate, and colorectal cancer patients with end-stage disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Qual Life Res. 2013 Nov 1.

- Enlace al texto completo (gratuito o de pago) [1007/s11136-013-0562-y](#)

**AUTORES / AUTHORS:** - Farkkila N; Torvinen S; Roine RP; Sintonen H; Hanninen J; Taari K; Saarto T

**INSTITUCIÓN / INSTITUTION:** - Department of Public Health, Hjelt-Institute, University of Helsinki, Helsinki, Finland, [niilo.farkkila@helsinki.fi](mailto:niilo.farkkila@helsinki.fi).

**RESUMEN / SUMMARY:** - PURPOSE: To explore end-stage breast, prostate, and colorectal cancer patients' health-related quality of life (HRQoL); to compare results obtained by different HRQoL instruments; and to explore factors related to impaired HRQoL. METHODS: A cross-sectional observational study utilized two generic HRQoL instruments, the 15D and the EQ-5D, and a cancer-specific instrument, the EORTC QLQ-C30. Patients were recruited from the Helsinki University Hospital's Department of Oncology and from a local hospice. RESULTS: Of the 114 palliative care patients included in the analysis, 27 had breast cancer, 30 had prostate cancer, and 57 had colorectal cancer. Of these, 28 % died within 3 months after their response, while 32 % died within three to 6 months, and 39 % died more than 6 months after. Utility values varied widely by instrument: the 15D gave the highest utility values and VAS the lowest (15D: 0.74, EQ-5D: 0.59 and VAS: 55). Patients close to death had lower HRQoL scores independently from the instrument used. The EQ-5D showed a pronounced ceiling effect, with 13 % of patients reporting full health, whereas the corresponding figures for the 15D and VAS were 1 and 0 %, respectively. Fatigue was the most common symptom and also predicted impaired HRQoL most significantly. CONCLUSIONS: All instruments were applicable for the evaluation of HRQoL among end-stage cancer patients. Fatigue seemed to be the most significant deteriorating factor, whereas clinical and demographic factors had less of an effect on HRQoL.

[63]

**TÍTULO / TITLE:** - Online Prostate Cancer Screening Decision Aid for At-Risk Men: A Randomized Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Health Psychol. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [1037/a0034405](#)

**AUTORES / AUTHORS:** - Watts KJ; Meiser B; Wakefield CE; Barratt AL; Howard K; Cheah BC; Mann GJ; Lobb EA; Gaff CL; Patel MI

**RESUMEN / SUMMARY:** - Objective: This study examines the efficacy of an online screening decision aid (DA) for men with a family history of prostate cancer. Methods: Unaffected Australian men (40-79 years) with at least one affected relative completed the first online questionnaire, were randomized to read either the tailored DA (intervention) or nontailored information about prostate cancer screening (control), then completed a questionnaire postreading and 12 months later. The primary outcome was decisional conflict regarding prostate specific antigen (PSA) testing. The impact of the DA on longitudinal outcomes was analyzed by using random intercept mixed effects models. Logistic and linear regressions were used to analyze the impact of the DA on screening behavior and decision regret. Stage of decision-making was tested as a moderator for decisional conflict and decision regret. The frequency of online material access was recorded. Results: The DA had no effect on decisional conflict, knowledge, inclination toward PSA testing, accuracy of perceived risk, or screening behavior. However, among men considering PSA testing, those who read the DA had lower decision regret compared with men who read the control materials, beta = 0.34, p < .001, 95% confidence interval (CI) = [.22, .53]. Conclusions: This is the first study to our knowledge to evaluate the uptake and efficacy of an online screening DA among men with a family history of prostate cancer. Men who were undecided about screening at baseline benefitted from the DA, experiencing less regret 12 months later. In relation to

decisional conflict, the control materials may have operated as a less complex and equally informative DA. (PsycINFO Database Record © 2013 APA, all rights reserved).

[64]

**TÍTULO / TITLE:** - Metastatic castration-resistant prostate cancer reveals inpatient similarity and interpatient heterogeneity of therapeutic kinase targets.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Proc Natl Acad Sci U S A. 2013 Nov 18.

●● Enlace al texto completo (gratis o de pago) [1073/pnas.1319948110](#)

**AUTORES / AUTHORS:** - Drake JM; Graham NA; Lee JK; Stoyanova T; Faltermeier CM; Sud S; Titz B; Huang J; Pienta KJ; Graeber TG; Witte ON

**INSTITUCIÓN / INSTITUTION:** - Department of Microbiology, Immunology, and Molecular Genetics, Crump Institute for Molecular Imaging, Department of Molecular and Medical Pharmacology, Division of Hematology and Oncology, Department of Medicine, Molecular Biology Institute, Jonsson Comprehensive Cancer Center, Department of Pathology and Laboratory Medicine, Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research, Institute for Molecular Medicine, California NanoSystems Institute, and Howard Hughes Medical Institute, David Geffen School of Medicine, University of California, Los Angeles, CA 90095.

**RESUMEN / SUMMARY:** - In prostate cancer, multiple metastases from the same patient share similar copy number, mutational status, erythroblast transformation specific (ETS) rearrangements, and methylation patterns supporting their clonal origins. Whether actionable targets such as tyrosine kinases are also similarly expressed and activated in anatomically distinct metastatic lesions of the same patient is not known. We evaluated active kinases using phosphotyrosine peptide enrichment and quantitative mass spectrometry to identify druggable targets in metastatic castration-resistant prostate cancer obtained at rapid autopsy. We identified distinct phosphopeptide patterns in metastatic tissues compared with treatment-naive primary prostate tissue and prostate cancer cell line-derived xenografts. Evaluation of metastatic castration-resistant prostate cancer samples for tyrosine phosphorylation and upstream kinase targets revealed SRC, epidermal growth factor receptor (EGFR), rearranged during transfection (RET), anaplastic lymphoma kinase (ALK), and MAPK1/3 and other activities while exhibiting inpatient similarity and interpatient heterogeneity. Phosphoproteomic analyses and identification of kinase activation states in metastatic castration-resistant prostate cancer patients have allowed for the prioritization of kinases for further clinical evaluation.

[65]

**TÍTULO / TITLE:** - Phase II trial of docetaxel, cisplatin and 5FU chemotherapy in locally advanced and metastatic penis cancer (CRUK/09/001).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 12;109(10):2554-9. doi: 10.1038/bjc.2013.620. Epub 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.620](#)

**AUTORES / AUTHORS:** - Nicholson S; Hall E; Harland SJ; Chester JD; Pickering L; Barber J; Elliott T; Thomson A; Burnett S; Cruickshank C; Carrington B; Waters R; Bahl A

**INSTITUCIÓN / INSTITUTION:** - Imperial College Healthcare NHS Trust, Department of Medical Oncology, Charing Cross Hospital, London W6 8RF, UK.

**RESUMEN / SUMMARY:** - Background: Penis cancer is rare and clinical trial evidence on which to base treatment decisions is limited. Case reports suggest that the combination of docetaxel, cisplatin and 5-fluorouracil (TPF) is highly active in this disease. Methods: Twenty-nine patients with locally advanced or metastatic squamous carcinoma of the penis were recruited into a single-arm phase II trial from nine UK centres. Up to three cycles of chemotherapy were received (docetaxel 75 mg m(-2) day 1, cisplatin 60 mg m(-2) day 1, 5-fluorouracil 750 mg m(-2) per day days 1-5, repeated every 3 weeks). Primary outcome was objective response (assessed by RECIST). Fourteen or more responses in 26 evaluable patients were required to confirm a response rate of 60% or higher (Fleming-A'Hern design), warranting further evaluation. Secondary endpoints included toxicity and survival. Results: 10/26 evaluable patients (38.5%, 95% CI: 20.2-59.4) achieved an objective response. Two patients with locally advanced disease achieved radiological complete remission. 65.5% of patients experienced at least one grade  $\frac{3}{4}$  adverse event. Conclusion: Docetaxel, cisplatin and 5FU did not reach the pre-determined threshold for further research and caused significant toxicity. Our results do not support the routine use of TPF. The observed complete responses support further investigation of combination chemotherapy in the neoadjuvant setting.

[66]

**TÍTULO / TITLE:** - A Prospective, Blinded Comparison of Magnetic Resonance (MR) Imaging-Ultrasound Fusion and Visual Estimation in the Performance of MR-targeted Prostate Biopsy: The PROFUS Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov 8. pii: S0302-2838(13)01186-X. doi: 10.1016/j.eururo.2013.10.048.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.eururo.2013.10.048](#)

**AUTORES / AUTHORS:** - Wysock JS; Rosenkrantz AB; Huang WC; Stifelman MD; Lepor H; Deng FM; Melamed J; Taneja SS

**INSTITUCIÓN / INSTITUTION:** - Division of Urologic Oncology, Department of Urology, New York University Langone Medical Center, New York, NY, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Increasing evidence supports the use of magnetic resonance (MR)-targeted prostate biopsy. The optimal method for such biopsy remains undefined, however. OBJECTIVE: To prospectively compare targeted biopsy outcomes between MR imaging (MRI)-ultrasound fusion and visual targeting. DESIGN, SETTING, AND PARTICIPANTS: From June 2012 to March 2013, prospective targeted biopsy was performed in 125 consecutive men with suspicious regions identified on prebiopsy 3-T MRI consisting of T2-weighted, diffusion-weighted, and dynamic-contrast enhanced sequences. INTERVENTION: Two MRI-ultrasound fusion targeted cores per target were performed by one operator using the ei-Nav\Artemis system. Targets were then blinded, and a second operator took two visually targeted cores and a 12-core biopsy. OUTCOME MEASUREMENTS AND

STATISTICAL ANALYSIS: Biopsy information yield was compared between targeting techniques and to 12-core biopsy. Results were analyzed using the McNemar test. Multivariate analysis was performed using binomial logistic regression. RESULTS AND LIMITATIONS: Among 172 targets, fusion biopsy detected 55 (32.0%) cancers and 35 (20.3%) Gleason sum  $\geq 7$  cancers compared with 46 (26.7%) and 26 (15.1%), respectively, using visual targeting ( $p=0.1374$ ,  $p=0.0523$ ). Fusion biopsy provided informative nonbenign histology in 77 targets compared with 60 by visual ( $p=0.0104$ ). Targeted biopsy detected 75.0% of all clinically significant cancers and 86.4% of Gleason sum  $\geq 7$  cancers detected on standard biopsy. On multivariate analysis, fusion performed best among smaller targets. The study is limited by lack of comparison with whole-gland specimens and sample size. Furthermore, cancer detection on visual targeting is likely higher than in community settings, where experience with this technique may be limited. CONCLUSIONS: Fusion biopsy was more often histologically informative than visual targeting but did not increase cancer detection. A trend toward increased detection with fusion biopsy was observed across all study subsets, suggesting a need for a larger study size. Fusion targeting improved accuracy for smaller lesions. Its use may reduce the learning curve necessary for visual targeting and improve community adoption of MR-targeted biopsy.

[67]

**TÍTULO / TITLE:** - TALEN-engineered AR gene rearrangements reveal endocrine uncoupling of androgen receptor in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Proc Natl Acad Sci U S A. 2013 Oct 22;110(43):17492-7. doi: 10.1073/pnas.1308587110. Epub 2013 Oct 7.

●● [Enlace al texto completo \(gratis o de pago\) 1073/pnas.1308587110](#)

**AUTORES / AUTHORS:** - Nyquist MD; Li Y; Hwang TH; Manlove LS; Vessella RL; Silverstein KA; Voytas DF; Dehm SM

**INSTITUCIÓN / INSTITUTION:** - Masonic Cancer Center, Graduate Program in Molecular, Cellular, and Developmental Biology and Genetics, and Biostatistics and Bioinformatics Core, Masonic Cancer Center, University of Minnesota, Minneapolis, MN 55455.

**RESUMEN / SUMMARY:** - Androgen receptor (AR) target genes direct development and survival of the prostate epithelial lineage, including prostate cancer (PCa). Thus, endocrine therapies that inhibit the AR ligand-binding domain (LBD) are effective in treating PCa. AR transcriptional reactivation is central to resistance, as evidenced by the efficacy of AR retargeting in castration-resistant PCa (CRPC) with next-generation endocrine therapies abiraterone and enzalutamide. However, resistance to abiraterone and enzalutamide limits this efficacy in most men, and PCa remains the second-leading cause of male cancer deaths. Here we show that AR gene rearrangements in CRPC tissues underlie a completely androgen-independent, yet AR-dependent, resistance mechanism. We discovered intragenic AR gene rearrangements in CRPC tissues, which we modeled using transcription activator-like effector nuclease (TALEN)-mediated genome engineering. This modeling revealed that these AR gene rearrangements blocked full-length AR synthesis, but promoted expression of truncated AR variant proteins lacking the AR ligand-binding domain. Furthermore, these AR variant proteins maintained the constitutive activity of the AR transcriptional program

and a CRPC growth phenotype independent of full-length AR or androgens. These findings demonstrate that AR gene rearrangements are a unique resistance mechanism by which AR transcriptional activity can be uncoupled from endocrine regulation in CRPC.

[68]

**TÍTULO / TITLE:** - A pilot randomized control trial to evaluate pelvic floor muscle training for urinary incontinence among gynecologic cancer survivors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Gynecol Oncol. 2013 Oct 29. pii: S0090-8258(13)01273-0. doi: 10.1016/j.ygyno.2013.10.024.

●● Enlace al texto completo (gratis o de pago) [1016/j.ygyno.2013.10.024](#)

**AUTORES / AUTHORS:** - Rutledge TL; Rogers R; Lee SJ; Muller CY

**INSTITUCIÓN / INSTITUTION:** - Department of Obstetrics and Gynecology, University of New Mexico Health Sciences Center, Albuquerque, NM, USA. Electronic address: [trutledge@salud.unm.edu](mailto:trutledge@salud.unm.edu).

**RESUMEN / SUMMARY:** - **OBJECTIVES:** We previously reported high rates of urinary incontinence among gynecologic cancer survivors and aimed to evaluate the effectiveness of a simple intervention for treatment of urinary incontinence in this population. **METHODS:** We recruited 40 gynecologic cancer survivors who reported urinary incontinence on a validated questionnaire. Women were randomized to either pelvic floor muscle training/behavioral therapy (treatment group) or usual care (control group). The primary outcome measure, assessed at 12 weeks post intervention, was a 40% difference in the validated Patient Global Impression of Improvement (PGI-I) score. Fisher's exact test was used to identify differences between groups for frequency data; two-sample t-test was conducted for continuous measurements. **RESULTS:** Mean age of this cohort was 57 (range: 37-79). The majority of the survivors had uterine cancer (60%), 18% had received radiation therapy, 95% had received surgical therapy, and 35% had received chemotherapy. At three months, 80% of the treatment and 40% of the control group reported that their urinary incontinence was "much better" or "very much better" as evaluated by the Patient Global Impression of Improvement scale ( $p=0.02$ ). Brink's scores were significantly improved in the treatment group as compared to those of the controls ( $p<0.0001$ ). Treatment group adherence was high; the treatment group performed exercises with an average of 22 days/month. **CONCLUSIONS:** Urinary incontinence negatively affects quality of life, and despite a high prevalence among gynecologic cancer survivors, it is often under-assessed and undertreated. We found a simple intervention that included pelvic floor muscle training and behavioral therapy, which significantly improved cancer survivor's urinary incontinence.

[69]

**TÍTULO / TITLE:** - A Risk-adapted Study of Cisplatin and Etoposide, with or without Ifosfamide, in Patients with Metastatic Seminoma: Results of the GETUG S99 Multicenter Prospective Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Sep 13. pii: S0302-2838(13)00991-3. doi: 10.1016/j.eururo.2013.09.004.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.004](http://1016/j.eururo.2013.09.004)

**AUTORES / AUTHORS:** - Fizazi K; Delva R; Caty A; Chevreau C; Kerbrat P; Rolland F; Priou F; Geoffrois L; Rixe O; Beuzeboc P; Malhaire JP; Culine S; Aubelle MS; Laplanche A

**INSTITUCIÓN / INSTITUTION:** - Department of Cancer Medicine, Institut Gustave Roussy, Villejuif, France. Electronic address: [fizazi@igr.fr](mailto:fizazi@igr.fr).

**RESUMEN / SUMMARY:** - **BACKGROUND:** Whether patients with good prognosis and intermediate/poor prognosis advanced seminoma should be treated differently has not been defined. **OBJECTIVE:** To assess a risk-adapted chemotherapy regimen in patients with advanced seminoma. **DESIGN, SETTING, AND PARTICIPANTS:** A total of 132 patients were included in this prospective study. Patients with a good prognosis according to the International Germ Cell Cancer Collaboration Group (IGCCCG) were treated with four cycles of cisplatin-etoposide (EP). Patients with an intermediate prognosis according to the IGCCCG (or a poor prognosis according to the Medical Research Council classification) were treated with four cycles of VIP (EP and ifosfamide) and granulocyte colony-stimulating factor (G-CSF). **OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS:** Survival curves were estimated using the Kaplan-Meier method. **RESULTS AND LIMITATIONS:** The median follow-up was 4.5 yr (range: 0.4-11.6 yr). Among 108 patients (82%) with a good prognosis who received EP, grade 3-4 toxicity included neutropenia (47%) and neutropenic fever (12%). Among the 24 patients (18%) with an intermediate/poor prognosis who received VIP plus G-CSF, toxicity included grade 3-4 neutropenia (36%), neutropenic fever (23%), thrombocytopenia (23%), anemia (23%), and a toxicity-related death (n=1; 4%). The 3-yr progression-free survival (PFS) rate was 93% (range: 85-97%) in the good prognosis group and 83% (range: 63-93%) in the intermediate/poor prognosis group (p=0.03 for PFS). The 3-yr overall survival (OS) rate was 99% (range: 92-100%) and 87% (range: 67-95%), respectively (p<0.005 for OS). Only four patients died of seminoma or its treatment. **CONCLUSIONS:** A risk-adapted chemotherapy policy for advanced seminoma yielded an excellent outcome with a 3-yr OS rate of 96%.

[70]

**TÍTULO / TITLE:** - Influence of renal function on long-term graft survival and patient survival in renal transplant recipients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Med Res Opin. 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1185/03007995.2013.855189](http://1185/03007995.2013.855189)

**AUTORES / AUTHORS:** - Smith-Palmer J; Kalsekar A; Valentine W

**INSTITUCIÓN / INSTITUTION:** - Ossian Health Economics and Communications , Basel , Switzerland.

**RESUMEN / SUMMARY:** - **Abstract Objectives:** Renal function post kidney transplantation is an outcome of interest for both clinicians and regulators evaluating immunosuppressive treatments post-transplantation. The current review sought to provide a synopsis of currently available literature examining the relationship between post-transplantation renal function and long-term graft survival and patient survival. **Methods:** A systematic literature review was performed using the PubMed, EMBASE

and Cochrane Library databases. The search strategy was designed based on high level Medical Subject Heading (MeSH) terms and designed to capture studies published in English to 2012 and identified a total of 2683 unique hits; for inclusion studies were required to have >100 patients. Following two rounds of screening, a total of 27 studies were included in the final review (26 of which were identified via the literature review and one study was identified via searches of the reference sections of included studies). Results: The consensus among studies was that lower post-transplantation GFR, in particular 12 month GFR, was consistently and significantly associated with an increased risk for overall graft loss, death-censored graft loss and all-cause mortality in both univariate and multivariate analyses. The magnitude of the association between reduced GFR and outcomes was greater for death-censored graft loss versus overall graft loss and for graft loss in comparison with overall patient mortality. The predictive utility of GFR alone in predicting long-term outcomes was reported to be limited. Conclusions: Lower GFR and greater rates of decline in GFR post-transplantation are associated with an increased risk for graft loss (overall and death-censored) and all-cause mortality; however, the predictive utility of GFR alone in predicting long-term outcomes is limited.

[71]

**TÍTULO / TITLE:** - Abiraterone Acetate in Combination with Prednisone for the Treatment of Patients with Metastatic Castration-Resistant Prostate Cancer: U.S. Food and Drug Administration Drug Approval Summary.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-2134](#)

**AUTORES / AUTHORS:** - Kluetz PG; Ning YM; Maher VE; Zhang L; Tang S; Ghosh D; Aziz R; Palmby T; Pfuma E; Fourie Zirkelbach J; Mehrotra N; Tilley A; Sridhara R; Ibrahim A; Justice R; Pazdur R

**INSTITUCIÓN / INSTITUTION:** - Office of Hematology and Oncology Products, Food and Drug Administration.

**RESUMEN / SUMMARY:** - On December 10, 2012, the U.S. Food and Drug Administration granted full approval for a modified indication for abiraterone acetate (ZYTIGA® Tablets, Janssen Biotech, Inc.) in combination with prednisone for the treatment of patients with metastatic castration-resistant prostate cancer (mCRPC). The approval was based on clinical trial COU-AA-302 which randomly allocated asymptomatic or mildly symptomatic patients with chemotherapy-naïve mCRPC and no visceral metastases to either abiraterone acetate (AA) plus prednisone (N = 546) or placebo plus prednisone (N = 542). The co-primary endpoints were radiographic progression-free survival (rPFS) and overall survival (OS). The median rPFS was 8.3 months in the placebo arm and had not yet been reached in the AA arm [HR 0.43 (95% CI: 0.35, 0.52), p < 0.0001]. A pre-specified interim analysis demonstrated an improvement in OS favoring the AA arm [HR 0.79 (95% CI: 0.66, 0.96)] but did not cross the O'Brien-Fleming boundary for statistical significance. Safety data confirmed the known adverse reaction profile of AA. Full approval was granted based on a large magnitude of effect on rPFS, a favorable trend in OS, and internal consistency across multiple secondary endpoints and exploratory patient-reported pain data. This is the

first drug approval for mCRPC to utilize rPFS as the primary endpoint. Importantly, this approval was granted in the context of a prior statistically significant OS benefit that formed the basis of the original April 28, 2011 approval of AA for patients with mCRPC who had received prior chemotherapy containing docetaxel.

[72]

**TÍTULO / TITLE:** - Enzalutamide for treatment of patients with metastatic castration-resistant prostate cancer who have previously received docetaxel: u.s. Food and drug administration drug approval summary.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 15;19(22):6067-73. doi: 10.1158/1078-0432.CCR-13-1763. Epub 2013 Oct 18.

●● [Enlace al texto completo \(gratis o de pago\) 1158/1078-0432.CCR-13-](#)

[1763](#)

**AUTORES / AUTHORS:** - Ning YM; Pierce W; Maher VE; Karuri S; Tang SH; Chiu HJ; Palmby T; Zirkelbach JF; Marathe D; Mehrotra N; Liu Q; Ghosh D; Cottrell CL; Leighton J; Sridhara R; Ibrahim A; Justice R; Pazdur R

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Office of Hematology and Oncology Products, Office of New Drugs, Office of Biostatistics, Office of Clinical Pharmacology, Office of New Drug Quality Assessment, and Center for Drug Evaluation and Research, U.S. Food and Drug Administration, Silver Spring, Maryland.

**RESUMEN / SUMMARY:** - This article summarizes the regulatory evaluation that led to the full approval of enzalutamide (XTANDI, Medivation Inc.) by the U.S. Food and Drug Administration (FDA) on August 31, 2012, for the treatment of patients with metastatic castration-resistant prostate cancer who have previously received docetaxel. This approval was based on the results of a randomized, placebo-controlled trial which randomly allocated 1,199 patients with mCRPC who had received prior docetaxel to receive either enzalutamide, 160 mg orally once daily (n = 800), or placebo (n = 399). All patients were required to continue androgen deprivation therapy. The primary endpoint was overall survival. At the prespecified interim analysis, a statistically significant improvement in overall survival was demonstrated for the enzalutamide arm compared with the placebo arm [HR = 0.63; 95% confidence interval: 0.53-0.75; P < 0.0001]. The median overall survival durations were 18.4 months and 13.6 months in the enzalutamide and placebo arms, respectively. The most common adverse reactions (>=10%) included asthenia or fatigue, back pain, diarrhea, arthralgia, hot flush, peripheral edema, musculoskeletal pain, headache, and upper respiratory infection. Seizures occurred in 0.9% of patients on enzalutamide compared with no patients on the placebo arm. Overall, the FDA's review and analyses of the submitted data confirmed that enzalutamide had a favorable benefit-risk profile in the study patient population, thus supporting its use for the approved indication. The recommended dose is 160 mg of enzalutamide administered orally once daily. Enzalutamide represents the third product that the FDA has approved in the same disease setting within a period of 2 years. Clin Cancer Res; 19(22); 6067-73. ©2013 AACR.

[73]

**TÍTULO / TITLE:** - Cohort study of insulin glargine and risk of breast, prostate, and colorectal cancer among patients with diabetes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diabetes Care. 2013 Dec;36(12):3953-60. doi: 10.2337/dc13-0140. Epub 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [2337/dc13-0140](#)

**AUTORES / AUTHORS:** - Habel LA; Danforth KN; Quesenberry CP; Capra A; Van Den Eeden SK; Weiss NS; Ferrara A

**INSTITUCIÓN / INSTITUTION:** - Corresponding author: Laurel A. Habel, [laurel.habel@kp.org](mailto:laurel.habel@kp.org).

**RESUMEN / SUMMARY:** - OBJECTIVE To examine whether use of insulin glargine, compared with another long-acting insulin, is associated with risk of breast, prostate, colorectal cancer, or all cancers combined. RESEARCH DESIGN AND METHODS Computerized health records from Kaiser Permanente Northern and Southern California regions starting in 2001 and ending in 2009 were used to conduct a population-based cohort study among patients with diabetes aged  $\geq 18$  years. With use of Cox regression modeling, cancer risk in users of insulin glargine ( $n = 27,418$ ) was compared with cancer risk in users of NPH ( $n = 100,757$ ). RESULTS The cohort had a median follow-up of 3.3 years during which there was a median of 1.2 years of glargine use and 1.4 years of NPH use. Among users of NPH at baseline, there was no clear increase in risk of breast, prostate, colorectal, or all cancers combined associated with switching to glargine. Among those initiating insulin, ever use or  $\geq 2$  years of glargine was not associated with increased risk of prostate or colorectal cancer or all cancers combined. Among initiators, the hazard ratio (HR) for breast cancer associated with ever use of glargine was 1.3 (95% CI 1.0-1.8); the HR for breast cancer associated with use of glargine for  $\geq 2$  years was 1.6 or 1.7 depending on whether glargine users had also used NPH. CONCLUSIONS Results of this study should be viewed cautiously, given the relatively short duration of glargine use to date and the large number of potential associations examined.

[74]

**TÍTULO / TITLE:** - The impact of prior platinum therapy on survival in patients with metastatic urothelial cancer receiving vinflunine.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 12;109(10):2548-53. doi: 10.1038/bjc.2013.617. Epub 2013 Oct 15.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.617](#)

**AUTORES / AUTHORS:** - Harshman LC; Fougeray R; Choueiri TK; Schutz FA; Salhi Y; Rosenberg JE; Bellmunt J

**INSTITUCIÓN / INSTITUTION:** - Bladder Cancer Center at the Lank Center for Genitourinary Oncology, Dana-Farber Cancer Institute/Brigham and Women's Hospital, Harvard Medical School, 450 Brookline Avenue, 1230 DANA, Boston, MA 02215, USA.

**RESUMEN / SUMMARY:** - Background:A phase III trial demonstrated an overall survival advantage with the addition of vinflunine to best supportive care (BSC) in platinum-refractory advanced urothelial cancer. We subsequently examined the impact of an additional 2 years of survival follow-up and evaluated the influence of first-line platinum

therapy on survival. Methods: The 357 eligible patients from the phase III study were categorised into two cohorts depending on prior cisplatin treatment: cisplatin or non-cisplatin. Survival was calculated using the Kaplan-Meier method. Results: The majority had received prior cisplatin (70.3%). Survival was higher in the cisplatin group (HR: 0.76; CI 95% 0.58-0.99; P=0.04) irrespective of treatment arm. Multivariate analysis including known prognostic factors (liver involvement, haemoglobin, performance status) and prior platinum administration did not show an independent effect of cisplatin. Vinflunine reduced the risk of death by 24% in the cisplatin-group (HR: 0.76; CI 95% 0.58-0.99; P=0.04) and by 35% in non-cisplatin patients (HR: 0.65; CI 95% 0.41-1.04; P=0.07). Interpretation: Differences in prognostic factors between patients who can receive prior cisplatin and those who cannot may explain the survival differences in patients who undergo second line therapy. Prior cisplatin administration did not diminish the subsequent benefit of vinflunine over BSC.

[75]

**TÍTULO / TITLE:** - Influence of Anemia on Patient and Graft Survival After Renal Transplantation: Results From the French DIVAT Cohort.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplantation. 2013 Oct 24.

●● [Enlace al texto completo \(gratis o de pago\) 1097/TP.0b013e3182a94a4d](#)

**AUTORES / AUTHORS:** - Garrigue V; Szwarc I; Giral M; Souillou JP; Legendre C; Kreis H; Kessler M; Ladriere M; Kamar N; Rostaing L; Morelon E; Buron F; Daguin P; Mourad G

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**RESUMEN / SUMMARY:** - BACKGROUND AND OBJECTIVES: Contradictory results are reported concerning the influence of anemia on patient and graft survival after renal transplantation. Assuming that level of renal function and anemia are strongly correlated, posttransplantation anemia (PTA) may have a different impact depending on the stage of chronic kidney disease (CKD). METHODS: This study is a retrospective multicenter analysis using the DIVAT French database. The prevalence, risk factors, and influence of 12-month PTA (World Health Organization's definition) on patient and graft survival were analyzed according to CKD stage (Modification of Diet in Renal Disease equation). RESULTS: The prevalence of 12-month PTA in our cohort of 4217 patients was 41.1%. Multivariate analysis demonstrated that worse renal function, donor age, period of transplantation, induction therapy, and mTOR inhibitors were significant risk factors for PTA. Posttransplantation anemia was a significant risk factor

for all-cause mortality in CKD stages 1 to 2T (hazard ratio, 2.39; 95% confidence interval, 1.99-4.40) and 3T (hazard ratio, 1.52; 95% confidence interval, 1.08-2.15) and for cardiovascular mortality only on CKD stages 1T and 2T. In renal transplant recipients with CKD stages 4 to 5T, patient and graft survival were similar in patients with versus without anemia. Graft survival was not influenced by PTA, whatever the CKD stage. CONCLUSIONS: Posttransplantation anemia is associated with decreased patient survival only in CKD stages 1T, 2T, and 3T. Posttransplantation anemia has no influence on graft survival regardless of CKD stage.

[76]

**TÍTULO / TITLE:** - Long-term Survival and Biomarker Correlates of Tasquinimod Efficacy in a Multicenter Randomized Study of Men with Minimally Symptomatic Metastatic Castration-Resistant Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 19.

- Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-1581](#)

**AUTORES / AUTHORS:** - Armstrong AJ; Haggman M; Stadler WM; Gingrich JR; Assikis V; Polikoff J; Damber JE; Belkoff L; Nordle O; Forsberg G; Carducci MA; Pili R

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Duke Cancer Institute and the Duke Prostate Center, Duke University, Durham, North Carolina; University Hospital of Uppsala, Uppsala, Sweden; University of Chicago, Chicago, Illinois; University of Pittsburgh, Pittsburgh, Pennsylvania; Peachtree Hematology Oncology Consultants, Atlanta, Georgia; Kaiser Permanente Medical Group, San Diego, California; Sahlgrenska University Hospital, Gothenburg, Sweden; Urologic Consultants of SE PA, Bala Cynwyd, Pennsylvania; Active Biotech AB, Lund, Sweden; Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore Maryland; Roswell Park Cancer Institute, Buffalo, New York.

**RESUMEN / SUMMARY:** - PURPOSE: Tasquinimod (Active Biotech) is an oral immunomodulatory, anti-angiogenic, and anti-metastatic agent that delayed metastatic disease progression in a randomized placebo-controlled phase II trial in men with metastatic castration-resistant prostate cancer (mCRPC). Here, we report long-term survival with biomarker correlates from this trial. EXPERIMENTAL DESIGN: Two hundred and one (134 tasquinimod and 67 placebo) men with mCRPC were evaluated. Forty-one men randomized to placebo crossed over to tasquinimod. Survival data were collected with a median follow-up time of 37 months. Exploratory biomarker studies at baseline and over time were collected to evaluate potential mechanism-based correlates with tasquinimod efficacy including progression-free survival (PFS) and overall survival (OS). RESULTS: With 111 mortality events, median OS was 33.4 months for tasquinimod versus 30.4 months for placebo overall, and 34.2 versus 27.1 months in men with bone metastases (n = 136), respectively. Multivariable analysis demonstrated an adjusted HR of 0.52 [95% confidence interval (CI), 0.35-0.78; P = 0.001] for PFS and 0.64 (95% CI, 0.42-0.97; P = 0.034) for OS, favoring tasquinimod. Time-to-symptomatic progression was improved with tasquinimod (P = 0.039, HR = 0.42). Toxicities tended to be mild in nature and improved over time. Biomarker analyses suggested a favorable impact on bone alkaline phosphatase and lactate dehydrogenase (LDH) over time and a transient induction of inflammatory biomarkers,

VEGF-A, and thrombospondin-1 levels with tasquinimod. Baseline levels of thrombospondin-1 less than the median were predictive of treatment benefit. CONCLUSIONS: The survival observed in this trial of men with minimally symptomatic mCRPC suggests that the prolongation in PFS with tasquinimod may lead to a survival advantage in this setting, particularly among men with skeletal metastases, and has a favorable risk:benefit ratio. Clin Cancer Res; 1-11. ©2013 AACR.

[77]

**TÍTULO / TITLE:** - Management of adverse events in patients with metastatic renal cell carcinoma treated with sunitinib and clinical outcomes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):5043-50.

**AUTORES / AUTHORS:** - Arakawa-Todo M; Yoshizawa T; Zennami K; Nishikawa G; Kato Y; Kobayashi I; Kajikawa K; Yamada Y; Matsuura K; Tsukiyama I; Saito H; Hasegawa T; Nakamura K; Sumitomo M

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**RESUMEN / SUMMARY:** - Patients with progressive renal cell carcinoma who undergo sunitinib treatment, experience many adverse events (AEs), including thrombopenia and hypertension. Dose reduction or treatment discontinuation due to AEs makes it difficult to control the clinical condition. Therefore, patients' understanding regarding the basics of blood pressure (BP) measurement and how to deal with each AE are particularly important. Here we report whether or not pharmacist instructions help in order to increase patients' awareness of early AE management results in an improvement of treatment outcomes. The present study included 15 patients who were administered sunitinib. From the start of sunitinib treatment, pharmacists continuously provided drug administration guidance to the patients and confirmed their awareness and knowledge regarding AEs, symptom management, and drug adherence. The relative dose intensity (RDI) of 15 patients from week 1 to 24 after sunitinib treatment was calculated. Pharmaceutical interventions significantly improved patients' understanding of BP measurements and reference values, etc. Although the RDI was 67.3%-78.7%, there were no cases of discontinuation of administration or reduction of the dose caused by e.g. hypertension, hand and foot syndrome (HFS) and stomatitis. Pharmaceutical interventions improved patients' awareness of the management of AEs and adherence to sunitinib therapy. As a result, a high RDI was maintained, which may lead to prolonged survival. Therefore, our results suggest that early AE management provided by pharmacists is particularly important to assure the safety and efficacy of sunitinib therapy.

[78]

**TÍTULO / TITLE:** - SMYD3 as an Oncogenic Driver in Prostate Cancer by Stimulation of Androgen Receptor Transcription.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Nov 20;105(22):1719-28. doi: 10.1093/jnci/djt304. Epub 2013 Oct 30.

●● Enlace al texto completo (gratis o de pago) [1093/jnci/djt304](http://1093/jnci/djt304)

**AUTORES / AUTHORS:** - Liu C; Wang C; Wang K; Liu L; Shen Q; Yan K; Sun X; Chen J; Liu J; Ren H; Liu H; Xu Z; Hu S; Xu D; Fan Y

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**RESUMEN / SUMMARY:** - **BACKGROUND:** Androgen receptor (AR) is critical for prostate tumorigenesis and is frequently overexpressed during prostate cancer (PC) progression. However, few studies have addressed the epigenetic regulation of AR expression. **METHODS:** We analyzed SMYD3 expression in human PC with Western blot and immunohistochemistry. SMYD3 expression was knocked down using short hairpin RNA (shRNA) or small interfering RNA (siRNA). Cell proliferation, colony formation, and apoptosis analyses and xenograft transplantation were performed to evaluate the impact of SMYD3 depletion on PC cells. AR expression and promoter activity were determined using real-time quantitative polymerase chain reaction, western blot, and luciferase reporter assay. AR promoter association with Sp1, SMYD3, and histone modifications was assessed by chromatin immunoprecipitation. Differences in AR mRNA abundance and promoter activity were analyzed using Wilcoxon signed-rank tests, SMYD3 expression was analyzed using with Mann-Whitney U tests for unpaired samples, and tumor weight was analyzed with Student t test. All statistical tests were two-sided. **RESULTS:** The upregulation of SMYD3 protein expression was observed in seven of eight prostate tumor specimens, compared with matched normal tissues. Immunohistochemical analysis showed a strong SMYD3 staining in the nuclei of PC tissues in eight of 25 (32%) cases and in the cytoplasm in 23 out of 25 (92%) cases, whereas benign prostate tissue exhibited weak immunostaining. Depletion of SMYD3 by siRNA or shRNA inhibited PC cell proliferation (72 hours relative to 24 hours: control shRNA vs SMYD3 shRNA 1: mean fold change = 2.76 vs 1.68; difference = 1.08; 95% confidence interval = 0.78 to 1.38, P < .001), colony formation, cell migration, invasion, and xenograft tumor formation. Two functional SMYD3-binding motifs were identified in the AR promoter region. **CONCLUSIONS:** SMYD3 promotes prostate tumorigenesis and mediates epigenetic upregulation of AR expression.

[79]

**TÍTULO / TITLE:** - Generation of Prostate Tumor-Initiating Cells Is Associated with Elevation of Reactive Oxygen Species and IL-6/STAT3 Signaling.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Res. 2013 Dec 1;73(23):7090-100. doi: 10.1158/0008-5472.CAN-13-1560. Epub 2013 Oct 7.

- Enlace al texto completo (gratis o de pago) [1158/0008-5472.CAN-13-1560](https://doi.org/10.1158/0008-5472.CAN-13-1560)

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**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: The Gade Institute, Broegelmann Research Laboratory, Department of Clinical Science, Department of Medicine, University of Bergen; Departments of Microbiology and Pathology, Center for Medical Genetics and Molecular Medicine, Haukeland University Hospital; KinN Therapeutics AS, Bergen, Norway; College of Pharmacy, Second Military Medical University, Shanghai, PR China; Institute of Pathology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany; Zhejiang-California International NanoSystems Institute, Zhejiang University, Hangzhou, PR China; Swedish Medical Center; and Department of Urology, University of Washington, Seattle, Washington.

**RESUMEN / SUMMARY:** - How prostate cancer is initiated remains a topic of debate. In an effort to establish a human model of prostate carcinogenesis, we adapted premalignant human prostate EPT2-D5 cells to protein-free medium to generate numerous tight prostate spheres (D5HS) in monolayer culture. In contrast to EPT2-D5 cells, the newly generated D5HS efficiently formed large subcutaneous tumors and subsequent metastases in vivo, showing the tumorigenicity of D5HS spheres. A striking production of interleukin (IL)-6 mRNA and protein was found in D5HS cells. The essential roles of IL-6 and the downstream STAT3 signaling in D5HS tumor sphere formation were confirmed by neutralizing antibody, chemical inhibitors, and fluorescent pathway reporter. In addition, elevated reactive oxygen species (ROS) produced upon protein depletion was required for the activation of IL-6/STAT3 in D5HS. Importantly, a positive feedback loop was found between ROS and IL-6 during tumor sphere formation. The association of ROS/IL-6/STAT3 to the carcinogenesis of human prostate cells was further examined in xenograft tumors and verified by limiting dilution implantations. Collectively, we have for the first time established human prostate tumor-initiating cells based on physiologic adaptation. The intrinsic association of ROS and IL-6/STAT3 signaling in human prostate carcinogenesis shed new light on this relationship and define therapeutic targets in this setting. *Cancer Res*; 73(23); 7090-100. ©2013 AACR.

[80]

**TÍTULO / TITLE:** - Radiation-induced acid ceramidase confers prostate cancer resistance and tumor relapse.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *J Clin Invest*. 2013 Oct 1;123(10):4344-58. doi: 10.1172/JCI64791. Epub 2013 Sep 16.

- Enlace al texto completo (gratis o de pago) [1172/JCI64791](https://doi.org/10.1172/JCI64791)

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**RESUMEN / SUMMARY:** - Escape of prostate cancer (PCa) cells from ionizing radiation-induced (IR-induced) killing leads to disease progression and cancer relapse. The influence of sphingolipids, such as ceramide and its metabolite sphingosine 1-

phosphate, on signal transduction pathways under cell stress is important to survival adaptation responses. In this study, we demonstrate that ceramide-deacylating enzyme acid ceramidase (AC) was preferentially upregulated in irradiated PCa cells. Radiation-induced AC gene transactivation by activator protein 1 (AP-1) binding on the proximal promoter was sensitive to inhibition of de novo ceramide biosynthesis, as demonstrated by promoter reporter and ChIP-qPCR analyses. Our data indicate that a protective feedback mechanism mitigates the apoptotic effect of IR-induced ceramide generation. We found that deregulation of c-Jun induced marked radiosensitization in vivo and in vitro, which was rescued by ectopic AC overexpression. AC overexpression in PCa clonogens that survived a fractionated 80-Gy IR course was associated with increased radioresistance and proliferation, suggesting a role for AC in radiotherapy failure and relapse. Immunohistochemical analysis of human PCa tissues revealed higher levels of AC after radiotherapy failure than those in therapy-naive PCa, prostatic intraepithelial neoplasia, or benign tissues. Addition of an AC inhibitor to an animal model of xenograft irradiation produced radiosensitization and prevention of relapse. These data indicate that AC is a potentially tractable target for adjuvant radiotherapy.

[81]

**TÍTULO / TITLE:** - Information needs of early-stage prostate cancer patients: within- and between-group agreement of patients and health professionals.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Support Care Cancer. 2013 Nov 28.

•• Enlace al texto completo (gratis o de pago) [1007/s00520-013-2052-8](#)

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**RESUMEN / SUMMARY:** - PURPOSE: The aims of this study were to analyze agreement on information needs within a group of early-stage prostate cancer patients and to compare information preferences of patients with the view of health-care professionals about patients' needs. METHODS: Sample consists of patients (n = 128) and six subgroups of health-care professionals (urologists, n = 32; nurses, n = 95; radiotherapy technologists (RTTs), n = 36; medical oncologists, n = 19; radiation oncologists, n = 12; general practitioners (GPs), n = 10). Information needs have been assessed with 92 questions concerning prostate cancer and its treatment. Respondents judged the importance of addressing each question. Within- and between-group agreements of patients and health-care professional groups were estimated with raw agreement indices as well as chance-corrected Kappa and Gwet's AC1 measures. Finally, group-specific core items rated with high importance as well as high agreement were defined. RESULTS: Patients rated on average (median) half, i.e., 51 out of 92 items as essential (interquartile range (IQR) = 36-66), 26 items as desired (IQR = 14-38), and 10 items as avoidable (IQR = 2-22). Within-group agreement on the presented information topics is modest for any participating group (AC1patients = 0.319; AC1professionals = 0.295-0.398). Agreement between patients and professionals is low too (AC1 = 0.282-0.329). Defining group-specific core sets of information topics results in 51 items being part of at least one core set. Concordance

of the item core sets of patients and professionals is moderate with kappa = 0.38-0.66, sensitivity of professionals' core sets for patients' preferences varies between 56 and 74 %. CONCLUSIONS: Results emphasize the need for dialogue between doctor/professional and patient in identifying the information needed by individual patients and support the importance of shared decision making.

[82]

**TÍTULO / TITLE:** - Significance of Urinary Tract Involvement in Patients Treated with Cytoreductive Surgery (CRS) and Hyperthermic Intraperitoneal Chemotherapy (HIPEC).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg Oncol. 2013 Nov 12.

●● [Enlace al texto completo \(gratis o de pago\) 1245/s10434-013-3354-2](#)

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**RESUMEN / SUMMARY:** - BACKGROUND: Urinary tract involvement in patients with peritoneal surface disease treated with cytoreductive surgery (CRS) and hyperthermic intraperitoneal chemotherapy (HIPEC) often requires complex urologic resections and reconstruction to achieve optimal cytoreduction. The impact of these combined procedures on surgical outcomes is not well defined. METHODS: A prospective database of CRS/HIPEC procedures was analyzed retrospectively. Type of malignancy, performance status, resection status, hospital and intensive care unit stay, morbidity, mortality, and overall survival were reviewed. RESULTS: A total of 864 patients underwent 933 CRS/HIPEC procedures, while 64 % (550) had preoperative ureteral stent placement. A total of 7.3 % had an additional urologic procedure without an increase in 30-day ( $p = 0.4$ ) or 90-day ( $p = 1.0$ ) mortality. Urologic procedures correlated with increased length of operating time ( $p < 0.001$ ), blood loss ( $p < 0.001$ ), and length of hospitalization ( $p = 0.003$ ), yet were not associated with increased overall 30-day major morbidity (grade III/IV,  $p = 0.14$ ). In multivariate analysis, independent predictors of additional urologic procedures were prior surgical score ( $p < 0.001$ ), number of resected organs ( $p = 0.001$ ), and low anterior resection ( $p = 0.03$ ). Long-term survival was not statistically different between patients with and without urologic resection for low-grade appendiceal primary lesions ( $p = 0.23$ ), high-grade appendiceal primary lesions ( $p = 0.40$ ), or colorectal primary lesions ( $p = 0.14$ ). CONCLUSIONS: Urinary tract involvement in patients with peritoneal surface disease does not increase overall surgical morbidity. Patients with urologic procedures demonstrate survival patterns with meaningful prolongation of life. Urologic involvement should not be considered a contraindication for CRS/HIPEC in patients with resectable peritoneal surface disease.

[83]

**TÍTULO / TITLE:** - Treatment and 5-Year Survival in Patients With Nonmetastatic Prostate Cancer: The Norwegian Experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 12. pii: S0090-4295(13)01251-X. doi: 10.1016/j.urology.2013.08.081.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.081](#)

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**RESUMEN / SUMMARY:** - OBJECTIVE: To establish the 5-year overall and prostate cancer-specific survival in 3486 patients with a new diagnosis of nonmetastatic prostate cancer recorded in the Norwegian Prostate Cancer Registry in 2004-2005. METHODS: The eligible patients were  $\leq 75$  years old and had undergone radical prostatectomy (n = 895), high-dose radiotherapy with or without adjuvant hormonal therapy (n = 1339), or no local treatment (n = 1252). Kaplan-Meier estimates, Cox regression analyses, and competing risk methods were used. RESULTS: For all patients, the overall and prostate cancer-specific survival was 89.8% (95% confidence interval 88.8-90.8) and 96.5% (95% confidence interval 95.9-97.1), respectively. Less than 1% of the 76 deaths in patients with low-risk tumors were from prostate cancer. Among the patients with high-risk tumors in the no local treatment group, 48% of the 207 deaths were from prostate cancer compared with 33% of the 81 deaths in the radical prostatectomy and radiotherapy groups (P = .03). On multivariate analysis, local treatment (yes vs no), tumor risk category, and performance status were independently associated with prostate cancer survival, but age was not. No significant differences emerged between the radical prostatectomy and radiotherapy groups. A lack of local treatment and a reduced performance status were significantly associated with reduced prostate cancer-specific survival. CONCLUSION: Although based on only 5 years of observation, we have concluded that patients with low-risk tumors should be informed about the option of active surveillance. Patients with high-risk tumors run a risk of undertreatment if local treatment is not applied. The correct identification of tumor risk categories and comorbidity at the diagnosis of nonmetastatic prostate cancer remains a challenge for clinicians.

[84]

**TÍTULO / TITLE:** - Improved overall survival after implementation of targeted therapy for patients with metastatic renal cell carcinoma: Results from the Danish Renal Cancer Group (DARENCA) study-2.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Nov 8. pii: S0959-8049(13)00948-9. doi: 10.1016/j.ejca.2013.10.010.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejca.2013.10.010](#)

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**RESUMEN / SUMMARY:** - AIM: To evaluate the implementation of targeted therapy on overall survival (OS) in a complete national cohort of patients with metastatic renal cell

carcinoma (mRCC). METHODS: All Danish patients with mRCC referred for first line treatment with immunotherapy, TKIs or mTOR-inhibitors between 2006 and 2010 were included. Baseline and outcome data were collected retrospectively. Prognostic factors were identified using log-rank tests and Cox proportional hazard model. Differences in distributions were tested with the Chi-square test. RESULTS: 1049 patients were referred; 744 patients received first line treatment. From 2006 to 2010 we observed a significant increase in the number of referred patients; a significant increase in treated patients (64% versus 75%,  $P=0.0188$ ); a significant increase in first line targeted therapy (22% versus 75%,  $P<0.0001$ ); a significant increase in second line treatment (20% versus 40%,  $P=0.0104$ ), a significant increased median OS (11.5 versus 17.2 months,  $P=0.0435$ ) whereas survival for untreated patients remained unchanged. Multivariate analysis validated known prognostic factors. Moreover, treatment start years 2008 (HR 0.74, 95% CI, 0.55-0.99;  $P=0.0415$ ), 2009 (HR 0.72, 95% CI, 0.54-0.96;  $P=0.0277$ ) and 2010 (HR 0.63, 95% CI, 0.47-0.86;  $P=0.0035$ ) compared to 2006, and more than two treatment lines received for patients with performance status 0-1 (HR 0.76, 95% CI, 0.58-0.99;  $P=0.0397$ ) and performance status 2-3 (HR 0.19, 95% CI, 0.06-0.60;  $P=0.0051$ ) were significantly associated with longer OS. CONCLUSION: This retrospective study documents that the implementation of targeted therapy has resulted in significantly improved treatment rates and overall survival in a complete national cohort of treated mRCC patients.

[85]

**TÍTULO / TITLE:** - Circulating proteins as potential biomarkers of sunitinib and interferon-alpha efficacy in treatment-naive patients with metastatic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Chemother Pharmacol. 2013 Nov 13.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00280-013-2333-4](#)

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**INSTITUCIÓN / INSTITUTION:** - Pfizer Oncology, 10646 Science Center Drive, La Jolla, San Diego, CA, 92121, USA.

**RESUMEN / SUMMARY:** - PURPOSE: We investigated potential biomarkers of efficacy in a phase III trial of sunitinib versus interferon-alpha (IFN-alpha), first-line in metastatic renal cell carcinoma (mRCC), by analyzing plasma levels of vascular endothelial growth factor (VEGF)-A, VEGF-C, soluble VEGF receptor-3 (sVEGFR-3) and interleukin (IL)-8. METHODS: Seven hundred and fifty mRCC patients were randomized to oral sunitinib 50 mg/day in repeated cycles of a 4-week on/2-week off schedule or IFN-alpha 9 million units subcutaneously thrice weekly. Plasma samples collected from a subset of 63 patients on days 1 and 28 of cycles 1-4 and at end of treatment were analyzed by ELISA. RESULTS: Baseline characteristics of biomarker-evaluated patients in sunitinib (N = 33) and IFN-alpha (N = 30) arms were comparable to their respective intent-to-treat populations. By univariate Cox regression analysis, low baseline soluble protein levels were associated with lower risk of progression/death (all  $P < 0.05$ ): in both treatment arms, baseline VEGF-A and IL-8 were associated with overall survival (OS) and baseline VEGF-C with progression-free survival (PFS); in the sunitinib arm, baseline VEGF-A was associated with PFS and baseline sVEGFR-3 with

PFS and OS; in the IFN-alpha arm, baseline IL-8 was associated with PFS. In multivariate analysis, baseline sVEGFR-3 and IL-8 remained independent predictors of OS in the sunitinib arm, while no independent predictors of outcome remained in the IFN-alpha arm. Pharmacodynamic changes were not associated with PFS or OS for any plasma protein investigated. CONCLUSIONS: Our findings suggest that, in mRCC, baseline VEGF-A and IL-8 may have prognostic value, while baseline sVEGFR-3 may predict sunitinib efficacy.

[86]

**TÍTULO / TITLE:** - Early Results from a United States Trial of Prostatic Artery Embolization in the Treatment of Benign Prostatic Hyperplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Vasc Interv Radiol. 2013 Oct 28. pii: S1051-0443(13)01442-5. doi: 10.1016/j.jvir.2013.09.010.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.jvir.2013.09.010](#)

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**INSTITUCIÓN / INSTITUTION:** - Cardiovascular and Interventional Radiology Department (S.B., Arl.v.B., K.M.S., D.P., K.S.R., Ari.v.B.), Inova Alexandria Hospital, Alexandria.

**RESUMEN / SUMMARY:** - PURPOSE: To report early findings from a prospective United States clinical trial to evaluate the efficacy and safety of prostatic artery embolization (PAE) for benign prostatic hyperplasia (BPH). MATERIALS AND METHODS: From January 2012 to March 2013, 72 patients were screened and 20 patients underwent treatment. Patients were evaluated at baseline and selected intervals (1, 3, and 6 mo) for the following efficacy variables: American Urological Association (AUA) symptom score, quality of life (QOL)-related symptoms, International Index of Erectile Function score, peak urine flow rate, and prostate volume (on magnetic resonance imaging at 6 mo). Complications were monitored and reported per Society of Interventional Radiology guidelines. RESULTS: Embolization was technically successful in 18 of 20 patients (90%); bilateral PAE was successful in 18 of 19 (95%). Unsuccessful embolizations were secondary to atherosclerotic occlusion of prostatic arteries. Clinical success was seen in 95% of patients (19 of 20) at 1 month, with average AUA symptom score improvements of 10.8 points at 1 month ( $P < .0001$ ), 12.1 points at 3 months ( $P = .0003$ ), and 9.8 points at 6 months ( $P = .06$ ). QOL improved at 1 month (1.9 points;  $P = .0002$ ), 3 months (1.9 points;  $P = .003$ ), and 6 months (2.6 points;  $P = .007$ ). Sexual function improved by 34% at 1 month ( $P = .11$ ), 5% at 3 months ( $P = .72$ ), and 16% at 6 months ( $P = .19$ ). Prostate volume at 6 months had decreased 18% ( $n = 5$ ;  $P = .05$ ). No minor or major complications were reported. CONCLUSIONS: Early results from this clinical trial indicate that PAE offers a safe and efficacious treatment option for men with BPH.

[87]

**TÍTULO / TITLE:** - Intraobserver and interobserver variability in computed tomography size and attenuation measurements in patients with renal cell carcinoma receiving antiangiogenic therapy: Implications for alternative response criteria.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Nov 21. doi: 10.1002/cncr.28493.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28493](#)

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**INSTITUCIÓN / INSTITUTION:** - Department of Imaging, Dana-Farber Cancer Institute and Harvard Medical School, Boston, Massachusetts.

**RESUMEN / SUMMARY:** - BACKGROUND: Alternative response criteria have been proposed in patients with metastatic renal cell carcinoma (mRCC) who are receiving vascular endothelial growth factor (VEGF)-targeted therapy, including 10% tumor shrinkage as an indicator of response/outcome. However, to the authors' knowledge, intraobserver and interobserver measurement variability have not been defined in this setting. The objective of the current study was to determine intraobserver and interobserver agreement of computed tomography (CT) size and attenuation measurements to establish reproducible response indicators. METHODS: Seventy-one patients with mRCC with 179 target lesions were enrolled in phase 2 and phase 3 trials of VEGF-targeted therapies and retrospectively studied with Institutional Review Board approval. Two radiologists independently measured the long axis diameter and mean attenuation of target lesions at baseline and on follow-up CT. Concordance correlation coefficients and Bland-Altman plots were used to assess intraobserver and interobserver agreement. RESULTS: High concordance correlation coefficients (range, 0.8602-0.9984) were observed in all types of measurements. The 95% limits of agreement for the percentage change of the sum longest diameter was -7.30% to 7.86% for intraobserver variability, indicating that 10% tumor shrinkage represents a true change in tumor size when measured by a single observer. The 95% limits of interobserver variability were -16.3% to 15.4%. On multivariate analysis, the location of the lesion was found to significantly contribute to interobserver variability (P = .048). The 95% limits of intraobserver agreement for the percentage change in CT attenuation were -18.34% to 16.7%. CONCLUSIONS: In patients with mRCC who are treated with VEGF inhibitors, 10% tumor shrinkage is a reproducible radiologic response indicator when baseline and follow-up studies are measured by a single radiologist. Lesion location contributes significantly to measurement variability and should be considered when selecting target lesions. Cancer 2013. Esta es una cita bibliográfica que va por delante de la publicación en papel. La fecha indicada en la cita provista, NO corresponde con la fecha o la cita bibliográfica de la publicación en papel. La cita bibliográfica definitiva (con el volumen y su paginación) saldrá en 1 ó 2 meses a partir de la fecha de la emisión electrónica-online. \*\*\* This is a bibliographic record ahead of the paper publication. The given date in the bibliographic record does not correspond to the date or the bibliographic citation on the paper publication. The publisher will provide the final bibliographic citation (with the volume, and pagination) within 1 or 2 months from the date the record was published online. © 2013 American Cancer Society.

[88]

**TÍTULO / TITLE:** - Stat bite prostate cancer incidence and mortality rates, 2001-2007.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Nov 6;105(21):1593. doi: 10.1093/jnci/djt329. Epub 2013 Oct 18.

- Enlace al texto completo (gratis o de pago) [1093/jnci/djt329](http://1093/jnci/djt329)

[89]

**TÍTULO / TITLE:** - Predicting Survival of Patients with Node-positive Prostate Cancer Following Multimodal Treatment.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Sep 27. pii: S0302-2838(13)01012-9. doi: 10.1016/j.eururo.2013.09.025.

- Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.025](http://1016/j.eururo.2013.09.025)

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**INSTITUCIÓN / INSTITUTION:** - Department of Urology, San Raffaele Hospital, University Vita-Salute, Milan, Italy.

**RESUMEN / SUMMARY:** - BACKGROUND: According to the TNM staging system, patients with prostate cancer (PCa) with lymph node invasion (LNI) are considered a single-risk group. However, not all LNI patients share the same cancer control outcomes. OBJECTIVE: To develop and internally validate novel nomograms predicting cancer-specific mortality (CSM)-free rate in pN1 patients. DESIGN, SETTING, AND PARTICIPANTS: We evaluated 1107 patients with pN1 PCa treated with radical prostatectomy, pelvic lymph node dissection, and adjuvant therapy at two tertiary care centers between 1988 and 2010. OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: Univariable and multivariable Cox regression models tested the relationship between CSM and patient clinical and pathologic characteristics, which consisted of prostate-specific antigen (PSA) value, pathologic Gleason score, pathologic tumor stage, status of surgical margins, number of positive lymph nodes, and status of adjuvant therapy. A Cox regression coefficient-based nomogram was developed and internally validated. RESULTS AND LIMITATIONS: All 1107 patients received adjuvant hormonal therapy (aHT). Additionally, 35% of patients received adjuvant radiotherapy (aRT). The 10-yr CSM-free rate was 84% in the entire cohort and 87% in patients treated with aRT plus aHT versus 82% in patients treated with aHT alone ( $p=0.08$ ). At multivariable analyses, PSA value, pathologic Gleason score, pathologic tumor stage, surgical margin status, number of positive lymph nodes, and aRT status were statistically significant predictors of CSM (all  $p \leq 0.04$ ). Based on these predictors, nomograms were developed to predict the 10-yr CSM-free rate in the overall patient population and in men with biochemical recurrence. These models showed high discrimination accuracy (79.5-83.3%) and favorable calibration characteristics. These results are limited by their retrospective nature. CONCLUSIONS: Some patients with pN1 PCa have favorable CSM-free rates at 10 yr. We developed and internally validated the first nomograms that allow an accurate prediction of the CSM-free rate in these patients at an individual level.

[90]

**TÍTULO / TITLE:** - Tracking the clonal origin of lethal prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Invest. 2013 Nov 1;123(11):4918-22. doi: 10.1172/JCI70354. Epub 2013 Oct 25.

●● Enlace al texto completo (gratis o de pago) [1172/JCI70354](https://doi.org/10.1172/JCI70354)

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**RESUMEN / SUMMARY:** - Recent controversies surrounding prostate cancer overtreatment emphasize the critical need to delineate the molecular features associated with progression to lethal metastatic disease. Here, we have used whole-genome sequencing and molecular pathological analyses to characterize the lethal cell clone in a patient who died of prostate cancer. We tracked the evolution of the lethal cell clone from the primary cancer to metastases through samples collected during disease progression and at the time of death. Surprisingly, these analyses revealed that the lethal clone arose from a small, relatively low-grade cancer focus in the primary tumor, and not from the bulk, higher-grade primary cancer or from a lymph node metastasis resected at prostatectomy. Despite being limited to one case, these findings highlight the potential importance of developing and implementing molecular prognostic and predictive markers, such as alterations of tumor suppressor proteins PTEN or p53, to augment current pathological evaluation and delineate clonal heterogeneity. Furthermore, this case illustrates the potential need in precision medicine to longitudinally sample metastatic lesions to capture the evolving constellation of alterations during progression. Similar comprehensive studies of additional prostate cancer cases are warranted to understand the extent to which these issues may challenge prostate cancer clinical management.

[91]

**TÍTULO / TITLE:** - Five year outcome of a randomized prospective study comparing bacillus Calmette-Guerin with epirubicin and interferon alpha 2b in patients with T1 bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 11. pii: S0022-5347(13)05899-0. doi: 10.1016/j.juro.2013.11.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.11.005](https://doi.org/10.1016/j.juro.2013.11.005)

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**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Surgical Sciences, University Hospital Uppsala, Sweden. Electronic address: [tammer.hemdan@surgsci.uu.se](mailto:tammer.hemdan@surgsci.uu.se).

**RESUMEN / SUMMARY:** - **PURPOSE:** In a multicenter, prospectively randomized study we evaluated the five-year outcome of bacillus Calmette-Guerin (BCG) alone compared to a combination of epirubicin and interferon alpha 2b in the treatment of patients with T1 bladder cancer. **MATERIAL AND METHODS:** The transurethral resection was followed by a second resection and bladder mapping. Stratification was for grade and cancer in situ. Follow-up entailed regular cystoscopy and cytology during the first 5 years. The end points assessed in this analysis were recurrence-free survival, time to failure of the treatment and progression, cancer-specific survival, and prognostic factors. **RESULTS:** The study recruited 250 eligible patients. The five years recurrence-free survival were 38% in the combination arm and 59% in the BCG arm

(p=0.001). The corresponding rates for the other endpoints were not significantly different; free of - progression 78 and 77%, - treatment failure 75 and 75% and cancer-specific survival 90 and 92%. The type of treatment, size and tumour status at second resection were independent variables associated with recurrence. Concomitant carcinoma in situ was not predictive of failure of BCG therapy. Independent factor for treatment failure was remaining T1 stage at second resection. CONCLUSIONS: BCG therapy was more effective than the tested combination. Presently recommended management with second resection and three week maintenance BCG entails a low risk of cancer specific death. More aggressive treatment in patients with infiltrative tumours at second resection might improve these results. In particular, concomitant carcinoma in situ was not a predictive factor for poor outcome after BCG therapy.

[92]

**TÍTULO / TITLE:** - Re: Plasma Phospholipid Fatty Acids and Prostate Cancer Risk in the SELECT Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Dec;64(6):1015-6. doi: 10.1016/j.eururo.2013.09.032.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.032](#)

**AUTORES / AUTHORS:** - Chow K; Murphy DG

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Royal Melbourne Hospital, Melbourne, Australia.

[93]

**TÍTULO / TITLE:** - Cigarette smoking is associated with an increased risk of biochemical disease recurrence, metastasis, castration-resistant prostate cancer, and mortality after radical prostatectomy: Results from the SEARCH database.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Oct 11. doi: 10.1002/cncr.28423.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28423](#)

**AUTORES / AUTHORS:** - Moreira DM; Aronson WJ; Terris MK; Kane CJ; Amling CL; Cooperberg MR; Boffetta P; Freedland SJ

**INSTITUCIÓN / INSTITUTION:** - The Arthur Smith Institute for Urology, North Shore Long Island Jewish Health System, New Hyde Park, New York.

**RESUMEN / SUMMARY:** - BACKGROUND: The current study was conducted to analyze the association between cigarette smoking and metastasis (the primary outcome) as well as time to biochemical disease recurrence (BCR), metastasis, castration-resistant prostate cancer (CRPC), and prostate cancer-specific and overall mortality (secondary outcomes) after radical prostatectomy among men from the Shared Equal Access Regional Cancer Hospital cohort. METHODS: A retrospective analysis was performed of 1450 subjects for whom smoking status was available from preoperative notes. Analysis of baseline characteristics by smoking status was performed using the chi-square and rank sum tests. The association between smoking status and time to the event was analyzed using Kaplan-Meier plots, the log-rank test, and Cox and competing risk models. RESULTS: A total of 549 men (33%) were active smokers and 1121 (67%) were nonsmokers at the time of surgery. Current

smokers were younger and had a lower body mass index, higher prostate-specific antigen level, and more extracapsular extension and seminal vesicle invasion (all  $P < .05$ ). A total of 509 patients, 26 patients, 30 patients, 18 patients, and 217 patients, respectively, experienced BCR, metastasis, CRPC, prostate cancer-related death, and any-cause death over a median follow-up of 62 months, 75 months, 61 months, 78 months, and 78 months, respectively. After adjusting for preoperative features, active smoking was found to be associated with an increased risk of BCR (hazards ratio [HR], 1.25;  $P = .024$ ), metastasis (HR, 2.64;  $P = .026$ ), CRPC (HR, 2.62;  $P = .021$ ), and overall mortality (HR, 2.14;  $P < .001$ ). Similar results were noted after further adjustment for postoperative features, with the exception of BCR (HR, 1.10;  $P = .335$ ), metastasis (HR, 2.51;  $P = .044$ ), CRPC (HR, 2.67;  $P = .015$ ), and death (HR, 2.03;  $P < .001$ ). CONCLUSIONS: Among patients undergoing radical prostatectomy, cigarette smoking was associated with an increased risk of metastasis. In addition, smoking was associated with a higher risk of BCR, CRPC, and overall mortality. If confirmed, these data suggest that smoking is a modifiable risk factor in patients with aggressive prostate cancer. Cancer 2013. © 2013 American Cancer Society.

[94]

**TÍTULO / TITLE:** - Prognostic Impact of Baseline Serum C-Reactive Protein in Metastatic Renal Cell Carcinoma Patients Treated With Sunitinib.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 8. doi: 10.1111/bju.12494.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12494](#)

**AUTORES / AUTHORS:** - Beuselinck B; Vano YA; Oudard S; Wolter P; De Smet R; Depoorter L; Teghom C; Karadimou A; Zucman-Rossi J; Debruyne PR; Van Poppel H; Joniau S; Lerut E; Strijbos M; Dumez H; Paridaens R; Van Calster B; Schoffski P

**INSTITUCIÓN / INSTITUTION:** - Department of General Medical Oncology and Laboratory for Experimental Oncology, University Hospitals Leuven, Leuven Cancer Institute, KU Leuven, Herestraat 49, 3000 Leuven, Belgium; Inserm U674 Genomique fonctionnelle des tumeurs solides, Universite Paris-5 Rene Descartes, 27 rue Juliette Dodu, 75010 Paris, France.

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate the impact of baseline serum C-reactive protein (CRP) level on outcome in metastatic renal cell carcinoma (mRCC) patients treated with sunitinib. PATIENTS AND METHODS: We reviewed the charts of mRCC patients who started sunitinib as first targeted treatment between 2005 and 2012 in three hospitals in Belgium and France. Collected data included known prognostic factors for mRCC and anatomical location of metastatic sites, response rate (RR), progression-free survival (PFS) and overall survival (OS). RESULTS: 200 eligible patients were identified by retrospective chart review. Median PFS (mPFS) and median OS (mOS) were 12 and 20 months, respectively. We observed a clear impact of baseline CRP-levels on outcome: mPFS was 25 months in the group with baseline CRP  $<5$  mg/l versus 8 months in the group with baseline CRP  $>5$  mg/l (HR 2.48, 95%CI 1.74-3.59). mOS was 50 versus 12 months respectively (HR 3.17, 2.20-4.68). In the group with baseline CRP  $<5$  mg/l, 61% of patients experienced a partial response (PR) compared to 32% of patients in the group with baseline CRP  $>5$  mg/l (difference = 29%, 95% CI 15-42). When adding baseline CRP (with a log-transformation) to the six variables of the IMDC (International Metastatic RCC

Database Consortium) model in a multivariable Cox regression model, baseline CRP was independently associated with poor PFS (HR for each doubling in CRP level: 1.14, 1.03-1.26;  $p=0.01$ ) and OS (HR: 1.29, 1.16-1.43;  $p<0.0001$ ). Adding baseline CRP to the model increased the c-statistic of PFS at 5 years from 0.63 (0.59-0.68) to 0.69 (0.65-0.73), and the c-statistic of OS at 5 years from 0.65 (0.60-0.69) to 0.70 (0.66-0.74). Patients with elevated baseline CRP-levels have a poor prognosis independent of the IMDC risk group, whereas IMDC favorable risk patients with a low baseline CRP have a very good outcome. CONCLUSION: Baseline serum CRP level is a strong independent parameter linked with RR, PFS and OS in mRCC patients treated with sunitinib.

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[95]

**TÍTULO / TITLE:** - Surgical complications after immediate nephrectomy versus preoperative chemotherapy in non-metastatic Wilms' tumour: Findings from the 1991-2001 United Kingdom Children's Cancer Study Group UKW3 Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pediatr Surg. 2013 Nov;48(11):2181-6. doi: 10.1016/j.jpedsurg.2013.07.001.

●● Enlace al texto completo (gratis o de pago) [1016/j.jpedsurg.2013.07.001](#)

**AUTORES / AUTHORS:** - Powis M; Messahel B; Hobson R; Gornall P; Walker J; Pritchard-Jones K

**INSTITUCIÓN / INSTITUTION:** - Department of Paediatric Surgery, Leeds Teaching Hospitals, Leeds, UK. Electronic address: [mark.powis@leedsth.nhs.uk](mailto:mark.powis@leedsth.nhs.uk).

**RESUMEN / SUMMARY:** - PURPOSE: To compare surgical complication rates after immediate nephrectomy versus delayed nephrectomy following preoperative chemotherapy in children with non-metastatic Wilms' tumour enrolled in UKW3, both in randomised patients and in those for whom the treatment approach was defined by parental or physician choice. METHODS: Records for all patients enrolled into UKW3 were reviewed. Any record of tumour rupture or surgical complication was extracted and comparisons made between the two treatment strategies in both populations of randomised and non-randomised patients. RESULTS: Of 525 children enrolled, 205 patients were randomised to either immediate nephrectomy ( $n=103$ ) or pre-operative chemotherapy followed by delayed nephrectomy ( $n=102$ ). Of the 320 children not randomised, data were available on 189 cases treated with immediate nephrectomy and 103 treated with pre-operative chemotherapy. There were significantly fewer surgical complications in randomised children given pre-operative chemotherapy before surgery compared to children undergoing immediate nephrectomy (1% vs. 20.4%,  $P<0.001$ ); this difference was most marked for tumour rupture (0% vs. 14.6%,  $P<0.001$ ). CONCLUSIONS: Delayed nephrectomy for Wilms' tumour, preceded by pre-operative chemotherapy was associated with fewer surgical complications compared with immediate nephrectomy.

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[96]

**TÍTULO / TITLE:** - Increased expression of CYP24A1 correlates with advanced stages of prostate cancer and can cause resistance to vitamin D3-based therapies.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - FASEB J. 2013 Sep 30.

●● Enlace al texto completo (gratis o de pago) [1096/fj.13-236109](https://doi.org/10.1096/fj.13-236109)

**AUTORES / AUTHORS:** - Tannour-Louet M; Lewis SK; Louet JF; Stewart J; Addai JB; Sahin A; Vangapandu HV; Lewis AL; Dittmar K; Pautler RG; Zhang L; Smith RG; Lamb DJ

**INSTITUCIÓN / INSTITUTION:** - \*Scott Department of Urology, daggerDepartment of Molecular and Cellular Biology, double daggerDepartment of Molecular Physiology and Biophysics, section signDepartment of Neuroscience, parallelDepartment of Radiology, and paragraph signCenter for Reproductive Medicine, Baylor College of Medicine, Houston, Texas, USA;

**RESUMEN / SUMMARY:** - A major limitation of exogenous vitamin D3 administration for the treatment of prostate cancer is the marginal, if any, clinical efficacy. We dissected the basis for the resistance to the vitamin D3 antitumor properties and specifically examined the effect of its major catabolic enzyme, CYP24A1, in prostate cancer. Local CYP24A1 expression levels and the effect of selective modulation were analyzed using tissue microarrays from needle core biopsy specimens and xenograft-bearing mouse models. CYP24A1 mRNA was elevated in malignant human prostate tissues compared to benign lesions. High CYP24A1 protein levels were seen in poorly differentiated and highly advanced stages of prostate cancer and correlated with parallel increase in the tumor proliferation rate. The use of CYP24A1 RNAi enhanced the cytostatic effects of vitamin D3 in human prostate cancer cells. Remarkably, subcutaneous and orthotopic xenografts of prostate cancer cells harboring CYP24A1 shRNA resulted in a drastic reduction in tumor volume when mice were subjected to vitamin D3 supplementation. CYP24A1 may be a predictive marker of vitamin D3 clinical efficacy in patients with advanced prostate cancer. For those with up-regulated CYP24A1, combination therapy with RNAi targeting CYP24A1 could be considered to improve clinical responsiveness to vitamin D3.-Tannour-Louet, M., Lewis, S. K., Louet, J.-F., Stewart, J., Addai, J. B., Sahin, A., Vangapandu, H. V., Lewis, A. L., Dittmar, K., Pautler, R. G., Zhang, L., Smith, R. G., Lamb, D. J. Increased expression of CYP24A1 correlates with advanced stages of prostate cancer and can cause resistance to vitamin D3-based therapies.

[97]

**TÍTULO / TITLE:** - Bladder cancer: No cohesion for cohesin's role.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Rev Cancer. 2013 Dec;13(12):825. doi: 10.1038/nrc3631. Epub 2013 Oct 31.

●● Enlace al texto completo (gratis o de pago) [1038/nrc3631](https://doi.org/10.1038/nrc3631)

**AUTORES / AUTHORS:** - Seton-Rogers S

[98]

**TÍTULO / TITLE:** - Prostate cancer: Understanding why.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nat Rev Cancer. 2013 Nov;13(11):754. doi: 10.1038/nrc3615. Epub 2013 Oct 10.

●● Enlace al texto completo (gratis o de pago) [1038/nrc3615](https://doi.org/10.1038/nrc3615)

**AUTORES / AUTHORS:** - McCarthy N

[99]

**TÍTULO / TITLE:** - Prognostic and therapeutic impact of argininosuccinate synthase-1 control in bladder cancer as monitored longitudinally by PET imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Res. 2013 Nov 27.

●● Enlace al texto completo (gratis o de pago) [1158/0008-5472.CAN-13-1702](#)

**AUTORES / AUTHORS:** - Allen M; Luong P; Hudson C; Leyton J; Delage B; Ghazaly E; Cutts R; Yuan M; Syed N; Lo Nigro C; Lattanzio L; Chmielewska-Kassassir M; Tomlinson I; Roylance R; Whitaker HC; Warren AY; Neal D; Freeza C; Beltran L; Chelala C; Jones LJ; Wu BW; Bomalaski JS; Jackson RC; Lu YJ; Crook T; Lemoine NR; Mather S; Foster J; Sosabowski J; Avril N; Li CF; Szlosarek PW

**INSTITUCIÓN / INSTITUTION:** - Barts Cancer Institute, Queen Mary University of London, Barts and The London School of Medicine.

**RESUMEN / SUMMARY:** - Targeted therapies have yet to have significant impact on the survival of patients with bladder cancer. In this study, we focused on the urea cycle enzyme argininosuccinate synthetase (ASS1) as a therapeutic target in bladder cancer, based on our discovery of the prognostic and functional import of ASS1 in this setting. ASS1 expression status in bladder tumors from 183 Caucasian and 295 Asian patients was analyzed, along with its hypothesized prognostic impact and association with clinicopathological features including tumor size and invasion. Further, the genetics, biology and therapeutic implications of ASS1 loss was investigated in urothelial cancer cells. We detected ASS1 negativity in 40% of bladder cancers, where multivariate analysis indicated worse disease-specific and metastasis-free survival. ASS1 loss secondary to epigenetic silencing was accompanied by increased tumor cell proliferation and invasion, consistent with a tumor suppressor role for ASS1. In developing a treatment approach, we identified a novel targeted antimetabolite strategy to exploit arginine deprivation with pegylated arginine deiminase (ADI-PEG20) as a therapeutic. ADI-PEG20 was synthetically lethal in ASS1-methylated bladder cells and its exposure was associated with a marked reduction in intracellular levels of thymidine, due to both suppression of both uptake and de novo synthesis. We found that thymidine uptake correlated with thymidine kinase-1 protein levels, and that thymidine levels were imageable with [18F]-fluoro-L-thymidine (FLT)-positron emission tomography (PET). In contrast, inhibition of de novo synthesis was linked to decreased expression of thymidylate synthase and dihydrofolate reductase. Notably, inhibition of de novo synthesis was associated with potentiation of ADI-PEG20 activity by the antifolate drug pemetrexed. Taken together, our findings argue that arginine deprivation combined with antifolates warrants clinical investigation in ASS1-negative urothelial and related cancers, using FLT-PET as an early surrogate marker of response.

[100]

**TÍTULO / TITLE:** - Active surveillance for small renal masses diagnosed in elderly or comorbid patients: Looking for the best treatment strategy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 11. pii: S0210-4806(13)00326-4. doi: 10.1016/j.acuro.2013.04.012.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.04.012](https://doi.org/10.1016/j.acuro.2013.04.012)

**AUTORES / AUTHORS:** - Brunocilla E; Borghesi M; Schiavina R; Palmieri F; Perneti R; Monti C; Martorana G

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Bologna, S. Orsola-Malpighi Hospital, Bologna, Italia.

**RESUMEN / SUMMARY:** - INTRODUCTION: Aim of this study is to provide our results after long-term active surveillance (AS) protocol for small renal masses (SRMs), and to report the outcomes of patients who remained in AS compared to those who underwent delayed surgical intervention. PATIENTS AND METHODS: We retrospectively reviewed our database of 58 patients diagnosed with 60 contrast enhancing SRMs suspicious for renal cell carcinoma (RCC). All patients had clinical and radiological follow-up every 6 months. We evaluated the differences between patients who remained on AS and those who underwent surgical delayed intervention. RESULTS: The mean age was 75 years, the mean follow-up was 88.5 months. The median initial tumor size at presentation was 2.6cm, and the median estimated tumor volume was 8.7cm<sup>3</sup>. The median linear growth rate of the cohort was 0.7cm/year, and the median volumetric growth rate was 8.8 cm<sup>3</sup>/year. Death for metastatic disease occurred in 2 patients (3.4%). No correlation was found between initial tumor size and size growth rate. The mean linear and volumetric growth rates of the group of patients who underwent surgery was higher than in those who remained on surveillance (1.9 vs. 0.4cm/year and 16.1 vs. 4.6 cm<sup>3</sup>/year, respectively; P<.001). CONCLUSIONS: Most of SRMs demonstrate to have an indolent course and low metastatic potential. Malignant disease could have faster linear and volumetric growth rates, thus suggesting the need for a delayed surgical intervention. In properly selected patients with low life-expectancy, AS could be a reasonable option in the management of SRMs.

[101]

**TÍTULO / TITLE:** - Preclinical trial of a new dual mTOR inhibitor, MLN0128, using renal cell carcinoma tumorgrafts.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Oct 31. doi: 10.1002/ijc.28579.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28579](https://doi.org/10.1002/ijc.28579)

**AUTORES / AUTHORS:** - Ingels A; Zhao H; Thong AE; Saar M; Valta MP; Nolley R; Santos J; Peehl DM

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Stanford University School of Medicine, Stanford, CA; Department of Urology, Centre Hospitalier Universitaire du Kremlin-Bicetre, Kremlin-Bicetre, France.

**RESUMEN / SUMMARY:** - mTOR is a rational target in renal cell carcinoma (RCC) because of its role in disease progression. However, the effects of temsirolimus, the only first-generation mTOR inhibitor approved by the FDA for first-line treatment of metastatic RCC, on tumor reduction and progression-free survival are minimal. Second-generation mTOR inhibitors have not been evaluated on RCC. We compared the effects of temsirolimus and MLN0128, a potent second-generation mTOR inhibitor, on RCC growth and metastasis using a realistic patient-derived tissue slice graft (TSG) model. TSGs were derived from three fresh primary RCC specimens by subrenal

implantation of precision-cut tissue slices into immunodeficient mice that were randomized and treated with MLN0128, temsirolimus, or placebo. MLN0128 consistently suppressed primary RCC growth, monitored by magnetic resonance imaging (MRI), in three TSG cohorts for up to 2 months. Temsirolimus, in contrast, only transiently inhibited the growth of TSGs in one of two cohorts before resistance developed. In addition, MLN0128 reduced liver metastases, determined by human-specific quantitative polymerase chain reaction, in two TSG cohorts, whereas temsirolimus failed to have any significant impact. Moreover, MLN0128 decreased levels of key components of the two mTOR subpathways including TORC1 targets 4EBP1, p-S6K1, HIF1alpha and MTA1 and the TORC2 target c-Myc, consistent with dual inhibition. Our results demonstrated that MLN0128 is superior to temsirolimus in inhibiting primary RCC growth as well as metastases, lending strong support for further clinical development of dual mTOR inhibitors for RCC treatment.

[102]

**TÍTULO / TITLE:** - The Natural History of Symptoms and Distress for Patients and Families following Cystectomy for Treatment of Muscle-Invasive Bladder Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 29. pii: S0022-5347(13)05840-0. doi: 10.1016/j.juro.2013.10.101.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.101](#)

**AUTORES / AUTHORS:** - Benner C; Greenberg M; Shepard N; Meng MV; Rabow MW

**INSTITUCIÓN / INSTITUTION:** - Division of General Internal Medicine, UCSF. Electronic address: [carly.benner@ucsf.edu](mailto:carly.benner@ucsf.edu).

**RESUMEN / SUMMARY:** - PURPOSE:: To characterize the natural history of symptoms over time in bladder cancer patients undergoing cystectomy. MATERIALS AND METHODS:: Thirty-three participants undergoing muscle invasive bladder cancer treatment with cystectomy were followed for six months in this prospective cohort study. Patients and family caregivers completed validated symptom assessment and satisfaction surveys at baseline and two, four, and six months later. Primary outcomes were change from baseline in pain, fatigue, depression, anxiety, quality of life, and spiritual well being. Secondary outcomes included post-traumatic growth, patient satisfaction, and family caregiver burden. RESULTS:: Pain increased following radical cystectomy and remained elevated six months post-operatively based on Brief Pain Inventory scores (baseline score 4.0, 95% CI 0-8.0; 6 month score 9.8, 95% CI 1.9-17.6, P 0.03). Post-traumatic growth showed a trend towards an increase at 2 months (p=0.06). Fatigue peaked at 4 months but did not change significantly over time (p=0.12). Similarly, there was no significant change over time for depression, anxiety, quality of life, spiritual well being, or satisfaction. Neither family caregiver burden nor satisfaction showed statistically significant change over time post-operatively. CONCLUSIONS:: Pain increased following radical cystectomy and remained elevated six months post-operatively. There was a trend toward increased post-traumatic growth at 2 months. Otherwise, by six months, cystectomy was associated with no improvement in pre-operative symptoms of fatigue, quality of life, spiritual well being, depression or anxiety. Pain should be assessed and treated more aggressively among bladder cancer patients following cystectomy and efforts should be made to improve symptoms after cystectomy.

[103]

**TÍTULO / TITLE:** - Angiogenesis inhibitor therapies for advanced renal cell carcinoma: Toxicity and treatment patterns in clinical practice from a global medical chart review.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2014 Jan;44(1):5-16. doi: 10.3892/ijo.2013.2181. Epub 2013 Nov 15.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2181](#)

**AUTORES / AUTHORS:** - Oh WK; McDermott D; Porta C; Levy A; Elaidi R; Scotte F; Hawkins R; Castellano D; Bellmunt J; Rha SY; Sun JM; Nathan P; Feinberg BA; Scott J; McDermott R; Ahn JH; Wagstaff J; Chang YH; Ou YC; Donnellan P; Huang CY; McCaffrey J; Chiang PH; Chuang CK; Korves C; Neary MP; Diaz JR; Mehmud F; Duh MS

**INSTITUCIÓN / INSTITUTION:** - Dana-Farber Cancer Institute, Boston, MA, USA.

**RESUMEN / SUMMARY:** - The aim of this study was to assess the treatment patterns and safety of sunitinib, sorafenib and bevacizumab in real-world clinical settings in US, Europe and Asia. Medical records were abstracted at 18 community oncology clinics in the US and at 21 tertiary oncology centers in US, Europe and Asia for 883 patients  $\geq 18$  years who had histologically/cytologically confirmed diagnosis of advanced RCC and received sunitinib (n=631), sorafenib (n=207) or bevacizumab (n=45) as firstline treatment. No prior treatment was permitted. Data were collected on all adverse events (AEs) and treatment modifications, including discontinuation, interruption and dose reduction. Treatment duration was estimated using Kaplan-Meier analysis. Demographics were similar across treatment groups and regions. Median treatment duration ranged from 6.1 to 10.7 months, 5.1 to 8.5 months and 7.5 to 9.8 months for sunitinib, sorafenib and bevacizumab patients, respectively. Grade  $\geq 3$  AEs were experienced by 26.0, 28.0 and 15.6% of sunitinib, sorafenib and bevacizumab patients, respectively. Treatment discontinuations occurred in 62.4 (Asia) to 63.1% (US) sunitinib, 68.8 (Asia) to 90.0% (Europe) sorafenib, and 66.7 (Asia) to 81.8% (US) bevacizumab patients. Globally, treatment modifications due to AEs occurred in 55.1, 54.2 and 50.0% sunitinib, sorafenib and bevacizumab patients, respectively. This study in a large, global cohort of advanced RCC patients found that angiogenesis inhibitors are associated with high rates of AEs and treatment modifications. Findings suggest an unmet need for more tolerable agents for RCC treatment.

[104]

**TÍTULO / TITLE:** - Conditional Survival After Radical Cystectomy for Bladder Cancer: Evidence for a Patient Changing Risk Profile over Time.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 9. pii: S0302-2838(13)01053-1. doi: 10.1016/j.eururo.2013.09.050.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.050](#)

**AUTORES / AUTHORS:** - Ploussard G; Shariat SF; Dragomir A; Kluth LA; Xylinas E; Masson-Lecomte A; Rieken M; Rink M; Matsumoto K; Kikuchi E; Klatte T; Boorjian SA; Lotan Y; Roghmann F; Fairey AS; Fradet Y; Black PC; Rendon R; Izawa J; Kassouf W

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Division of Urology, McGill University, Montreal, QC, Canada; Department of Urology, Saint-Louis Hospital, Assistance Publique Hopitaux de Paris, Paris, France.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Standard survival statistics do not take into consideration the changes in the weight of individual variables at subsequent times after the diagnosis and initial treatment of bladder cancer. **OBJECTIVE:** To assess the changes in 5-yr conditional survival (CS) rates after radical cystectomy for bladder cancer and to determine how well-established prognostic factors evolve over time. **DESIGN, SETTING, AND PARTICIPANTS:** We analyzed data from 8141 patients treated with radical cystectomy at 15 international academic centers between 1979 and 2012. **INTERVENTIONS:** Radical cystectomy and pelvic lymph node dissection. **OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS:** Conditional cancer-specific survival (CSS) and overall survival (OS) estimates were calculated using the Kaplan-Meier method. The multivariable Cox regression model was used to calculate proportional hazard ratios for the prediction of mortality after stratification by clinical characteristics (age, perioperative chemotherapy status) and pathologic characteristics (pT stage, grade, lymphovascular invasion, pN stage, number of nodes removed, margin status). The median follow-up was 32 mo. **RESULTS AND LIMITATIONS:** The 5-yr CSS and OS rates were 67.7% and 57.5%, respectively. Given a 1-, 2-, 3-, 5- and 10-yr survivorship, the 5-yr conditional OS rates improved by +5.6 (60.7%), +8.4 (65.8%), +7.6 (70.8%), +3.0 (72.9%), and +1.9% (74.3%), respectively. The 5-yr conditional CSS rates improved by +5.6 (71.5%), +9.8 (78.5%), +7.9 (84.7%), +7.2 (90.8%), and 5.6% (95.9%), respectively. The 5- and 10-yr CS improvement was primarily noted among surviving patients with advanced stage disease. The impact of pathologic parameters on CS estimates decreased over time for both CSS and OS. Findings were confirmed on multivariable analyses. The main limitation was the retrospective design. **CONCLUSIONS:** CS analysis demonstrates that the patient risk profile changes over time. The risk of mortality decreases with increasing survivorship. The CS rates improve mainly in the case of advanced stage disease. The impact of prognostic pathologic features decreases over time and can disappear for long-term CS.

[105]

**TÍTULO / TITLE:** - Impact of a Common Clinical Pathway on Length of Hospital Stay for Patients Undergoing Open and Minimally Invasive Kidney Surgery.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 21. pii: S0022-5347(13)05983-1. doi: 10.1016/j.juro.2013.11.030.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.11.030](#)

**AUTORES / AUTHORS:** - Tarin T; Feifer A; Kimm S; Chen L; Sjoberg D; Coleman J; Russo P

**RESUMEN / SUMMARY:** - **PURPOSE:** Clinical pathways are designed to reduce variability in patient care practices and to improve clinical outcomes. We evaluated the effect of implementing a clinical care pathway on the length of stay (LOS) for patients undergoing kidney surgery. **MATERIALS AND METHODS:** Following institutional review board approval, we evaluated prospectively obtained data on consecutive cases of partial and radical nephrectomy performed at our institution from 2000 to 2011. We

identified 1,775 partial (1,449 open, 326 minimally invasive (MIS)) and 1,025 radical (857 open, 168 MIS) nephrectomies. We used multivariate linear regression to test for an interaction between procedure type and surgery before versus after a clinical pathway was instituted. RESULTS: Median LOS decreased 40% (from 5 to 3 days) for open surgery and 33% (from 3 to 2 days) for MIS after implementation of the clinical pathway. The LOS for patients who underwent MIS or open partial nephrectomy and open radical nephrectomy decreased, and it remained stable for patients who underwent MIS radical nephrectomy. The difference in LOS between open and MIS partial nephrectomy before and after implementation of the clinical pathway decreased by 1.5 days (95% CI 0.56, 2.5; p=0.002). Thirty-day postoperative major complication rates remained similar. CONCLUSIONS: The clinical pathway resulted in a significantly shorter LOS for patients undergoing partial and radical nephrectomy without a discernible impact on safety and quality of care. Clinical pathways for kidney surgery should be employed and continually optimized to enhance efficiency, patient safety, and outcomes.

[106]

**TÍTULO / TITLE:** - Genetic score of multiple risk-associated single nucleotide polymorphisms is a marker for genetic susceptibility to bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Genes Chromosomes Cancer. 2014 Jan;53(1):98-105. doi: 10.1002/gcc.22121. Epub 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1002/gcc.22121](#)

**AUTORES / AUTHORS:** - Wang P; Ye D; Guo J; Liu F; Jiang H; Gong J; Gu C; Shao Q; Sun J; Zheng SL; Yu H; Lin X; Xia G; Fang Z; Zhu Y; Ding Q; Xu J

**INSTITUCIÓN / INSTITUTION:** - State Key Laboratory of Genetic Engineering, School of Life Sciences, Fudan University, Shanghai, China; Center for Genetic Epidemiology, School of Life Sciences, Fudan University, Shanghai, China.

**RESUMEN / SUMMARY:** - Genome-wide association studies have identified 13 single nucleotide polymorphisms (SNPs) that are associated with bladder cancer; three of these SNPs were validated in the Chinese population. This study assessed the performance of these three SNPs, in combination, to predict genetic susceptibility to bladder cancer in Chinese. Three previously established bladder cancer risk-associated SNPs (rs798766 in TACC3, rs9642880 in MYC, and rs2294008 in PSCA) were genotyped in 1,210 bladder cancer patients and 1,008 control subjects in Shanghai, China. A genetic score was calculated for each subject based on these three SNPs. Each of these three SNPs was significantly associated with bladder cancer risk in this independent study population,  $P < 0.05$ . The genetic score based on these three SNPs was significantly higher in cases than controls, with a mean of 1.05 and 0.99, respectively,  $P = 1.03E-05$ . Compared with subjects with a genetic score  $\leq 1.00$ , subjects with an elevated genetic score ( $>1.00$ ) had a significantly increased risk for bladder cancer after adjusting for age, gender, and smoking status, OR = 1.58, 95% Confidence Interval (CI) = 1.21 - 2.06,  $P = 0.0007$ . When tested separately for lower (Ta) or higher (Tis, T1-T4) tumor stage, the association was significantly stronger for lower (OR = 2.24, 95% CI = 1.66 - 3.01,  $P = 1.02E-07$ ) than higher tumor stage (OR = 1.33, 95% CI = 1.00 - 1.78,  $P = 0.05$ ),  $P = 0.001$ . In conclusion, A combination of three

previously implicated bladder cancer risk-associated SNPs is a significant predictor of genetic susceptibility to bladder cancer in Chinese. © 2013 Wiley Periodicals, Inc.

[107]

**TÍTULO / TITLE:** - Influence of Age-Related Versus Non-Age-Related Renal Dysfunction on Survival in Patients With Left Ventricular Dysfunction.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Cardiol. 2013 Oct 3. pii: S0002-9149(13)01955-3. doi: 10.1016/j.amjcard.2013.09.029.

●● Enlace al texto completo (gratis o de pago) [1016/j.amjcard.2013.09.029](#)

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**INSTITUCIÓN / INSTITUTION:** - Department of Internal Medicine, Yale University, New Haven, Connecticut; Program of Applied Translational Research, Yale University, New Haven, Connecticut. Electronic address: [Jeffrey.testani@yale.edu](mailto:Jeffrey.testani@yale.edu).

**RESUMEN / SUMMARY:** - Normal aging results in a predictable decrease in glomerular filtration rate (GFR), and low GFR is associated with worsened survival. If this survival disadvantage is directly caused by the low GFR, as opposed to the disease causing the low GFR, the risk should be similar regardless of the underlying mechanism. Our objective was to determine if age-related decreases in estimated GFR (eGFR) carry the same prognostic importance as disease-attributable losses in patients with ventricular dysfunction. We analyzed the Studies Of Left Ventricular Dysfunction limited data set (n = 6,337). The primary analysis focused on determining if the eGFR-mortality relation differed by the extent to which the eGFR was consistent with normal aging. Mean eGFR was 65.7 ml/min/1.73 m<sup>2</sup> (SD = 19.0). Across the range of age in the population (27 to 80 years), baseline eGFR decreased by 0.67 ml/min/1.73 m<sup>2</sup>/year (95% confidence interval [CI] 0.63 to 0.71). The risk of death associated with eGFR was strongly modified by the degree to which the low eGFR could be explained by aging (p for interaction <0.0001). For example, in a model incorporating the interaction, uncorrected eGFR was no longer significantly related to mortality (adjusted hazard ratio 1.0 per 10 ml/min/1.73 m<sup>2</sup>, 95% CI 0.97 to 1.1, p = 0.53), whereas a disease-attributable decrease in eGFR above the median carried significant risk (adjusted hazard ratio 2.8, 95% CI 1.6 to 4.7, p <0.001). In conclusion, in the setting of left ventricular dysfunction, renal dysfunction attributable to normal aging had a limited risk for mortality, suggesting that the mechanism underlying renal dysfunction is critical in determining prognosis.

[108]

**TÍTULO / TITLE:** - Stat bite prostate cancer death rates by race/ethnicity (2006-2010).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Nov 20;105(22):1674. doi: 10.1093/jnci/djt345. Epub 2013 Nov 6.

●● Enlace al texto completo (gratis o de pago) [1093/jnci/djt345](#)

[109]

**TÍTULO / TITLE:** - Feasibility of Pre- and Postoperative Gemcitabine-plus-Cisplatin Systemic Chemotherapy for the Treatment of Locally Advanced Urothelial Carcinoma in Kidney Transplant Patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplant Proc. 2013 Nov;45(9):3293-7. doi: 10.1016/j.transproceed.2013.06.008.

●● Enlace al texto completo (gratis o de pago)

[1016/j.transproceed.2013.06.008](#)

**AUTORES / AUTHORS:** - Zhang P; Zhang XD; Wang Y; Wang W

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Beijing Chaoyang Hospital, Capital Medical University, Beijing, China. Electronic address: [seabottlezp@126.com](mailto:seabottlezp@126.com).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To investigate the feasibility of pre- and postoperative gemcitabine-plus-cisplatin (GC) adjuvant chemotherapy for the treatment of locally advanced urothelial carcinoma in kidney transplant patients. **METHODS:** Seven kidney transplant patients diagnosed with locally advanced urothelial carcinoma were treated with a pre- and postoperative GC adjuvant chemotherapy between January 2008 and March 2012. Gemcitabine (800 mg/m<sup>2</sup>) was administered as an intravenous infusion on days 1 and 8. A total cisplatin dosage of 100 mg/cycle was administered on 2 days (50 mg/d on days 2 and 3) as an intravenous infusion. A single treatment cycle lasted 21 days. At the beginning of chemotherapy, the cyclosporine (CSA) dosage was reduced by 25 mg/d (on day 1 through day 8) if the blood CSA concentration was well maintained and did not fluctuate significantly. In addition, mycophenolate mofetil was reduced by 500 mg/d, while azathioprine was reduced by 25 mg/d (on day 1 through day 16). One cycle of GC neoadjuvant chemotherapy was given before operation, and several GC cycles were given after operation according to the patients' situation. Retrospective analysis was performed on the clinical data, chemotherapy regimen, chemotherapy efficacy, and side effects of the 7 patients. **RESULTS:** The 7 patients were all treated with 1 course of presurgical chemotherapy. The seven patients completed 24 treatment cycles of chemotherapy in total. The average GC medication period per patient was 3.4 cycles. The postsurgery follow-up was 6 to 36 months (average-22.1); all of the patients survived. There was 1 case of complete remission (14.5%), 2 of partial remission (28.5%), and 4 of stable disease (57%), with one case of T4N1M0 and three cases of T3N0M0. The overall efficacy was 43%. The toxicity and side effects associated with the GC regimen were largely associated with myelosuppression. The other side effects included reversible nephrotoxicity, gastrointestinal tract and skin reactions, as well as phlebitis. Hematologic toxic reactions included reversible leukopenia, thrombocytopenia, and anemia. There was 1 case of degree III anemia and 1 case of degree II; 5 cases of degree III and 1 of degree II leukopenia; and 3 of degree II thrombocytopenia. Gastrointestinal reactions included nausea, vomiting, and constipation. There were 2 cases of degree III and 4 cases of degree II nausea and vomiting as well as 2 cases of degree III and 3 cases of degree II constipation. There were 3 cases of degree I phlebitis (43%) and 2 cases of degree I skin erythema. The nephrotoxicity reactions were all reversible. Both liver function and grafted kidney function were not significantly altered after chemotherapy compared with prior to chemotherapy. None of the patients suffered renal allograft rejection after chemotherapy; none required additional antirejection drug treatments. The original antirejection treatment regimen was restored after the patients completed the chemotherapy treatment cycles. **CONCLUSION:** We

confirmed the efficacy of applying a GC regimen to treat locally advanced urothelial carcinoma in kidney transplant patients. The side effects were tolerable and reversible with minor impacts on graft function.

[110]

**TÍTULO / TITLE:** - A Self-Expanding Thermolabile Nitinol Stent as a Minimally Invasive Treatment Alternative for Ureteral Strictures in Renal Transplant Patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 14.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0180](#)

**AUTORES / AUTHORS:** - Bach C; Kabir MN; Goyal A; Malliwal R; Kachrilas S; El Howairis ME; Masood J; Buchholz N; Junaid I

**INSTITUCIÓN / INSTITUTION:** - 1 The Bristol Urological Institute , Bristol, United Kingdom .

**RESUMEN / SUMMARY:** - Abstract Background and Purpose: Ureteral obstruction in renal transplant allografts secondary to strictures can pose a challenging problem. Its incidence is reported between 0.5% and 4.7%. Usually, open surgical repair is performed. We present a series of patients in whom a metal Memokath 051 stent has been used as a minimally invasive treatment alternative. Methods: We analyzed our data on the use of thermo-expandable metallic Memokath 051 stents for ureteral strictures in renal transplant patients. Results: Between 2003 and 2010, eight male kidney recipients with a mean age of 49 years and obstructed ureters after kidney transplantation were treated with ureteral Memokath insertion. In six patients, the obstruction was at the level of the anastomosis, and in two, at the pelviureteral junction. After a mean follow-up of 4 years, half of the stents are in situ providing a good graft function. The average indwelling time is 4 years. Spontaneous resolution of the stricture without the need for further stent insertion was seen in three patients after a mean indwelling time of 7.3 months. There was one treatment failure in a patient with an obstructed, dilated, and convoluted ureter that was unable to withhold the stent in situ. No perioperative complications were recorded in this series. The overall success rate was 87%. Conclusion: Ureteral stent placement with the Memokath 051 is a safe minimally invasive treatment alternative for ureteral strictures in renal transplant recipients.

[111]

**TÍTULO / TITLE:** - A self-expanding thermo-labile nitinol stent as minimally invasive treatment alternative for ureteric strictures in renal transplant patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 9.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013-0180.ECC13](#)

**AUTORES / AUTHORS:** - Bach C; Kabir M; Goyal A; Malliwal R; Kachrilas S; El Howairis ME; Junaid I; Masood J; Buchholz N

**INSTITUCIÓN / INSTITUTION:** - Barts Health NHS Trust, Department of Urology, Endourology & Stone Services, London, United Kingdom ; [dr.christian.bach@gmail.com](mailto:dr.christian.bach@gmail.com).

**RESUMEN / SUMMARY:** - Objective: Ureteric obstruction in renal transplant allografts secondary to strictures can pose a challenging problem. Its incidence is reported between 0.5 and 4.7%. Usually, open surgical repair is performed. We present a series of patients where a metal Memokath 051 stent has been used as a minimal invasive treatment alternative. Material and methods: We analysed our prospective database on the use of thermo-expandable metallic Memokath 051 stents for ureteric strictures in renal transplant patients. Results: Between 2003 and 2010, eight male kidney recipients with a mean age of 49 years and obstructed ureters following kidney transplantation have been treated with ureteric Memokath insertion. In 6 patients, the obstruction was at the level of the anastomosis, and in 2 at the pelvi-ureteric junction. After a mean follow up of 4.5 years, half of the stents are in situ providing a good graft function. The average indwelling time is 4 years. Spontaneous resolution of the stricture without the need for further stenting was seen in three patients after a mean indwelling time of 7.3 months. There was one treatment failure in a patient with an obstructed, dilated and convoluted ureter which was unable to withhold the stent in situ. No peri-operative complications were recorded in this series. The overall success rate was 87%. Conclusion: Ureteric stenting with the Memokath 051 is a safe minimal invasive treatment alternative for ureteric strictures in renal transplant recipients.

[112]

**TÍTULO / TITLE:** - Clinicopathologic characteristics and overall survival in patients with bladder cancer involving the gastrointestinal tract.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Virchows Arch. 2013 Dec;463(6):811-8. doi: 10.1007/s00428-013-1479-0. Epub 2013 Oct 4.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00428-013-1479-0](#)

**AUTORES / AUTHORS:** - D'Souza AM; Phillips GS; Pohar KS; Zynger DL

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, The Ohio State University Medical Center, 410 W 10<sup>th</sup> Ave, 401 Doan Hall, Columbus, OH, 43210, USA.

**RESUMEN / SUMMARY:** - Involvement of the gastrointestinal (GI) tract by bladder cancer is rare and documented in only a few case reports with no prognostic information available. The aim of this study was to clinicopathologically characterize patients with pathologically proven bladder cancer in the GI tract. We reviewed pathology reports from cystectomy patients at our institution from 2006 to 2011, identifying those with GI involvement at or after cystectomy. Overall survival (OS) was analyzed using Kaplan-Meier curves and Cox proportional hazard regression models. Twelve patients had surgical pathology specimens with GI involvement (anus, rectum, colon, and small bowel) at (n = 11) or within 4 months (n = 1) of cystectomy. These patients were noted to be pathologically staged inconsistently. GI involvement was a negative predictor of survival, with a 1.5-year OS of 25 versus 62 % without GI involvement (P < 0.001), similar to our pT4 patients (OS 26 %). In node-negative patients, there was a significantly worse 1.5-year OS with GI involvement compared to those without tumor in the GI tract (P = 0.005). We provide the first case series of patients with bladder cancer in the GI tract. GI involvement is a strong negative predictor of survival and behaves comparable to pT4 patients. However, we recommend that pathologists adhere to the current pT staging guidelines, in which GI

involvement is not a criterion, until further research is conducted illustrating if and how it should be incorporated.

[113]

**TÍTULO / TITLE:** - Dosimetric predictors of biochemical control of prostate cancer in patients randomised to external beam radiotherapy with a boost of high dose rate brachytherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Oct 4. pii: S0167-8140(13)00443-X. doi: 10.1016/j.radonc.2013.08.043.

●● Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.08.043](#)

**AUTORES / AUTHORS:** - Hoskin PJ; Rojas AM; Ostler PJ; Hughes R; Bryant L; Lowe GJ

**INSTITUCIÓN / INSTITUTION:** - Cancer Centre, Mount Vernon Hospital, Middlesex, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: To correlate dose and volume dosimetric parameters (D90 and V100) with biochemical control in advanced prostate cancer treated with high-dose rate brachytherapy (HDR-BT). METHODS: One hundred and eight patients received external beam radiotherapy (EBRT) to 35.75Gy in 13 fractions followed by HDR-BT of 2x8.5Gy. Kaplan-Meier freedom-from-biochemical relapse (FFbR; nadir+2mg/L) fits were grouped by the first (Q1), second (Q2) and third (Q3) D90 and V100 quartiles. Groups were compared with the log-rank test. Univariate and multivariate Hazard Ratios (HR) for D90 and V100 and other co-variables (PSA, androgen deprivation therapy (ADT) were obtained using Cox's proportional hazard model. RESULTS: FFbR was significantly higher in patients whose D90 and V100 were at or above the second and third quartile (log rank p0.04). In multivariate analysis D90, V100 were significant covariates for risk of relapse. CONCLUSIONS: Dichotomising the data using 6 levels of response (above and below Q1, Q2 and Q3) showed a progressive and continuous improvement in biochemical control of disease across the entire dose (and volume) range. The data show that a minimum D90 of 108% of the prescribed dose should be the target to achieve.

[114]

**TÍTULO / TITLE:** - Elevated insulin-like growth factor binding protein-1 (IGFBP-1) in men with metastatic prostate cancer starting androgen deprivation therapy (ADT) is associated with shorter time to castration resistance and overall survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 16. doi: 10.1002/pros.22744.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22744](#)

**AUTORES / AUTHORS:** - Sharma J; Gray KP; Evan C; Nakabayashi M; Fichorova R; Rider J; Mucci L; Kantoff PW; Sweeney CJ

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, Dana-Farber Cancer Institute, Boston, Massachusetts.

**RESUMEN / SUMMARY:** - BACKGROUND: Insulin-like growth factor (IGF) and adipokines have been implicated in prostate cancer carcinogenesis. METHOD: Data from 122 men with serum samples drawn within 3 months of starting ADT for metastatic prostate cancer was accessed retrospectively. IGF-1, IGF binding protein

(BP)-1, leptin, and adiponectin levels were measured by multiplex electrochemiluminescence assays. A multivariable Cox model assessed the association of time to castration resistant prostate cancer (CRPC) and overall survival by the protein levels, adjusted for clinical variables, age and prostate specific antigen (PSA) levels at start of ADT, race, ECOG status, extent of metastases and were reported as hazard ratio (HR) with 95% confidence interval (CI). RESULTS: Median follow-up and overall survival were 44 and 42.2 months, respectively. ECOG performance status ( $\geq 1$  vs. 0) was negatively associated with overall survival [HR = 2.8 (1.1-7.0), P = 0.03], and PSA nadir  $< 0.2$  was predictive of longer time to CRPC [HR = 0.3 (0.2-0.5), P < 0.0001]. The median time to CRPC by low, middle, and top IGFBP-1 tertile distribution was 20.7, 18.1, and 12.4 months, respectively, with HR for middle versus low tertile levels 3.1 (1.7-5), P = 0.0003, and for top versus low tertile levels was 2.4 (1.3-4.2), P = 0.003. The median overall survival by low, middle and top tertile IGFBP-1 level was 48.5, 46.4, and 32.8 months, respectively, with HR for top versus low tertile 2.5 (1.2-5.1), P = 0.01. There was no association with IGF-1, adiponectin and leptin. CONCLUSION: Elevated IGFBP-1 appears to be associated with shorter time to CRPC and lower overall survival in men with metastatic prostate cancer. Prostate © 2013 Wiley Periodicals, Inc.

[115]

**TÍTULO / TITLE:** - A Clinical Trial Strategy for Penis Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 13. doi: 10.1111/bju.12563.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12563](#)

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[116]

**TÍTULO / TITLE:** - Association analysis of 9,560 prostate cancer cases from the International Consortium of Prostate Cancer Genetics confirms the role of reported prostate cancer associated SNPs for familial disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Genet. 2013 Oct 26.

●● Enlace al texto completo (gratis o de pago) [1007/s00439-013-1384-2](#)

**AUTORES / AUTHORS:** - Teerlink CC; Thibodeau SN; McDonnell SK; Schaid DJ; Rinckle A; Maier C; Vogel W; Cancel-Tassin G; Egrot C; Cussenot O; Foulkes WD; Giles GG; Hopper JL; Severi G; Eeles R; Easton D; Kote-Jarai Z; Guy M; Cooney KA; Ray AM; Zuhlke KA; Lange EM; Fitzgerald LM; Stanford JL; Ostrander EA; Wiley KE; Isaacs SD; Walsh PC; Isaacs WB; Wahlfors T; Tammela T; Schleutker J; Wiklund F; Gronberg H; Emanuelsson M; Carpten J; Bailey-Wilson J; Whittemore AS; Oakley-Girvan I; Hsieh CL; Catalona WJ; Zheng SL; Jin G; Lu L; Xu J; Camp NJ; Cannon-Albright LA

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**RESUMEN / SUMMARY:** - Previous GWAS studies have reported significant associations between various common SNPs and prostate cancer risk using cases unselected for family history. How these variants influence risk in familial prostate cancer is not well studied. Here, we analyzed 25 previously reported SNPs across 14 loci from prior prostate cancer GWAS. The International Consortium for Prostate Cancer Genetics (ICPCG) previously validated some of these using a family-based association method (FBAT). However, this approach suffered reduced power due to the conditional statistics implemented in FBAT. Here, we use a case-control design with an empirical analysis strategy to analyze the ICPCG resource for association between these 25 SNPs and familial prostate cancer risk. Fourteen sites contributed 12,506 samples (9,560 prostate cancer cases, 3,368 with aggressive disease, and 2,946 controls from 2,283 pedigrees). We performed association analysis with Genie software which accounts for relationships. We analyzed all familial prostate cancer cases and the subset of aggressive cases. For the familial prostate cancer phenotype, 20 of the 25 SNPs were at least nominally associated with prostate cancer and 16 remained significant after multiple testing correction ( $p \leq 1E-3$ ) occurring on chromosomal bands 6q25, 7p15, 8q24, 10q11, 11q13, 17q12, 17q24, and Xp11. For aggressive disease, 16 of the SNPs had at least nominal evidence and 8 were statistically significant including 2p15. The results indicate that the majority of common, low-risk alleles identified in GWAS studies for all prostate cancer also contribute risk for familial prostate cancer, and that some may contribute risk to aggressive disease.

[117]

**TÍTULO / TITLE:** - USANZ: Time-trends in use and impact on outcomes of perioperative chemotherapy in patients treated with radical cystectomy for urothelial bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov;112 Suppl 2:74-82. doi: 10.1111/bju.12384.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12384](http://1111/bju.12384)

**AUTORES / AUTHORS:** - Liew MS; Azad A; Tafreshi A; Eapen R; Bolton D; Davis ID; Sengupta S

**INSTITUCIÓN / INSTITUTION:** - Joint Austin-Ludwig Oncology Unit, Austin Health; Ludwig Institute for Cancer Research, Austin Health; University of Melbourne.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To review time-trends in the use of perioperative chemotherapy and its impact on oncological outcomes in patients with bladder urothelial cancer (UC) at a single tertiary institution. **PATIENTS AND METHODS:** Using electronic and paper medical records, 89 patients were identified who underwent radical cystectomy with or without perioperative chemotherapy between 2004 and 2011 at Austin Health in Melbourne, Australia. Patient demographics, clinico-pathological characteristics and details of recurrence and death were assessed by retrospective chart review. Survival analysis was carried out using the Kaplan Meier method, with the impact of predictors assessed using Cox proportional hazard models. **RESULTS:** The median (range) age of this cohort was 65 (37-84) years, and 66 (74%) patients were male. Pathologic features included 68 (76%) pure UC, 21 (24%) mixed UC and 84 (94%) high grade tumours. On clinical staging,

63 (71%) patients had muscle-invasive bladder cancer (cT-stage  $\geq$  T2), of whom 11 (17%) received neoadjuvant chemotherapy, with an increasing trend in use over time. Following radical cystectomy, pT-stage  $\geq$  T3 and/or node positive were identified in 35 (39%) patients, of whom 16 (46%) received adjuvant chemotherapy. In addition, five patients with stage pT2 received adjuvant chemotherapy. Of the total cohort of patients, 31 (35%) suffered recurrences, and 33 died, 27 from urothelial carcinoma. On multivariate analysis, after adjusting for age, pT-stage and pN-stage, perioperative chemotherapy was associated with a significantly lower risk of recurrence [relative risk (RR) 0.41,  $p < 0.05$ ], but not death from cancer or all causes. CONCLUSIONS: Perioperative chemotherapy, and in particular neoadjuvant chemotherapy, remains relatively under-utilised at our institution despite recent increases. The significant reduction in the risk of recurrence following treatment with perioperative chemotherapy with radical cystectomy highlights the importance of multi-modality treatment in bladder UC. Identifying barriers to more widespread implementation of perioperative chemotherapy is critical for enhancing outcomes in patients with bladder UC.

[118]

**TÍTULO / TITLE:** - First-in-human Phase I study of EZN-4176, a locked nucleic acid antisense oligonucleotide to exon 4 of the androgen receptor mRNA in patients with castration-resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 12;109(10):2579-86. doi: 10.1038/bjc.2013.619. Epub 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.619](#)

**AUTORES / AUTHORS:** - Bianchini D; Omlin A; Pezaro C; Lorente D; Ferraldeschi R; Mukherji D; Crespo M; Figueiredo I; Miranda S; Riisnaes R; Zivi A; Buchbinder A; Rathkopf DE; Attard G; Scher HI; de Bono J; Danila DC

**INSTITUCIÓN / INSTITUTION:** - 1] Prostate Cancer Targeted Therapy Group and Drug Development Unit, Royal Marsden NHS Foundation Trust and The Institute of Cancer Research, Downs Road, Sutton, Surrey, UK [2] Memorial Sloan-Kettering Cancer Center (MSKCC) and Weill Cornell Medical College, Center for Prostate and Urologic Cancers, New York, NY, USA.

**RESUMEN / SUMMARY:** - Background: Prostate cancer remains dependent of androgen receptor (AR) signalling, even after emergence of castration resistance. EZN-4176 is a third-generation antisense oligonucleotide that binds to the hinge region (exon 4) of AR mRNA resulting in full-length AR mRNA degradation and decreased AR protein expression. This Phase I study aimed to evaluate EZN-4176 in men with castration-resistant prostate cancer (CRPC). Methods: Patients with progressing CRPC were eligible; prior abiraterone and enzalutamide treatment were allowed. EZN-4176 was administered as a weekly (QW) 1-h intravenous infusion. The starting dose was 0.5 mg kg<sup>-1</sup> with a 4-week dose-limiting toxicity (DLT) period and a 3+3 modified Fibonacci dose escalation design. After determination of the DLT for weekly administration, an every 2 weeks schedule was initiated. Results: A total of 22 patients were treated with EZN-4176. At 10 mg kg<sup>-1</sup> QW, two DLTs were observed due to grade 3-4 ALT or AST elevation. No confirmed biochemical or soft tissue responses were observed. Of eight patients with  $\geq$ 5 circulating tumour cells at baseline, a conversion to  $<$ 5 was observed in three (38%) patients. The most common EZN-4176-related toxicities (all

grades) were fatigue (59%), reversible abnormalities in liver function tests ALT (41%) and AST (41%) and infusion-related reactions including chills (36%) and pyrexia (14%). Conclusion: Activity of EZN-4176 at the doses and schedules explored was minimal. The highest dose of 10 mg kg<sup>-1</sup> QW was associated with significant but reversible transaminase elevation.

[119]

**TÍTULO / TITLE:** - An Epidemiologic and Genomic Investigation Into the Obesity Paradox in Renal Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Nov 27.

- [Enlace al texto completo \(gratis o de pago\) 1093/jnci/djt310](#)

**AUTORES / AUTHORS:** - Ari Hakimi A; Furberg H; Zabor EC; Jacobsen A; Schultz N; Ciriello G; Mikkineni N; Fiegoli B; Kim PH; Voss MH; Shen H; Laird PW; Sander C; Reuter VE; Motzer RJ; Hsieh JJ; Russo P

**INSTITUCIÓN / INSTITUTION:** - Affiliations of authors: Urology Service, Department of Surgery (AAH, NM, BF, PHK, PR), Human Oncology & Pathogenesis Program (AAH, JJH); Epidemiology and Biostatistics (HF, ECZ), Computational Biology (AJ, NS, GC, CS), Genitourinary Oncology (MHV, RJM, JJH), and Department of Pathology (VER), Memorial Sloan-Kettering Cancer Center, New York, NY; USC Epigenome Center, University of Southern California, Los Angeles, California (HS, PWL); Weill Medical College, Cornell University, New York, NY (RJM, JJH, PR).

**RESUMEN / SUMMARY:** - BACKGROUND: Obesity increases risk for clear-cell renal cell carcinoma (ccRCC), yet obese patients appear to experience longer survival than nonobese patients. We examined body mass index (BMI) in relation to stage, grade, and cancer-specific mortality (CSM) while considering detection bias, nutritional status, and molecular tumor features. METHODS: Data were available from 2119 ccRCC patients who underwent renal mass surgery at Memorial Sloan-Kettering Cancer Center between 1995 and 2012. Logistic regression models produced associations between BMI and advanced disease. Multivariable competing risks regression models estimated associations between BMI and CSM. Somatic mutation, copy number, methylation, and expression data were examined by BMI among a subset of 126 patients who participated in the Cancer Genome Atlas Project for ccRCC using the Kruskal-Wallis or Fisher exact tests. All statistical tests were two-sided. RESULTS: Obese and overweight patients were less likely to present with advanced-stage disease compared with normal-weight patients (odds ratio [OR] = 0.61, 95% confidence interval [CI] = 0.48 to 0.79 vs OR = 0.65, 95% CI = 0.51 to 0.83, respectively). Higher BMI was associated with reduced CSM in univariable analyses ( $P < .005$ ). It remained statistically significant after adjustment for comorbidities and albumin level, but it became non-statistically significant after adjusting for stage and grade ( $P > .10$ ). Genome-wide interrogation by BMI suggested differences in gene expression of metabolic and fatty acid genes, including fatty acid synthase (FASN), consistent with the obesity paradox. CONCLUSIONS: Our findings suggest that although BMI is not an independent prognostic factor for CSM after controlling for stage and grade, tumors developing in an obesogenic environment may be more indolent.

[120]

**TÍTULO / TITLE:** - The effects of a physical exercise programme after radical cystectomy for urinary bladder cancer. A pilot randomized controlled trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Rehabil. 2013 Nov 18.

●● Enlace al texto completo (gratis o de pago) [1177/0269215513506230](#)

**AUTORES / AUTHORS:** - Porsrud A; Sherif A; Tollback A

**INSTITUCIÓN / INSTITUTION:** - 1Department of Physiotherapy, Karolinska University Hospital, Stockholm, Sweden.

**RESUMEN / SUMMARY:** - Objective: Assessment of feasibility and effects of an exercise training programme in patients following cystectomy due to urinary bladder cancer. Design: Single-blind, pilot, randomized controlled trial. Setting: University hospital, Sweden. Subjects: Eighteen patients (64-78 years), of 89 suitable, cystectomized due to urinary bladder cancer, were randomized after hospital discharge to intervention or control. Interventions: The 12-week exercise programme included group exercise training twice a week and daily walks. The control group received only standardized information at discharge. Main outcome measures: Trial eligibility and compliance to inclusion were registered. Assessments of functional capacity, balance, lower body strength and health-related quality of life (HRQoL) with SF-36. Results: Out of 122 patients 89 were eligible, but 64 did not want to participate/were not invited. Twenty-five patients were included, but 7 dropped out before randomization. Eighteen patients were randomized to intervention or control. Thirteen patients completed the training period. The intervention group increased walking distance more than the control group, 109 m (75-177) compared to 62 m (36-119) ( $P = 0.013$ ), and role physical domain in SF-36 more than the control group ( $P = 0.031$ ). Ten patients were evaluated one year postoperatively. The intervention group had continued increasing walking distance, 20 m (19-36), whereas the control group had shortened the distance -15.5 m (-43 to -5) ( $P = 0.010$ ). Conclusions: A 12-week group exercise training programme was not feasible for most cystectomy patients. However, functional capacity and the role-physical domain in HRQoL increased in the short and long term for patients in the intervention group compared with controls.

[121]

**TÍTULO / TITLE:** - Docetaxel and dasatinib or placebo in men with metastatic castration-resistant prostate cancer (READY): a randomised, double-blind phase 3 trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Lancet Oncol. 2013 Dec;14(13):1307-16. doi: 10.1016/S1470-2045(13)70479-0. Epub 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [1016/S1470-2045\(13\)70479-0](#)

**AUTORES / AUTHORS:** - Araujo JC; Trudel GC; Saad F; Armstrong AJ; Yu EY; Bellmunt J; Wilding G; McCaffrey J; Serrano SV; Matveev VB; Efsthathiou E; Oudard S; Morris MJ; Sizer B; Goebell PJ; Heidenreich A; de Bono JS; Begbie S; Hong JH; Richardet E; Gallardo E; Paliwal P; Durham S; Cheng S; Logothetis CJ

**INSTITUCIÓN / INSTITUTION:** - Department of Genitourinary Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA. Electronic address: [johna@mdanderson.org](mailto:johna@mdanderson.org).

**RESUMEN / SUMMARY:** - BACKGROUND: Src kinase-mediated interactions between prostate cancer cells and osteoclasts might promote bone metastasis. Dasatinib inhibits tyrosine kinases, including Src kinases. Data suggests that dasatinib kinase inhibition leads to antitumour activity, affects osteoclasts, and has synergy with docetaxel, a first-line chemotherapy for metastatic castration-resistant prostate cancer. We assessed whether dasatinib plus docetaxel in chemotherapy-naive men with metastatic castration-resistant prostate cancer led to greater efficacy than with docetaxel alone. METHODS: In this double-blind, randomised, placebo-controlled phase 3 study, we enrolled men of 18 years or older with chemotherapy-naive, metastatic, castration-resistant prostate cancer, and adequate organ function from 186 centres across 25 countries. Eligible patients were randomly assigned (1:1) via an interactive voice response system to receive docetaxel (75 mg/m<sup>2</sup>) intravenously every 3 weeks, plus oral prednisone 5 mg twice daily, plus either dasatinib (100 mg orally once daily) or placebo until disease progression or unacceptable toxicity. Randomisation was stratified by Eastern Cooperative Oncology Group performance status (0-1 vs 2), bisphosphonate use (yes vs no), and urinary N-telopeptide (uNTx) value (<60 μmol/mol creatinine vs ≥60 μmol/mol creatinine). All patients, investigators, and personnel involved in study conduct and data analyses were blinded to treatment allocation. The primary endpoint was overall survival, analysed by intention to treat. The trial is registered with ClinicalTrials.gov, number NCT00744497. FINDINGS: Between Oct 30, 2008, and April 11, 2011, 1522 eligible patients were randomly assigned to treatment; 762 patients were assigned to dasatinib and 760 to placebo. At final analysis, median follow-up was 19.0 months (IQR 11.2-25.1) and 914 patients had died. Median overall survival was 21.5 months (95% CI 20.3-22.8) in the dasatinib group and 21.2 months (20.0-23.4) in the placebo group (stratified hazard ratio [HR] 0.99, 95.5% CI 0.87-1.13; p=0.90). The most common grade 3-4 adverse events included diarrhoea (58 [8%] patients in the dasatinib group vs 27 [4%] patients in the placebo group), fatigue (62 [8%] vs 42 [6%]), and asthenia (40 [5%] vs 23 [3%]); grade 3-4 pleural effusions were uncommon (ten [1%] vs three [ $<1\%$ ]). INTERPRETATION: The addition of dasatinib to docetaxel did not improve overall survival for chemotherapy-naive men with metastatic castration-resistant prostate cancer. This study does not support the combination of dasatinib and docetaxel in this population of patients. FUNDING: Bristol-Myers Squibb.

[122]

**TÍTULO / TITLE:** - New tests for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Nov 20;105(22):1672-4. doi: 10.1093/jnci/djt344. Epub 2013 Nov 6.

●● Enlace al texto completo (gratis o de pago) [1093/jnci/djt344](#)

**AUTORES / AUTHORS:** - O'Hanlon LH

[123]

**TÍTULO / TITLE:** - The effects of multidisciplinary rehabilitation: RePCa-a randomised study among primary prostate cancer patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Oct 29. doi: 10.1038/bjc.2013.679.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.679](https://doi.org/10.1038/bjc.2013.679)

**AUTORES / AUTHORS:** - Dieperink KB; Johansen C; Hansen S; Wagner L; Andersen KK; Minet LR; Hansen O

**INSTITUCIÓN / INSTITUTION:** - Department of Oncology, Odense University Hospital, Southern Boulevard 29, DK-5000 Odense C, Denmark.

**RESUMEN / SUMMARY:** - Background: The objective of this study is the effectiveness of multidisciplinary rehabilitation on treatment-related adverse effects after completed radiotherapy in patients with prostate cancer (PCa). Methods: In a single-centre oncology unit in Odense, Denmark, 161 PCa patients treated with radiotherapy and androgen deprivation therapy were randomly assigned to either a programme of two nursing counselling sessions and two instructive sessions with a physical therapist (n=79) or to usual care (n=82). Primary outcome was Expanded Prostate Cancer Index Composite (EPIC-26) urinary irritative sum-score. Before radiotherapy, pre-intervention 4 weeks after radiotherapy, and after a 20-week intervention, measurements included self-reported disease-specific quality of life (QoL; EPIC-26, including urinary, bowel, sexual, and hormonal symptoms), general QoL (Short-form-12, SF-12), pelvic floor muscle strength (Modified Oxford Scale), and pelvic floor electromyography. Intention-to-treat analyses were made with adjusted linear regression. Results: The intervention improved, as compared with controls, urinary irritative sum-score 5.8 point (Cohen's d=0.40; P=0.011), urinary sum-score (d=0.34; P=0.023), hormonal sum-score (d=0.19; P=0.018), and the SF-12 Physical Component Summary, d=0.35; P=0.002. Patients with more severe impairment gained most. Pelvic floor muscle strength measured by electromyography declined in both groups, P=0.0001. Conclusion: Multidisciplinary rehabilitation in irradiated PCa patients improved urinary and hormonal symptoms, and SF-12 physical QoL. British Journal of Cancer advance online publication 29 October 2013; doi:10.1038/bjc.2013.679 [www.bjcancer.com](http://www.bjcancer.com).

[124]

**TÍTULO / TITLE:** - Emerging role of tumor-associated macrophages as therapeutic targets in patients with metastatic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Immunol Immunother. 2013 Dec;62(12):1757-68. doi: 10.1007/s00262-013-1487-6. Epub 2013 Oct 17.

●● Enlace al texto completo (gratis o de pago) [1007/s00262-013-1487-6](https://doi.org/10.1007/s00262-013-1487-6)

**AUTORES / AUTHORS:** - Santoni M; Massari F; Amantini C; Nabissi M; Maines F; Burattini L; Berardi R; Santoni G; Montironi R; Tortora G; Cascinu S

**INSTITUCIÓN / INSTITUTION:** - Medical Oncology, AOU Ospedali Riuniti, Polytechnic University of the Marche Region, via Conca 71, 60126, Ancona, Italy, [mattymo@alice.it](mailto:mattymo@alice.it).

**RESUMEN / SUMMARY:** - Tumor-associated macrophages (TAMs) derived from peripheral blood monocytes recruited into the renal cell carcinoma (RCC) microenvironment. In response to inflammatory stimuli, macrophages undergo M1 (classical) or M2 (alternative) activation. M1 cells produce high levels of inflammatory cytokines, such as tumor necrosis factor-alpha, interleukin (IL)-12, IL-23 and IL-6, while M2 cells produce anti-inflammatory cytokines, such as IL-10, thus contributing to RCC-related immune dysfunction. The presence of extensive TAM infiltration in RCC

microenvironment contributes to cancer progression and metastasis by stimulating angiogenesis, tumor growth, and cellular migration and invasion. Moreover, TAMs are involved in epithelial-mesenchymal transition of RCC cancer cells and in the development of tumor resistance to targeted agents. Interestingly, macrophage autophagy seems to play an important role in RCC. Based on this scenario, TAMs represent a promising and effective target for cancer therapy in RCC. Several strategies have been proposed to suppress TAM recruitment, to deplete their number, to switch M2 TAMs into antitumor M1 phenotype and to inhibit TAM-associated molecules. In this review, we summarize current data on the essential role of TAMs in RCC angiogenesis, invasion, impaired anti-tumor immune response and development of drug resistance, thus describing the emerging TAM-centered therapies for RCC patients.

[125]

**TÍTULO / TITLE:** - Penile vibratory stimulation in the recovery of urinary continence and erectile function after nerve sparing radical prostatectomy: A randomized, controlled trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12501.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12501](#)

**AUTORES / AUTHORS:** - Fode M; Borre M; Ohl DA; Lichtbach J; Sonksen J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Herlev University Hospital, Herlev, Denmark.

**RESUMEN / SUMMARY:** - OBJECTIVE: To examine the effect of penile vibratory stimulation (PVS) in the preservation and restoration of erectile function and urinary continence in conjunction with nerve-sparing radical prostatectomy.

SUBJECTS/PATIENTS AND METHODS: The study was conducted between July 2010 and March 2013 as a randomized prospective trial at two university hospitals. Eligible participants were continent men with an International Index of Erectile Function-5 (IIEF-5) score of at least 18, scheduled to undergo nerve sparing radical prostatectomy. Patients were randomized to a PVS group or a control group. Patients in the PVS group were instructed in using a PVS device (FERTI CARE® vibrator, Multicept A/S, Frederiksberg, Denmark). Stimulation was performed at the frenulum once daily by the patients in their own homes for a minimum of one week prior to surgery. After catheter removal, daily PVS was re-initiated for a period of six weeks. Participants were evaluated at 3, 6 and 12 months following surgery with the IIEF-5 questionnaire and questions regarding urinary bother. Patients using up to 1 pad daily for security reasons only were considered continent. The study was registered at [www.clinicaltrials.org](http://www.clinicaltrials.org) (NCT01067261). RESULTS: Data from 68 patients were available for analyses (30 patients randomized to PVS and 38 patients randomized to the control group). The IIEF-5 score was highest in the PVS group at all time points after surgery with a median score of 18 vs. 7.5 in the control group at 12 months ( $p=0.09$ ), but the difference only reached borderline significance. At 12 months 16/30 (53%) patients in the PVS group had reached an IIEF-5 score of at least 18 while this was the case for 12/38 (32%) patients in the control group ( $P=0.07$ ). There were no significant differences in the proportions of continent patients between groups at either 3, 6 or 12 months. At 12 months 90% of the PVS patients were continent while 94.7%

of the control patients were continent ( $P=0.46$ ). CONCLUSION: Our study did not document significant effect of PVS. However, the method proved to be acceptable for most patients and there was a trend toward better erectile function with PVS. More studies are needed to explore this possible effect further.

[126]

**TÍTULO / TITLE:** - Study of Quality of life in Patients with Benign Prostatic Hyperplasia under Treatment with Silodosin.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Nov 22. pii: S0210-4806(13)00374-4. doi: 10.1016/j.acuro.2013.10.002.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.10.002](#)

**AUTORES / AUTHORS:** - Castro-Diaz D; Callejo D; Cortes X; Perez M

**INSTITUCIÓN / INSTITUTION:** - Servicio de Urología, Hospital Universitario de Canarias, La Laguna, Tenerife, España.

**RESUMEN / SUMMARY:** - OBJECTIVES: To assess the impact of urinary symptoms associated with benign prostatic hyperplasia and its treatment with silodosin, on quality of life (QoL) and sexual function, depending on age, severity of symptoms, time on treatment and prostate size. MATERIAL AND METHODS: A cross-sectional, observational study was conducted in 305 urology practices all around España. Socio-demographic and clinical data were collected and patients filled the following questionnaires: EQ-5D, Sexual Function Index (SFI) and International Prostate Symptom Score (IPSS). Multiple regression models were used to determine factors independently associated with patients' QoL. RESULTS: A total of 1,019 patients were enrolled, mean (SD) for: age 62.7 (5.7), EQ-5D 89.9 (13.9), sexual drive-SFI 3.71 (1.67), erection-SFI 6.11 (3.08), ejaculation-SFI 4.50 (2.06) problems-SFI 6.85 (3.37) and overall satisfaction-SFI 2.00 (0.99). The EQ-5D and SFI score were statistically lower with: older age, severe LUTS and greater prostate size ( $P<.01$ ), but no differences were found related to time on treatment with silodosin. The EQ-5D score was positively associated with sexual satisfaction and desire size of SFI and the EQ-5D VAS score, and negatively with disability, semi-urban residence and comorbidities in the multiple regression analyses. CONCLUSIONS: Severe LUTS and older age are associated to a greater deterioration in sexual function and quality of life. However time on treatment with silodosin does not produce deterioration in the quality of life.

[127]

**TÍTULO / TITLE:** - Chromosome inversions in lymphocytes of prostate cancer patients treated with X-rays and carbon ions.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Oct 30. pii: S0167-8140(13)00508-2. doi: 10.1016/j.radonc.2013.09.021.

●● Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.09.021](#)

**AUTORES / AUTHORS:** - Pignalosa D; Lee R; Hartel C; Sommer S; Nikoghosyan A; Debus J; Ritter S; Durante M

**INSTITUCIÓN / INSTITUTION:** - GSI Helmholtz Centre for Heavy Ion Research, Biophysics Department, Darmstadt, Germany.

**RESUMEN / SUMMARY:** - BACKGROUND AND PURPOSE: To investigate the cytogenetic damage of the intrachange type in peripheral blood lymphocytes of patients treated for prostate cancer with different radiation qualities. MATERIAL AND METHODS: Prostate cancer patients were enrolled in a clinical trial based at the Heidelberg University Hospital and at the GSI Helmholtz Centre for Heavy Ion Research in 2006. Patients were treated either with intensity-modulated radiation therapy (IMRT) alone or with a carbon-ion boost followed by IMRT. Blood samples were collected at the end of the therapy and the mBAND technique was used to investigate the cytogenetic damage of the inter and intrachange types. Moreover, the mBAND analysis was performed on healthy donor cells irradiated in vitro with X-rays or C-ions. RESULTS: Our results show no statistically significant differences in the yield and the spectrum of chromosome aberrations among patients treated only with IMRT and patients receiving the combined treatment when similar target volumes and doses to the target are compared. CONCLUSION: The study suggests that the risks of normal tissue late effects and second malignancies in prostate cancer patients are comparable when heavy ions or IMRT radiotherapy are applied.

[128]

**TÍTULO / TITLE:** - A phase II trial of AS1411 (a novel nucleolin-targeted DNA aptamer) in metastatic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Invest New Drugs. 2013 Nov 16.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s10637-013-0045-6](#)

**AUTORES / AUTHORS:** - Rosenberg JE; Bambury RM; Van Allen EM; Drabkin HA; Lara PN Jr; Harzstark AL; Wagle N; Figlin RA; Smith GW; Garraway LA; Choueiri T; Erlandsson F; Laber DA

**INSTITUCIÓN / INSTITUTION:** - Dana-Farber Cancer Institute/Harvard Medical School, Boston, MA, USA, [rosenbj1@mskcc.org](mailto:rosenbj1@mskcc.org).

**RESUMEN / SUMMARY:** - Background DNA aptamers represent a novel strategy in anti-cancer medicine. AS1411, a DNA aptamer targeting nucleolin (a protein which is overexpressed in many tumor types), was evaluated in patients with metastatic, clear-cell, renal cell carcinoma (RCC) who had failed treatment with  $\geq 1$  prior tyrosine kinase inhibitor. Methods In this phase II, single-arm study, AS1411 was administered at 40 mg/kg/day by continuous intravenous infusion on days 1-4 of a 28-day cycle, for two cycles. Primary endpoint was overall response rate; progression-free survival (PFS) and safety were secondary endpoints. Results 35 patients were enrolled and treated. One patient (2.9 %) had a response to treatment. The response was dramatic (84 % reduction in tumor burden by RECIST 1.0 criteria) and durable (patient remains free of progression 2 years after completing therapy). Whole exome sequencing of this patient's tumor revealed missense mutations in the mTOR and FGFR2 genes which is of interest because nucleolin is known to upregulate mTOR pathway activity by enhancing AKT1 mRNA translation. No other responses were seen. Thirty-four percent of patients had an AS1411-related adverse event, all of which were mild or moderate. Conclusions AS1411 appears to have minimal activity in unselected patients with metastatic RCC. However, rare, dramatic and durable responses can be observed and toxicity is low. One patient in this study had an excellent response and was found to have FGFR2 and mTOR mutations which will be of interest in future efforts to discover

and validate predictive biomarkers of response to nucleolin targeted compounds. DNA aptamers represent a novel way to target cancer cells at a molecular level and continue to be developed with a view to improving treatment and imaging in cancer medicine.

[129]

**TÍTULO / TITLE:** - Genetic variation in the GSTM3 promoter confer risk and prognosis of renal cell carcinoma by reducing gene expression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Oct 24. doi: 10.1038/bjc.2013.669.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.669](#)

**AUTORES / AUTHORS:** - Tan X; Wang Y; Han Y; Chang W; Su T; Hou J; Xu D; Yu Y; Ma W; Thompson TC; Cao G

**INSTITUCIÓN / INSTITUTION:** - Department of Epidemiology, Second Military Medical University, 800 Xiangyin Road, Shanghai 200433, China.

**RESUMEN / SUMMARY:** - Background:Glutathione S-transferase mu 3 (GSTM3) has been proven to be downregulated in renal cell carcinoma (RCC). We aimed to characterise the role of GSTM3 and its genetic predisposition on the occurrence and postoperative prognosis of RCC.Methods:The effect of GSTM3 on RCC aggressiveness was examined using transfection and silencing methods. Glutathione S-transferase mu 3 expression in renal tissues was examined by immunohistochemistry. The associations of rs1332018 (A-63C) and rs7483 (V224I) polymorphisms with RCC risk were examined using 400 RCC patients and 802 healthy controls. The factors contributing to postoperative disease-specific survival of RCC patients were evaluated using the Cox proportional hazard model.Results:Glutathione S-transferase mu 3 silencing increased the invasion and anchorage-independent growth of RCC cell lines. rs1332018 (AC+CC vs AA), which correlated with low expression of GSTM3 in kidney, was associated with RCC risk (odds ratio, 1.446; 95% confidence interval (CI), 1.111-1.882). rs1332018 variants and low GSTM3 expression significantly predicted unfavourable postoperative survivals of RCC patients (P<0.05). rs1332018 variants independently predicted a poor prognosis (hazard ratio, 2.119; 95% CI, 1.043-4.307).Conclusion:Glutathione S-transferase mu 3 may function as a tumour suppressor in RCC. rs1332018 genetic variants predispose the host to downregulating GSTM3 expression in kidney, facilitate carcinogenesis, and predict an unfavourable postoperative prognosis of RCC.British Journal of Cancer advance online publication, 24 October 2013; doi:10.1038/bjc.2013.669 [www.bjcancer.com](http://www.bjcancer.com).

[130]

**TÍTULO / TITLE:** - Intermittent versus continuous cyproterone acetate in bone metastatic prostate cancer: results of a randomized trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Nov 21.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1206-0](#)

**AUTORES / AUTHORS:** - Verhagen PC; Wildhagen MF; Verkerk AM; Vjaters E; Pagi H; Kukk L; Bratus D; Fiala R; Bangma CH; Schroder FH; Mickisch GH

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Erasmus University Medical Center, Rotterdam, The Netherlands, [p.verhagen@erasmusmc.nl](mailto:p.verhagen@erasmusmc.nl).

**RESUMEN / SUMMARY:** - BACKGROUND: To compare intermittent treatment (IT) versus continuous treatment (CT) using cyproterone acetate (CPA) in bone metastatic prostate cancer patients, we conducted an open-label, multicenter randomized trial. Continuous androgen deprivation therapy is the standard treatment in metastatic prostate cancer. Intermittent treatment might maintain efficacy while toxicity and costs are reduced. METHODS: Patients received CPA 100 mg tid in the prephase. Patients with a PSA decline of  $\geq 90\%$  or PSA  $< 4$  ng/ml were randomized. If patients were progressive, LHRH analogues were added. Primary end point was time to PSA progression. RESULTS: A total of 366 patients were recruited; 258 reached a good response after 3 or 6 months and were randomized. A total of 131 patients randomized to IT and 127 to CT. Patients on IT had an average of 1.7 episodes on CPA, before LHRH analogues were started. The mean time without treatment in IT was 463 days versus 422 days on treatment. There were statistical significant differences between IT and CT in 3 of the 5 functional scales of EORTC QLQ C 30; however, the clinical relevance of this finding appears modest. Symptom and potency scales showed significant advantages for IT. There were no differences in time to PSA progression on CPA, time to PSA and/or clinical progression on LHRH analogues and time to cancer-specific and overall survival. CONCLUSIONS: IT by CPA is associated with less symptoms and modest advantages in QOL domains. There were no differences in time to PSA progression, clinical progression or survival.

[131]

**TÍTULO / TITLE:** - Obesity That Makes Kidney Cancer More Likely but Helps Fight It More Strongly.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Natl Cancer Inst. 2013 Nov 27.

●● Enlace al texto completo (gratis o de pago) [1093/jnci/djt348](#)

**AUTORES / AUTHORS:** - Li L; Kalantar-Zadeh K

**INSTITUCIÓN / INSTITUTION:** - Affiliations of authors: Harold Simmons Center for Kidney Disease Research & Epidemiology, Orange, CA (LL, KK-Z); University of California Irvine Medical Center, Orange, CA (LL, KK-Z); Department of Epidemiology, University of California Los Angeles School of Public Health, Los Angeles, CA (KK-Z).

[132]

**TÍTULO / TITLE:** - Increased expression of putative cancer stem cell markers in the bone marrow of prostate cancer patients is associated with bone metastasis progression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Dec;73(16):1738-46. doi: 10.1002/pros.22689. Epub 2013 Sep 21.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22689](#)

**AUTORES / AUTHORS:** - Ricci E; Mattei E; Dumontet C; Eaton CL; Hamdy F; van der Pluije G; Cecchini M; Thalmann G; Clezardin P; Colombel M

**INSTITUCIÓN / INSTITUTION:** - Service d'Urologie et Chirurgie de la Transplantation, Université Lyon 1, Lyon, France.

**RESUMEN / SUMMARY:** - BACKGROUND: The number of cells positive for the alpha-6 and alpha-2 integrin subunits and the c-Met receptor in primary tumors and bone biopsies from prostate cancer patients has been correlated with metastasis and disease progression. The objective of this study was to quantify disseminated tumour cells present in bone marrow in prostate cancer patients using specific markers and determine their correlation with metastasis and survival. METHODS: Patients were included at different stage of prostate cancer disease, from localised to metastatic castration-resistant prostate cancer. Healthy men were used as a control group. Bone marrow samples were collected and nucleated cells separated. These were stained for CD45, alpha-2, alpha-6 integrin subunits and c-Met and samples were processed for analysis and quantification of CD45-/alpha2+/alpha6+/c-met + cells using flow cytometry. Clinical and pathological parameters were assessed and survival measured. Statistical analyses were made of associations between disease specific parameters, bone marrow flow cytometry data, prostate-specific antigen (PSA) progression free survival and bone metastases progression free survival. RESULTS: For all markers, the presence of more than 0.1% positive cells in bone marrow aspirates was significantly associated with the risk of biochemical progression, the risk of developing metastasis and death from prostate cancer. CONCLUSIONS: Quantification of cells carrying putative stem cell markers in bone marrow is a potential indicator of disease progression. Functional studies on isolated cells are needed to show more specifically their property for metastatic spread in prostate cancer. Prostate 73:1738-1746, 2013. © 2013 Wiley Periodicals, Inc.

[133]

**TÍTULO / TITLE:** - Long-term survival in patients with germ cell testicular cancer: A population-based competing-risks regression analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Surg Oncol. 2013 Sep 25. pii: S0748-7983(13)00812-3. doi: 10.1016/j.ejso.2013.09.019.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejso.2013.09.019](#)

**AUTORES / AUTHORS:** - Gandaglia G; Becker A; Trinh QD; Abdollah F; Schiffmann J; Roghmann F; Tian Z; Montorsi F; Briganti A; Karakiewicz PI; Sun M

**INSTITUCIÓN / INSTITUTION:** - Cancer Prognostics and Health Outcomes Unit, University of Montreal Health Centre, Montreal, Canada; Department of Urology, Urological Research Institute, Vita Salute San Raffaele University, San Raffaele Scientific Institute, Milan, Italy. Electronic address: [giorgan10@libero.it](mailto:giorgan10@libero.it).

**RESUMEN / SUMMARY:** - BACKGROUNDS: Incidence of secondary malignancies and cardiovascular diseases among testicular germ cell tumor (TGCT) survivors is higher compared to the general population. We sought to describe the rates of other-cancer (OCM), non-cancer related (NCRM), and cancer-specific mortality (CSM) among men with TGCT. METHODS: Using the Surveillance, Epidemiology, and End Results (SEER) database, 31,330 patients with a primary diagnosis of TGCT between 1973 and 2009 were identified. The primary endpoints comprised of 15-year CSM, OCM, and NCRM rates. Survival rates were stratified according to histology (seminoma vs. non-seminoma), median age (<34 vs. ≥34 years old), and disease stage (localized vs. regional vs. distant). Competing-risks Poisson regression methodologies were performed. RESULTS: For seminoma patients, the rates of CSM at 15 years increased

with advancing stage (0.4-12.6%;  $P < 0.001$ ), but varies little with age. In contrast, the rates of OCM (0.4-7.9%) and NCRM (2.9-8.9%) at 15 years increased with advancing stage and age (all  $P < 0.001$ ). For non-seminoma patients, the 15-year CSM rates increased with advancing stage and age (1.9-24.4%; all  $P < 0.001$ ). For the same time point, the rates of OCM (0.3-11.4%) and NCRM (2.4-8.0%) also increased with age and stage (all  $P \leq 0.001$ ). CONCLUSIONS: The risk of dying from secondary malignancies or other causes significantly increases with advancing stage and age at diagnosis among TGCT survivors. Such information can help provide patients and physicians with better screening strategies, follow-up protocols, and mental preparedness for such undesirable effects.

[134]

**TÍTULO / TITLE:** - Bispecific small molecule-antibody conjugate targeting prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Proc Natl Acad Sci U S A. 2013 Oct 29;110(44):17796-801. doi: 10.1073/pnas.1316026110. Epub 2013 Oct 14.

●● Enlace al texto completo (gratis o de pago) [1073/pnas.1316026110](#)

**AUTORES / AUTHORS:** - Kim CH; Axup JY; Lawson BR; Yun H; Tardif V; Choi SH; Zhou Q; Dubrovskaya A; Biroc SL; Marsden R; Pinstaff J; Smider VV; Schultz PG

**INSTITUCIÓN / INSTITUTION:** - Departments of Chemistry, Immunology and Microbial Science, and Molecular Biology and The Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA 92037.

**RESUMEN / SUMMARY:** - Bispecific antibodies, which simultaneously target CD3 on T cells and tumor-associated antigens to recruit cytotoxic T cells to cancer cells, are a promising new approach to the treatment of hormone-refractory prostate cancer. Here we report a site-specific, semisynthetic method for the production of bispecific antibody-like therapeutics in which a derivative of the prostate-specific membrane antigen-binding small molecule DUPA was selectively conjugated to a mutant alphaCD3 Fab containing the unnatural amino acid, p-acetylphenylalanine, at a defined site. Homogeneous conjugates were generated in excellent yields and had good solubility. The efficacy of the conjugate was optimized by modifying the linker structure, relative binding orientation, and stoichiometry of the ligand. The optimized conjugate showed potent and selective *in vitro* activity ( $EC_{50}$  approximately 100 pM), good serum half-life, and potent *in vivo* activity in prophylactic and treatment xenograft mouse models. This semisynthetic approach is likely to be applicable to the generation of additional bispecific agents using drug-like ligands selective for other cell-surface receptors.

[135]

**TÍTULO / TITLE:** - High expression of nucleobindin 2 mRNA: an independent prognostic factor for overall survival of patients with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1268-z](#)

**AUTORES / AUTHORS:** - Zhang H; Qi C; Wang A; Li L; Xu Y

**INSTITUCIÓN / INSTITUTION:** - National Key Clinical Specialty of Urology, Second Affiliated Hospital of Tianjin Medical University, Tianjin Key Institute of Urology, 23 Pingjiang Road, Hexi District, Tianjin, 300211, China.

**RESUMEN / SUMMARY:** - Nucleobindin 2 (NUCB2) has been demonstrated to play critical roles in tumorigenesis and tumor development of breast cancer. The expression change of nucleobindin 2 at mRNA level in prostate cancer (PCa) tissues compared with adjacent benign prostate tissues was detected by using real-time quantitative reverse transcriptase-polymerase chain reaction analysis in our previous study. The data suggests that NUCB2 is a cancer-related gene associated with the aggressive progression and biochemical recurrence-free survival predictor of PCa patients. However, the correlation between the expression of the NUCB2 mRNA and the overall survival of patients with PCa was not analyzed. Thus, the association of NUCB2 mRNA expression with overall survival of PCa patients was analyzed in this study. Kaplan-Meier analysis and Cox proportional hazards regression models were used to investigate the correlation between NUCB2 mRNA expression and prognosis of PCa patients. The Kaplan-Meier survival analysis showed that the high expression of NUCB2 was related to the poor overall survival of patients with PCa. Multivariate Cox analysis showed that NUCB2 mRNA was an independent prognostic factor for overall survival of patients with PCa. In conclusion, we demonstrated that high NUCB2 mRNA expression correlated with poor overall survival in patients with PCa.

[136]

**TÍTULO / TITLE:** - Monotherapeutic high-dose-rate brachytherapy for prostate cancer: A dose reduction trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Oct 30. pii: S0167-8140(13)00524-0. doi: 10.1016/j.radonc.2013.10.015.

•• Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.10.015](#)

**AUTORES / AUTHORS:** - Yoshioka Y; Konishi K; Suzuki O; Nakai Y; Isohashi F; Seo Y; Otani Y; Koizumi M; Yoshida K; Yamazaki H; Nonomura N; Ogawa K

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**RESUMEN / SUMMARY:** - **PURPOSE:** To report preliminary results of our second regimen with 45.5Gy/7 fractions aiming to reduce toxicity, compared with our first regimen with 54Gy/9 fractions, using high-dose-rate (HDR) brachytherapy as monotherapy for prostate cancer. **MATERIALS AND METHODS:** From 2005 through 2010, 63 patients with localized prostate cancer were treated with HDR brachytherapy alone in 45.5Gy/7 fractions for 4days. Thirty-four patients were considered as intermediate-risk and 29 as high-risk. Thirty-seven patients also received neoadjuvant and/or adjuvant hormonal therapy. Biologically effective dose assuming  $\alpha/\beta=1.5$ Gy (BED1.5) was reduced from 270Gy to 243Gy, and BED3.0 from 162Gy to 144Gy, compared to previous 54Gy/9 fractions for 5days. **RESULTS:** Median follow-up time was 42months (range 13-72). Grade 2 acute toxicities occurred in six (9.5%), late toxicities in five (7.9%) patients, and Grade 3 or higher in none. Grade 2 late gastrointestinal toxicity rate was 1.6%, compared with 7.1% for the 54Gy regimen. Three-year PSA failure-free rates for intermediate- and high-risk patients were 96%

and 90%, which were comparable to 93% and 85% for the 54Gy regimen.  
CONCLUSIONS: Compared to the 54 Gy/9 fractions regimen, dose-reduced regimen of 45.5Gy/7 fractions using HDR brachytherapy as monotherapy preliminarily showed an equivalent or lower incidence rate for acute and late toxicities without compromising the excellent PSA failure-free rate. Further studies with more patients and longer follow-up are warranted.

[137]

**TÍTULO / TITLE:** - Axitinib with or without dose titration for first-line metastatic renal-cell carcinoma: a randomised double-blind phase 2 trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Lancet Oncol. 2013 Nov;14(12):1233-42. doi: 10.1016/S1470-2045(13)70464-9. Epub 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago) [1016/S1470-2045\(13\)70464-9](#)

**AUTORES / AUTHORS:** - Rini BI; Melichar B; Ueda T; Grunwald V; Fishman MN; Arranz JA; Bair AH; Pithavala YK; Andrews GI; Pavlov D; Kim S; Jonasch E

**INSTITUCIÓN / INSTITUTION:** - Cleveland Clinic Taussig Cancer Institute, Cleveland, OH, USA. Electronic address: [rini2@ccf.org](mailto:rini2@ccf.org).

**RESUMEN / SUMMARY:** - BACKGROUND: Population pharmacokinetic data suggest axitinib plasma exposure correlates with efficacy in metastatic renal-cell carcinoma. Axitinib dose titration might optimise exposure and improve outcomes. We prospectively assessed the efficacy and safety of axitinib dose titration in previously untreated patients with metastatic renal-cell carcinoma. METHODS: In this randomised, double-blind, multicentre, phase 2 study, patients were enrolled from 49 hospitals and outpatient clinics in the Czech Republic, Germany, Japan, Russia, España, and USA. Patients with treatment-naive metastatic renal-cell carcinoma received axitinib 5 mg twice daily during a 4 week lead-in period. Those patients with blood pressure 150/90 mm Hg or lower, no grade 3 or 4 treatment-related toxic effects, no dose reductions, and no more than two antihypertensive drugs for 2 consecutive weeks were stratified by Eastern Cooperative Oncology Group performance status (0 vs 1), and then randomly assigned (1:1) to either masked titration with axitinib to total twice daily doses of 7 mg, and then 10 mg, if tolerated, or placebo titration. Patients who did not meet these criteria continued without titration. The primary objective was comparison of the proportion of patients achieving an objective response between randomised groups. Safety analyses were based on all patients who received at least one dose of axitinib. This ongoing trial is registered with ClinicalTrials.gov, number NCT00835978. FINDINGS: Between Sept 2, 2009, and Feb 28, 2011, we enrolled 213 patients, of whom 112 were randomly assigned to either the axitinib titration group (56 patients) or the placebo titration group (56 patients). 91 were not eligible for titration, and ten withdrew during the lead-in period. 30 patients (54%, 95% CI 40-67) in the axitinib titration group had an objective response, as did 19 patients (34%, 22-48) in the placebo titration group (one-sided p=0.019). 54 (59%, 95% CI 49-70) of non-randomised patients achieved an objective response. Common grade 3 or worse, all-causality adverse events in treated patients were hypertension (ten [18%] of 56 in the axitinib titration group vs five [9%] of 56 in the placebo titration group vs 45 [49%] of 91 in the non-randomised group), diarrhoea (seven [13%] vs two [4%] vs eight [9%]), and decreased weight (four [7%] vs three [5%] vs six [7%]). One or more all-causality

serious adverse events were reported in 15 (27%) patients in the axitinib titration group, 13 (23%) patients in the placebo titration group, and 35 (38%) non-randomised patients. The most common serious adverse events in all 213 patients were disease progression and dehydration (eight each [4%]), and diarrhoea, vomiting, pneumonia, and decreased appetite (four each [2%]). INTERPRETATION: The greater proportion of patients in the axitinib titration group achieving an objective response supports the concept of individual axitinib dose titration in selected patients with metastatic renal-cell carcinoma. Axitinib shows clinical activity with a manageable safety profile in treatment-naive patients with this disease. FUNDING: Pfizer Inc.

[138]

**TÍTULO / TITLE:** - Re: stratifying risk of urinary tract malignant tumors in patients with asymptomatic microscopic hematuria.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2103-4. doi: 10.1016/j.juro.2013.08.032. Epub 2013 Aug 23.

●● Enlace al texto completo (gratuito o de pago) [1016/j.juro.2013.08.032](#)

**AUTORES / AUTHORS:** - Babayan RK

[139]

**TÍTULO / TITLE:** - Usefulness of the Memorial Sloan Kettering Cancer Center Nomogram in the prognosis of patients treated with radical cystectomy for invasive bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Esp Urol. 2013 Nov;66(9):859-864.

**AUTORES / AUTHORS:** - Molina Escudero R; Herranz Amo F; Monzo Gardiner J; Paez Borda A; Hernandez Fernandez C

**INSTITUCIÓN / INSTITUTION:** - Servicio de Urología.Hospital Universitario Fuenlabrada. Hospital Universitario Gregorio Marañon Madrid.Spain. Servicio urología .Hospital Dr.Federico Abete.Buenos Aires. Argentina.

**RESUMEN / SUMMARY:** - OBJECTIVES: To evaluate the usefulness of the Memorial Sloan Kettering Cancer Center (MSKCC) nomogram for prediction of recurrence probability in our series of patients who have undergone radical cystectomy for bladder cancer. METHODS: 397 patients underwent radical cystectomy for bladder cancer between 1986 and 2005. 165 patients were excluded:21 due to exitus in the immediate postoperative period, 32 due to previous radiation therapy, 6 due to neoadjuvant chemotherapy, 5 due to inability to complete follow-up, 15 that did not undergo lymphadenectomy and 86 who were alive at the time of review with less than 5 years of follow-up. Patients were classified into recurrence risk groups: organ-confined tumors (pT0-2 pN0), extra-bladder involvement (pT3-4 pN0) and lymph node involvement (pN+). Survival analysis was performed using the Kaplan-Meier method. Five-year recurrence-free survival by risk groups in our series was compared with the one estimated using the MSKCC nomogram using a ROC curve. RESULTS: We analyzed 232 patients. Follow-up in patients who died of cancer was 25 +/- 25 months. For alive patients and those who died of other causes, follow-up was 120 +/- 39 months. Pathology studies revealed 42.7% organ-confined tumors, 33.2% with extra-bladder

involvement and 24.1% with lymph node involvement. The five-year recurrence free survival analysis according to the Kaplan-Meier method stratified by risk groups was: pT0-2 76%, pT3-4 51%, pN+ 31%. The probability of recurrence free survival according to the MSKCC nomogram in the same risk groups was: 85% +/- 5%, 62% +/- 10% and 25% +/- 13%, respectively. The area under the ROC curve was 0.795 (95% CI 0.739-0.852) CONCLUSION: In our series, the MSKCC nomogram constitutes a useful tool for predicting 5-year cancer free survival in patients who undergo radical cystectomy.

[140]

**TÍTULO / TITLE:** - Cross-Cultural Application of the Korean Version of the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire for Patients with Prostate Cancer - EORTC QLQ-PR25.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncology. 2013;85(5):299-305. doi: 10.1159/000355689. Epub 2013 Nov 6.

●● Enlace al texto completo (gratis o de pago) [1159/000355689](#)

**AUTORES / AUTHORS:** - Park J; Shin DW; Yun SJ; Park SW; Jeon SS; Kwak C; Kwon TG; Kim HJ; Ahn H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Eulji University Hospital, Daejeon, Korea.

**RESUMEN / SUMMARY:** - Objective: We evaluated the psychometric properties of the Korean version of the European Organization for Research and Treatment of Cancer QLQ-PR25 when applied to Korean prostate cancer (PC) patients. Methods: A total of 172 patients who underwent curative radical prostatectomy (RP) with or without adjuvant androgen deprivation therapy were asked to complete the Korean version of the EORTC QLQ-C30 and PR25 questionnaires 3 times (before and 3 and 6 months after RP). Psychometric evaluation of the questionnaire was conducted. Results: Multitrait scaling analysis showed satisfactory construct validity in most scales except for bowel symptoms and hormonal treatment-related symptoms. Internal consistency tested by Cronbach's alpha coefficient met the 0.70 criterion for the urinary symptom, sexual activity and sexual functioning scales at the all 3 time points. Known-group comparison analyses showed better quality-of-life (QOL) scores in patients with higher performance status, and higher hormonal treatment-related symptom scores in patients on hormonal treatment. Responsiveness to changes was in line with clinical implications over time after RP. Conclusions: Our results show that the EORTC QLQ-PR25 questionnaire has adequate levels in cross-cultural validity. The Korean version of the EORTC QLQ-PR25 is a generally reliable and robust instrument for the assessment of various QOL aspects that can be self-administered to Korean PC patients undergoing RP. © 2013 S. Karger AG, Basel.

[141]

**TÍTULO / TITLE:** - Genome-wide association study identifies multiple loci associated with bladder cancer risk.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Mol Genet. 2013 Nov 23.

●● Enlace al texto completo (gratis o de pago) [1093/hmg/ddt519](https://doi.org/10.1093/hmg/ddt519)

**AUTORES / AUTHORS:** - Figueroa JD; Ye Y; Siddiq A; Garcia-Closas M; Chatterjee N; Prokunina-Olsson L; Cortessis VK; Kooperberg C; Cussenot O; Benhamou S; Prescott J; Porru S; Dinney CP; Malats N; Baris D; Purdue M; Jacobs EJ; Albanes D; Wang Z; Deng X; Chung CC; Tang W; Bas Bueno-de-Mesquita H; Trichopoulos D; Ljungberg B; Clavel-Chapelon F; Weiderpass E; Krogh V; Dorronsoro M; Travis R; Tjonneland A; Brenan P; Chang-Claude J; Riboli E; Conti D; Gago-Dominguez M; Stern MC; Pike MC; Van Den Berg D; Yuan JM; Hohensee C; Rodabough R; Cancel-Tassin G; Roupert M; Comperat E; Chen C; De Vivo I; Giovannucci E; Hunter DJ; Kraft P; Lindstrom S; Carta A; Pavanello S; Arici C; Mastrangelo G; Kamat AM; Lerner SP; Barton Grossman H; Lin J; Gu J; Pu X; Hutchinson A; Burdette L; Wheeler W; Kogevinas M; Tardon A; Serra C; Carrato A; Garcia-Closas R; Lloreta J; Schwenn M; Karagas MR; Johnson A; Schned A; Armenti KR; Hosain GM; Andriole G Jr; Grubb R 3rd; Black A; Ryan Diver W; Gapstur SM; Weinstein SJ; Virtamo J; Haiman CA; Landi MT; Caporaso N; Fraumeni JF Jr; Vineis P; Wu X; Silverman DT; Chanock S; Rothman N

**INSTITUCIÓN / INSTITUTION:** - Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA.

**RESUMEN / SUMMARY:** - Candidate gene and genome-wide association studies (GWAS) have identified 11 independent susceptibility loci associated with bladder cancer risk. To discover additional risk variants, we conducted a new GWAS of 2422 bladder cancer cases and 5751 controls, followed by a meta-analysis with two independently published bladder cancer GWAS, resulting in a combined analysis of 6911 cases and 11 814 controls of European descent. TaqMan genotyping of 13 promising single nucleotide polymorphisms with  $P < 1 \times 10^{-5}$  was pursued in a follow-up set of 801 cases and 1307 controls. Two new loci achieved genome-wide statistical significance: rs10936599 on 3q26.2 ( $P = 4.53 \times 10^{-9}$ ) and rs907611 on 11p15.5 ( $P = 4.11 \times 10^{-8}$ ). Two notable loci were also identified that approached genome-wide statistical significance: rs6104690 on 20p12.2 ( $P = 7.13 \times 10^{-7}$ ) and rs4510656 on 6p22.3 ( $P = 6.98 \times 10^{-7}$ ); these require further studies for confirmation. In conclusion, our study has identified new susceptibility alleles for bladder cancer risk that require fine-mapping and laboratory investigation, which could further understanding into the biological underpinnings of bladder carcinogenesis.

[142]

**TÍTULO / TITLE:** - Clinical Implications of Preoperative Serum Total Cholesterol in Patients With Clear Cell Renal Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct 19. pii: S0090-4295(13)01136-9. doi: 10.1016/j.urology.2013.08.052.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.052](https://doi.org/10.1016/j.urology.2013.08.052)

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**RESUMEN / SUMMARY:** - OBJECTIVE: To investigate the clinical implication of preoperative serum total cholesterol (TC) level in patients with clear cell renal cell

carcinoma (RCC). METHODS: The records of 364 patients with clear cell RCC who had undergone nephrectomy were retrospectively reviewed. The association among preoperative TC level, clinicopathologic factors, and oncological outcome in terms of cancer-specific survival (CSS) and recurrence-free survival period was analyzed by univariate and multivariate analyses. RESULTS: As a continuous variable, lower serum TC level was found to be significantly associated with male sex, symptomatic tumor, advanced TNM stage, higher nuclear grade, microscopic venous invasion, poor Eastern Cooperative Oncology Group Performance Status, larger tumor size, elevated C-reactive protein level, and lower hemoglobin level. Univariate analysis showed that relatively lower preoperative serum TC level was associated with lower recurrence-free survival (P = .040) and CSS (P <.001) rates. Multivariate analysis indicated that in addition to pT stage, M stage, nuclear grade, and Eastern Cooperative Oncology Group Performance Status, serum TC level (hazard ratio, 0.988 per mg/dL; 95% confidence interval, 0.980-0.998; P = .019) was an independent predictor of CSS. CONCLUSION: Low preoperative serum TC level is associated with worse prognosis in patients with clear cell RCC. Consideration of preoperative serum TC level might thus provide additional prognostic information for patients with clear cell RCC.

[143]

**TÍTULO / TITLE:** - Echocardiographic, histopathologic, and surgical findings in Staphylococcus lugdunensis mitral valve endocarditis after prostate biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Circulation. 2013 Oct 1;128(14):e204-6. doi: 10.1161/CIRCULATIONAHA.113.002928.

●● Enlace al texto completo (gratis o de pago)

[1161/CIRCULATIONAHA.113.002928](#)

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[144]

**TÍTULO / TITLE:** - Prospective Multicenter Study of Bone Scintigraphy in Consecutive Patients With Newly Diagnosed Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Nov 7.

●● Enlace al texto completo (gratis o de pago)

[1097/RLU.0000000000000291](#)

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**INSTITUCIÓN / INSTITUTION:** - From the \*Department of Clinical Physiology, Viborg Hospital, Viborg; daggerDepartment of Nuclear Medicine, Aalborg University Hospital, Aalborg; double daggerDepartment of Urology, Viborg Hospital, Viborg; Departments of section signNuclear Medicine and parallelUrology, Regional Hospital West Jutland, Herning; Departments of paragraph signClinical Physiology and Nuclear Medicine and

#Urology, Randers Hospital, Randers; and \*\*Department of Clinical Medicine, Aalborg University, Aalborg, Denmark.

**RESUMEN / SUMMARY:** - BACKGROUND: International guidelines uniformly suggest no routine staging of bone metastasis in patients with bone scintigraphy (BS) in low-risk prostate cancer (PCa). These recommendations are based on retrospective investigations only. In addition, BS has most often been reported as a definitive investigation with no room for equivocal cases. OBJECTIVE: The objective of this study was to determine the diagnostic value of BS in a large cohort of consecutive patients with newly diagnosed PCa. DESIGN, SETTING, AND PARTICIPANTS: Over a period of 1.5 years in 2008 to 2009, consecutive patients with newly diagnosed PCa were enrolled in a noninterventional, multicenter, observational study. All patients had a whole-body, planar BS. Clinical history and clinical, pathological, and biochemical data were obtained from electronic patient files and questionnaires. OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: Bone scintigraphy was classified into 4 categories as nonmalignant, equivocal, likely malignant, or multiple metastasis. The primary end point was final imaging, which was a composite end point of BS and additional CT and MRI investigations. RESULTS AND LIMITATIONS: A total of 635 eligible patients were recruited. Their median prostate-specific antigen (PSA) was 15 ng/mL, median Gleason was 7, and 80% of patients had local disease (T1 or T2). The proportion of nonmalignant BS was 61%, equivocal scans 26%, and likely or definitive metastasis 13%. A total of 154 patients had additional CT or MRI investigations. The final imaging diagnosis showed a prevalence of bone metastases in 87 (13.7%) of 635 patients. No bone metastases were observed in (1) patients with PSA of less than 10 ng/mL, independently of the clinical T stage and Gleason score (n = 212) and (2) PSA of less than 20 ng/mL if T stage is less than T3 and Gleason score is less than 8 (n = 97). Approximately 50% of the patients enrolled in this study met these criteria. CONCLUSION: This is the first prospective trial to demonstrate that BS can be avoided in patients with low-risk PCa.

[145]

**TÍTULO / TITLE:** - Distribution of metastatic sites in patients with prostate cancer: A population-based analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 16. doi: 10.1002/pros.22742.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22742](#)

**AUTORES / AUTHORS:** - Gandaglia G; Abdollah F; Schiffmann J; Trudeau V; Shariat SF; Kim SP; Perrotte P; Montorsi F; Briganti A; Trinh QD; Karakiewicz PI; Sun M

**INSTITUCIÓN / INSTITUTION:** - Cancer Prognostics and Health Outcomes Unit, University of Montreal Health Center, Montreal, Canada; Department of Urology, Urological Research Institute, Vita Salute San Raffaele University, San Raffaele Scientific Institute, Milan, Italy.

**RESUMEN / SUMMARY:** - BACKGROUND: There is few data on what constitutes the distribution of metastatic sites in prostate cancer (PCa). The aim of our study was to systematically describe the most common sites of metastases in a contemporary cohort of PCa patients. METHODS: Patients with metastatic PCa were abstracted from the Nationwide Inpatient Sample (1998-2010). Most common metastatic sites within the entire population were described. Stratification was performed according to the

presence of single or multiple ( $\geq 2$  sites) metastases. Additionally, we evaluated the distribution of metastatic sites amongst patients with and without bone metastases. RESULTS: Overall, 74,826 patients with metastatic PCa were identified. The most common metastatic sites were bone (84%), distant lymph nodes (10.6%), liver (10.2%), and thorax (9.1%). Overall, 18.4% of patients had multiple metastatic sites involved. When stratifying patients according to the site of metastases, only 19.4% of men with bone metastases had multiple sites involved. Conversely, among patients with lymph nodes, liver, thorax, brain, digestive system, retroperitoneum, and kidney and adrenal gland metastases the proportion of men with multiple sites involved was 43.4%, 76.0%, 76.7%, 73.0%, 52.2%, 60.9%, and 76.4%, respectively. When focusing exclusively on patients with bone metastases, the most common sites of secondary metastases were liver (39.1%), thorax (35.2%), distant lymph nodes (24.6%), and brain (12.4%). CONCLUSIONS: Although the majority of patients with metastatic PCa experience bone location, the proportion of patients with atypical metastases is not negligible. These findings might be helpful when planning diagnostic imaging procedures in patients with advanced PCa. Prostate © 2013 Wiley Periodicals, Inc.

[146]

**TÍTULO / TITLE:** - Second cancer risk and mortality in men treated with radiotherapy for stage I seminoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 21. doi: 10.1038/bjc.2013.551.

●● [Enlace al texto completo \(gratis o de pago\) 1038/bjc.2013.551](#)

**AUTORES / AUTHORS:** - Horwich A; Fossa SD; Huddart R; Dearnaley DP; Stenning S; Aresu M; Bliss JM; Hall E

**INSTITUCIÓN / INSTITUTION:** - Academic Radiotherapy Unit, The Institute of Cancer Research and the Royal Marsden NHS Trust, 123 Old Brompton Rd, London SW7 3RP, UK.

**RESUMEN / SUMMARY:** - Background: Patients with stage I testicular seminoma are typically diagnosed at a young age and treatment is associated with low relapse and mortality rates. The long-term risks of adjuvant radiotherapy in this patient group are therefore particularly relevant. Methods: We identified patients and obtained treatment details from 12 cancer centres (11 United Kingdom, 1 Norway) and ascertained second cancers and mortality through national registries. Data from 2629 seminoma patients treated with radiotherapy between 1960 and 1992 were available, contributing 51 151 person-years of follow-up. Results: Four hundred and sixty-eight second cancers (excluding non-melanoma skin cancers) were identified. The standardised incidence ratio (SIR) was 1.61 (95% confidence interval (CI): 1.47-1.76,  $P < 0.0001$ ). The SIR was 1.53 (95% CI: 1.39-1.68,  $P < 0.0001$ ) when the 32 second testicular cancers were also excluded. This increase was largely due to an excess risk to organs in the radiation field; for pelvic-abdominal sites the SIR was 1.62 (95% CI: 1.43-1.83), with no significant elevated risk of cancers in organs elsewhere. There was no overall increase in mortality with a standardised mortality ratio (SMR) of 1.06 (95% CI: 0.98-1.14), despite an increase in the cancer-specific mortality (excluding testicular cancer deaths) SMR of 1.46 (95% CI: 1.30-1.65,  $P < 0.0001$ ). Conclusion: The prognosis of stage I seminoma is excellent and it is important to avoid conferring long-term increased risk of iatrogenic disease such as radiation-associated second cancers. British Journal of

[147]

**TÍTULO / TITLE:** - Mounting Evidence for Prediagnostic Use of Statins in Reducing Risk of Lethal Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2013.53.2770](https://doi.org/10.1200/JCO.2013.53.2770)

**AUTORES / AUTHORS:** - Mucci LA; Stampfer MJ

**INSTITUCIÓN / INSTITUTION:** - Harvard School of Public Health, Boston, MA.

[148]

**TÍTULO / TITLE:** - Personal History of Prostate Cancer and Increased Risk of Incident Melanoma in the United States.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 4.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2013.51.1915](https://doi.org/10.1200/JCO.2013.51.1915)

**AUTORES / AUTHORS:** - Li WQ; Qureshi AA; Ma J; Goldstein AM; Giovannucci EL; Stampfer MJ; Han J

**INSTITUCIÓN / INSTITUTION:** - Wen-Qing Li and Alisa M. Goldstein, National Cancer Institute, National Institutes of Health, Rockville, MD; Wen-Qing Li, Abrar A. Qureshi, Jing Ma, Edward L. Giovannucci, Meir J. Stampfer, and Jiali Han, Brigham and Women's Hospital, Harvard Medical School; Edward L. Giovannucci and Meir J. Stampfer, Harvard School of Public Health, Boston, MA; Jiali Han, Richard M. Fairbanks School of Public Health, Simon Cancer Center, Indiana University, Indianapolis, IN; and Jiali Han, Tianjin Medical University Cancer Institute and Hospital, Tianjin, China.

**RESUMEN / SUMMARY:** - PURPOSE: Steroid hormones, particularly androgens, play a major role in prostatic carcinogenesis. Personal history of severe acne, a surrogate for higher androgen activity, has been associated with an increased risk of prostate cancer (PCa), and one recent study indicated that severe teenage acne was a novel risk factor for melanoma. These findings suggest a possible relationship between PCa and risk of melanoma. We prospectively evaluated this association among US men. METHODS: A total of 42,372 participants in the Health Professionals' Follow-Up Study (HPFS; 1986 to 2010) were included. Biennially self-reported PCa diagnosis was confirmed using pathology reports. Diagnosis of melanoma and nonmelanoma skin cancer (NMSC) was self-reported biennially, and diagnosis of melanoma was pathologically confirmed. We sought to confirm the association in 18,603 participants from the Physicians' Health Study (PHS; 1982 to 1998). RESULTS: We identified 539 melanomas in the HPFS. Personal history of PCa was associated with an increased risk of melanoma (multivariate-adjusted hazard ratio [HR], 1.83; 95% CI, 1.32 to 2.54). Although we also detected a marginally increased risk of NMSC associated with PCa (HR, 1.08; 95% CI, 0.995 to 1.16), the difference in the magnitude of the association between melanoma and NMSC was significant (P for heterogeneity = .002). We did not find an altered risk of melanoma associated with personal history of other cancers.

The association between PCa and risk of incident melanoma was confirmed in the PHS (HR, 2.17; 95% CI, 1.12 to 4.21). CONCLUSION: Personal history of PCa is associated with an increased risk of melanoma, which may not be entirely a result of greater medical scrutiny.

[149]

**TÍTULO / TITLE:** - Loss of androgen receptor expression promotes a stem-like cell phenotype in prostate cancer through STAT3 signaling.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Res. 2013 Oct 31.

●● Enlace al texto completo (gratis o de pago) [1158/0008-5472.CAN-13-](#)

[0594](#)

**AUTORES / AUTHORS:** - Schroeder A; Herrmann A; Cherryholmes G; Kowolik C; Buettner R; Pal S; Yu H; Mueller-Newen G; Jove R

**INSTITUCIÓN / INSTITUTION:** - Molecular Medicine, Beckman Research Institute City of Hope.

**RESUMEN / SUMMARY:** - Androgen receptor (AR) signaling is important for prostate cancer progression. However, androgen-deprivation and/or AR targeting-based therapies often lead to resistance. Here we demonstrate that loss of AR expression results in STAT3 activation in prostate cancer cells. AR downregulation further leads to development of prostate cancer stem-like cells (CSC), which requires STAT3. In human prostate tumor tissues, elevated cancer stem-like cell markers coincide with those cells exhibiting high STAT3 activity and low AR expression. AR downregulation-induced STAT3 activation is mediated through increased IL-6 expression. Treating mice with soluble IL-6 receptor fusion protein or silencing STAT3 in tumor cells significantly reduced prostate tumor growth and CSCs. Together, these findings indicate an opposing role of AR and STAT3 in prostate CSC development.

[150]

**TÍTULO / TITLE:** - Diethylstilbestrol for the treatment of patients with castration-resistant prostate cancer: Retrospective analysis of a single institution experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2014 Jan;31(1):428-34. doi: 10.3892/or.2013.2852. Epub 2013 Nov 14.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2852](#)

**AUTORES / AUTHORS:** - Grenader T; Plotkin Y; Gips M; Cherny N; Gabizon A

**INSTITUCIÓN / INSTITUTION:** - Department of Oncology, Shaare Zedek Medical Center, and Hebrew University-School of Medicine, Jerusalem, Israel.

**RESUMEN / SUMMARY:** - The aim of the present retrospective study was to evaluate the efficacy and safety of diethylstilbestrol (DES) as treatment for patients with castration-resistant prostate cancer (CRPC) and to identify predicting factors of response to DES. Patients treated with DES during the castration-resistant phase following the failure of prior treatment with LH-RH analogs during the castration-sensitive phase were retrieved from a prostate cancer database of our institution. Patients were treated with a daily dose of DES of 1-4 mg (mean, 2.6 mg) and anticoagulants for thromboembolic prophylaxis until disease progression. We analyzed

their medical records, biochemical prostate-specific antigen (PSA) response and time to disease progression (TDP). Disease response and progression were identified according to the PCWG2 criteria. Patient data were examined using Kaplan-Meier survival analysis and statistical correlation tests with intra-patient comparison of the LH-RH and DES treatment phases. Forty-three DES-treated CRPC patients were found in our database through July 2011. The median age was 66 years. Sixty-three percent of the patients achieved a  $\geq 50\%$  decline in their serum PSA levels during DES therapy. Median TDP was 20.4 months for LH-RH analog treatment in the castration-sensitive phase, and 7.1 months for DES treatment in the castration-resistant phase. Durable responses ( $>1$  year) were observed in 31% of the patients. Median overall survival was 57 months from the start of the DES therapy. There was no significant correlation between the TDP under LH-RH analogs and under DES therapy among the 38 patients eligible for correlation analysis. However, the magnitudes of serum PSA responses under DES and LH-RH analogs were significantly correlated with each other, and with the TDP under DES therapy. There were no treatment-related deaths. Four patients (9%) developed thromboembolic complications while under treatment, some of which appeared to be related to a discontinuation of thromboprophylaxis. In conclusion, DES confers substantial clinical benefit in the treatment of CRPC, with a relatively good safety profile when administered with thromboprophylaxis. The use of DES may be effective in CRPC, irrespective of the length of the hormone-sensitive period with LH-RH treatment. The magnitude of PSA response to previous treatment with LH-RH analogs, as well as to DES, was predictive of the duration of response to DES.

[151]

**TÍTULO / TITLE:** - Clinical benefits of non-taxane chemotherapies in unselected symptomatic metastatic castration-resistant prostate cancer patients after docetaxel: the Getug P02 study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 1. doi: 10.1111/bju.12552.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12552](#)

**AUTORES / AUTHORS:** - Joly F; Delva R; Mourey L; Sevin E; Bompas E; Vedrine L; Ravaut A; Eymard J; Tubiana-Mathieu N; Linassier C; Houede N; Guillot A; Ringensen F; Cojocarasu O; Valenza B; Leconte A; Lheureux S; Clarisse B; Oudard S

**INSTITUCIÓN / INSTITUTION:** - Medical Oncology Department - Clinical Research Department, Centre Francois Baclesse - CHU Cote de nacre, Caen, France; Université Basse Normandie Caen, France. [f.joly@baclesse.fr](mailto:f.joly@baclesse.fr).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To evaluate the overall benefits of non-taxane chemotherapies in a non-selected population including unfit patients presenting with symptoms and pain. **PATIENTS AND METHODS:** This randomised phase 2 study reports data from 92 patients (52%  $> 70$  yrs-old; 40% PS II) previously treated with taxane-based chemotherapy and collected at 15 centres in France. Patients received intravenous mitoxantrone (MTX), oral vinorelbine (VN), or oral etoposide (EP) associated with oral prednisone. Palliative benefit (pain response without progression of the disease), biological and tumoral responses, and toxicity profile as well as geriatric assessment (in elderly population) were analysed on an intention-to-treat basis. **RESULTS:** The palliative response rate was 17% for the whole population, and

reached 29% when considering the MTX arm. The control of pain was achieved in 40% of the patients. The median overall survival was 10.4 months, and was longer in palliative responders. Few grade 3-4 toxicities were observed. The subgroup analysis of elderly patients showed similar results regarding the number and dose-intensity of treatments, efficacy and safety. CONCLUSION: In a population including frailty and/or elderly patients, who are poorly represented in most of the clinical studies, non-taxane chemotherapy may remain a relevant option for metastatic prostate cancer having relapsed after a docetaxel-based regimen. While new treatment options are now approved, decision-making process should take into account the expected benefit/risk ratio based on the patient status.

[152]

**TÍTULO / TITLE:** - Diabetes mellitus as predictor of patient and graft survival after kidney transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplant Proc. 2013 Nov;45(9):3245-8. doi: 10.1016/j.transproceed.2013.08.030.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1016/j.transproceed.2013.08.030](#)

**AUTORES / AUTHORS:** - Maamoun HA; Soliman AR; Fathy A; Elkhatib M; Shaheen N

**INSTITUCIÓN / INSTITUTION:** - Internal Medicine and Nephrology Department, Cairo University, Cairo, Egypt. Electronic address: [hodamamoun@yahoo.com](mailto:hodamamoun@yahoo.com).

**RESUMEN / SUMMARY:** - BACKGROUND: In this study, we used a single-center database to examine the risks of renal transplantation in patients with diabetes mellitus (DM). We aimed to compare 1-year outcomes of survival and morbidity after renal transplantation among recipients with and without DM. METHODS: We reviewed retrospectively 1211 adult patients who underwent renal transplantation from January 2001 to December 2010. The patients were divided into 2 groups: Those with (33%) and those without (67%) pretransplant diabetes. Unpaired Student's t tests and chi(2) tests were used to compare outcomes between diabetic and nondiabetic renal transplant recipients. We analyzed survival, renal function, development of proteinuria, rejection, and infection (requiring hospitalization). RESULTS: Patients with diabetes were older, had a greater body mass index (mean, 29.5 vs 25.3 kg/m<sup>2</sup>; P < .05), and had lower creatinine clearance (44.2 +/- 11.4 vs 56.0 +/- 18.2; P = .01). Forty-one patients died in hospital (3.4%; P = nonsignificant). Furthermore, survival rates were similar between these 2 groups. However, we found a trend toward decreased survival for those with DM at 1 year (80.4% vs 88.7%; P = .20). Mean follow-up time was 3.2 years. Infection rate within 6 months was greater among those with DM (19% vs 5%; odds ratio, 6.25). Freedom from rejection at 3 years was similar (75.2% vs 76.8%; P = .57). Multivariate analysis showed increased baseline creatinine level as a significant risk factor for survival. Body mass index >30 kg/m<sup>2</sup> was a significant risk factor for survival among patients with DM. CONCLUSION: We found an increased risk of serious infections in patients with DM, particularly within the first 6 months. However, our data suggest that diabetes is not associated with worse 1-year survival or higher morbidity in renal transplant patients, as long as good blood glucose control is maintained.

[153]

**TÍTULO / TITLE:** - Lysophosphatidic acid induces reactive oxygen species generation by activating protein kinase C in PC-3 human prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Biophys Res Commun. 2013 Nov 1;440(4):564-9. doi: 10.1016/j.bbrc.2013.09.104. Epub 2013 Oct 8.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbrc.2013.09.104](#)

**AUTORES / AUTHORS:** - Lin CC; Lin CE; Lin YC; Ju TK; Huang YL; Lee MS; Chen JH; Lee H

**INSTITUCIÓN / INSTITUTION:** - Institute of Zoology, College of Life Science, National Taiwan University, Taipei, Taiwan, ROC.

**RESUMEN / SUMMARY:** - Prostate cancer is one of the most frequently diagnosed cancers in males, and PC-3 is a cell model popularly used for investigating the behavior of late stage prostate cancer. Lysophosphatidic acid (LPA) is a lysophospholipid that mediates multiple behaviors in cancer cells, such as proliferation, migration and adhesion. We have previously demonstrated that LPA enhances vascular endothelial growth factor (VEGF)-C expression in PC-3 cells by activating the generation of reactive oxygen species (ROS), which is known to be an important mediator in cancer progression. Using flow cytometry, we showed that LPA triggers ROS generation within 10min and that the generated ROS can be suppressed by pretreatment with the NADPH oxidase (Nox) inhibitor diphenylene iodonium. In addition, transfection with LPA1 and LPA3 siRNA efficiently blocked LPA-induced ROS production, suggesting that both receptors are involved in this pathway. Using specific inhibitors and siRNA, phospholipase C (PLC) and protein kinase C (PKC) were also suggested to participate in LPA-induced ROS generation. Overall, we demonstrated that LPA induces ROS generation in PC-3 prostate cancer cells and this is mediated through the PLC/PKC/Nox pathway.

[154]

**TÍTULO / TITLE:** - A phase II study of bevacizumab and high-dose interleukin-2 in patients with metastatic renal cell carcinoma: a Cytokine Working Group (CWG) study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Immunother. 2013 Nov-Dec;36(9):490-5. doi: 10.1097/CJI.0000000000000003.

●● Enlace al texto completo (gratis o de pago) [1097/CJI.0000000000000003](#)

**AUTORES / AUTHORS:** - Dandamudi UB; Ghebremichael M; Sosman JA; Clark JI; McDermott DF; Atkins MB; Dutcher JP; Urba WJ; Regan MM; Puzanov I; Crocenzi TS; Curti BD; Vaishampayan UN; Crosby NA; Margolin KA; Ernstoff MS

**INSTITUCIÓN / INSTITUTION:** - \*Dartmouth Hitchcock Medical Center, Lebanon, NH daggerDana-Farber Cancer Institute, Harvard School of Public Health parallelBeth Israel Deaconess Medical Center double daggerdouble daggerDana-Farber Cancer Institute, Harvard Medical School, Boston, MA double daggerVanderbilt University Medical Center, Nashville, TN section signLoyola University Medical Center, Maywood, IL paragraph signGeorgetown Lombardi Comprehensive Cancer Center, Washington, DC #St. Luke's Roosevelt Hospital Center, New York, NY \*\*Earle A. Chiles Research Institute daggerdaggerProvidence Cancer Center, Portland, OR

Department of Oncology, Wayne State University, Karmanos Cancer Institute, Detroit, MI parallel parallelDivision of Oncology, Department of Medicine, University of Washington, Seattle Cancer Care Alliance, Seattle, WA.

**RESUMEN / SUMMARY:** - Overexpression of vascular endothelial growth factor in renal cell carcinoma (RCC) leads to angiogenesis, tumor progression, and inhibition of immune function. We conducted the first phase II study to estimate the efficacy and safety of bevacizumab with high-dose interleukin-2 (IL-2) therapy in patients with metastatic RCC. Eligible patients had predominantly clear cell metastatic RCC, measurable disease, a Karnofsky Performance Status of  $\geq 80\%$ , and adequate end-organ function. IL-2 (600,000 IU/kg) was infused intravenously every 8 hours (maximum 28 doses) during two 5-day cycles on days 1 and 15 of each 84-day course. Bevacizumab (10 mg/kg) was infused intravenously every 2 weeks beginning 2 weeks before initiating IL-2. Fifty of 51 eligible patients from 8 centers were enrolled. Median progression-free survival (PFS) was 11.2 months (90% confidence interval, 5.7-17.7), and 2-year PFS was 18% (90% confidence interval, 8%-27%). Responses included 4 complete (8%) and 11 partial (22%) responses. Toxicities did not exceed those expected from each agent alone. Combining IL-2 plus bevacizumab is feasible, with a response rate and PFS at least as high as reported previously for the single agents. The regimen did not appear to enhance the rate of durable major responses over that of IL-2 alone.

[155]

**TÍTULO / TITLE:** - Frequent inactivating mutations of STAG2 in bladder cancer are associated with low tumor grade and stage and inversely related to chromosomal copy number changes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Mol Genet. 2013 Nov 22.

●● Enlace al texto completo (gratis o de pago) [1093/hmg/ddt589](#)

**AUTORES / AUTHORS:** - Taylor CF; Platt FM; Hurst CD; Thygesen HH; Knowles MA  
**INSTITUCIÓN / INSTITUTION:** - Cancer Research UK Centre Genomics Facility.

**RESUMEN / SUMMARY:** - Inactivating mutations of STAG2 have been reported at low frequency in several cancers. In glioblastoma, the function of STAG2 has been related to maintenance of euploidy via its role in the cohesin complex. In a screen of a large series of bladder tumors and cell lines, we found inactivating mutations (nonsense, frameshift and splicing) in 67 of 307 tumors (21.8%) and 6 of 47 cell lines. Thirteen missense mutations of unknown significance were also identified. Inactivating mutation was associated with low tumor stage ( $p=0.001$ ) and low grade ( $p=0.0002$ ). There was also a relationship with female patient gender ( $p=0.042$ ). Examination of copy number profiles revealed an inverse relationship of mutation with both fraction of genome altered and with whole chromosome copy number changes. Immunohistochemistry showed that in the majority of cases with inactivating mutations, STAG2 protein expression was absent. Strikingly we identified a relatively large sub-set of tumors (12%) with areas of both positive and negative immunoreactivity, in only 4 of which a potentially function-altering mutation was detected. Regions of differential expression were contiguous and showed similar morphological phenotype in all cases. Microdissected positive and negative areas from one tumor showed an inactivating mutation to be present only in the negative area, suggesting intra-tumoral sub-clonal

genomic evolution. Our findings indicate that loss of STAG2 function plays a more important role in non-invasive than in muscle-invasive bladder cancer and suggest that cohesin complex-independent functions are likely to be important in these cases.

[156]

**TÍTULO / TITLE:** - Integrin-free tetraspanin CD151 can inhibit tumor cell motility upon clustering and is a clinical indicator of prostate cancer progression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Res. 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1158/0008-5472.CAN-13-0275](#)

**AUTORES / AUTHORS:** - Palmer TD; Martinez CH; Vasquez C; Hebron K; Jones-Paris C; Arnold SA; Chan SM; Chalasani V; Gomez-Lemus JA; Williams AK; Chin JL; Giannico GA; Ketova T; Lewis JD; Zijlstra A

**INSTITUCIÓN / INSTITUTION:** - Pathology, Microbiology and Immunology, Vanderbilt University Medical Center.

**RESUMEN / SUMMARY:** - Normal physiology relies on the organization of transmembrane proteins by molecular scaffolds, such as tetraspanins. Oncogenesis frequently involves changes in their organization or expression. The tetraspanin CD151 is thought to contribute to cancer progression through direct interaction with the laminin-binding integrins alpha3beta1 and alpha6beta1. However, this interaction cannot explain the ability of CD151 to control migration in the absence of these integrins or on non-laminin substrates. We demonstrate that CD151 can regulate tumor cell migration without direct integrin binding and that integrin-free CD151 (CD151free) correlates clinically with tumor progression and metastasis. Clustering CD151free through its integrin-binding domain promotes accumulation in areas of cell-cell contact leading to enhanced adhesion and inhibition of tumor cell motility in vitro and in vivo. CD151free clustering is a strong regulator of motility even in the absence of alpha3 expression but requires PKCalpha, suggesting that CD151 can control migration independent of its integrin associations. The histological detection of CD151free in prostate cancer correlates with poor patient outcome. When CD151free is present, patients are more likely to recur after radical prostatectomy and progression to metastatic disease is accelerated. Multivariable analysis identifies CD151free as an independent predictor of survival. Moreover, the detection of CD151free can stratify survival among patients with elevated PSA. Cumulatively these studies demonstrate that a subpopulation of CD151 exists on the surface of tumor cells that can regulate migration independent of its integrin partner. The clinical correlation of CD151free with prostate cancer progression suggests that it may contribute to the disease and predict cancer progression.

[157]

**TÍTULO / TITLE:** - Association between the body mass index and chronic kidney disease in men and women. A population-based study from Israel.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Nov;28 Suppl 4:iv130-iv135. doi: 10.1093/ndt/gft072.

- Enlace al texto completo (gratis o de pago) [1093/ndt/gft072](https://doi.org/10.1093/ndt/gft072)

**AUTORES / AUTHORS:** - Cohen E; Fraser A; Goldberg E; Milo G; Garty M; Krause I

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine F-Recanati, Rabin Medical Center, Campus Beilinson, Petah Tiqwa, Israel.

**RESUMEN / SUMMARY:** - BACKGROUND: Any association between the body mass index (BMI) and chronic kidney disease (CKD) has so far proved inconclusive. Most studies have estimated glomerular filtration rate (eGFR) using the Modification of Diet in Renal Disease (MDRD) equation. This has recently been replaced by the more accurate Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation. METHODS: In a cross-sectional study, data from a screening centre in Israel, n = 21880 (32% women) were used to assess the prevalence of CKD defined as eGFR < 60 mL/min/1.73 m<sup>2</sup> in relation to BMI categories. The CKD-EPI equation was used to assess the eGFR. RESULTS: CKD was found in 167 men and 45 women. Subjects with a BMI of 25-29.9 kg/m<sup>2</sup>, compared with those with a BMI of <25 kg/m<sup>2</sup>, had an odds ratio (OR; 95% confidence intervals) for CKD of 1.8 (1.2-2.7) and 3.4 (1.5-7.7) for men and women, respectively. Subjects with a BMI of 30-35 kg/m<sup>2</sup> had an OR of 2.5 (1.6-4.0) and 4.5 (1.7-11.7) for men and women, respectively. In comparable data, for subjects with a BMI > 35 kg/m<sup>2</sup> the OR was 2.7 (1.3-5.5) and 15.4 (6.4-36.7) for men and women, respectively. After multivariate adjustment for age, hypertension and diabetes mellitus, no association was found in men yet it persisted for women. This correlation in women, between the BMI and CKD, was attributed to the subcategory of severely obese women with a BMI of >35 kg/m<sup>2</sup>. CONCLUSIONS: Our study is the first to suggest that morbid obesity may be an independent factor related to CKD in women.

[158]

**TÍTULO / TITLE:** - Analysis of plasma cytokines and angiogenic factors in patients with pretreated urothelial cancer receiving Pazopanib: the role of circulating interleukin-8 to enhance the prognostic accuracy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 14. doi: 10.1038/bjc.2013.719.

- Enlace al texto completo (gratis o de pago) [1038/bjc.2013.719](https://doi.org/10.1038/bjc.2013.719)

**AUTORES / AUTHORS:** - Necchi A; Pennati M; Zaffaroni N; Landoni E; Giannatempo P; Raggi D; Schwartz LH; Morosi C; Crippa F; Fare E; Nicolai N; Lanocita R; Sava T; Sacco C; Messina C; Ortega C; De Braud FG; Salvioni R; Daidone MG; Gianni AM; Mariani L

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology, Medical Oncology 2 Unit, Fondazione IRCCS Istituto Nazionale dei Tumori, Via G. Venezian 1, Milan 20133, Italy.

**RESUMEN / SUMMARY:** - Background: Pazopanib achieved the end point of clinical activity in pretreated patients with urothelial cancer in a single-group, phase 2 trial. The objective was to identify biological predictors of clinical benefit to pazopanib in these patients. Methods: EDTA blood samples were collected at baseline (T0) and after 4 weeks (T1) of treatment, together with radiological imaging in all 41 patients to analyse plasma circulating angiogenic factor levels by multiplex ELISA plates. Changes from T0 to T1 in marker levels were matched with response with the covariance analysis. Univariable and multivariable analyses evaluated the association with overall survival

(OS), adjusted for prespecified clinical variables. Net reclassification improvement (NRI) tested the performance of the recognised Cox model. Results: Increasing IL8T1 level associated with lower response probability at covariance analysis (P=0.010). Both IL8T0 (P=0.019) and IL8T1 (P=0.004) associated with OS and the prognostic model, including clinical variables and IL8T1 best-predicted OS after backward selection. The NRI for this model was 39%. When analysed as a time-varying covariate, IL8T1 level <80 pg ml<sup>-1</sup> portended significantly greater response (approximately 80%) and 6-month OS (approximately 60%) probability than level ≥80. Conclusion: IL8-level changes during pazopanib allowed for a prognostic improvement and were associated with response probability. British Journal of Cancer advance online publication, 14 November 2013; doi:10.1038/bjc.2013.719 [www.bjcancer.com](http://www.bjcancer.com).

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[159]

**TÍTULO / TITLE:** - Self-reported sexual, bowel and bladder function in cervical cancer patients following different treatment modalities: longitudinal prospective cohort study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Gynecol Cancer. 2013 Nov;23(9):1717-25. doi: 10.1097/IGC.0b013e3182a80a65.

●● Enlace al texto completo (gratis o de pago) [1097/IGC.0b013e3182a80a65](http://1097/IGC.0b013e3182a80a65)

**AUTORES / AUTHORS:** - Pieterse QD; Kenter GG; Maas CP; de Kroon CD; Creutzberg CL; Trimbos JB; Ter Kuile MM

**INSTITUCIÓN / INSTITUTION:** - Departments of \*Gynaecology and Oncology, Leiden University Medical Centre, Leiden, the Netherlands.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** Conventional radical hysterectomy with pelvic lymphadenectomy (RHL) for early-stage cervical cancer is associated with significant bladder, anorectal, and sexual dysfunction. Nerve-sparing modification of RHL (NS-RHL) has been developed with the aim to reduce surgical treatment-related morbidity. Postoperative radiation therapy (RT) is offered to patients with unfavorable prognostic features to improve local control. The aim of the study was to assess self-reported morbidity of various types of treatment in cervical cancer patients. **METHODS:** Self-reported symptoms were prospectively assessed before and 1 and 2 years after treatment by the Dutch Gynaecologic Leiden Questionnaire. **RESULTS:** Included were 229 women (123 NS-RHL and 106 conventional RHL). Ninety-four (41%) received RT. Up to 2 years (response rate, 81%), women reported significantly more bowel, bladder, and sexual symptoms compared with the pretreatment situation. No significant difference was found between the conventional RHL and NS-RHL with the exception of the unexpected finding that a smaller percentage in the NS-RHL group (34% vs 68%) complained about numbness of the labia and/or thigh. Radiation therapy had a negative impact on diarrhea, urine incontinence, lymphedema, and sexual symptoms (especially a narrow/short vagina). **CONCLUSIONS:** In the current longitudinal cohort study, treatment for early-stage cervical cancer was associated with worse subjective bladder, anorectal, and sexual functioning, irrespective of the surgical procedure used. Postoperative RT resulted in a significant deterioration of these functions. The results have to be interpreted with caution in view of the study design and method used.

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[160]

**TÍTULO / TITLE:** - Expression and regulatory effects of murine schlafen (slfn) genes in malignant melanoma and renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Biol Chem. 2013 Nov 15;288(46):33006-15. doi: 10.1074/jbc.M113.460741. Epub 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [1074/jbc.M113.460741](#)

**AUTORES / AUTHORS:** - Mavrommatis E; Arslan AD; Sassano A; Hua Y; Kroczyńska B; Plataniotis LC

**INSTITUCIÓN / INSTITUTION:** - From the Division of Hematology-Oncology, Robert H. Lurie Comprehensive Cancer Center, Northwestern University Medical School, Chicago, Illinois 60611 and.

**RESUMEN / SUMMARY:** - There is emerging evidence that the IFN-inducible family of Slfn genes and proteins play important roles in cell cycle progression and control of cellular proliferation, but the precise functional roles of different Slfn members in the regulation of tumorigenesis remain unclear. In the present study, we undertook a systematic analysis on the expression and functional relevance of different mouse Slfn genes in malignant melanoma and renal cell carcinoma cells. Our studies demonstrate that several mouse Slfn genes are up-regulated in response to IFN treatment of mouse melanoma and renal cell carcinoma cells, including Slfn1, Slfn2, Slfn4, Slfn5, and Slfn8. Our data show that Slfn2 and Slfn3 play essential roles in the control of mouse malignant melanoma cell proliferation and/or anchorage-independent growth, suggesting key and non-overlapping roles for these genes in the control of malignant melanoma tumorigenesis. In renal cell carcinoma cells, in addition to Slfn2 and Slfn3, Slfn5 also exhibits important antineoplastic effects. Altogether, our findings indicate important functions for distinct mouse Slfn genes in the control of tumorigenesis and provide evidence for differential involvement of distinct members of this gene family in controlling tumorigenesis. They also raise the potential of future therapeutic approaches involving modulation of expression of members of this family of genes in malignant melanoma and renal cell carcinoma.

[161]

**TÍTULO / TITLE:** - BAP1 immunohistochemistry in a multi-institutional cohort predicts outcomes in patients with clear cell renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Sep 25. pii: S0022-5347(13)05532-8. doi: 10.1016/j.juro.2013.09.041.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.09.041](#)

**AUTORES / AUTHORS:** - Kapur P; Christie A; Raman JD; Then MT; Nuhn P; Buchner A; Bastian P; Seitz C; Shariat SF; Bensalah K; Rioux-Leclercq N; Xie XJ; Lotan Y; Margulis V; Brugarolas J

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University of Texas Southwestern Medical Center, Dallas, TX, USA; Department of Urology, University of Texas Southwestern Medical Center, Dallas, TX, USA. Electronic address: [payal.kapur@utsouthwestern.edu](mailto:payal.kapur@utsouthwestern.edu).

**RESUMEN / SUMMARY:** - PURPOSE: Mutations in the tumor suppressor gene, BAP1 occur in approximately 15% of clear cell renal cell carcinoma (ccRCC). Sequencing efforts have demonstrated worse outcomes in patients with BAP1 mutated ccRCC.

Here, we investigate the clinicopathologic significance and oncologic outcomes of BAP1 loss using a previously validated immunohistochemical assay. **MATERIALS AND METHODS:** Immunohistochemistry for BAP1 was performed on tissue microarray sections from 559 non-metastatic ccRCC that were treated at multiple institutions with nephrectomy. The association of BAP1 expression with clinicopathological parameters was analyzed using Wilcoxon Rank-Sum test and Cochran-Mantel-Haenszel test. Survival was assessed with Cox regression analyses, which also identified independent predictors of time-dependent outcomes. **RESULTS:** At a median follow up of 50 months (range 0-183 months), recurrence and death were experienced by 17.8% (86 of 483) and 21.6% (121 of 559), respectively. BAP1 was negative in 14.7% (82 of 559) tumors. BAP1 loss was associated with adverse clinicopathologic variables including high Fuhrman grade ( $p < 0.0001$ ), advanced pT stage ( $p = 0.0021$ ), presence of sarcomatoid dedifferentiation ( $p = 0.0001$ ), and necrosis ( $p < 0.0001$ ). Cox regression demonstrated that patients with BAP1 negative tumors had significantly worse disease free survival (DFS) (HR, 2.9; 95% CI, 1.8-4.7;  $p < 0.0001$ ) and overall survival (OS) (HR, 2.0; 95% CI, 1.3-3.1;  $p = 0.0010$ ) compared to patients with BAP1 positive tumors. **CONCLUSIONS:** Immunohistochemistry for BAP1 serves as a powerful marker to predict poor oncologic outcomes and adverse clinicopathologic features in patients with non-metastatic ccRCC. Assessment of BAP1 using immunohistochemistry on needle biopsies may benefit preoperative risk stratification and guide treatment planning in the future.

[162]

**TÍTULO / TITLE:** - Management of patients with biochemical recurrence after local therapy for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematol Oncol Clin North Am. 2013 Dec;27(6):1205-19. doi: 10.1016/j.hoc.2013.08.005. Epub 2013 Sep 18.

●● Enlace al texto completo (gratis o de pago) [1016/j.hoc.2013.08.005](#)

**AUTORES / AUTHORS:** - Paller CJ; Antonarakis ES; Eisenberger MA; Carducci MA

**INSTITUCIÓN / INSTITUTION:** - Prostate Cancer Research Program, Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, 1650 Orleans Street, CRB1-1M59, Baltimore, MD 21287, USA.

**RESUMEN / SUMMARY:** - Nearly three-quarters of a million American men who have been treated with prostatectomy and/or radiation therapy experience an increasing prostate-specific antigen level known as biochemical recurrence. Although androgen-deprivation therapy remains a reasonable option for some men with biochemical recurrence, deferring androgen ablation or offering nonhormonal therapies may be appropriate in patients in whom the risk of clinical or metastatic progression and prostate cancer-specific death is low. A risk-stratified approach informed by the patient's prostate-specific antigen kinetics, comorbidities, and personal preferences is recommended to determine the best management approach.

[163]

**TÍTULO / TITLE:** - Expression of p53 family genes in urinary bladder cancer: correlation with disease aggressiveness and recurrence.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Nov 11.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1328-4](#)

**AUTORES / AUTHORS:** - Papadogianni D; Soultzis N; Delakas D; Spandidos DA

**INSTITUCIÓN / INSTITUTION:** - Laboratory of Clinical Virology, Medical School, University of Crete, Heraklion, 71003, Crete, Greece.

**RESUMEN / SUMMARY:** - p53 is a tumour suppressor gene with an established role in the majority of human neoplasias. Its homologues-p63 and p73-cannot be classified as tumour suppressors, since they encode isoforms with oncogenic properties as well. p63 plays a crucial role in epithelial cell differentiation and p73 is essential for neuronal cell development. The p63 and p73 expressions have been investigated in a variety of human tumours including bladder carcinomas; yet, this is the first study to simultaneously analyse the transcriptional levels of all p53 family members in bladder cancer. Using quantitative real-time polymerase chain reaction, we measured the mRNA expression of p53, p63 and p73 in 30 bladder tumours, each paired with adjacent normal tissue. All three studied genes were up-regulated in malignant specimens, p53 by 1.9-fold, p63 by threefold and p73 by twofold, respectively. Further analysis suggested that p63 and p73 act independently of p53 in the malignant bladder epithelium. Statistical analysis revealed that p63 overexpression was more frequent in recurrent bladder tumours ( $p = 0.045$ ) and in older patients ( $p = 0.022$ ). Papillary tumours also exhibited abnormal p63 expression ( $p = 0.026$ ). Finally, p73 was up-regulated in Grade III one-site tumours ( $p = 0.040$ ). Our results indicate that all p53 family members are abnormally expressed in bladder cancer but do not act synergistically. High levels of p63 correlate with non-muscle invasive tumours with frequent relapses, whereas p73 overexpression is associated with a more aggressive tumour phenotype.

[164]

**TÍTULO / TITLE:** - Tumour shrinkage measured with first treatment evaluation under VEGF-targeted therapy as prognostic marker in metastatic renal cell carcinoma (mRCC).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Oct 29. doi: 10.1038/bjc.2013.662.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.662](#)

**AUTORES / AUTHORS:** - Seidel C; Busch J; Weikert S; Steffens S; Bokemeyer C; Grunwald V

**INSTITUCIÓN / INSTITUTION:** - Department of Oncology, Hematology and Bone Marrow Transplantation with section of Pneumology, University Medical Center Eppendorf, Martinistrasse 52, 20246 Hamburg, Germany.

**RESUMEN / SUMMARY:** - Background:The aim of our analysis is to further characterise the prognostic relevance of early tumour shrinkage (TS) during VEGF-targeted therapy in mRCC, in order to explore whether this could define a group of patients with long-term survivorship.Methods:A hundred patients were stratified into five subgroups according to their change of tumour size with first treatment evaluation: -100% to -60%; -59% to -30% and -29% to 0% TS or gain of tumour size from 1% to 19% and  $\geq 20\%$  or occurrence of new lesions (i.e., progressive disease).Results:The median PFS and OS were 10.4 months and 28.2 months, respectively. The median OS stratified

according to the subgroups as described above was 77.4, 33.5, 26.9, 30.0 and 14.3 months, respectively. Multivariate analysis revealed early TS as a prognostic marker (P=0.021; HR 1.624). Conclusion: The extent of TS defines a small proportion of patients with an excellent prognosis. Larger studies are warranted to define the relationship of long-term survivorship and extent of TS with targeted therapies. British Journal of Cancer advance online publication, 29 October 2013; doi:10.1038/bjc.2013.662 [www.bjcancer.com](http://www.bjcancer.com).

[165]

**TÍTULO / TITLE:** - Erratum to: Bone-Targeted Therapies for Elderly Patients with Renal Cell Carcinoma: Current and Future Directions.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Drugs Aging. 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [1007/s40266-013-0139-z](http://1007/s40266-013-0139-z)

**AUTORES / AUTHORS:** - Roza T; Hakim L; van Poppel H; Joniau S

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University Hospitals Leuven, Herestraat 49, 3000, Leuven, Belgium, [Tomroza@hotmail.com](mailto:Tomroza@hotmail.com).

[166]

**TÍTULO / TITLE:** - A Randomised Phase 2 Study Combining LY2181308 Sodium (Survivin Antisense Oligonucleotide) with First-line Docetaxel/Prednisone in Patients with Castration-resistant Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov 6. pii: S0302-2838(13)01134-2. doi: 10.1016/j.eururo.2013.10.039.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.10.039](http://1016/j.eururo.2013.10.039)

**AUTORES / AUTHORS:** - Wiechno P; Somer BG; Mellado B; Chlosta PL; Cervera Grau JM; Castellano D; Reuter C; Stockle M; Kamradt J; Pikiel J; Duran I; Wedel S; Callies S; Andre V; Hurt K; Brown J; Lahn M; Heinrich B

**INSTITUCIÓN / INSTITUTION:** - Uro-Oncology Department, Cancer Center, Warsaw, Poland. Electronic address: [wiechno@coi.waw.pl](mailto:wiechno@coi.waw.pl).

**RESUMEN / SUMMARY:** - Castration-resistant prostate cancer (CRPC) is partially characterised by overexpression of antiapoptotic proteins, such as survivin. In this phase 2 study, patients with metastatic CRPC (n=154) were randomly assigned (1:2 ratio) to receive standard first-line docetaxel/prednisone (control arm) or the combination of LY2181308 with docetaxel/prednisone (experimental arm). The primary objective was to estimate progression-free survival (PFS) for LY2181308 plus docetaxel. Secondary efficacy measures included overall survival (OS), several predefined prostate-specific antigen (PSA)-derived end points, and Brief Pain Inventory (BPI) and Functional Assessment of Cancer Therapy-Prostate (FACT-P) scores. The median PFS of treated patients for the experimental arm (n=98) was 8.64 mo (90% confidence interval [CI], 7.39-10.45) versus 9.00 mo (90% CI, 7.00-10.09) in the control arm (n=51; p=0.755). The median OS for the experimental arm was 27.04 mo (90% CI, 19.94-33.41) compared with 29.04 mo (90% CI, 20.11-39.26; p=0.838). The PSA responses ( $\geq$ 50% PSA reduction), BPI, and FACT-P scores were similar in both arms. In the experimental arm, patients had a numerically higher incidence of

grades 3-4 neutropenia, anaemia, thrombocytopenia, and sensory neuropathy. In conclusion, this study failed to detect a difference in efficacy between the two treatment groups.

[167]

**TÍTULO / TITLE:** - MicroRNAs, miR-154, miR-299-5p, miR-376a, miR-376c, miR-377, miR-381, miR-487b, miR-485-3p, miR-495 and miR-654-3p, mapped to the 14q32.31 locus, regulate proliferation, apoptosis, migration and invasion in metastatic prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Oct 28. doi: 10.1038/onc.2013.451.

●● Enlace al texto completo (gratis o de pago) [1038/onc.2013.451](#)

**AUTORES / AUTHORS:** - Formosa A; Markert EK; Lena AM; Italiano D; Finazzi-Agro' E; Levine AJ; Bernardini S; Garabadgiu AV; Melino G; Candi E

**INSTITUCIÓN / INSTITUTION:** - 1] University of Tor Vergata, Department Experimental Medicine and Surgery, Rome, Italy [2] IDI-IRCCS, Rome, Italy.

**RESUMEN / SUMMARY:** - miRNAs act as oncogenes or tumor suppressors in a wide variety of human cancers, including prostate cancer (PCa). We found a severe and consistent downregulation of miRNAs, miR-154, miR-299-5p, miR-376a, miR-376c, miR-377, miR-381, miR-487b, miR-485-3p, miR-495 and miR-654-3p, mapped to the 14q32.31 region in metastatic cell lines as compared with normal prostatic epithelial cells (PrEC). In specimens of human prostate (28 normals, 99 primary tumors and 13 metastases), lower miRNA levels correlated significantly with a higher incidence of metastatic events and higher prostate specific antigen (PSA) levels, with similar trends observed for lymph node invasion and the Gleason score. We transiently transfected 10 members of the 14q32.31 cluster in normal prostatic epithelial cell lines and characterized their affect on malignant cell behaviors, including proliferation, apoptosis, migration and invasion. Finally, we identified FZD4, a gene important for epithelial-to-mesenchymal transition in (PCa), as a target of miR-377. Oncogene advance online publication, 28 October 2013; doi:10.1038/onc.2013.451.

[168]

**TÍTULO / TITLE:** - Heterogeneity of ERG expression in core needle biopsies of patients with early prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Dec;44(12):2727-35. doi: 10.1016/j.humpath.2013.07.019. Epub 2013 Sep 26.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.07.019](#)

**AUTORES / AUTHORS:** - Mertz KD; Horcic M; Hailemariam S; D'Antonio A; Dirnhofer S; Hartmann A; Agaimy A; Eppenberger-Castori S; Obermann E; Cathomas G; Bubendorf L

**INSTITUCIÓN / INSTITUTION:** - Institute for Pathology Liestal, Cantonal Hospital Baselland, CH-4410 Liestal, Switzerland. Electronic address: [kirsten.mertz@ksbl.ch](mailto:kirsten.mertz@ksbl.ch).

**RESUMEN / SUMMARY:** - Prostate cancer is a heterogeneous, frequently multifocal disease with a broad spectrum of clinical, pathologic, and molecular characteristics. The TMPRSS2-ERG gene rearrangement is highly specific for prostate cancer. We

used immunohistochemistry as a surrogate marker of the TMPRSS2-ERG fusion to study the heterogeneity of ERG expression in 280 prostate core needle biopsy series from 256 patients with early prostate cancer defined as 3 or less positive cores with no more than 50% of cancer per biopsy and a Gleason score of 7 or lower (3 + 4). Among the 163 patients with 2 or 3 cancer-positive biopsies, we found a subset of 19 patients (11.7%) with heterogeneous ERG expression. Thirteen (68.4%) of these patients showed biopsies with distinct positive and negative ERG staining in separate cores. The remaining 6 patients showed a mixture of both positive and negative staining within 1 biopsy core. This was either caused by different cancer foci (n = 3) or by one single, ERG-heterogeneous cancer focus (n = 3) in 1 core. Furthermore, we observed a heterogeneous ERG staining pattern over time in 6 (2.3%) of the 256 patients, in biopsies taken at various time points. An interobserver study of 21 cases with 2 separate cancer foci revealed that heterogeneity of ERG status in different cancer foci can be suspected based on morphologic differences (kappa = 0.44). We conclude that heterogeneity of ERG expression is detectable in 10% to 15% of core biopsies of early prostate cancer. Further studies are needed to explore the clinical impact of heterogeneous ERG status in this patient group.

[169]

**TÍTULO / TITLE:** - Comparison of Classic and International Society of Urological Pathology 2005 Modified Gleason Grading Using Needle Biopsies From the Reduction by Dutasteride of Prostate Cancer Events (REDUCE) Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Pathol Lab Med. 2013 Dec;137(12):1740-6. doi: 10.5858/arpa.2012-0447-OA.

●● Enlace al texto completo (gratis o de pago) [5858/arpa.2012-0447-OA](#)

**AUTORES / AUTHORS:** - Lucia MS; Bostwick DG; Somerville MC; Fowler IL; Rittmaster RS

**INSTITUCIÓN / INSTITUTION:** - From the Department of Pathology, University of Colorado Anschutz Medical Campus, Aurora (Dr Lucia); Bostwick Laboratories, Richmond, Virginia (Dr Bostwick); and GlaxoSmithKline, Research Triangle Park, North Carolina (Mr Somerville, Ms Fowler, and Dr Rittmaster). Ms Fowler is with Pharmaceutical Product Development, 929 North Front St, Wilmington, North Carolina. Dr Rittmaster is now at 42 William Glen Dr, Camden, Maine.

**RESUMEN / SUMMARY:** - Context.-Use of the International Society of Urological Pathology (ISUP) 2005 modified Gleason score may result in higher scores compared with the classic Gleason scoring system. Objective.-To compare scores derived using the 2 scoring systems. Design.-On-study and for-cause biopsies were centrally reviewed and assigned a classic Gleason score in the Reduction by Dutasteride of prostate Cancer Events trial. Positive biopsies were reviewed by an independent pathologist in a secondary review using the ISUP 2005 modified Gleason score. The independent pathologist also recorded a classic Gleason score. Results.-In total, 1482/1507 (98%) positive biopsy results were independently reviewed. Scores assigned by the 2 pathologists (classic versus modified) agreed in 83% (1230 of 1481) of cases; 99% (1471 of 1481) of cancers were within +/-1 of their previous score. Of discordant cases, similar numbers of biopsies were upgraded and downgraded in the secondary review, with minor differences in the score distributions. Interobserver

agreement was good, with kappa values ranging from 0.62 (95% confidence interval [CI], 0.56-0.67) to 0.70 (95% CI, 0.65-0.76). The overall number of high-grade tumors (Gleason score 8-10; n = 48) remained constant between reviews, with 3 fewer cases in the placebo group (n = 16) and 3 more in the dutasteride group (n = 32) in the secondary review. When comparing the independent pathologist's modified scores versus the classic, 17 of 1481 cancers (1.1%) were upgraded (including 9 of 17 upgrades [53%] to high-grade tumors). Conclusions.-This analysis showed similar score distributions between the classic and modified Gleason scoring systems. The differences seen between the 2 pathologists' scores likely reflect differences in interpretation rather than the scoring system chosen.

[170]

**TÍTULO / TITLE:** - Locally advanced prostate cancer: optimal therapy in older patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Drugs Aging. 2013 Dec;30(12):959-67. doi: 10.1007/s40266-013-0123-7.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s40266-013-0123-7](#)

**AUTORES / AUTHORS:** - Froehner M; Wirth MP

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**RESUMEN / SUMMARY:** - There is no standard treatment for locally advanced prostate cancer. Even the definition is still unclear. Locally advanced disease may refer to overstaged well-curable tumors as well as to advanced and probably incurable cancers. Similar uncertainties are present regarding the definition of 'old' in this context. Conservatively treated locally advanced prostate cancer is associated with poor survival outcome. With the increasing life expectancy, in the absence of curative treatment, even patients in their ninth decade of life may later suffer from symptoms of aggressive prostate cancer and are at a high risk of death from prostate cancer that might be prevented at least in part by early intervention. On the other hand, functional results after prostate cancer treatment are worse in elderly patients. In this article we discuss aspects of the management of locally advanced prostate cancer in the elderly with special focus on the recommendation of current clinical guidelines.

[171]

**TÍTULO / TITLE:** - Evolution of the Treatment Paradigm for Patients with Metastatic Castration-Resistant Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Adv Ther. 2013 Nov 26.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s12325-013-0070-z](#)

**AUTORES / AUTHORS:** - Malik Z; Payne H; Ansari J; Chowdhury S; Butt M; Birtle A; Sundar S; Eswar CV; Hughes S; Bahl A

**INSTITUCIÓN / INSTITUTION:** - Clatterbridge Cancer Centre NHS Foundation Trust, Clatterbridge Road, Bebington, Wirral, Merseyside, CH63 4JY, UK, [Zafar.Malik@clatterbridgecc.nhs.uk](mailto:Zafar.Malik@clatterbridgecc.nhs.uk).

**RESUMEN / SUMMARY:** - As recently as 2004, treatment options for men with metastatic castration-resistant prostate cancer (mCRPC) were limited, with docetaxel the only approved agent conferring a survival benefit. The therapeutic landscape is now very different, with several agents demonstrating prolonged survival since 2010. New agents for the treatment of mCRPC include sipuleucel-T, cabazitaxel, abiraterone acetate, enzalutamide and radium-223. All are now approved for use in this patient group, although the specific licensing terms vary between agents. In addition, denosumab may have utility in patients with bone metastases. A number of novel agents are also in development with promising initial results. However, because these treatment options have proliferated rapidly, there is currently a paucity of clinical evidence regarding their optimal sequencing. Selection of an appropriate treatment option should take into consideration disease characteristics, drug availability and patient choice. In summary, we discuss several new treatment options available for mCRPC and their integration into the current treatment paradigm.

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[172]

**TÍTULO / TITLE:** - How to Manage Intravenous Vinflunine in Cancer Patients with Renal Impairment: Results of a Pharmacokinetic and Tolerability Phase I Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Clin Pharmacol. 2013 Jul 30. doi: 10.1111/bcp.12218.

●● Enlace al texto completo (gratis o de pago) [1111/bcp.12218](#)

**AUTORES / AUTHORS:** - Isambert N; Delord JP; Tourani JM; Fumoleau P; Ravaud A; Pinel MC; Petain A; Nguyen T; Nguyen L

**RESUMEN / SUMMARY:** - AIMS: Vinflunine (VFL) ditartrate, a novel tubulin-targeted inhibitor is registered for the treatment of patients with advanced or metastatic urothelial transitional cell carcinoma. This phase I study assessed the effect of renal impairment on the pharmacokinetics and tolerability of vinflunine. METHODS: Vinflunine was infused in patients with advanced/metastatic solid tumours once every 3 weeks with anticipated doses reduction on the first cycle stratified according to the creatinine clearance (CLCr) values. Pharmacokinetic data were collected on the first two cycles in renally impaired patients (CLCr  $\leq$  60 mL/min) and were compared to a control cohort of patients (CLCr  $>$  60 mL/min). RESULTS: Thirty-three patients (46-86 yrs) were treated: 13 in group 1 (40 mL/min  $\leq$  CLCr  $\leq$  60 mL/min) and 20 in group 2 (20 mL/min  $\leq$  CLCr  $<$  40 mL/min). The renal dysfunction induced a mean decrease in VFL clearance of 12% in group 1 and 28% in group 2, compared to the control group. The anticipated doses reduction given in renally impaired patients (i.e.: 280 mg/m<sup>2</sup> and 250 mg/m<sup>2</sup> in groups 1 and 2, respectively) yielded similar drug exposure to control patients. The tolerance profile of vinflunine in patients with renal dysfunction was similar to that observed in patients with CLCr  $>$  60 mL/min. CONCLUSION: In conclusion, the recommended doses of intravenous VFL administered once every 3-weeks in cancer patients with renal impairment are 280 mg/m<sup>2</sup> when CLCr is between 40 and 60 mL/min and 250 mg/m<sup>2</sup> when CLCr is between 20 and  $<$  40 mL/min.

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[173]

**TÍTULO / TITLE:** - A randomised study of a diet intervention to maintain consistent rectal volume for patients receiving radical radiotherapy to the prostate.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Oncol. 2013 Nov 18.

●● Enlace al texto completo (gratis o de pago) [3109/0284186X.2013.854927](#)

**AUTORES / AUTHORS:** - Oates RW; Schneider ME; Lim Joon M; McPhee NJ; Jones DK; Foroudi F; Collins M; Kron T

**INSTITUCIÓN / INSTITUTION:** - Radiation Therapy Services, Peter MacCallum Cancer Centre, Bendigo, Australia.

[174]

**TÍTULO / TITLE:** - Re: Prostate Biopsy in Patients with Long-Term Use of Indwelling Bladder Catheter: What is the Rationale?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2095-6. doi: 10.1016/j.juro.2013.08.040. Epub 2013 Aug 24.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.040](#)

**AUTORES / AUTHORS:** - Kaplan SA

[175]

**TÍTULO / TITLE:** - Risk of biochemical recurrence and positive surgical margins in patients with pT2 prostate cancer undergoing radical prostatectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Surg Oncol. 2013 Oct 24. doi: 10.1002/jso.23469.

●● Enlace al texto completo (gratis o de pago) [1002/jso.23469](#)

**AUTORES / AUTHORS:** - Roder MA; Thomsen FB; Berg KD; Christensen IJ; Brasso K; Vainer B; Iversen P

**INSTITUCIÓN / INSTITUTION:** - Copenhagen Prostate Cancer Center, University of Copenhagen, Copenhagen, Denmark; Faculty of Health and Medical Sciences, Department of Clinical Medicine, University of Copenhagen, Copenhagen, Denmark.

**RESUMEN / SUMMARY:** - BACKGROUND AND OBJECTIVE: To investigate risk factors associated with positive surgical margins (PSM) and biochemical recurrence (BR) in organ confined tumors (pT2) after radical prostatectomy (RP) for localized prostate cancer (PCa). METHODS: Between 1995 and 2011, 1,649 patients underwent RP at our institution. The study includes the 1,133 consecutive patients with pT2 tumors at final histopathology. Logistic regression analysis was used for risk of PSM. Risk of BR, defined as the first PSA  $\geq$  0.2 ng/ml, was analyzed with Kaplan-Meier and Cox regression analysis. RESULTS: Median follow-up was 3.6 years (range: 0.5-15.5 years). In logistic regression, NS surgery was independently associated with an increased risk of pT2 PSM (OR = 1.68, 95% CI: 1.3-2.0, P = 0.01) relative to non-NS surgery. NS surgery was not independently associated with BR but the interaction of PSM and NS surgery trended (P = 0.08) to increase the risk of BR compared to PSM and non-NS surgery. CONCLUSION: Several factors influence the risk of pT2 PSMs in radical prostatectomy. In our cohort pT2 PSM is associated with NS surgery and trend to increase risk of BR compared to non-NS surgery. The optimal selection of candidates for NS surgery is still not clear. J. Surg. Oncol. © 2013 Wiley Periodicals, Inc.

[176]

**TÍTULO / TITLE:** - Cold spot mapping inferred from MRI at time of failure predicts biopsy-proven local failure after permanent seed brachytherapy in prostate cancer patients: Implications for focal salvage brachytherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Nov 11. pii: S0167-8140(13)00537-9. doi: 10.1016/j.radonc.2013.10.028.

●● Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.10.028](#)

**AUTORES / AUTHORS:** - Crehange G; Krishnamurthy D; Cunha JA; Pickett B; Kurhanewicz J; Hsu IC; Gottschalk AR; Shinohara K; Roach M 3rd; Pouliot J

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**RESUMEN / SUMMARY:** - BACKGROUND AND PURPOSE: (1) To establish a method to evaluate dosimetry at the time of primary prostate permanent implant (pPPI) using MRI of the shrunken prostate at the time of failure (tf). (2) To compare cold spot mapping with sextant-biopsy mapping at tf. MATERIAL AND METHODS: Twenty-four patients were referred for biopsy-proven local failure (LF) after pPPI. Multiparametric MRI and combined-sextant biopsy with a central review of the pathology at tf were systematically performed. A model of the shrinking pattern was defined as a Volumetric Change Factor (VCF) as a function of time from time of pPPI (t0). An isotropic expansion to both prostate volume (PV) and seed position (SP) coordinates determined at tf was performed using a validated algorithm using the VCF. RESULTS: pPPI CT-based evaluation (at 4weeks) vs. MR-based evaluation: Mean D90% was 145.23+/-19.16Gy [100.0-167.5] vs. 85.28+/-27.36Gy [39-139] (p=0.001), respectively. Mean V100% was 91.6+/-7.9% [70-100%] vs. 73.1+/-13.8% [55-98%] (p=0.0006), respectively. Seventy-seven per cent of the pathologically positive sextants were classified as cold. CONCLUSIONS: Patients with biopsy-proven LF had poorer implantation quality when evaluated by MRI several years after implantation. There is a strong relationship between microscopic involvement at tf and cold spots.

[177]

**TÍTULO / TITLE:** - The Cancer of the Prostate Risk Assessment (CAPRA) score predicts biochemical recurrence in intermediate risk prostate cancer treated with external beam radiotherapy (EBRT) dose escalation or low-dose rate (LDR) brachytherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 26. doi: 10.1111/bju.12587.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12587](#)

**AUTORES / AUTHORS:** - Krishnan V; Delouya G; Bahary JP; Larrivee S; Taussky D  
**INSTITUCIÓN / INSTITUTION:** - Departement of Radiation Oncology, Centre hospitalier de l'Universite de Montreal (CHUM), Hopital Notre-Dame, Montreal, Canada.

**RESUMEN / SUMMARY:** - OBJECTIVE: To study the prognostic value of the University of California, San Francisco Cancer of the Prostate Risk Assessment (CAPRA) score to predict biochemical failure (bF) after various doses of external beam radiotherapy (EBRT) and/or permanent seed prostate brachytherapy (PB). MATERIAL AND

METHODS: We retrospectively analyzed 345 patients with a PSA 10 - 20 ng/ml and/or Gleason 7 including 244 EBRT patients (70.2 - 80 Gy) and 101 patients treated with PB. Minimum follow up was 3 years. No patient received primary androgen deprivation therapy (ADT). Biochemical failure (bF) was defined according to Phoenix definition. Cox regression analysis was used to estimate the differences between CAPRA groups. RESULTS: Overall bF was 13% (45/345). The CAPRA score as a continuous variable was statistically significant in multivariate analysis for predicting bF (HR: 1.37, 95%CI 1.10-1.72, p=0.006). There was a trend for lower bF rate in patients treated with brachytherapy when compared to those treated by EBRT  $\leq$ 74 Gy (HR: 0.234, 95%CI 0.05-1.03, p=0.055) in multivariate analysis. In the subgroup of patients with a CAPRA of 3 - 5, CAPRA remained predictive of bF as a continuous variable (HR: 1.51, 95%CI 1.01-2.27, 0.047) in multivariate analysis. CONCLUSION: The CAPRA score is useful to predict biochemical recurrence in patients treated for intermediate-risk prostate cancer with EBRT or PB. It could help in treatment decisions and can be completed by incorporating Cell Cycle Progression scores.

[178]

**TÍTULO / TITLE:** - The interplay of AMP-activated protein kinase and androgen receptor in prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cell Physiol. 2013 Oct 15. doi: 10.1002/jcp.24494.

●● [Enlace al texto completo \(gratis o de pago\) 1002/jcp.24494](#)

**AUTORES / AUTHORS:** - Shen M; Zhang Z; Ratnam M; Dou QP

**INSTITUCIÓN / INSTITUTION:** - Department of Pharmacology, School of Medicine, Wayne State University, Detroit, MI, 48201; Department of Barbara Ann Karmanos Cancer Institute, School of Medicine, Wayne State University, Detroit, MI, 48201.

**RESUMEN / SUMMARY:** - AMP-activated protein kinase (AMPK) has recently emerged as a potential target for cancer therapy due to the observation that activation of AMPK inhibits tumor cell growth. It is well-known that androgen receptor (AR) signaling is a major driver for the development and progression of prostate cancer and that downregulation of AR is a critical step in the induction of apoptosis in prostate cancer cells. However, little is known about the potential interaction between AMPK and AR signaling pathways. In the current study, we showed that activation of AMPK by metformin caused decrease of AR protein level through suppression of AR mRNA expression and promotion of AR protein degradation, demonstrating that AMPK activation is upstream of AR downregulation. We also showed that inhibition of AR function by an anti-androgen or its siRNA enhanced AMPK activation and growth inhibition whereas overexpression of AR delayed AMPK activation and increased prostate cancer cellular resistance to metformin treatment, suggesting that AR suppresses AMPK signaling-mediated growth inhibition in a feedback mechanism. Our findings thus reveal a novel AMPK-AR regulatory loop in prostate cancer cells and should have a potential clinical significance. J. Cell. Physiol. © 2013 Wiley Periodicals, Inc.

[179]

**TÍTULO / TITLE:** - Combined heart-kidney transplant improves post-transplant survival compared with isolated heart transplant in recipients with reduced glomerular filtration rate: Analysis of 593 combined heart-kidney transplants from the United Network Organ Sharing Database.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Thorac Cardiovasc Surg. 2013 Oct 30. pii: S0022-5223(13)01094-5. doi: 10.1016/j.jtcvs.2013.09.017.

●● Enlace al texto completo (gratis o de pago) [1016/j.jtcvs.2013.09.017](#)

**AUTORES / AUTHORS:** - Karamlou T; Welke KF; McMullan DM; Cohen GA; Gelow J; Tibayan FA; Mudd JM; Slater MS; Song HK

**INSTITUCIÓN / INSTITUTION:** - Division of Pediatric Cardiothoracic Surgery, Benioff Children's Hospital, University of California, San Francisco, San Francisco, Calif. Electronic address: [tara.karamlou@ucsfmedctr.org](mailto:tara.karamlou@ucsfmedctr.org).

**RESUMEN / SUMMARY:** - OBJECTIVE: Criteria for simultaneous heart-kidney transplant (HKTx) recipients are unclear. We characterized the evolution of combined HKTx in the United States over time compared with isolated heart transplantation (HTx) and determined factors maximizing post-transplant survival. We focused on whether a threshold estimated glomerular filtration rate (eGFR) could be identified that justified combined transplantation. METHODS: A supplemented United Network Organ Sharing Dataset identified HTx and HKTx recipients from 2000 to 2010. eGFR was calculated for HTx and recipients were grouped into eGFR quintiles. Time-related mortality was compared among recipients, with multivariable factors sought using Cox proportional hazard regression models. RESULTS: We identified 26,183 HTx recipients, of whom 593 were HKTx recipients. HTx increased modestly over time (3.6%), whereas prevalence of HKTx increased dramatically (147%). Risk-unadjusted survival was similar among HTx recipients (8.4 +/- 0.04 years) and HKTx recipients (7.7 +/- 0.2 years) (P = .76). Isolated HTx recipients in the lowest eGFR quintile had decreased survival (P < .001), but those in the third eGFR quintile had superior survival, suggesting a benefit in this subgroup. HTx recipients in the lowest eGFR quintile (eGFR less than mean 37 mL/minute) had worse survival than combined HKTx recipients (7.1 +/- 0.07 vs 7.7 +/- 0.2; P < .001). Multivariable factors for increased mortality among HTx recipients included lower eGFR, higher recent panel reactive antibody score, older age, African American race, diabetes, longer ischemic time, and certain diagnoses. CONCLUSIONS: Performance of combined HKTx is increasing out of proportion to isolated HTx. eGFR is an important determinant of improved HTx survival. Combined HKTx recovers post-transplant survival in patients with eGFR <37 mL/minute and can be recommended in this subgroup.

[180]

**TÍTULO / TITLE:** - Efficacy and Safety of Abiraterone Acetate in an Elderly Patient Subgroup (Aged 75 and Older) with Metastatic Castration-resistant Prostate Cancer After Docetaxel-based Chemotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Sep 20. pii: S0302-2838(13)00992-5. doi: 10.1016/j.eururo.2013.09.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.005](#)

**AUTORES / AUTHORS:** - Mulders PF; Molina A; Marberger M; Saad F; Higano CS; Chi KN; Li J; Kheoh T; Haqq CM; Fizazi K

**INSTITUCIÓN / INSTITUTION:** - Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands. Electronic address: [p.mulders@uro.umcn.nl](mailto:p.mulders@uro.umcn.nl).

**RESUMEN / SUMMARY:** - BACKGROUND: Metastatic castration-resistant prostate cancer (mCRPC) is a disease that primarily affects older men. Abiraterone acetate (AA), a selective androgen biosynthesis inhibitor, in combination with low-dose prednisone (P) improved overall survival (OS) in a randomised trial in mCRPC progressing after docetaxel versus placebo (PL) plus P. OBJECTIVE: To examine the efficacy and safety of AA plus P versus PL plus P in subgroups of elderly (aged  $\geq 75$  yr) (n=331) and younger patients (<75 yr) (n=863). DESIGN, SETTING, AND PARTICIPANTS: We conducted a post hoc analysis of a randomised double-blind PL-controlled study in mCRPC patients progressing after docetaxel chemotherapy. INTERVENTION: Patients were randomised 2:1 to AA (1000mg) plus low-dose P (5mg twice daily) (n=797) or PL plus P (n=398). OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: Primary end point was OS. Secondary end points were time to prostate-specific antigen (PSA) progression (TTPP), radiographic progression-free survival (rPFS), and PSA response rate. Treatment differences were compared using the stratified log-rank test. The Cox proportional hazards model was used to estimate the hazard ratio (HR) and 95% confidence interval (CI). The key limitation was the post hoc analysis. RESULTS AND LIMITATIONS: Elderly patients treated with AA plus P showed improved OS (HR: 0.64; 95% CI, 0.478-0.853; p=0.0022), TTPP (HR: 0.76; 95% CI, 0.503-1.155; p=0.1995), and rPFS (HR: 0.66; 95% CI, 0.506-0.859; p=0.0019), and higher PSA response rate with relative risk (HR: 4.15; 95% CI, 2.2-8.0); p  $\leq 0.0001$  compared with patients treated with PL plus P. Grade  $\geq 3$  adverse events occurred in 62% of elderly patients and in 60% of patients aged <75 yr treated with AA plus P. Incidences of hypertension and hypokalaemia, although increased in the AA plus P arm, were similar in both age subgroups and readily managed. CONCLUSIONS: AA improves OS and is well tolerated in both elderly patients and younger patients with mCRPC following docetaxel, hence providing an important treatment option for elderly patients who may not tolerate alternative therapies with greater toxicity. TRIAL REGISTRATION: ClinicalTrials.gov, identifier NCT00638690.

[181]

**TÍTULO / TITLE:** - Mediators of the resistance and aerobic exercise intervention effect on physical and general health in men undergoing androgen deprivation therapy for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Oct 7. doi: 10.1002/cncr.28396.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28396](#)

**AUTORES / AUTHORS:** - Buffart LM; Galvao DA; Chinapaw MJ; Brug J; Taaffe DR; Spry N; Joseph D; Newton RU

**INSTITUCIÓN / INSTITUTION:** - EMGO Institute for Health and Care Research, Department of Epidemiology and Biostatistics, Vrije University Medical Center, Amsterdam, The Netherlands.

**RESUMEN / SUMMARY:** - BACKGROUND: The objective of the current study was to identify mediators of the effects of a combined resistance and aerobic exercise

program on perceived physical and general health in men undergoing androgen deprivation therapy for prostate cancer. METHODS: In total, 57 patients with prostate cancer undergoing androgen deprivation therapy were randomly assigned to 12 weeks of resistance and aerobic exercise or usual care. The outcome measures of physical and general health were assessed by standardized questionnaires. Linear regression analyses were conducted on the residual change scores of the variables. The mediating effects of fatigue, muscle strength, and functional performance on the intervention's effect on physical and general health were examined using the product of coefficients method. Bootstrapping was used to calculate the 95% confidence intervals (95% CIs). RESULTS: The exercise intervention was found to significantly improve physical (beta, 5.03; 95% CI, 1.01-9.04) and general health (beta, 12.89; 95% CI, 2.24-23.54). Upper body muscle strength and walking speed significantly mediated the intervention effect on physical health (beta, 2.65; 95% CI, 0.64-5.54), accounting for 53% of the total effect. Walking speed and fatigue were found to be mediators in the intervention effect on general health (beta, 7.52; 95% CI, 2.16-16.92), accounting for 51% of the total effect. CONCLUSIONS: The intervention effects on physical and general health were explained by different mediating mechanisms. Walking speed mediated the intervention effect on both physical and general health. The intervention effect on physical health was further mediated by upper body strength, whereas the effect on general health was mediated by fatigue. Cancer 2013. © 2013 American Cancer Society.

[182]

**TÍTULO / TITLE:** - Prostate-Specific Membrane Antigen Protein Expression in Tumor Tissue and Risk of Lethal Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov 22.

●● Enlace al texto completo (gratis o de pago) [1158/1055-9965.EPI-13-0668](#)

**AUTORES / AUTHORS:** - Kasperzyk JL; Finn SP; Flavin R; Fiorentino M; Lis R; Hendrickson WK; Clinton SK; Sesso HD; Giovannucci EL; Stampfer MJ; Loda M; Mucci LA

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Departments of Epidemiology and Nutrition, Harvard School of Public Health; Channing Division of Network Medicine and Division of Preventive Medicine, Department of Medicine, Department of Pathology, Brigham and Women's Hospital, Harvard Medical School; Center for Molecular Oncologic Pathology, Department of Medical Oncology, Dana-Farber Cancer Institute, Boston, Massachusetts; Department of Histopathology, St. James's Hospital, Dublin, Ireland; Pathology Unit, Addarii Institute of Oncology, Sant' Orsola-Malpighi Hospital, Bologna, Italy; and Division of Medical Oncology, Department of Internal Medicine, Comprehensive Cancer Center, The Ohio State University, Columbus, Ohio.

**RESUMEN / SUMMARY:** - BACKGROUND: Overexpression of prostate-specific membrane antigen (PSMA) in tumor tissue and serum has been linked to increased risk of biochemical recurrence in surgically treated prostate cancer patients, but none of the studies have assessed its association with disease-specific mortality.

METHODS: We examined whether high PSMA protein expression in prostate tumor tissue was associated with lethal disease, and with tumor biomarkers of progression, among participants of two U.S.-based cohorts (n = 902, diagnosed 1983-2004). We

used Cox proportional hazards regression to calculate multivariable HRs and 95% confidence intervals (CI) of lethal prostate cancer, defined as disease-specific death or development of distant metastases (n = 95). Partial Spearman rank correlation coefficients were used to correlate PSMA with tumor biomarkers. RESULTS: During an average 13 years of follow-up, higher PSMA expression at prostatectomy was significantly associated with lethal prostate cancer (age-adjusted HR<sub>Quartile(Q)4vs.Q1</sub> = 2.42; P<sub>trend</sub> < 0.01). This association was attenuated and nonsignificant (multivariable-adjusted HR<sub>Q4vs.Q1</sub> = 1.01; P<sub>trend</sub> = 0.52) after further adjusting for Gleason score and prostate-specific antigen (PSA) at diagnosis. High PSMA expression was significantly (P < 0.05) correlated with higher Gleason score and PSA at diagnosis, increased tumor angiogenesis, lower vitamin D receptor and androgen receptor expression, and absence of ets-related gene (ERG) expression. CONCLUSIONS: High tumor PSMA expression was not an independent predictor of lethal prostate cancer in the current study. PSMA expression likely captures, in part, malignant features of Gleason grade and tumor angiogenesis. IMPACT: PSMA is not a strong candidate biomarker for predicting prostate cancer-specific mortality in surgically treated patients. Cancer Epidemiol Biomarkers Prev; 22(12); 1-10. ©2013 AACR.

[183]

**TÍTULO / TITLE:** - Chromosomal Radiosensitivity Analyzed by FISH in Lymphocytes of Prostate Cancer Patients and Healthy Donors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiat Res. 2013 Nov;180(5):465-73. doi: 10.1667/RR3239.1. Epub 2013 Oct 1.

●● Enlace al texto completo (gratis o de pago) [1667/RR3239.1](#)

**AUTORES / AUTHORS:** - Schmitz S; Brzozowska K; Pinkawa M; Eble M; Kriehuber R

**INSTITUCIÓN / INSTITUTION:** - a Department of Safety and Radiation Protection, Forschungszentrum Julich GmbH, D-52425 Julich, Germany; and.

**RESUMEN / SUMMARY:** - It is known that about 5-10% of cancer patients show severe clinical side effects during and after radiotherapy due to enhanced sensitivity to ionizing radiation. Identification of those radiosensitive individuals by a reliable in vitro assay before onset of treatment would have a great impact on successful radiotherapy. We compared the radiosensitivity of the chromosomes 2, 11 and 17 in prostate cancer patients with and without severe side effects after radiotherapy and in age-matched healthy donors. Each cohort consisted of at least 10 donors. Peripheral blood lymphocytes were irradiated ex vivo with 0.5, 1 und 2 Gy ((<sup>137</sup>Cs gamma rays). We investigated the radiosensitivity of the chromosomes 2, 11 and 17 by scoring of 100 FISH painted metaphases for each dose point and donor group. Statistical analyses were performed by nonparametric tests as Mann-Whitney test and Kruskal-Wallis ANOVA, paired Wilcoxon rank test, chi(2) goodness-of-fit test and Spearman rank-order correlation at a significance level of P < 0.05. Analysis of the overall aberration yield revealed no significant differences between any donor groups. The translocation frequencies of the chromosomes 2, 11 and 17 coincided with their relative size. Thus, none of the chromosomes analyzed were more or less radiosensitive with respect to the genomic translocation frequency. Additionally, neither of the chromosomes showed enhanced or diminished radiosensitivity in one of the donor groups. Furthermore, variance analyses revealed that the distribution pattern of the aberrations per donor did

not differ in each donor group even after exposure to 2 Gy. Prostate cancer patients with and without side effects cannot be distinguished from healthy donors based on aberration yield after irradiation with gamma rays.

[184]

**TÍTULO / TITLE:** - Value of 3-T Multiparametric Magnetic Resonance Imaging and Magnetic Resonance-Guided Biopsy for Early Risk Re-stratification in Active Surveillance of Low-Risk Prostate Cancer: A Prospective Multicenter Cohort Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Invest Radiol. 2013 Nov 11.

●● [Enlace al texto completo \(gratis o de pago\) 1097/RLI.0000000000000008](#)

**AUTORES / AUTHORS:** - Hoeks CM; Somford DM; van Oort IM; Vergunst H; Oddens JR; Smits GA; Roobol MJ; Bul M; Hambroek T; Witjes JA; Futterer JJ; Hulsbergen-van de Kaa CA; Barentsz JO

**INSTITUCIÓN / INSTITUTION:** - From the Departments of \*Radiology, and daggerUrology, Radboud University Nijmegen Medical Centre; double daggerDepartment of Urology, Canisius Wilhelmina Hospital, Nijmegen; section signDepartment of Urology, Jeroen Bosch Hospital, Den Bosch; parallelDepartment of Urology, Alysis Zorggroep, Arnhem; paragraph signDepartment of Urology, Erasmus University Medical Centre, Rotterdam; and #Department of Pathology, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** The objective of this study was to evaluate the role of 3-T multiparametric magnetic resonance imaging (MP-MRI) and magnetic resonance-guided biopsy (MRGB) in early risk re-stratification of patients on active surveillance at 3 and 12 months of follow-up. **MATERIALS AND METHODS:** Within 4 hospitals participating in a large active surveillance trial, a side study was initiated. Pelvic magnetic resonance imaging, prostate MP-MRI, and MRGB were performed at 3 and 12 months (latter prostate MP-MRI and MRGB only) after prostate cancer diagnosis in 1 of the 4 participating hospitals. Cancer-suspicious regions (CSRs) were defined on prostate MP-MRI using Prostate Imaging Reporting And Data System (PI-RADS) scores. Risk re-stratification criteria for active surveillance discontinuance were (1) histopathologically proven magnetic resonance imaging suspicion of node/bone metastases and/or (2) a Gleason growth pattern (GGP) 4 and/or 5 and/or cancer multifocality ( $\geq 3$  foci) in MRGB specimens of a CSR on MP-MRI. **RESULTS:** From 2009 to 2012, a total of 64 of 82 patients were consecutively and prospectively included and underwent MP-MRI and a subsequent MRGB. At 3 and 12 months of follow-up, 14% (9/64) and 10% (3/30) of the patients were risk-re-stratified on the basis of MP-MRI and MRGB. An overall CSR PI-RADS score of 1 or 2 had a negative predictive value of 84% (38/45) for detection of any prostate cancer and 100% (45/45) for detection of a GGP 4 or 5 containing cancer upon MRGB, respectively. A CSR PI-RADS score of 4 or higher had a sensitivity of 92% (11/12) for detection of a GGP 4 or 5 containing cancer upon MRGB. **CONCLUSIONS:** Application of MP-MRI and MRGB in active surveillance may contribute in early identification of patients with GGP 4 or 5 containing cancers at 3 months of follow-up. If, during further follow-up, a PI-RADS score of 1 or 2 continues to have a negative predictive value for GGP 4 or 5 containing cancers, a PI-RADS standardized reported MP-MRI may be a promising tool for the selection of prostate cancer patients suitable for active surveillance.

[185]

**TÍTULO / TITLE:** - Whole-genome methylation sequencing reveals distinct impact of differential methylations on gene transcription in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Pathol. 2013 Dec;183(6):1960-70. doi: 10.1016/j.ajpath.2013.08.018. Epub 2013 Oct 8.

●● Enlace al texto completo (gratis o de pago) [1016/j.ajpath.2013.08.018](#)

**AUTORES / AUTHORS:** - Yu YP; Ding Y; Chen R; Liao SG; Ren BG; Michalopoulos A; Michalopoulos G; Nelson J; Tseng GC; Luo JH

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania.

**RESUMEN / SUMMARY:** - DNA methylation is one of the most important epigenetic mechanisms in regulating gene expression. Genome hypermethylation has been proposed as a critical mechanism in human malignancies. However, whole-genome quantification of DNA methylation of human malignancies has rarely been investigated, and the significance of the genome distribution of CpG methylation is unclear. We performed whole-genome methylation sequencing to investigate the methylation profiles of 13 prostate samples: 5 prostate cancers, 4 matched benign prostate tissues adjacent to tumor, and 4 age-matched organ-donor prostate tissues. Alterations of methylation patterns occurred in prostate cancer and in benign prostate tissues adjacent to tumor, in comparison with age-matched organ-donor prostates. More than 95% alterations of genome methylation occurred in sequences outside CpG islands. Only a small fraction of the methylated CpG islands had any effect on RNA expression. Both intragene and promoter CpG island methylations negatively affected gene expression. However, suppressions of RNA expression did not correlate with levels of CpG island methylation, suggesting that CpG island methylation alone might not be sufficient to shut down gene expression. Motif analysis revealed a consensus sequence containing Sp1 binding motif significantly enriched in the effective CpG islands.

[186]

**TÍTULO / TITLE:** - REST mediates androgen receptor actions on gene repression and predicts early recurrence of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nucleic Acids Res. 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1093/nar/gkt921](#)

**AUTORES / AUTHORS:** - Svensson C; Ceder J; Iglesias-Gato D; Chuan YC; Pang ST; Bjartell A; Martinez RM; Bott L; Helczynski L; Ulmert D; Wang Y; Niu Y; Collins C; Flores-Morales A

**INSTITUCIÓN / INSTITUTION:** - Novo Nordisk Foundation Center for Protein Research, Faculty of Health Sciences, University of Copenhagen, DK-2200 Copenhagen, Denmark, Division of Urological Cancers, Department of Clinical Sciences, Skane University Hospital, Lund University, 20502 Malmo, Sweden, Department of Urology, Chang Gung Memorial Hospital, Tao-Yuan 33305, Taiwan, R.O.C., Department of Epidemiology, Karolinska Institutet, 171 77 Stockholm, Sweden, Department of Cell

and Molecular Biology, Karolinska Institute, 171 77 Stockholm, Sweden, Regional Laboratories Region Skane, Clinical Pathology, 205 80 Malmo, Sweden, Department of Surgery (Urology), Memorial Sloan-Kettering Cancer Center, New York, NY 100 65, USA, Vancouver Prostate Centre and The Department of Urologic Sciences, University of British Columbia, Vancouver, BC Canada V6H 3Z6 and Tianjin Institute of Urology, Tianjin Medical University, Tianjin 300 211, China.

**RESUMEN / SUMMARY:** - The androgen receptor (AR) is a key regulator of prostate tumorigenesis through actions that are not fully understood. We identified the repressor element (RE)-1 silencing transcription factor (REST) as a mediator of AR actions on gene repression. Chromatin immunoprecipitation showed that AR binds chromatin regions containing well-characterized cis-elements known to mediate REST transcriptional repression, while cell imaging studies confirmed that REST and AR closely co-localize in vivo. Androgen-induced gene repression also involves modulation of REST protein turnover through actions on the ubiquitin ligase beta-TRCP. Androgen deprivation or AR blockage with inhibitor MDV3100 (Enzalutamide) leads to neuroendocrine (NE) differentiation, a phenomenon that is mimicked by REST inactivation. Gene expression profiling revealed that REST not only acts to repress neuronal genes but also genes involved in cell cycle progression, including Aurora Kinase A, that has previously been implicated in the growth of NE-like castration-resistant tumors. The analysis of prostate cancer tissue microarrays revealed that tumors with reduced expression of REST have higher probability of early recurrence, independently of their Gleason score. The demonstration that REST modulates AR actions in prostate epithelia and that REST expression is negatively correlated with disease recurrence after prostatectomy, invite a deeper characterization of its role in prostate carcinogenesis.

[187]

**TÍTULO / TITLE:** - Impact of the type of ultrasound probe on prostate cancer detection rate and characterization in patients undergoing MRI-targeted prostate biopsies using cognitive fusion.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 16.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1186-0](#)

**AUTORES / AUTHORS:** - Ploussard G; Aronson S; Pelsser V; Levental M; Anidjar M; Bladou F

**INSTITUCIÓN / INSTITUTION:** - Jewish General Hospital, McGill University, Pavilion E-941, 3755 Chemin de la Cote Sainte Catherine, Montreal, QC, H3T 1E2, Canada, [g.ploussard@gmail.com](mailto:g.ploussard@gmail.com).

**RESUMEN / SUMMARY:** - **PURPOSE:** To assess the impact of ultrasound probe (end fire vs. side fire) during MRI-targeted prostate biopsy using cognitive fusion. **METHODS:** Inclusion criteria were as follows: consecutive patients undergoing prostate biopsies after multiparametric MRI; no PSA above 10 ng/ml; no clinical bulking disease; MRI areas suspicious for malignancy. From January 2011 to December 2012, 91 patients were included. A standard 10 TRUS-guided biopsy protocol plus 2 targeted biopsies at any MRI lesion was used. Patient's characteristics, MRI findings, and pathology evaluations were compared between the two groups. **RESULTS:** Mean patient age and PSA were 63 years and 5.95 ng/ml, respectively. The median number

of MRI lesions was 2, and the mean volume of the index lesion was 0.64 cc. The overall PCa detection rate was 58.2 %. The MRI scoring system was significantly predictive for PCa detection and aggressiveness ( $p < 0.001$ ). There was a not statistically significant trend toward greater PCa detection rate (+23 %) in the end-fire cohort ( $p = 0.235$ ). The PCa detection rate is significantly improved by 1.7-fold in case of MRI score 4-5 lesion as compared to MRI score 3 lesion ( $p = 0.031$ ) when using the end-fire probe. Conversely, the MRI score does not significantly influence the detection rate in the side-fire group ( $p = 0.250$ ). The improvement in the PCa detection rate by the end-fire probe was predominantly reported in anterior and of apical peripheral MRI lesions. CONCLUSION: In case of high MRI score lesions, the PCa detection rate is significantly improved when using end-firing, particularly in case of anterior and apical peripheral lesions.

[188]

**TÍTULO / TITLE:** - Clinical significance of definite muscle layer in TUR specimen for evaluating progression rate in T1G3 bladder cancer: multicenter retrospective study by the Sapporo Medical University Urologic Oncology Consortium (SUOC).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Nov 5.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1205-1](#)

**AUTORES / AUTHORS:** - Shindo T; Masumori N; Kitamura H; Tanaka T; Fukuta F; Hasegawa T; Yanase M; Miyake M; Miyao N; Takahashi A; Matsukawa M; Taguchi K; Shigyo M; Kunishima Y; Tachiki H; Tsukamoto T

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, School of Medicine, Sapporo Medical University, S1W16, Chuo-ku, Sapporo, 060-8543, Japan.

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the clinical impact on progression and recurrence according to presence and absence of a muscle layer, we conducted a retrospective, multicenter study. METHODS: We retrospectively reviewed 247 patients who received transurethral resection (TUR) of bladder tumors and were pathologically diagnosed as having T1G3 bladder cancer from 1990 to 2009. We ruled out 8 patients who received immediate cystectomy and analyzed the remaining 239 T1G3 patients. Patients who had invasion to the prostatic urethra and patients who underwent a second TUR were not included. RESULTS: TUR specimens from 194 patients were confirmed to have a definite muscle layer and those from 45 did not. The median follow-up period was 53 months, ranging from 3 to 181 months. The progression-free survival rates at 5 years after TUR were 91.1 % for patients who had a muscle layer in their specimen and 77.3 % for those who did not ( $p = 0.005$ , log-rank test). Multivariate analysis indicated that the absence of a muscle layer was a risk factor for progression ( $p = 0.006$ , Cox proportional hazards analysis). CONCLUSIONS: Patients without a muscle layer in the specimen had high risk for progression. The initial TUR must have a muscle layer in the specimen. Variations of progression rates in previous studies might be due to different proportions of patients who had a muscle layer in TUR specimens.

[189]

**TÍTULO / TITLE:** - Prediction of Extraprostatic Extension in Patients with Clinically Organ-Confined Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 20.

●● Enlace al texto completo (gratis o de pago) [1159/000353654](#)

**AUTORES / AUTHORS:** - Lin S; Zhang Q; Li P; Li Z; Sun Y; Shao Y; Zhang X; Fu S

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, The Sixth Hospital of Shanghai Jiao Tong University, Shanghai, PR China.

**RESUMEN / SUMMARY:** - Introduction: Preoperative parameters for predicting extraprostatic extension (ECE) in clinically organ-confined prostate cancer patients are not well defined. Our aim was to evaluate the roles of the biopsy Gleason score, prostate-specific antigen (PSA)-based parameters, volume, and clinical T classification in prediction of ECE. Materials and Methods: A total of 188 patients with clinically organ-confined prostate cancer who underwent radical prostatectomy from January 1998 to December 2007 were included in the study. Age, prostate volume, preoperative total serum PSA (tPSA), free PSA, PSA density (PSAD), biopsy Gleason score, and clinical T classification were analyzed by univariate and multivariate analyses to predict ECE. Results: Pathologic examination revealed 130 patients had organ-confined disease and 58 patients were positive for ECE. Multivariate logistic regression analyses showed that tPSA was an independent predictor of ECE. Gleason score  $\geq 8$  had a trend for predicting ECE. Receiver operating characteristic (ROC) curves suggested that tPSA and PSAD had a similar diagnosis performance in the whole cohort. For patients with Gleason score of 7, PSAD was found to be statistically better than tPSA for predicting ECE. Conclusions: tPSA remains one of the most important factors for predicting ECE in prostate cancer patients. PSAD may be more helpful than tPSA for predicting ECE in the patients with Gleason score of 7. © 2013 S. Karger AG, Basel.

[190]

**TÍTULO / TITLE:** - Urinary Concentrations of Aquaporin-1 and Perilipin-2 in Patients With Renal Cell Carcinoma Correlate With Tumor Size and Stage but Not Grade.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 13. pii: S0090-4295(13)01261-2. doi: 10.1016/j.urology.2013.09.026.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.09.026](#)

**AUTORES / AUTHORS:** - Morrissey JJ; Mobley J; Song J; Vetter J; Luo J; Bhayani S; Sherburne Figenshau R; Kharasch ED

**INSTITUCIÓN / INSTITUTION:** - Division of Clinical and Translational Research, Department of Anesthesiology, Washington University School of Medicine, St. Louis, MO; Siteman Cancer Center, Washington University School of Medicine, St. Louis, MO. Electronic address: [morrisse@wustl.edu](mailto:morrisse@wustl.edu).

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate the trends in urine aquaporin-1 (AQP1) and perilipin 2 (PLIN2) concentrations in patients with clear cell and papillary renal cell carcinoma (RCC), we determined the relationship between the urine concentration of these biomarkers and tumor size, grade, and stage. MATERIALS AND METHODS: The biomarker concentrations were determined by sensitive and specific Western blot procedures normalized to the urine creatinine excretion. The analysis

included 61 patients undergoing partial or radical nephrectomy for clear cell or papillary RCC and 43 age- and sex-matched control patients. Relationships between urine biomarker concentrations and tumor size, stage, and grade were assessed. RESULTS: Patients with RCC had 35-fold and 9-fold higher median urinary AQP1 and PLIN2 concentrations, respectively, compared with controls. Both tumor markers decreased after tumor resection to concentrations equivalent to those of controls. The sensitivity and specificity were both 100% for AQP1 and 92% and 100%, respectively, for PLIN2. A significant linear correlation was found between the tumor size and the pre-nephrectomy AQP1 (Spearman coefficient 0.78,  $P < .001$ ) and PLIN2 (Spearman coefficient 0.69,  $P < .001$ ) concentrations. A correlation was found for both markers with tumor stage (overall  $P = .030$ ), when the stage was dependent primarily on the tumor size (stages T1 and T2), but not with stage T3, which reflected extrarenal spread. Neither marker showed a significant correlation with tumor grade. CONCLUSION: AQP1 and PLIN2 were significantly increased in patients with clear cell and papillary RCC compared with controls. The preoperative urinary concentrations of these markers reflected the tumor size and stage.

[191]

**TÍTULO / TITLE:** - Argon plasma coagulation therapy versus topical formalin for intractable rectal bleeding and anorectal dysfunction after radiation therapy for prostate carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Oncol Biol Phys. 2013 Dec 1;87(5):954-9. doi: 10.1016/j.ijrobp.2013.08.034. Epub 2013 Oct 8.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.ijrobp.2013.08.034](#)

**AUTORES / AUTHORS:** - Yeoh E; Tam W; Schoeman M; Moore J; Thomas M; Botten R; Di Matteo A

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, Royal Adelaide Hospital, Adelaide, Australia; School of Medicine, University of Adelaide, Adelaide, Australia. Electronic address: [eric.yeoh@health.sa.gov.au](mailto:eric.yeoh@health.sa.gov.au).

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate and compare the effect of argon plasma coagulation (APC) and topical formalin for intractable rectal bleeding and anorectal dysfunction associated with chronic radiation proctitis. METHODS AND MATERIALS: Thirty men (median age, 72 years; range, 49-87 years) with intractable rectal bleeding (defined as  $\geq 1x$  per week and/or requiring blood transfusions) after radiation therapy for prostate carcinoma were randomized to treatment with APC ( $n=17$ ) or topical formalin ( $n=13$ ). Each patient underwent evaluations of (1) anorectal symptoms (validated questionnaires, including modified Late Effects in Normal Tissues-Subjective, Objective, Management, and Analytic and visual analogue scales for rectal bleeding); (2) anorectal motor and sensory function (manometry and graded rectal balloon distension); and (3) anal sphincteric morphology (endoanal ultrasound) before and after the treatment endpoint (defined as reduction in rectal bleeding to 1x per month or better, reduction in visual analogue scales to  $\leq 25$  mm, and no longer needing blood transfusions). RESULTS: The treatment endpoint was achieved in 94% of the APC group and 100% of the topical formalin group after a median (range) of 2 (1-5) sessions of either treatment. After a follow-up duration of 111 (29-170) months, only 1 patient in each group needed further treatment. Reductions in rectal compliance

and volumes of sensory perception occurred after APC, but no effect on anorectal symptoms other than rectal bleeding was observed. There were no differences between APC and topical formalin for anorectal symptoms and function, nor for anal sphincteric morphology. CONCLUSIONS: Argon plasma coagulation and topical formalin had comparable efficacy in the durable control of rectal bleeding associated with chronic radiation proctitis but had no beneficial effect on anorectal dysfunction.

[192]

**TÍTULO / TITLE:** - Multiple tumor types including leiomyoma and Wilms tumor in a patient with Gorlin syndrome due to 9q22.3 microdeletion encompassing the PTCH1 and FANC-C loci.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Med Genet A. 2013 Nov;161(11):2894-901. doi: 10.1002/ajmg.a.36259. Epub 2013 Oct 7.

●● Enlace al texto completo (gratis o de pago) [1002/ajmg.a.36259](#)

**AUTORES / AUTHORS:** - Garavelli L; Piemontese MR; Cavazza A; Rosato S; Wischmeijer A; Gelmini C; Albertini E; Albertini G; Forzano F; Franchi F; Carella M; Zelante L; Superti-Furga A

**INSTITUCIÓN / INSTITUTION:** - Clinical Genetics Unit, Obstetric and Paediatric Department, Istituto di Ricovero e Cura a Carattere Scientifico, Arcispedale S Maria Nuova, Reggio Emilia, Italy.

**RESUMEN / SUMMARY:** - Gorlin syndrome or nevoid basal cell carcinoma syndrome (NBCCS) is an autosomal dominant condition mainly characterized by the development of mandibular keratocysts which often have their onset during the second decade of life and/or multiple basal cell carcinoma (BCC) normally arising during the third decade. Cardiac and ovarian fibromas can be found. Patients with NBCCS develop the childhood brain malignancy medulloblastoma (now often called primitive neuroectodermal tumor [PNET]) in 5% of cases. The risk of other malignant neoplasms is not clearly increased, although lymphoma and meningioma can occur in this condition. Wilms tumor has been mentioned in the literature four times. We describe a patient with a 10.9 Mb 9q22.3 deletion spanning 9q22.2 through 9q31.1 that includes the entire coding sequence of the gene PTCH1, with Wilms tumor, multiple neoplasms (lung, liver, mesenteric, gastric and renal leiomyomas, lung typical carcinoid tumor, adenomatoid tumor of the pleura) and a severe clinical presentation. We propose including leiomyomas among minor criteria of the NBCCS. © 2013 Wiley Periodicals, Inc.

[193]

**TÍTULO / TITLE:** - Identification of Wilms' Tumor 1-associating Protein Complex and Its Role in Alternative Splicing and the Cell Cycle.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Biol Chem. 2013 Nov 15;288(46):33292-302. doi: 10.1074/jbc.M113.500397. Epub 2013 Oct 7.

●● Enlace al texto completo (gratis o de pago) [1074/jbc.M113.500397](#)

**AUTORES / AUTHORS:** - Horiuchi K; Kawamura T; Iwanari H; Ohashi R; Naito M; Kodama T; Hamakubo T

**INSTITUCIÓN / INSTITUTION:** - From the Department of Quantitative Biology and Medicine and.

**RESUMEN / SUMMARY:** - Wilms' tumor 1-associating protein (WTAP) is a putative splicing regulator that is thought to be required for cell cycle progression through the stabilization of cyclin A2 mRNA and mammalian early embryo development. To further understand how WTAP acts in the context of the cellular machinery, we identified its interacting proteins in human umbilical vein endothelial cells and HeLa cells using shotgun proteomics. Here we show that WTAP forms a novel protein complex including Hakai, Virilizer homolog, KIAA0853, RBM15, the arginine/serine-rich domain-containing proteins BCLAF1 and THRAP3, and certain general splicing regulators, most of which have reported roles in post-transcriptional regulation. The depletion of these respective components of the complex resulted in reduced cell proliferation along with G2/M accumulation. Double knockdown of the serine/arginine-rich (SR)-like proteins BCLAF1 and THRAP3 by siRNA resulted in a decrease in the nuclear speckle localization of WTAP, whereas the nuclear speckles were intact. Furthermore, we found that the WTAP complex regulates alternative splicing of the WTAP pre-mRNA by promoting the production of a truncated isoform, leading to a change in WTAP protein expression. Collectively, these findings show that the WTAP complex is a novel component of the RNA processing machinery, implying an important role in both posttranscriptional control and cell cycle regulation.

[194]

**TÍTULO / TITLE:** - The Relationship Between Lymph Node Ratio and Cancer-Specific Survival in a Contemporary Series of Patients with Penile Cancer and Lymph Node Metastases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12510.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12510](#)

**AUTORES / AUTHORS:** - Lughezzani G; Catanzaro M; Torelli T; Piva L; Biasoni D; Stagni S; Necchi A; Giannatempo P; Raggi D; Fare E; Colecchia M; Pizzocaro G; Salvioni R; Nicolai N

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Fondazione IRCCS Istituto Nazionale Tumori, Milano, Italy; Department of Urology, San Raffaele Turro, Fondazione IRCCS Ospedale San Raffaele, Milano, Italy.

**RESUMEN / SUMMARY:** - OBJECTIVE: - To evaluate the association between lymph node ratio (LNR) and cancer-specific survival (CSS) in a population of patients with penile cancer and lymph node metastases (LNM). PATIENTS AND METHODS: - We evaluated 81 patients with pathologically-determined LNM who were surgically treated at our Institution between 2000 and 2012. - LNR was considered both as a continuously-coded and as a categorically-coded variable. The minimum p-value approach was used to determine the most significant LNR cut-off value. -The Kaplan-Meier method was used to determine CSS rates. Univariable and multivariable Cox regression models were fitted to test the predictors of CSS. RESULTS: - The median number of positive and removed lymph nodes were 2 (IQR: 1-4) and 22 (IQR: 13-30), respectively. Median LNR was 10.3% (IQR: 6.3 -16.6) and the most significant LNR cut-off value was 22%. Median follow-up was 26 months (IQR: 16-62). - Overall, 5-year CSS rate was 50.5%. After stratification according to LNR, 5-year CSS rates

were 65.2 vs. 9.6% in patients with LNR < vs.  $\geq$  22%, respectively ( $p < 0.001$ ). - At multivariable Cox regression models, after adjusting for several established prognostic factors, LNR emerged as independent predictor of CSS ( $p \leq 0.012$ ). - Finally, LNR significantly improved the accuracy of multivariable Cox regression models by a 4.9-10.5% extent. CONCLUSIONS: - Although further investigations are needed to evaluate the relationship between tumor burden and treatment intensity, lymph node ratio may represent a powerful predictor of CSS in patients with penile cancer and pathologically-determined LNM.

[195]

**TÍTULO / TITLE:** - Genes Upregulated in Prostate Cancer Reactive Stroma Promote Prostate Cancer Progression In Vivo.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 22.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-1184](#)

**AUTORES / AUTHORS:** - Dakhova O; Rowley D; Ittmann M

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Departments of Pathology and Immunology and Molecular and Cellular Biology, Baylor College of Medicine; and Michael E. DeBakey Department of Veterans Affairs Medical Center, Houston, Texas.

**RESUMEN / SUMMARY:** - PURPOSE: Marked reactive stroma formation is associated with poor outcome in clinically localized prostate cancer. We have previously identified genes with diverse functions that are upregulated in reactive stroma. This study tests the hypothesis that expression of these genes in stromal cells enhances prostate cancer growth in vivo. EXPERIMENTAL DESIGN: The expression of reactive stroma genes in prostate stromal cell lines was evaluated by reverse transcriptase (RT)-PCR and qRT-PCR. Genes were knocked down using stable expression of short-hairpin RNAs (shRNA) and the impact on tumorigenesis assessed using the differential reactive stroma (DRS) system, in which prostate stromal cell lines are mixed with LNCaP prostate cancer cells and growth as subcutaneous xenografts assessed. RESULTS: Nine of 10 reactive stroma genes tested were expressed in one or more prostate stromal cell lines. Gene knockdown of c-Kit, Wnt10B, Bmi1, Gli2, or COMP all resulted in decreased tumorigenesis in the DRS model. In all tumors analyzed, angiogenesis was decreased and there were variable effects on proliferation and apoptosis in the LNCaP cells. Wnt10B has been associated with stem/progenitor cell phenotype in other tissue types. Using a RT-PCR array, we detected downregulation of multiple genes involved in stem/progenitor cell biology such as OCT4 and LIF as well as cytokines such as VEGFA, BDNF, and CSF2 in cells with Wnt10B knockdown. CONCLUSIONS: These findings show that genes upregulated in prostate cancer-reactive stroma promote progression when expressed in prostate stromal cells. Moreover, these data indicate that the DRS model recapitulates key aspects of cancer cell/reactive stroma interactions in prostate cancer. Clin Cancer Res; 1-10. ©2013 AACR.

[196]

**TÍTULO / TITLE:** - T2-weighted prostate MRI at 7 tesla using a simplified external transmit-receive coil array: Correlation with radical prostatectomy findings in two prostate cancer patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Magn Reson Imaging. 2013 Nov 20. doi: 10.1002/jmri.24511.

●● Enlace al texto completo (gratis o de pago) [1002/jmri.24511](#)

**AUTORES / AUTHORS:** - Rosenkrantz AB; Zhang B; Ben-Eliezer N; Le Nobin J; Melamed J; Deng FM; Taneja SS; Wiggins GC

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, NYU Langone Medical Center, New York, New York, USA.

**RESUMEN / SUMMARY:** - **PURPOSE:** To report design of a simplified external transmit-receive coil array for 7 Tesla (T) prostate MRI, including demonstration of the array for tumor localization using T2-weighted imaging (T2WI) at 7T before prostatectomy. **MATERIALS AND METHODS:** Following simulations of transmitter designs not requiring parallel transmission or radiofrequency-shimming, a coil array was constructed using loop elements, with anterior and posterior rows comprising one transmit-receive element and three receive-only elements. This coil structure was optimized using a whole-body phantom. In vivo sequence optimization was performed to optimize achieved flip angle (FA) and signal to noise ratio (SNR) in prostate. The system was evaluated in a healthy volunteer at 3T and 7T. The 7T T2WI was performed in two prostate cancer patients before prostatectomy, and localization of dominant tumors was subjectively compared with histopathological findings. Image quality was compared between 3T and 7T in these patients. **RESULTS:** Simulations of the B1 + field in prostate using two-loop design showed good magnitude (B1 + of 0.245 A/m/w<sup>1/2</sup>) and uniformity (nonuniformity [SD/mean] of 10.4%). In the volunteer, 90 degrees FA was achieved in prostate using 225 v 1 ms hard-pulse (indicating good efficiency), FA maps confirmed good uniformity (14.1% nonuniformity), and SNR maps showed SNR gain of 2.1 at 7T versus 3T. In patients, 7T T2WI showed excellent visual correspondence with prostatectomy findings. 7T images demonstrated higher estimated SNR (eSNR) in benign peripheral zone (PZ) and tumor compared with 3T, but lower eSNR in fat and slight decreases in tumor-to-PZ contrast and PZ-homogeneity. **CONCLUSION:** We have demonstrated feasibility of a simplified external coil array for high-resolution T2-weighted prostate MRI at 7T. J. Magn. Reson. Imaging 2013. © 2013 Wiley Periodicals, Inc.

[197]

**TÍTULO / TITLE:** - Increased risk of pre-operative venous thromboembolism in patients with renal cell carcinoma and tumor thrombus.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Thromb Haemost. 2013 Nov 27. doi: 10.1111/jth.12459.

●● Enlace al texto completo (gratis o de pago) [1111/jth.12459](#)

**AUTORES / AUTHORS:** - Yokom DW; Ihaddadene R; Moretto P; Canil CM; Reaume N; Le Gal G; Carrier M

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, University of Ottawa, Ottawa, Ontario, Canada.

**RESUMEN / SUMMARY:** - **BACKGROUND:** The clinical impact of a tumor thrombus in renal cell carcinoma (RCC) patients awaiting radical nephrectomy and thrombectomy is

unknown. OBJECTIVE: To determine the incidence of venous thromboembolism (VTE) in RCC patients with tumor thrombus prior to nephrectomy. PATIENTS/METHODS: We conducted a retrospective cohort study including all late-stage (stage 3-4 excluding T1-2 N0M0) RCC patients that underwent a radical nephrectomy at our institution between January 1, 2005 and July 1. Tumor thrombus was defined as the presence of an intra-luminal filling defect in the renal, hepatic, portal or IVC directly extending from a renal mass detected on computed tomography. RESULTS: A total of 176 patients were included in the study. Fifty-three (30.1%) patients had tumor thrombus diagnosed on imaging. Three patients with tumor thrombus (5.7%; 95% CI: 1.4 to 16.8%) developed a VTE while awaiting radical nephrectomy whereas none (0%; 95% CI: 0 to 2.9%) of the patients without a tumor thrombus had an event ( $p = 0.026$ ). All three events were deep vein thrombosis. Time from tumor thrombus diagnosis to VTE was 5, 15 and 21 days. CONCLUSIONS: Tumor thrombus on imaging is a frequent finding among RCC patients awaiting nephrectomy. The presence of tumor thrombus in these patients increases the incidence of pre-operative VTE. This article is protected by copyright. All rights reserved.

[198]

**TÍTULO / TITLE:** - Re: Detailed Analysis of Patients with Metastasis to the Prostatic Anterior Fat Pad Lymph Nodes: A Multi-Institutional Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 13. pii: S0022-5347(13)05914-4. doi: 10.1016/j.juro.2013.07.110.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.07.110](#)

**AUTORES / AUTHORS:** - Tuliao PH; Rha KH

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Yonsei University College of Medicine, Seoul, Republic of Korea.

[199]

**TÍTULO / TITLE:** - Re: radical cystectomy in patients with preexisting three-piece inflatable penile prosthesis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2144. doi: 10.1016/j.juro.2013.07.044. Epub 2013 Jul 26.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.07.044](#)

**AUTORES / AUTHORS:** - Morey AF

[200]

**TÍTULO / TITLE:** - Abundant in vitro expression of the oncofetal ED-B-containing fibronectin translates into selective pharmacodelivery of I-L19SIP in a prostate cancer patient.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cancer Res Clin Oncol. 2013 Oct 17.

●● Enlace al texto completo (gratis o de pago) [1007/s00432-013-1538-6](#)

**AUTORES / AUTHORS:** - Locher R; Erba PA; Hirsch B; Bombardieri E; Giovannoni L; Neri D; Durkop H; Menssen HD

**INSTITUCIÓN / INSTITUTION:** - Charite-Universitätsmedizin Berlin, Berlin, Germany.

**RESUMEN / SUMMARY:** - **PURPOSE:** The extradomain B of fibronectin (ED-B) is a promising vascular target for selective pharmacodelivery in cancer patients. We analyzed a large series of prostatectomies from patients with prostate cancer, hyperplastic prostate disease, and normal prostates to study extent and tumor-selectivity of ED-B expression. **METHODS:** Using immunohistology, 68 adenocarcinomas of the prostate or prostate cancer-inflicted lymph nodes, 4 samples of benign prostatic hyperplasia, and 6 normal prostate glands were studied for ED-B expressing newly formed blood vessels. Further, we treated an advanced prostate cancer patient with the anti-ED-B antibody 131I-L19SIP to study in vivo target accessibility. **RESULTS:** ED-B-positive blood vessels were found significantly more frequent in prostate cancers as compared with peritumoral prostate tissues or normal prostate glands, independent of tumor differentiation. The ED-B-positive blood vessels' density was 97 (+/-23), 65 (+/-9), and 59 (+/-9)/mm<sup>2</sup> in G3, G2, and G1 prostate cancers, respectively, and 7 (+/-5)/mm<sup>2</sup> in normal prostate glands. In high-grade (G3) prostate cancers, also the peritumoral tissue showed a higher density of ED-B vessels than normal prostate glands. Similar results were obtained when ED-B-positive vessel density was expressed as a fraction of CD34-positive vessel density. Finally, selective uptake of ED-B-binding 131I-L19SIP to tumor lesions was found in an advanced prostate cancer patient by whole-body planar scintigraphy. **CONCLUSIONS:** ED-B-positive blood vessels were found to a large extent in prostate cancer tissues, but only rarely in normal prostates or benign prostatic hyperplasia. Whole-body planar scintigraphy in a prostate cancer patient confirmed selective uptake of 131I-L19SIP in the prostate cancer tissues, qualifying ED-B as a promising target for selective pharmacodelivery of anticancer agents in prostate cancer.

[201]

**TÍTULO / TITLE:** - Survival in patients with metastatic spinal cord compression from prostate cancer is associated with the number of extra-spinal organs involved.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4505-7.

**AUTORES / AUTHORS:** - Weber A; Bartscht T; Karstens JH; Schild SE; Rades D

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, University of Lubeck, Lubeck, Ratzeburger Allee 160, D-23538 Lubeck, Germany.

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**RESUMEN / SUMMARY:** - **BACKGROUND/AIM:** To investigate the predictive value of the number of extra-spinal organs involved by metastases for survival in metastatic spinal cord compression (MSCC) from prostate cancer. **PATIENTS AND METHODS:** In 95 patients irradiated with 10 x 3 Gy for MSCC from prostate cancer, seven factors were investigated: Age, performance score, number of involved vertebrae, interval from prostate cancer diagnosis to MSCC, pre-radiotherapy ambulatory status, time to motor deficits development, number of involved extra-spinal organs. **RESULTS:** Six-month survival rates for 0, 1 and  $\geq 2$  involved extra-spinal organs, were 81, 53 and 33%, respectively ( $p < 0.001$ ). On multivariate analysis, the number of involved extra-spinal organs maintained significance (risk ratio 1.88,  $p = 0.023$ ). Better performance score

( $p < 0.001$ ), longer interval from prostate cancer diagnosis to radiotherapy of MSCC ( $p < 0.001$ ), and being ambulatory prior to radiotherapy ( $p = 0.001$ ) were also positively associated with survival. CONCLUSION: The number of extra-spinal organs involved by metastases predicts survival in patients with MSCC from prostate cancer.

[202]

**TÍTULO / TITLE:** - Renal prognosis a long time after renal biopsy on patients with diabetic nephropathy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago) [1093/ndt/gft349](#)

**AUTORES / AUTHORS:** - Mise K; Hoshino J; Ubara Y; Sumida K; Hiramatsu R; Hasegawa E; Yamanouchi M; Hayami N; Suwabe T; Sawa N; Fujii T; Ohashi K; Hara S; Takaichi K

**INSTITUCIÓN / INSTITUTION:** - Nephrology Center, Toranomon Hospital, Tokyo, Japan.

**RESUMEN / SUMMARY:** - BACKGROUND: A new classification of diabetic nephropathy was reported by Tervaert et al., but the association between pathological findings and the clinical outcomes remains unclear. METHODS: Among 310 patients with diabetes mellitus who underwent renal biopsy from March 1985 to January 2010 and were confirmed to have diabetic nephropathy according to the Tervaert's classification, 205 patients were enrolled in this study. Cox proportional hazard regression analysis was used to calculate the hazard ratio (HR) and 95% confidence interval (CI) for death-censored renal death. Each regression analysis employed two levels of multivariate adjustment. RESULTS: After adjustment for age, gender, estimated glomerular filtration rate, type of diabetes, urinary protein excretion, systolic blood pressure, body mass index, HbA1c, diabetic retinopathy and red blood cells in urinary sediment at the time of renal biopsy, compared with glomerular class IIA, the HRs for death-censored renal death of glomerular classes I, IIB, III and IV were 0.23 (95% CI: 0.04-1.34), 2.15 (0.91-5.09), 4.35 (1.86-10.18) and 3.41 (1.38-8.45), respectively. Also, compared with an interstitial fibrosis and tubular atrophy score 1 group, HRs for score 0 group, score 2 group and score 3 group were 0.07 (0.008-0.57), 2.07 (0.92-4.67) and 4.95 (2.04-11.97), respectively. CONCLUSIONS: The progression of glomerular, tubulointerstitial and vascular lesions was associated with higher HRs for renal death. These results suggest the clinical utility of Tervaert's pathological classification.

[203]

**TÍTULO / TITLE:** - Psychological impact of prostate biopsy: physical symptoms, anxiety, and depression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 20;31(33):4235-41. doi: 10.1200/JCO.2012.45.4801. Epub 2013 Oct 21.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2012.45.4801](#)

**AUTORES / AUTHORS:** - Wade J; Rosario DJ; Macefield RC; Avery KN; Salter CE; Goodwin ML; Blazeby JM; Lane JA; Metcalfe C; Neal DE; Hamdy FC; Donovan JL

**INSTITUCIÓN / INSTITUTION:** - Julia Wade, Rhiannon C. Macefield, Kerry N.L. Avery, C. Elizabeth Salter, Jane M. Blazeby, J. Athene Lane, Chris Metcalfe, and Jenny L.

Donovan, University of Bristol, Clifton, Bristol; Derek J. Rosario and M. Louise Goodwin, Royal Hallamshire Hospital, University of Sheffield, Sheffield; David E. Neal, University of Cambridge, Addenbrooke's Hospital, Cambridge; and Freddie C. Hamdy, University of Oxford, John Radcliffe Hospital, Oxford, United Kingdom.

**RESUMEN / SUMMARY:** - PURPOSE: To investigate the psychological impact of prostate biopsy, including relationships between physical biopsy-related symptoms and anxiety and depression. PATIENTS AND METHODS: A prospective cohort of 1,147 men, nested within the Prostate Testing for Cancer and Treatment trial and recommended to receive prostate biopsy, completed questionnaires assessing physical and psychological harms after biopsy in the Prostate Biopsy Effects study. Psychological impact was measured using the Hospital Anxiety and Depression Scale, and scores were compared according to experiences of biopsy-related symptoms at biopsy, and at 7 and 35 days afterward, and in relation to biopsy results. RESULTS: A total of 1,144 men (99.7%) returned questionnaires at biopsy, with 1,090 (95.0%) and 1,016 (88.6%) responding at 7 and 35 days postbiopsy. Most men experienced biopsy-related symptoms as no problem or a minor problem, and overall levels of anxiety and depression were low and similar to normative levels. Of men receiving a negative biopsy result (n = 471), anxiety was greater in those experiencing problematic biopsy-related symptoms compared with those experiencing nonproblematic symptoms at 7 days for the following symptoms: pain (P < .001), shivers, (P = .020), hematuria (P < .001), hematochezia (P < .001), and hemoejaculate (P < .001). Anxiety was reduced, although symptoms were not, after 35 days. Overall levels of anxiety were low across all time points except at the 35-day assessment among men who had received a cancer diagnosis. CONCLUSION: Problematic postbiopsy symptoms can lead to increased anxiety, distinct from distress related to diagnosis of prostate cancer. Men and doctors need to consider these additional potential harms of biopsy when deciding whether to initiate prostate-specific antigen testing.

[204]

**TÍTULO / TITLE:** - Men (Aged 40-49 Years) With a Single Baseline Prostate-specific Antigen Below 1.0 ng/mL Have a Very Low Long-term Risk of Prostate Cancer: Results From a Prospectively Screened Population Cohort.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Dec;82(6):1211-9. doi: 10.1016/j.urology.2013.06.074. Epub 2013 Oct 19.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.06.074](#)

**AUTORES / AUTHORS:** - Weight CJ; Kim SP; Jacobson DJ; McGree ME; Karnes RJ; St Sauver J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Minnesota, MN. Electronic address: [cjweight@umn.edu](mailto:cjweight@umn.edu).

**RESUMEN / SUMMARY:** - OBJECTIVE: To study the use of a baseline prostate-specific antigen (PSA) and digital rectal examination in men (aged 40-49 years) in predicting long-term prostate cancer risk in a prospectively followed, representative population cohort. PATIENTS AND METHODS: Since 1990, a random sample of men in Olmsted County (aged 40-49 years) has been followed up prospectively (n = 268), with biennial visits, including a urologic questionnaire, PSA screening, and physical examination. The ensuing risk of prostate cancer (CaP) was compared using survival analyses.

RESULTS: Median follow-up was 16.3 years (interquartile range 14.0-17.3, max 19.1). For men with a baseline PSA <1.0 ng/mL (n = 195), the risk of subsequent Gleason 6 CaP diagnosis by 55 years was 0.6% (95% confidence interval [CI] 0%-1.7%) and 15.7% (95% CI 6.5%-24.9%) for men with a baseline PSA  $\geq$ 1.0 ng/mL. No man with a low baseline PSA developed an intermediate or high risk CaP, whereas 2.6% of men with a higher baseline PSA did (95% CI 0.58%-4.6%). CONCLUSION: Men (aged 40-49 years) can be stratified with a baseline PSA. If it is below 1.0 ng/mL, there is very little risk for developing a lethal CaP, and as many as 75% of men might be able to avoid additional PSA screening until 55 years. Conversely, men aged 40-49 years with a baseline PSA level >1.0 ng/mL had a significant risk of CaP diagnosis and should be monitored more closely.

[205]

**TÍTULO / TITLE:** - Clinical impact of the baseline donor-specific anti-HLA antibody measured by Luminex single antigen assay in living donor kidney transplant recipients after desensitization therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transpl Int. 2013 Sep 30. doi: 10.1111/tri.12199.

●● [Enlace al texto completo \(gratis o de pago\) 1111/tri.12199](#)

**AUTORES / AUTHORS:** - Chung BH; Choi BS; Oh EJ; Park CW; Kim JI; Moon IS; Kim YS; Yang CW

**INSTITUCIÓN / INSTITUTION:** - Transplant research center, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea; Division of Nephrology, Department of Internal Medicine, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea.

**RESUMEN / SUMMARY:** - The aim of this study is to investigate the clinical impact of donor-specific anti-HLA-antibody (HLA-DSA) baseline levels, measured using the Luminex single-antigen assay (LSA), in living-donor kidney-transplantation (LDKT). Total 129 cases of LDKT were divided into 4 groups according to baseline mean fluorescence intensity (MFI) HLA-DSA values: Strong (n=6), >10,000; Moderate (n=8), 5,000-10,000; Weak (n=11), 1,000-5,000, Negative (n=104), <1,000. Pre-transplant desensitization (DSZ) was performed to decrease the MFI to weak or negative values before KT. Clinical outcomes in the 4 groups were compared. After DSZ, HLA-DSA decreased to weak or negative levels in all patients; Acute rejections developed more frequently in strong group (5/6 (83.3%)) compared to other three groups (P<0.05) and especially acute antibody-mediated rejection (AAMR) developed almost exclusively in strong group (4/6 (66.7%)). Strong HLA-DSA levels at baseline were more predictive of AAMR than either type of XM (complement-dependent lymphocytotoxicity or flow cytometry) in ROC analysis. Allograft function in this group showed significant deterioration during follow-up compared to the other groups. In conclusion, strong HLA-DSA levels at baseline are associated with worse allograft outcome even after successful desensitization; therefore, strict monitoring and strong maintenance immunosuppression may be required in such patients. This article is protected by copyright. All rights reserved.

[206]

**TÍTULO / TITLE:** - Pre-Implant Biopsy Predicts Outcome of Single-Kidney Transplantation Independent of Clinical Donor Variables.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplantation. 2013 Nov 26.

- Enlace al texto completo (gratis o de pago)

[1097/01.tp.0000437428.12356.4a](http://1097/01.tp.0000437428.12356.4a)

**AUTORES / AUTHORS:** - Hofer J; Regele H; Bohmig GA; Gutjahr G; Kikic Z; Muhlbacher F; Kletzmayer J

**INSTITUCIÓN / INSTITUTION:** - 1 Institute of Clinical Pathology, Medical University of Vienna, Vienna, Austria. 2 Institute of Immunology, Medical University of Vienna, Vienna, Austria. 3 Division of Nephrology and Dialysis, Department of Medicine III, Medical University of Vienna, Vienna, Austria. 4 Competence Centre for Clinical Trials, University of Bremen, Bremen, Germany. 5 Department of Surgery, Medical University of Vienna, Vienna, Austria. 6 Department of Medicine III, SMZ-Ost/Donauspital, Vienna, Austria. 7 Address correspondence to: Josef Kletzmayer, M.D., Department of Medicine III, SMZ-Ost/Donauspital, Langobardenstrasse 122, 1220 Vienna, Austria.

**RESUMEN / SUMMARY:** - BACKGROUND: Pre-implant biopsy findings account for the discard of many donor kidneys although their clinical value is not fully understood. We retrospectively investigated the predictive value of pre-implant histology, which in our center was obtained for protocol purposes, not for transplant decisions, on long-term allograft and recipient outcome after single-kidney transplantation. METHODS: This single-center study included 628 consecutive adult recipients of 174 Expanded Criteria Donor (ECD) and 454 Standard Criteria Donor kidneys. Chronic donor organ injury was assessed applying a chronic lesion score differentiating between mild, moderate, and severe histologic organ injury based on the integration of glomerular, vascular, tubular, and interstitial lesions. Recipients were followed over a median time of 7.8 years. RESULTS: Donor kidneys exhibiting mild or moderate chronic lesions yielded almost identical graft and recipient survival independent of ECD status or other clinical covariables (HR 1.20, 95% CI 0.83-1.74, P=0.326, and HR 1.27, 95% CI 0.83-1.95, P=0.274, respectively). However, if allograft injury was severe, occurring in 3% of transplanted kidneys, graft and recipient survival was significantly reduced (HR 3.13, 95% CI 1.61-6.07, P<0.001 and HR 2.42, 95% CI 1.16-5.04, P=0.005, respectively). CONCLUSION: The results suggest that donor kidneys displaying moderate chronic injury can safely be transplanted as single kidneys, while organs displaying severe injury should be discarded. Thus, pre-implant biopsy might offer an effective approach to increase the utilization of renal donor organs, especially from ECD and donors with cerebrovascular accident as cause of death, and to improve overall graft outcome.

[207]

**TÍTULO / TITLE:** - Outcome with Radical Cystectomy and Extended Lymphadenectomy Alone in Lymph Node Positive Bladder Cancer Patients Unfit for or Declining Adjuvant Chemotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 16. doi: 10.1111/bju.12520.

- Enlace al texto completo (gratis o de pago) [1111/bju.12520](http://1111/bju.12520)

**AUTORES / AUTHORS:** - Zehnder P; Studer UE; Daneshmand S; Birkhauser FD; Skinner EC; Roth B; Miranda G; Burkhard FC; Cai J; Skinner DG; Thalmann GN; Gill IS

**INSTITUCIÓN / INSTITUTION:** - USC Institute of Urology, Catherine & Joseph Aresty Department of Urology, Keck School of Medicine, University of Southern California (USC), Angeles, California; Department of Urology, University of Bern (UB), Bern, Switzerland.

**RESUMEN / SUMMARY:** - OBJECTIVE: To analyze the long term outcome of lymph node (LN) positive bladder cancer patients following radical cystectomy (RC) and extended pelvic lymph node dissection (ePLND) who did not receive any adjuvant therapy PATIENTS AND METHODS: Retrospective, combined cohort analysis based on the two prospectively maintained cystectomy databases from the University of Southern California and the University of Bern Eligible patients underwent RC with ePLND for cN0M0 disease but turned out to be LN-positive None had neo-adjuvant therapy, all negative surgical margins Kaplan-Meier plots were used to estimate recurrence-free (RFS) and overall survival (OS), subgroup comparisons were performed with Log-rank tests, and multivariable analysis based on Cox proportional hazard models RESULTS: Of 521 LN-positive patients, 251 (48%) never received adjuvant therapy While pathological stage distribution was comparable, they were older and had both fewer total and positive LNs identified compared to those who underwent adjuvant therapy Median RFS for patients with surgery alone was 1.6y Recurrences mainly occurred within 2 years following RC resulting in 5- and 10-year RFS rates of 32% and 26%, respectively Pathological T-stage, total number of LNs and number of positive LNs identified were independent predictors of survival for RFS and OS CONCLUSIONS: 25% of patients with documented LN metastases not receiving adjuvant therapy were cured with RC and ePLND However, a few relapses may occur also later than three years predictors of survival are pathological T-stage, number of total LNs, and number of positive LNs identified.

[208]

**TÍTULO / TITLE:** - Advanced generation anti-prostate specific membrane antigen designer T Cells for prostate cancer immunotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 30. doi: 10.1002/pros.22749.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22749](#)

**AUTORES / AUTHORS:** - Ma Q; Gomes EM; Lo AS; Junghans RP

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, Biotherapeutics Development Lab, Roger Williams Medical Center, Boston University School of Medicine, Providence, Rhode Island.

**RESUMEN / SUMMARY:** - BACKGROUND: Adoptive immunotherapy by infusion of designer T cells (dTc) engineered with chimeric antigen receptors (CARs) for tumoricidal activity represents a potentially highly specific modality for the treatment of cancer. In this study, 2<sup>nd</sup> generation (gen) anti-prostate specific membrane antigen (PSMA) dTc were developed for improving the efficacy of previously developed 1<sup>st</sup> gen dTc for prostate cancer immunotherapy. The 1<sup>st</sup> gen dTc are modified with chimeric immunoglobulin-T cell receptor (IgTCR) while the 2<sup>nd</sup> gen dTc are engineered with an immunoglobulin-CD28-T cell receptor (IgCD28TCR), which incorporates a CD28

costimulatory signal for optimal T cell activation. METHODS: A 2<sup>nd</sup> gen anti-PSMA IgCD28TCR CAR was constructed by inserting the CD28 signal domain into the 1<sup>st</sup> gen CAR. 1<sup>st</sup> and 2<sup>nd</sup> gen anti-PSMA dTc were created by transducing human T cells with anti-PSMA CARs and their antitumor efficacy was compared for specific activation on PSMA-expressing tumor contact, cytotoxicity against PSMA-expressing tumor cells in vitro, and suppression of tumor growth in an animal model. RESULTS: The 2<sup>nd</sup> gen dTc can be optimally activated to secrete larger amounts of cytokines such as IL2 and IFN $\gamma$  than 1<sup>st</sup> gen and to proliferate more vigorously on PSMA-expressing tumor contact. More importantly, the 2<sup>nd</sup> gen dTc preserve the PSMA-specific cytotoxicity in vitro and suppress tumor growth in animal models with significant higher potency. CONCLUSIONS: Our results demonstrate that 2<sup>nd</sup> gen anti-PSMA designer T cells exhibit superior antitumor functions versus 1<sup>st</sup> gen, providing a rationale for advancing this improved agent toward clinical application in prostate cancer immunotherapy. Prostate © 2013 Wiley Periodicals, Inc.

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[209]

**TÍTULO / TITLE:** - Diffuse osteosclerosis in a patient with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Osteoporos Int. 2013 Oct 18.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00198-013-2545-9](#)

**AUTORES / AUTHORS:** - Ustun N; Ustun I; Ozgur T; Atci N; Aydogan F; Sumbul AT; Turhanoglu AD

**INSTITUCIÓN / INSTITUTION:** - Department of Physical Medicine and Rehabilitation, Faculty of Medicine, Mustafa Kemal University, Hatay, Turkey, [drmustun@yahoo.com.tr](mailto:drmustun@yahoo.com.tr).

**RESUMEN / SUMMARY:** - A 61-year-old man was referred to our outpatient clinic because of severe bilateral upper leg pain for 1 year. On admission, the patient had anemia and a high serum alkaline phosphatase level. Lumbar and femoral neck T-scores were +10.5 and +9.6, respectively. His radius 33 % T-score was -2.8. Plain radiographs of the patient's pelvis, spine, and long bones revealed osteosclerosis. The patient had previously undergone a prostate biopsy, which showed prostate adenocarcinoma (Gleason score 3 + 4). The patient's total and free prostate-specific antigen were very high. According to previous records, the patient did not have anemia, and his serum alkaline phosphatase (ALP) level was normal. An abdominal radiograph taken 2 years earlier revealed a normal spine and pelvic bone. Bone scintigraphy yielded nontypical findings for prostate cancer metastasis. Computed tomography of the patient's thorax and abdomen showed heterogeneous sclerotic areas in all bones consistent with prostate cancer metastasis. A bone marrow biopsy disclosed disseminated carcinomatosis of bone marrow in association with prostate cancer. Clinicians should be aware of the possibility of prostate malignancy as a cause of high bone mineral density (BMD), even in the absence of typical localized findings on plain radiographs.

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[210]

**TÍTULO / TITLE:** - Comparison of genome-wide DNA methylation in urothelial carcinomas of patients with and without arsenic exposure.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Environ Res. 2013 Nov 22. pii: S0013-9351(13)00181-3. doi: 10.1016/j.envres.2013.10.006.

●● Enlace al texto completo (gratis o de pago) [1016/j.envres.2013.10.006](#)

**AUTORES / AUTHORS:** - Yang TY; Hsu LI; Chiu AW; Pu YS; Wang SH; Liao YT; Wu MM; Wang YH; Chang CH; Lee TC; Chen CJ

**INSTITUCIÓN / INSTITUTION:** - Graduate Institute of Life Science, National Defense Medical Center, Taipei, Taiwan; Genomics Research Center, Academia Sinica, Taipei, Taiwan; Molecular and Genomic Epidemiology Center, China Medical University Hospital, Taichung, Taiwan; China Medical University, Taichung, Taiwan.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Arsenic is a well-documented carcinogen of human urothelial carcinoma (UC) with incompletely understood mechanisms. **OBJECTIVES:** This study aimed to compare the genome-wide DNA methylation profiles of arsenic-induced UC (AsUC) and non-arsenic-induced UC (Non-AsUC), and to assess associations between site-specific methylation levels and cumulative arsenic exposure. **METHODS:** Genome-wide DNA methylation profiles in 14 AsUC and 14 non-AsUC were analyzed by Illumina Infinium methylation27 BeadChip and validated by bisulfite pyrosequencing. Mean methylation levels (beta) in AsUC and non-AsUC were compared by their ratio (beta ratio) and difference (Deltabeta). Associations between site-specific methylation levels in UC and cumulative arsenic exposure were examined. **RESULTS:** Among 27,578 methylation sites analyzed, 231 sites had beta ratio >2 or <0.5 and 45 sites had Deltabeta >0.2 or <-0.2. There were 13 sites showing statistically significant (q<0.05) differences in beta between AsUC and non-AsUC including 12 hypermethylation sites in AsUC and only one hypermethylation site in non-AsUC. Significant associations between cumulative arsenic exposure and DNA methylation levels of 28 patients were observed in nine CpG sites of nine genes including PDGFD (Spearman rank correlation, 0.54), CTNNA2 (0.48), KCNK17 (0.52), PCDHB2 (0.57), ZNF132 (0.48), DCDC2 (0.48), KLK7 (0.48), FBXO39 (0.49), and NPY2R (0.45). These associations remained statistically significant for CpG sites in CTNNA2, KLK7, NPY2R, ZNF132 and KCNK17 in 20 non-smoking women after adjustment for tumor stage and age. **CONCLUSIONS:** Significant associations between cumulative arsenic exposure and methylation level of CTNNA2, KLK7, NPY2R, ZNF132 and KCNK17 were found in smoking-unrelated urothelial carcinoma. Arsenic exposure may cause urothelial carcinomas through the hypermethylation of genes involved in cell adhesion, proteolysis, transcriptional regulation, neuronal pathway, and ion transport. The findings of this study, which are limited by its small sample size and moderate dose-response relation, remain to be validated by further studies with large sample sizes.

[211]

**TÍTULO / TITLE:** - A common nonsense mutation of the BLM gene and prostate cancer risk and survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Gene. 2013 Dec 15;532(2):173-6. doi: 10.1016/j.gene.2013.09.079. Epub 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [1016/j.gene.2013.09.079](#)

**AUTORES / AUTHORS:** - Antczak A; Kluzniak W; Wokolorczyk D; Kashyap A; Jakubowska A; Gronwald J; Huzarski T; Byrski T; Debniak T; Masojc B; Gorski B; Gromowski T; Nagorna A; Golab A; Sikorski A; Słojewski M; Gliniewicz B; Borkowski T; Borkowski A; Przybyła J; Sosnowski M; Malkiewicz B; Zdrojowy R; Sikorska-Radek P; Matych J; Wilkosz J; Rozanski W; Kis J; Bar K; Domagała P; Stawicka M; Milecki P; Akbari MR; Narod SA; Lubinski J; Cybulski C

**INSTITUCIÓN / INSTITUTION:** - Chair of Urology, Poznan University of Medical Sciences, Poznan, Poland.

**RESUMEN / SUMMARY:** - BACKGROUND: Germline mutations of BRCA2 and NBS1 genes cause inherited recessive chromosomal instability syndromes and predispose to prostate cancer of poor prognosis. Mutations of the BLM gene cause another chromosomal instability clinical syndrome, called Bloom syndrome. Recently, a recurrent truncating mutation of BLM (Q548X) has been associated with a 6-fold increased risk of breast cancer in Russia, Belarus and Ukraine, but its role in prostate cancer etiology and survival has not been investigated yet. METHODS: To establish whether the Q548X allele of the BLM gene is present in Poland, and whether this allele predisposes to poor prognosis prostate cancer, we genotyped 3337 men with prostate cancer and 2604 controls. RESULTS: Q548X was detected in 13 of 3337 (0.4%) men with prostate cancer compared to 15 of 2604 (0.6%) controls (OR=0.7; 95% CI 0.3-1.4). A positive family history of any cancer in a first- or second-degree relative was seen only in 4 of the 13 (30%) mutation positive families, compared to 49% (1485/3001) of the non-carrier families (p=0.3). The mean follow-up was 49 months. Survival was similar among carriers of Q548X and non-carriers (HR=1.1; p=0.9). The 5-year survival for men with a BLM mutation was 83%, compared to 72% for mutation-negative cases. CONCLUSIONS: BLM Q548X is a common founder mutation in Poland. We found no evidence that this mutation predisposes one to prostate cancer or affect prostate cancer survival. However, based on the observed 0.6% population frequency of the Q548X allele, we estimate that one in 100,000 children should be affected by Bloom syndrome in Poland.

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[212]

**TÍTULO / TITLE:** - Re: benign prostate hyperplasia and stem cells: a new therapeutic opportunity.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2308. doi: 10.1016/j.juro.2013.08.039. Epub 2013 Aug 22.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.039](#)

**AUTORES / AUTHORS:** - Kaplan SA

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[213]

**TÍTULO / TITLE:** - Reference values for the CAVIPRES-30 questionnaire, a global questionnaire on the health-related quality of life of patients with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 29. pii: S0210-4806(13)00329-X. doi: 10.1016/j.acuro.2013.09.003.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.09.003](#)

**AUTORES / AUTHORS:** - Gomez-Veiga F; Silmi-Moyano A; Gunthner S; Puyol-Pallas M; Cozar-Olmo JM

**INSTITUCIÓN / INSTITUTION:** - Servicio de Urología, Complejo Hospitalario Universitario, A Coruña, España. Electronic address: [fgveiga@telefonica.net](mailto:fgveiga@telefonica.net).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** Define and establish the reference values of the CAVIPRES-30 Questionnaire, a health related quality of life questionnaire specific for prostate cancer patients. **MATERIAL AND METHODS:** The CAVIPRES-30 was administered to 2,630 males with prostate cancer included by 238 Urologist belonging to the Spanish National Healthcare System. Descriptive analysis on socio-demographic and clinical data were performed, and multivariate analyses were used to corroborate that stratification variables were statistically significantly and independently associated to the overall score of the questionnaire. **RESULTS:** The variables Time since diagnosis of the illness, whether the patient had a Stable partner or not, if he was, or not, undergoing Symptomatic treatment were statistically significantly and independently associated ( $P < .001$ ) to the overall score of the questionnaire. The reference values table of the CAVIPRES-30 questionnaire is made up of different kinds of information of each patient profile: sample size, descriptive statistics with regard to the overall score, Cronbach's alpha value (between .791 and .875) and the questionnaire's values are reported by deciles. **CONCLUSIONS:** The results of this study contribute new proof as to the suitability and usefulness of the CAVIPRES-30 questionnaire as an instrument for assessing individually the quality of life of prostate cancer.

[214]

**TÍTULO / TITLE:** - Pirin down-regulates the EAF2/U19 protein and alleviates its growth inhibition in prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Nov 23. doi: 10.1002/pros.22729.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pros.22729](#)

**AUTORES / AUTHORS:** - Qiao Z; Wang D; Hahn J; Ai J; Wang Z

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The 3<sup>rd</sup> Affiliated Hospital, Harbin Medical University, Harbin, Heilongjiang, China; Department of Urology, University of Pittsburgh, Pittsburgh, Pennsylvania.

**RESUMEN / SUMMARY:** - **BACKGROUND:** The tumor suppressor ELL associated factor 2 (EAF2/U19) has been reported to induce apoptosis of LNCaP cells and suppress AT6.1 xenograft prostate tumor growth. EAF2/U19 expression level is down-regulated in advanced human prostate cancer. EAF2/U19 is also a putative transcription factor with a transactivation domain and capability of sequence-specific DNA binding. Identification of binding partners and regulators of EAF2/U19 is essential to understand its function in regulating apoptosis/survival of prostate cancer cells. **METHODS:** Through a yeast two-hybrid screening system, we identified Pirin as a binding partner of EAF2. We further determined the interaction between epitope-tagged EAF2/U19 and Pirin by co-immunoprecipitation in mammalian cells. The effect of Pirin on EAF2/U19 inhibition of LNCaP growth was assayed by colony formation. **RESULTS:** Pirin co-immunoprecipitated with EAF2/U19 and the overexpressed Pirin decreased the expression level of EAF2/U19 protein in prostate cancer cell lines LNCaP and PC3. Furthermore, overexpression of EAF2/U19 suppressed LNCaP

colony formation, and co-expression of Pirin significantly blocked the growth inhibition induced by EAF2/U19 overexpression. CONCLUSION: Pirin is a newly identified binding partner of EAF2/U19 capable of down-regulating EAF2/U19 protein and alleviating its inhibition of prostate cancer cell survival/proliferation. Pirin may play an important role involved in EAF2/U19 function as an androgen-responsive gene and tumor repressor. Prostate © 2013 Wiley Periodicals, Inc.

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[215]

**TÍTULO / TITLE:** - Simultaneous detection of six urinary pteridines and creatinine by high-performance liquid chromatography-tandem mass spectrometry for clinical breast cancer detection.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anal Chem. 2013 Nov 19;85(22):11137-45. doi: 10.1021/ac403124a. Epub 2013 Nov 4.

●● [Enlace al texto completo \(gratis o de pago\) 1021/ac403124a](#)

**AUTORES / AUTHORS:** - Burton C; Shi H; Ma Y

**INSTITUCIÓN / INSTITUTION:** - Department of Chemistry and Center for Biomedical Science & Engineering, Missouri University of Science and Technology, 400 West 11<sup>th</sup> Street, Rolla, Missouri 65409, United States.

**RESUMEN / SUMMARY:** - Recent preliminary studies have implicated urinary pteridines as candidate biomarkers in a growing number of malignancies including breast cancer. While the developments of capillary electrophoresis-laser induced fluorescence (CE-LIF), high performance liquid chromatography (HPLC), and liquid chromatography-mass spectroscopy (LC-MS) pteridine urinalyses among others have helped to enable these findings, limitations including poor pteridine specificity, asynchronous or nonexistent renal dilution normalization, and a lack of information regarding adduct formation in mass spectrometry techniques utilizing electrospray ionization (ESI) have prevented application of these techniques to a larger clinical setting. In this study, a simple, rapid, specific, and sensitive high-performance liquid chromatography-tandem mass spectrometry (HPLC-MS/MS) method has been developed and optimized for simultaneous detection of six pteridines previously implicated in breast cancer and creatinine as a renal dilution factor in urine. In addition, this study reports cationic adduct formation of urinary pteridines under ESI-positive ionization for the first time. This newly developed technique separates and detects the following six urinary pteridines: 6-biopterin, 6-hydroxymethylpterin, d-neopterin, pterin, isoxanthopterin, and xanthopterin, as well as creatinine. The method detection limit for the pteridines is between 0.025 and 0.5 µg/L, and for creatinine, it is 0.15 µg/L. The method was also validated by spiked recoveries (81-105%), reproducibility (RSD: 1-6%), and application to 25 real urine samples from breast cancer positive and negative samples through a double-blind study. The proposed technique was finally compared directly with a previously reported CE-LIF technique, concluding that additional or alternative renal dilution factors are needed for proper investigation of urinary pteridines as breast cancer biomarkers.

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[216]

**TÍTULO / TITLE:** - Antitumour activity of enzalutamide (MDV3100) in patients with metastatic castration-resistant prostate cancer (CRPC) pre-treated with docetaxel and abiraterone.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Sep 25. pii: S0959-8049(13)00788-0. doi: 10.1016/j.ejca.2013.08.020.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejca.2013.08.020](#)

**AUTORES / AUTHORS:** - Bianchini D; Lorente D; Rodriguez-Vida A; Omlin A; Pezaro C; Ferraldeschi R; Zivi A; Attard G; Chowdhury S; de Bono JS

**INSTITUCIÓN / INSTITUTION:** - Prostate Cancer Targeted Therapy Group and Drug Development Unit, The Royal Marsden NHS Foundation Trust, The Institute of Cancer Research, Downs Road, Sutton, Surrey, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: The new generation anti-androgen enzalutamide and the potent CYP17 inhibitor abiraterone have both demonstrated survival benefits in patients with metastatic castration-resistant prostate cancer (CRPC) progressing after docetaxel. Preliminary data on the antitumour activity of abiraterone after enzalutamide have suggested limited activity. The antitumour activity and safety of enzalutamide after abiraterone in metastatic CRPC patients is still unknown. PATIENTS AND METHODS: We retrospectively identified patients treated with docetaxel and abiraterone prior to enzalutamide to investigate the activity and safety of enzalutamide in a more advanced setting. Prostate specific antigen (PSA), radiological and clinical assessments were analysed. RESULTS: 39 patients with metastatic CRPC were identified for this analysis (median age 70years, range: 54-85years). Overall 16 patients (41%) had a confirmed PSA decline of at least 30%. Confirmed PSA declines of 50% and 90% were achieved in 5/39 (12.8%) and 1/39 (2.5%) respectively. Of the 15 patients who responded to abiraterone, two (13.3%) also had a confirmed 50% PSA decline on subsequent enzalutamide. Among the 22 abiraterone-refractory patients, two (9%) achieved a confirmed 50% PSA decline on enzalutamide. CONCLUSION: Our preliminary case series data suggest limited activity of enzalutamide in the post-docetaxel and post-abiraterone patient population.

[217]

**TÍTULO / TITLE:** - Basal renal function reserve and mean kidney dose predict future radiation-induced kidney injury in stomach cancer patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Support Care Cancer. 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [1007/s00520-013-1996-z](#)

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**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, Selcuk University, Konya, Turkey, [guler.aydinyavas@gmail.com](mailto:guler.aydinyavas@gmail.com).

**RESUMEN / SUMMARY:** - BACKGROUND: Adjuvant chemoradiotherapy (CRT) improves the survival in patients with locally advanced stomach cancer. The kidneys are the major dose-limiting organs for radiotherapy (RT) in upper abdominal cancers. We aimed to evaluate the impact of adjuvant CRT on renal function of patients with stomach cancer. MATERIAL AND METHODS: Fifty-nine stomach cancer patients who underwent postoperative CRT were included. Demographic parameters (age, gender), and basal and 12<sup>th</sup>-month biochemical parameters were recorded. Mean kidney dose

(MKD) administered was determined. Estimated glomerular filtration rate (eGFR) was calculated by modification of diet in renal disease formula. RESULTS: Fifty-nine patients were recruited (age 60.8 +/- 11.9 years; female/male 25/34; follow-up duration 15.6 +/- 9.8 months). Twenty-one patients (35.6 %) had basal eGFR <90 ml/min/1.73 m<sup>2</sup>. When the basal and 12<sup>th</sup>-month eGFR was compared, eGFR decreased in 27 patients (45.8 %), whereas eGFR remained stable in 32 (54.2 %) patients. Cox regression analyses revealed that a MKD >=1,500 cGy and basal eGFR <90 ml/min/1.73 m<sup>2</sup> significantly increased the risk of a decreased eGFR at 12<sup>th</sup> month (HR = 2.288, 95 % CI 1.009-5.188, p = 0.048 and HR = 2.854, 95 % CI 1.121-7.262, p = 0.028, respectively). CONCLUSION: MKD >=1,500 cGy and a basal eGFR <90 ml/min/1.73 m<sup>2</sup> significantly increased the risk of a decreased eGFR at 12<sup>th</sup> month. We suggest that patients with stomach cancer be evaluated for their basal renal reserve prior to RT, and it may be more convenient to further minimize the dose to the kidneys with more sophisticated RT techniques in patients with stomach cancer, more specifically in patients with decreased renal reserve.

[218]

**TÍTULO / TITLE:** - Prostate cancer and the hypofractionation hypothesis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Oncol. 2013 Nov 1;31(31):3849-51. doi: 10.1200/JCO.2013.52.4942. Epub 2013 Oct 7.

●● Enlace al texto completo (gratis o de pago) [1200/JCO.2013.52.4942](#)

**AUTORES / AUTHORS:** - Lee WR

**INSTITUCIÓN / INSTITUTION:** - Duke University School of Medicine, Durham, NC.

[219]

**TÍTULO / TITLE:** - Bone Mineral Density in Prostate Cancer: A Comparative Study of Patients With Prostate Cancer and Healthy Controls Using Propensity Score Matching.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct 23. pii: S0090-4295(13)01126-6. doi: 10.1016/j.urology.2013.08.045.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.045](#)

**AUTORES / AUTHORS:** - Kwon T; Jeong IG; Park M; You D; Lee J; Kim HK; Hong S; Hong JH; Ahn H; Kim CS

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Ulsan College of Medicine, Asan Medical Center, Songpa-gu, Seoul, Korea.

**RESUMEN / SUMMARY:** - OBJECTIVE: To determine whether the prevalence of prostate cancer is associated with a decrease in bone mineral density (BMD) compared to a healthy control group and to identify the factors associated with osteoporosis in patients diagnosed with prostate cancer before the initiation of any kind of treatment. MATERIALS AND METHODS: A retrospective study was conducted in 582 patients with prostate cancer and 2536 healthy men. Confounding variables affecting BMD, including age, serum testosterone, body mass index (BMI), diabetes mellitus, hypertension, and smoking were matched in the 2 study groups using propensity score analysis. RESULTS: The propensity score model included 6 variables, and matching by propensity score yielded 502 patients in the prostate cancer

group matched to 502 men in the healthy control group. On the basis of the lowest T-score available, a high prevalence of osteoporosis was found in the prostate cancer group ( $P = .0001$ ). Prostate cancer was the factor correlating significantly with osteoporosis before propensity score matching (odds ratio [OR] 2.96,  $P < .001$ ) and after propensity score matching (OR 3.22,  $P < .001$ ). By multivariate analysis, conducted to assess the significance of each variable affecting the development of osteoporosis in patients with prostate cancer, bone metastasis was found to be an independent predictor of osteoporosis (OR 3.45,  $P = .002$ ), along with BMI (continuous, OR 0.75,  $P < .001$ ). CONCLUSION: After controlling for variables affecting BMD, prostate cancer was a risk factor for osteoporosis. Measurement of BMD is a logical first step in the clinical strategy to avoid or minimize potential bone-related complications in men with prostate cancer, especially if they have bone metastasis and a slender stature.

[220]

**TÍTULO / TITLE:** - Clinicopathological Characteristics of Incidental Prostate Cancer Discovered from Radical Cystoprostatectomy Specimen: A Multicenter French Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg Oncol. 2013 Oct 30.

●● [Enlace al texto completo \(gratis o de pago\)](#) [1245/s10434-013-3340-8](#)

**AUTORES / AUTHORS:** - Pignot G; Salomon L; Neuzillet Y; Masson-Lecomte A; Lebacle C; Patard JJ; Lunardi P; Rischmann P; Pasticier G; Bernhard JC; Cohen J; Timsit MO; Verkarre V; Peyronnet B; Verhoest G; Le Goux C; Zerbib M; Brecheteau F; Bigot P; Larre S; Murez T; Thuret R; Lacarriere E; Champy C; Roupret M; Comperat E; Berger J; Descazeaud A; Toledano H; Bastide C; Lavilledieu S; Avances C; Delage F; Valeri A; Molimard B; Houlgatte A; Gres P; Donnaint A; Kleinclauss F; Legal S; Doerfler A; Koutlidis N; Cormier L; Hetet JF; Colls P; Arvin-Berod A; Rambeaud JJ; Quintens H; Soulie M; Pfister C

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Bicetre Academic Hospital, Paris XI University, Le Kremlin Bicetre Cedex, France, [gg\\_pignot@yahoo.fr](mailto:gg_pignot@yahoo.fr).

**RESUMEN / SUMMARY:** - PURPOSE: The present study assessed the incidence and histopathological features of incidentally diagnosed prostate cancer (PCa) in specimens from radical cystoprostatectomy (RCP) for bladder cancer. The patient outcomes also were evaluated. METHODS: We retrospectively reviewed the histopathological features and survival data of 4,299 male patients who underwent a RCP for bladder cancer at 25 French centers between January 1996 and June 2012. No patients had preoperative clinical or biological suspicion of PCa. RESULTS: Among the 4,299 RCP specimens, PCa was diagnosed in 931 patients (21.7 %). Most tumors (90.1 %) were organ-confined (pT2), whereas 9.9 % of them were diagnosed at a locally advanced stage ( $\geq$ pT3). Gleason score was  $\leq 6$  in 129 cases (13.9 %), 6 in 575 cases (61.7 %), 7 (3 + 4) in 149 cases (16.0 %), 7 (4 + 3) in 38 cases (4.1 %), and  $> 7$  in 40 cases (4.3 %). After a median follow-up of 25.5 months (interquartile range 14.2-47.4), 35.4 % of patients had bladder cancer recurrence and 23.8 % died of bladder cancer. Only 16 patients (1.9 %) experienced PCa biochemical recurrence during follow-up, and no preoperative predictive factor was identified. No patients died from PCa. CONCLUSIONS: The rate of incidentally diagnosed PCa in RCP specimens

was 21.7 %. The majority of these PCas were organ-confined. PCa recurrence occurred in only 1.9 % of cases during follow-up.

[221]

**TÍTULO / TITLE:** - Association of de novo human leukocyte antigen and major histocompatibility complex class I chain-related gene-a antibodies and proteinuria with graft survival 5 years after renal transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplant Proc. 2013 Nov;45(9):3249-53. doi: 10.1016/j.transproceed.2013.08.029.

●● Enlace al texto completo (gratis o de pago)

[1016/j.transproceed.2013.08.029](#)

**AUTORES / AUTHORS:** - Zhang LW; Peng ZG; Xian WH; Cui XQ; Sun HB; Li EG; Geng LN; Zhao P; Tian J

**INSTITUCIÓN / INSTITUTION:** - Department of Organ Transplantation, Shandong University, Qilu Hospital, Shandong, China.

**RESUMEN / SUMMARY:** - BACKGROUND: Association of de novo human leukocyte antigen (HLA) and major histocompatibility complex class I chain-related gene-A (MICA) antibodies and proteinuria with graft survival 5 years after renal transplantation. De novo presence of HLA and MICA antibodies after renal transplantation is associated with poor graft survival. Proteinuria after transplantation is also considered a risk factor for premature graft loss. In this study, we investigated the association of de novo HLA and MICA antibodies on proteinuria after renal transplantation and the association of proteinuria and de novo antibodies with graft survival. METHODS: We enrolled 275 patients without preexisting HLA and MICA antibodies followed for >5 years after renal transplantation. All donor organs were from living-related donors or from an organ donation program. HLA and MICA antibodies were detected by the Luminex method. Patients with proteinuria (>150 mg/d) underwent intermittent 24-hour proteinuria examination. RESULTS: The frequencies of de novo HLA and MICA antibody 5 years after transplantation were 25.8% and 12%, respectively. In total, 26.5% of patients had proteinuria at the 5-year follow-up. De novo HLA antibody was associated with increased proteinuria after transplantation (relative risk, 3.12). HLA antibody and proteinuria were both associated with poor 5-year graft survival (P = .027 and P = .006, respectively). CONCLUSION: De novo HLA and MICA antibodies and proteinuria after renal transplantation are all associated with poor graft survival. De novo HLA antibody is independent risk factor for posttransplant proteinuria, and proteinuria affects the association of de novo antibodies with decreased graft survival after transplantation.

[222]

**TÍTULO / TITLE:** - Efficacy and safety of everolimus in Korean patients with metastatic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Chemother Pharmacol. 2013 Oct;72(4):853-60.

**AUTORES / AUTHORS:** - Kim KH; Yoon SH; Lee HJ; Kim HS; Shin SJ; Ahn JB; Rha SY

**RESUMEN / SUMMARY:** - PURPOSE: Few studies have investigated the effects of everolimus therapy in Asian populations. This study evaluates the safety and efficacy of everolimus in Korean patients with metastatic renal cell carcinoma (mRCC). METHODS: We retrospectively reviewed records of Korean patients with mRCC (n = 22) who received everolimus between January 2009 and July 2010 and evaluated them for efficacy and safety. RESULTS: One patient achieved a partial response, and 16 patients had stable disease, corresponding to an overall response rate of 4.5 % and a disease control rate of 77.3 %. Median progression-free survival was 5.4 months (95 % CI 0.9-9.8). Median overall survival was not reached. Univariate analysis showed that Memorial Sloan-Kettering Cancer Center risk (P = .004), thrombocytopenia (P = .018), hyperglycemia (P = .007) and hypertriglyceridemia (P = .041) were associated with disease progression. The most common adverse events (AEs) were hypertriglyceridemia and anemia, similar to Western patients. Creatinine and aspartate aminotransferase levels were higher than those reported for Western patients. The most common grade  $\geq 3$  AEs in this study were hypertriglyceridemia and anemia, compared with lymphopenia (14 %) in Western patients. CONCLUSIONS: Safety of everolimus in Korean mRCC patients differed from that reported in Western patients. Therefore, liver function enzymes, hemoglobin levels, lipid profile and chest CT scans should be monitored more closely in Asian mRCC patients receiving everolimus.

[223]

**TÍTULO / TITLE:** - The Impact of Low Serum Sodium on Treatment Outcome of Targeted Therapy in Metastatic Renal Cell Carcinoma: Results from the International Metastatic Renal Cell Cancer Database Consortium.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 26. pii: S0302-2838(13)01086-5. doi: 10.1016/j.eururo.2013.10.013.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.10.013](#)

**AUTORES / AUTHORS:** - Schutz FA; Xie W; Donskov F; Sircar M; McDermott DF; Rini BI; Agarwal N; Pal SK; Srinivas S; Kollmannsberger C; North SA; Wood LA; Vaishampayan U; Tan MH; Mackenzie MJ; Lee JL; Rha SY; Yuasa T; Heng DY; Choueiri TK

**INSTITUCIÓN / INSTITUTION:** - Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Hyponatremia has been associated with poor survival in many solid tumors and more recently found to be of prognostic and predictive value in metastatic renal cell cancer (mRCC) patients treated with immunotherapy. OBJECTIVE: To investigate the influence of baseline hyponatremia in mRCC patients treated with targeted therapy in the International Metastatic Renal Cell Carcinoma Database Consortium. DESIGN, SETTING, AND PARTICIPANTS: Data on 1661 patients treated with first-line vascular endothelial growth factor (VEGF) or mammalian target of rapamycin (mTOR) targeted therapy for mRCC were available from 18 cancer centers to study the impact of hyponatremia (serum sodium level  $<135$  mmol/l) on clinical outcomes. OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: The primary objective was overall survival (OS) and secondary end points included time to treatment failure (TTF) and the disease control rate (DCR). The chi-square test was used to compare the DCR in patients with and without hyponatremia.

OS and TTF were estimated with the Kaplan-Meier method and differences between groups were examined by the log-rank test. Multivariable logistic regression (for DCR) and Cox regression (for OS and TTF) were undertaken adjusted for prognostic risk factors. RESULTS AND LIMITATIONS: Median OS after treatment initiation was 18.5 mo (95% confidence interval [CI], 17.5-19.8 mo), with 552 (33.2%) of patients remaining alive on a median follow-up of 22.1 mo. Median baseline serum sodium was 138 mmol/l (range: 122-159 mmol/l), and hyponatremia was found in 14.6% of patients. On univariate analysis, hyponatremia was associated with shorter OS (7.0 vs 20.9 mo), shorter TTF (2.9 vs 7.4 mo), and lower DCR rate (54.9% vs 78.8%) ( $p < 0.0001$  for all comparisons). In multivariate analysis, these effects remain significant (hazard ratios: 1.51 [95% CI, 1.26-1.80] for OS, and 1.57 [95% CI, 1.34-1.83] for TTF; odds ratio: 0.50 [95% CI, 0.34-0.72] for DCR; adjusted  $p < 0.001$ ). Results were similar if sodium was analyzed as a continuous variable (adjusted  $p < 0.0001$  for OS, TTF, and DCR). CONCLUSIONS: This is the largest multi-institutional report to show that hyponatremia is independently associated with a worse outcome in mRCC patients treated with VEGF- and mTOR-targeted agents.

[224]

**TÍTULO / TITLE:** - Serum DNA hypermethylation in patients with kidney cancer: results of a prospective study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4651-6.

**AUTORES / AUTHORS:** - Hauser S; Zahalka T; Fechner G; Muller SC; Ellinger J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Bonn, Sigmund-Freud-Str. 25, 53105 Bonn, Germany. [Stefan.Hauser@uni-bonn.de](mailto:Stefan.Hauser@uni-bonn.de).

**RESUMEN / SUMMARY:** - AIM: No reliable biomarker for renal cell carcinoma (RCC) exists. The purpose of this study was to analyze the value of CpG island hypermethylation of cell-free (cf) circulating serum DNA in patients with RCC as a potential biomarker. PATIENTS AND METHODS: In total 35 patients with RCC and 54 healthy individuals were enrolled in this study. Cell-free DNA (cfDNA) in serum was isolated and digested with methylation-sensitive restriction enzymes (Bsh1236I, HpaII and HinP1I) to quantify the amount of methylated Adenomatosis-poliposis-coli gene (APC), Gluthation-a-transferase-protein 1 gene (GSTP1), ARF tumor suppressor protein gene (p14(ARF)), cyclin-dependent kinase inhibitor 2A (p16), Retinoid-acid-receptor-beta gene (RAR-B), RAS-association domain family-1 gene (RASSF1), Tissue inhibitor of metalloproteinase-gene (TIMP3) and Prostaglandin-endoperoxid synthase 2 (PTGS2) DNA fragments. RESULTS: In 30 of 35 investigated patients with RCC, at least one gene was methylated within the serum cfDNA. The methylation frequency ranged from 14.3% for p14(ARF) to 54.3% for APC. All genes, except p16 and TIMP3, were significantly more frequently methylated in patients with RCC compared to healthy individuals. Receiver operator characteristic analysis showed a high specificity for serum cfDNA methylation [between 85.2% for RAR-B and 100% for p14(ARF)], but the sensitivity was low in single-gene analysis [range-14.3% for p14(ARF) to 54.3% for APC]. The combined analysis of multiple genes increased the diagnostic sensitivity (i.e. APC, PTGS2 and GSTP1, 62.9%) at a high specificity (87%). DNA hypermethylation of APC was correlated with advanced tumor stage. CONCLUSION: The detection of

hypermethylated cfDNA in serum may be helpful for the identification of RCC; the combinatorial analysis of multiple genes may increase the diagnostic accuracy.

[225]

**TÍTULO / TITLE:** - Vitamin D binding protein, circulating vitamin D, and risk of renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Nov 9. doi: 10.1002/ijc.28596.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28596](#)

**AUTORES / AUTHORS:** - Mondul AM; Weinstein SJ; Moy KA; Mannisto S; Albanes D

**INSTITUCIÓN / INSTITUTION:** - Nutritional Epidemiology Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH, Rockville, MD.

**RESUMEN / SUMMARY:** - Cell culture experiments suggest that vitamin D may inhibit renal carcinogenesis, but human studies of circulating 25-hydroxyvitamin D (25(OH)D), the accepted measure of vitamin D status, and kidney cancer have been null. Limited research has examined the role of circulating vitamin D binding protein (DBP) in the association between 25(OH)D and disease risk, and it is unclear whether free 25(OH)D in circulation is a better measure of effective exposure, or if DBP may independently impact outcomes. We conducted a nested case-control analysis within the Alpha-Tocopherol, Beta-Carotene Cancer Prevention (ATBC) Study to examine whether circulating DBP concentration was prospectively associated with risk of renal cell carcinoma, and whether it modified the association with 25(OH)D. Renal cell carcinoma cases (n=262) were matched 1:1 to controls on age (+/- 1 year) and date of blood collection (+/- 30 days). We estimated odds ratios and 95% confidence intervals of renal cell carcinoma risk by quartiles of 25(OH)D, DBP, and the molar ratio of 25(OH)D:DBP, a proxy for free circulating 25(OH)D. Men with higher DBP concentrations were at significantly decreased risk of kidney cancer (Q4 vs. Q1: OR=0.17, 95% CI=0.08-0.33; p-trend<0.0001), a finding unchanged by adjustment for 25(OH)D. Although we observed no association with total 25(OH)D, we found slightly increased risk with higher levels of estimated free 25(OH)D (Q4 vs. Q1 of the 25(OH)D:DBP ratio, OR=1.61, 95% CI=0.95-2.73; p-trend=0.09). The strong protective association observed between higher circulating DBP concentration and kidney cancer risk requires replication but suggests a vitamin D-independent influence of DBP. © 2013 Wiley Periodicals, Inc.

[226]

**TÍTULO / TITLE:** - Stage Presentation, Care Patterns, and Treatment Outcomes for Squamous Cell Carcinoma of the Penis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Oncol Biol Phys. 2013 Oct 9. pii: S0360-3016(13)03015-0. doi: 10.1016/j.ijrobp.2013.08.013.

●● Enlace al texto completo (gratis o de pago) [1016/j.ijrobp.2013.08.013](#)

**AUTORES / AUTHORS:** - Burt LM; Shrieve DC; Tward JD

**INSTITUCIÓN / INSTITUTION:** - Radiation Oncology Department, Huntsman Cancer Institute, University of Utah, Salt Lake City, Utah.

**RESUMEN / SUMMARY:** - PURPOSE: Penile squamous cell carcinoma (SCC) is a rare entity, with few published series on outcomes. We evaluated the stage distributions and outcomes for surgery and radiation therapy in a U.S. population database. METHODS AND MATERIALS: Subjects with SCC of the penis were identified using the National Cancer Institute Surveillance, Epidemiology and End Results (SEER) Program database between 1988 and 2006. Descriptive statistics were performed, and cause-specific survival (CSS) was estimated using Kaplan-Meier analysis. Comparisons of treatment modalities were analyzed using multivariate Cox regression. Subjects were staged using American Joint Committee on Cancer, sixth edition, criteria. RESULTS: There were 2458 subjects identified. The median age was 66.8 years (range, 17-102 years). Grade 2 disease was present in 94.5% of cases. T1, T2, T3, T4, and Tx disease was present in 64.8%, 17.1%, 9.5%, 2.1%, and 6.5% of cases, respectively. N0, N1, N2, N3, and Nx disease was noted in 61.6%, 6.9%, 4.0%, 3.7%, and 23.8% of cases, respectively. M1 disease was noted in 2.5% of subjects. Individuals of white ethnicity accounted for 85.1% of cases. Lymphadenectomy was performed in 16.7% of cases. The CSS for all patients at 5 and 10 years was 80.8% and 78.6%. By multivariable analysis grades 2 and 3 disease, T3 stage, and positive lymph nodes were adverse prognostic factors for CSS. CONCLUSION: SCC of the penis often presents as early-stage T1, N0, M0, grade 1, or grade 2 disease. The majority of patients identified were treated with surgery, and only a small fraction of patients received radiation therapy alone or as adjuvant therapy.

[227]

**TÍTULO / TITLE:** - Immobilization of an esterase inhibitor on a porous hollow-fiber membrane by radiation-induced graft polymerization for developing a diagnostic tool for feline kidney diseases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biosci Biotechnol Biochem. 2013 Oct 23;77(10):2061-4. Epub 2013 Oct 7.

**AUTORES / AUTHORS:** - Matsuno S; Umeno D; Miyazaki M; Suzuta Y; Saito K; Yamashita T

**INSTITUCIÓN / INSTITUTION:** - Department of Applied Chemistry and Biotechnology, Chiba University.

**RESUMEN / SUMMARY:** - Removal of the major urinary protein, cauxin, a carboxylesterase, from cat urine is essential for distinguishing between physiological and abnormal proteinuria by a urine dipstick. We have previously developed a material for removing cauxin by using lens culinaris agglutinin (LCA) lectin which targets the N-linked oligosaccharides present in cauxin. To improve the affinity and specificity toward cauxin, we immobilized 1,1,1-trifluoro-3-(2-sulfanylethylsulfanyl) propane-2-one, an inhibitor of esterases, to a polymer chain grafted on to a porous hollow-fiber membrane by applying radiation-induced graft polymerization. Normal male urine was forced to permeate through the pores rimmed by the ligand-immobilized polymer chain. Cauxin could not be detected in the effluent from the membrane. The residence time of the urine across a membrane thickness of 1 mm was set at 7 s. The respective dynamic and equilibrium binding capacities of the membrane for cauxin were 2 and 3 mg/g. The developed cauxin-affinity membrane material was more effective for diagnosing cat kidney diseases than the LCA lectin tip.

[228]

**TÍTULO / TITLE:** - The prognostic value of Smad4 mRNA in patients with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Nov 24.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1439-y](#)

**AUTORES / AUTHORS:** - Zhang DT; Shi JG; Liu Y; Jiang HM

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, First Affiliated Hospital of Liaoning Medical University, Jinzhou, 121001, China.

**RESUMEN / SUMMARY:** - The tumor suppressor gene Smad4 has been localized to chromosome 18q21.1 and is a member of the Smad family that mediates the transforming growth factor beta signaling pathway suppressing epithelial cell growth. However, variable expression of Smad4 messenger RNA (mRNA) has been reported, with a loss in some cancers and increased expression in others. The aim of the present study was to investigate the Smad4 mRNA expression in prostate cancer tissues and adjacent noncancerous tissues and its potential relevance to clinicopathological variables and prognosis. The expression change of Smad4 mRNA was detected by using real-time quantitative reverse transcriptase-polymerase chain reaction analysis. The data showed that the Smad4 mRNA expression level in prostate cancer tissues was significantly lower than those in noncancerous tissues. The results indicated that the low expression of Smad4 mRNA in prostate cancer was associated with lymph node metastasis, preoperative prostate-specific antigen (PSA), and Gleason score. Kaplan-Meier survival analysis showed that patients with high Smad4 mRNA expression have longer biochemical recurrence-free survival time compared to patients with low Smad4 mRNA expression. Multivariate analysis revealed that Smad4 mRNA expression was an independent predictor of biochemical recurrence-free survival. Our results emphasize that Smad4 mRNA can be used as a predictive biomarker.

[229]

**TÍTULO / TITLE:** - Re: Germline BRCA Mutations are Associated with Higher Risk of Nodal Involvement, Distant Metastasis, and Poor Survival Outcomes in Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2093-4. doi: 10.1016/j.juro.2013.08.101. Epub 2013 Sep 6.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.101](#)

**AUTORES / AUTHORS:** - Taneja SS

[230]

**TÍTULO / TITLE:** - High-dose-rate brachytherapy alone given as two or one fraction to patients for locally advanced prostate cancer: Acute toxicity.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Nov 11. pii: S0167-8140(13)00517-3. doi: 10.1016/j.radonc.2013.09.025.

- Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.09.025](http://1016/j.radonc.2013.09.025)

**AUTORES / AUTHORS:** - Hoskin P; Rojas A; Ostler P; Hughes R; Alonzi R; Lowe G; Bryant L

**INSTITUCIÓN / INSTITUTION:** - Cancer Centre, Mount Vernon Hospital, Middlesex, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: To evaluate early urinary (GU) and gastrointestinal (GI) adverse events (AEs) after two or one fraction of high-dose rate brachytherapy (HDR-BT) in advanced prostate cancer. PATIENTS AND METHODS: 165 patients were treated with 2x13Gy (n=115), or a single dose of 19Gy (n=24) or 20Gy (n=26) HDR-BT. Early AEs were assessed using the RTOG scoring system and the International Prostate Symptom Score (IPSS). RESULTS: Week-2 prevalence of severe IPSS symptoms was higher after 20Gy than after 26 or 19Gy but by 12weeks all groups were at pre-treatment levels or less. Grade-3 GU toxicity was observed 9% of patients. No Grade 4 GU and no Grade 3 or 4 GI complications were observed. However, there was a significant increase in catheter use in the first 12weeks after implant after 19 and 20Gy compared with 2x13Gy. CONCLUSION: Single dose HDR-BT is feasible with acceptable levels of acute complications; tolerance may have been reached with the single 19Gy schedule.

[231]

**TÍTULO / TITLE:** - VEGF expression and response to sunitinib in patients with metastatic clear cell renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):5017-22.

**AUTORES / AUTHORS:** - Minardi D; Lucarini G; Santoni M; Mazzucchelli R; Burattini L; Pistelli M; Bianconi M; DI Primio R; Scartozzi M; Montironi R; Cascinu S; Muzzonigro G

**INSTITUCIÓN / INSTITUTION:** - Dipartimento di Scienze Cliniche e Specialistiche - Sezione di Urologia, Università Politecnica delle Marche - Azienda Ospedaliero-Universitaria Ospedali Riuniti - via Conca 71 - Ancona, Italy. [d.minardi@univpm.it](mailto:d.minardi@univpm.it).

**RESUMEN / SUMMARY:** - Aim: To verify whether vascular endothelial growth factor (VEGF) is associated with distant metastasis free survival (DMFS) and Overall Survival (OS) of patients with renal cell carcinoma (RCC) treated with sunitinib. PATIENTS AND METHODS: We have studied 41 patients with metastatic RCC treated with radical nephrectomy, between 2008 and 2010, and sunitinib. Pathological features were compared with the Memorial Sloan-Kettering Cancer Center (MSKCC) score, DMFS, and with OS, and PFS after first-line therapy. RESULTS: Tumor stage and grade, VEGF expression and H-score correlated with MSKCC score, DMFS, and with OS; VEGF expression correlated with stage and OS. Patients with higher H-score and higher VEGF expression had a significantly shorter survival; OS after first-line sunitinib therapy and PFS correlated with MSKCC score and DMFS but not with VEGF expression and H score. CONCLUSION: Our data suggest the potential use of tumor cell VEGF expression as a prognostic marker for DMFS and OS, but VEGF does not appear promising as a marker of response to therapy.

[232]

**TÍTULO / TITLE:** - Functional Cardiovascular Reserve Predicts Survival Pre-Kidney and Post-Kidney Transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Am Soc Nephrol. 2013 Nov 14.

●● Enlace al texto completo (gratis o de pago) [1681/ASN.2013040348](#)

**AUTORES / AUTHORS:** - Ting SM; Iqbal H; Kanji H; Hamborg T; Aldridge N; Krishnan N; Imray CH; Banerjee P; Bland R; Higgins R; Zehnder D

**INSTITUCIÓN / INSTITUTION:** - Departments of Renal Medicine and Transplantation.

**RESUMEN / SUMMARY:** - Exercise intolerance is an important comorbidity in patients with CKD. Anaerobic threshold (AT) determines the upper limits of aerobic exercise and is a measure of cardiovascular reserve. This study investigated the prognostic capacity of AT on survival in patients with advanced CKD and the effect of kidney transplantation on survival in those with reduced cardiovascular reserve. Using cardiopulmonary exercise testing, cardiovascular reserve was evaluated in 240 patients who were waitlisted for kidney transplantation between 2008 and 2010, and patients were followed for  $\leq 5$  years. Survival time was the primary endpoint. Cumulative survival for the entire cohort was 72.6% (24 deaths), with cardiovascular events being the most common cause of death (54.2%). According to Kaplan-Meier estimates, patients with AT  $< 40\%$  of predicted peak  $VO_2$  had a significantly reduced 5-year cumulative overall survival rate compared with those with AT  $\geq 40\%$  ( $P < 0.001$ ). Regarding the cohort with AT  $< 40\%$ , patients who underwent kidney transplantation (6 deaths) had significantly better survival compared with nontransplanted patients (17 deaths) (hazard ratio, 4.48; 95% confidence interval, 1.78 to 11.38;  $P = 0.002$ ). Survival did not differ significantly among patients with AT  $\geq 40\%$ , with one death in the nontransplanted group and no deaths in the transplanted group. In summary, this is the first prospective study to demonstrate a significant association of AT, as the objective index of cardiovascular reserve, with survival in patients with advanced CKD. High-risk patients with reduced cardiovascular reserve had a better survival rate after receiving a kidney transplant.

[233]

**TÍTULO / TITLE:** - 180 W vs 120 W Lithium Triborate Photoselective Vaporization of the Prostate for Benign Prostatic Hyperplasia: A Global, Multicenter Comparative Analysis of Perioperative Treatment Parameters.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov;82(5):1108-13. doi: 10.1016/j.urology.2013.03.059. Epub 2013 Oct 25.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.03.059](#)

**AUTORES / AUTHORS:** - Hueber PA; Liberman D; Ben-Zvi T; Woo H; Hai MA; Te AE; Chughtai B; Lee R; Rutman M; Gonzalez RR; Barber N; Al-Hathal N; Al-Qaoud T; Trinh QD; Zorn KC

**INSTITUCIÓN / INSTITUTION:** - Section of Urology, Department of Surgery, Centre Hospitalier de l'Université de Montreal, QC, Canada.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To evaluate the surgical performance of the new Greenlight XPS-180W laser system (American Medical Systems, Minnetonka, MI) and the effect of prostate volume (PV), in comparison with the former HPS-120W system, for the treatment of benign prostatic hyperplasia by photo-selective vaporization of the prostate. **METHODS:** Between July 2007 and March 2012, 1809 patients underwent laser photo-selective vaporization of the prostate (1187 patients

with the use of HPS-120W and 622 patients with the use of XPS-180W) at 7 international centers. All data were collected prospectively. Comparative analysis was performed between XPS and HPS according to PV measured by transrectal ultrasound. RESULTS: The XPS compared with HPS, allowed significantly reduced laser and operative time (29.6 minutes vs 65.8 minutes and 53 minutes vs 80 minutes, respectively;  $P < .01$  for both). The number of fiber used during the procedures was significantly reduced with the XPS system (1.11 vs 2.28;  $P < .01$ ), whereas total energy delivered was lower (250.2 kJ vs 267.7 kJ;  $P = .043$ ). Overall, the mean operative time, mean laser time, and mean energy were all significantly increased according to PV  $>80$  mL vs  $<80$  mL. However, when stratified according to PV, XPS demonstrates significant advantages compared with HPS, regardless of prostate size in all operative parameters ( $P < .01$ ). CONCLUSION: The new XPS-180W system exhibits significant advantages in all surgical parameters compared with the HPS-120W system. Overall, with XPS-180W and HPS-120W, mean operative time, laser time, and energy usage increased according to PV. This suggests that preoperative evaluation of PV by transrectal ultrasound should be mandatory.

[234]

**TÍTULO / TITLE:** - Primary testicular lymphoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Blood. 2013 Nov 26.

●● [Enlace al texto completo \(gratis o de pago\) 1182/blood-2013-10-530659](#)

**AUTORES / AUTHORS:** - Cheah CY; Wirth A; Seymour JF

**INSTITUCIÓN / INSTITUTION:** - Department of Haematology, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia;

**RESUMEN / SUMMARY:** - Primary testicular lymphoma (PTL) is a rare, clinically aggressive form of extranodal lymphoma. The vast majority of cases are histologically diffuse large B-cell lymphoma, but rarer subtypes are clinically important and must be recognised. In this review we discuss the incidence, clinical presentation and prognostic factors of PTL and present a summary of the recent advances in our understanding of the pathophysiology which may account for the characteristic clinical features. Although outcomes for patients with PTL have historically been poor, significant gains have been made with the successive addition of radiotherapy, full-course anthracycline-based chemotherapy, rituximab and CNS-directed prophylaxis. We describe the larger retrospective series, prospective clinical trials and critically examine the role of radiotherapy. Although 3-weekly RCHOP with intrathecal methotrexate and locoregional RT is the current international standard of care, a substantial minority of patients progress, representing an unmet medical need. Finally, we discuss new treatment approaches and recent discoveries which may translate into improved outcomes for patients with PTL.

[235]

**TÍTULO / TITLE:** - Comparison of Measured Renal Tumor Size Versus R.E.N.A.L. Nephrometry Score in Predicting Patient Outcomes After Robot-Assisted Laparoscopic Partial Nephrectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0202](https://doi.org/10.1089/end.2013.0202)

**AUTORES / AUTHORS:** - Sea JC; Bahler CD; Mendonsa E; Lucas SM; Sundaram CP

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Urology, University of Indiana, Indianapolis, Indiana.

**RESUMEN / SUMMARY:** - Abstract Partial nephrectomy (PN) is a technically challenging procedure, making selection of appropriate patients paramount to a successful operation. To identify patients at increased risk of an adverse outcome after PN, there are a number of scoring systems available. The nephrometry score was initially described in a series of laparoscopic and open partial and radical nephrectomies. We compare the association of the nephrometry score with perioperative outcomes in a population of robot-assisted partial nephrectomies. A total of 119 patients were retrospectively reviewed. Correlation and regression analysis was performed. We identified the separate variables R, E, N, and L to have limited correlation and no predictive value to patient outcomes. Nephrometry score and grade were found to have stronger correlation and predictive value than the individual components of the R.E.N.A.L. nephrometry score. Size of tumor measured on a continuous scale was found to have the strongest correlation and predictive value to outcomes. Outcomes predicted included operative time, length of stay, warm ischemia time, and entry into the collecting system.

[236]

**TÍTULO / TITLE:** - Urinary cytidine as an adjunct biomarker to improve the diagnostic ratio for gastric cancer in Taiwanese patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Chim Acta. 2013 Oct 29;428C:57-62. doi: 10.1016/j.cca.2013.10.008.

●● Enlace al texto completo (gratis o de pago) [1016/j.cca.2013.10.008](https://doi.org/10.1016/j.cca.2013.10.008)

**AUTORES / AUTHORS:** - Lo WY; Jeng LB; Lai CC; Tsai FJ; Lin CT; Chen WT

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Research, China Medical University Hospital, Taichung, Taiwan; Graduate Institute of Integrated Medicine, China Medical University, Taichung, Taiwan; Department of Life Science, National Chung Hsing University, Taichung, Taiwan.

**RESUMEN / SUMMARY:** - BACKGROUND: Gastric cancer is a major public health concern as the fourth most common cancer, and it is of particular relevance as the second most common cause of cancer death worldwide. We compared the urinary nucleoside concentrations between the gastric patients and healthy volunteers that try to evaluate the diagnostic value in the gastric cancer. METHOD: Urinary nucleosides from 49 gastric patients and 40 healthy volunteers were evaluated by high-performance liquid chromatography/electrospray ionization-tandem mass spectrometry (HPLC/ESI-MS/MS) under optimized conditions as determined in our previous study. RESULTS: The mean concentrations of 5 urinary nucleosides, cytidine, 3-methylcytidine (m3C), 1-methyladenosine (m1A), adenosine, and inosine, were found to be elevated in cancer patients, but only cytidine showed a significant elevation. Moreover, cytidine concentrations were significantly elevated by an average of 1.42-fold in patients with late stage (S3+4) disease. Combining the determined concentrations of preoperative serum alpha-fetoprotein (AFP, cutoff of 20µg/l) or carbohydrate antigen 19-9 (CA19-

9, cutoff of 37U/ml) with the mean urinary cytidine concentration was shown to improve the diagnostic ratio (sensitivity) for gastric cancer from 16.3% (8/49 patients) to 38.8% (8+11/49 patients) or from 28.6% (14/49 patients) to 51.0% (14+11/49 patients), respectively. CONCLUSIONS: Urinary cytidine may be an important adjunct biomarker for gastric cancer.

[237]

**TÍTULO / TITLE:** - Prevalence of dyslipidemia in patients with renal cell carcinoma: A case-control study in China.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 26. doi: 10.1111/bju.12581.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12581](#)

**AUTORES / AUTHORS:** - Zhang GM; Zhu Y; Luo L; Zhang HL; Gu CY; Sun LJ; Ye DW

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Fudan University Shanghai Cancer Center, Shanghai, China; Department of Oncology, Shanghai Medical College, Fudan University, Shanghai, China. [zhangguiming9@126.com](mailto:zhangguiming9@126.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: To examine the prevalence of dyslipidemia in patients with renal cell carcinoma (RCC) in a Chinese population. PATIENTS AND METHODS: A total of 550 histologically confirmed RCC cases and 570 controls, matched for age and sex were included. Total cholesterol, triglyceride, low-density lipoprotein (LDL) and high-density lipoprotein (HDL) were assessed before treatment using standard techniques. Lipid profiles were defined as normal, borderline high, high and low according to the Chinese Guidelines on Adult Dyslipidemia. Odds ratios (OR) and 95% confidence intervals (CI) were estimated using unconditional logistic regression in both unadjusted and adjusted models. RESULTS: Abnormal LDL elevation was common in RCC cases compared with controls ( $p < 0.001$ ). Results for total cholesterol, triglyceride and HDL levels between groups were insignificant. The OR for RCC for high levels of LDL ( $\geq 160$  mg/dl) compared with those with a normal LDL profile was 4.675 (95% CI 1.900-11.500). After adjustment for age, gender, body mass index, smoking status, hypertension, diabetes, total cholesterol and triglyceride, the coexistence of high levels of LDL and RCC was large and statistically significant (OR 8.955, 95% CI 3.371-23.786). A significant coexistence of RCC was observed for participants with high LDL levels when subgroups of cases with clear cell subtypes and advanced T stages were compared with controls. CONCLUSIONS: Abnormal LDL elevation was prevalent in Chinese patients with RCC. The results remain to be evaluated in prospective cohorts.

[238]

**TÍTULO / TITLE:** - Prostate cancer patients continue to have excess mortality up to 15 years after diagnosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 16. doi: 10.1111/bju.12519.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12519](#)

**AUTORES / AUTHORS:** - Husson O; van Steenbergen LN; Koldewijn EL; Poortmans PM; Coebergh JW; Janssen-Heijnen ML

**INSTITUCIÓN / INSTITUTION:** - Eindhoven Cancer Registry, Comprehensive Cancer Centre South, Eindhoven, The Netherlands; Center of Research on Psychology in Somatic Diseases, Tilburg University, Tilburg, The Netherlands.

**RESUMEN / SUMMARY:** - OBJECTIVE: To estimate the population-based conditional 5-year relative survival rates for prostate cancer patients. PATIENTS AND METHODS: All 98,672 patients diagnosed in the Netherlands with prostate cancer (clinical T stage 1-4) in 1989-2008 aged 45-89 years were selected from the Netherlands Cancer Registry and followed until 2010. Conditional 5-year relative survival was estimated for every subsequent year of survival up to 15 years after diagnosis. RESULTS: Conditional 5-year relative survival decreased with time of survival since diagnosis. Excess mortality (conditional 5-year relative survival <95%) for patients with clinical T1 stage became only manifest 5 years after diagnosis and increased to almost 10% after 10 years. Patients with more advanced disease (cT2-cT4) exhibited an excess mortality of 6-12% at diagnosis which increased up to 15-22% after 10 years. Excess mortality occurred earlier for the older age groups. Five-year relative survival at diagnosis was <90% for all age groups of patients with cT3/cT4 and excess mortality for this group increased to over 20% for those who had already survived for 5 years since diagnosis. CONCLUSION: Prostate cancer patients exhibited some excess mortality within 10 years after diagnosis, being earlier for more advanced stage and older age groups. Quantitative insight into conditional survival is useful for caregivers to help planning optimal cancer treatment and surveillance and to inform patients about their actual prognosis during follow-up, taking the current condition of the patient into account.

[239]

**TÍTULO / TITLE:** - Comparison between Gleason score and apparent diffusion coefficient obtained from diffusion-weighted imaging of prostate cancer patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Invest. 2013 Nov;31(9):625-9. doi: 10.3109/07357907.2013.845673. Epub 2013 Oct 18.

●● [Enlace al texto completo \(gratis o de pago\) 3109/07357907.2013.845673](#)

**AUTORES / AUTHORS:** - Caivano R; Rabasco P; Lotumolo A; Cirillo P; D'Antuono F; Zandolino A; Villonio A; Macarini L; Salvatore M; Cammarota A

**INSTITUCIÓN / INSTITUTION:** - I.R.C.C.S.-C.R.O.B. Rionero in Vulture (Pz), Italy, 1.

**RESUMEN / SUMMARY:** - Objectives: To correlate the apparent diffusion coefficient (ADC) of prostate cancer patients with pathological Gleason scores (GS). Methods: 40 patients with GS 2 + 3, 3 + 3, 3 + 4, or 4 + 4 were selected. The magnetic resonance imaging (MRI) study was performed adding axial diffusion-weighted imaging (DWI) sequences to the standard MRI protocol. ADC values obtained were correlated with the GS data. Results: Statistically significant differences of ADC ( $p < .05$ ) were found among GS groups with a trend of decreasing ADC values with increasing GS. Conclusions: The ADC values may help clinicians to delineate prostate carcinoma, recognizing its high- or low-grade compartments.

[240]

**TÍTULO / TITLE:** - Bacillus Calmette-Guerin Failure in Patients with Non-Muscle-invasive Urothelial Carcinoma of the Bladder May Be Due to the Urologist's Failure to Detect Urothelial Carcinoma of the Upper Urinary Tract and Urethra.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 9. pii: S0302-2838(13)01052-X. doi: 10.1016/j.eururo.2013.09.049.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.049](#)

**AUTORES / AUTHORS:** - Giannarini G; Birkhauser FD; Recker F; Thalmann GN; Studer UE

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Bern, Inselspital, Bern, Switzerland.

**RESUMEN / SUMMARY:** - BACKGROUND: Various reasons exist for so-called bacillus Calmette-Guerin (BCG) failure in patients with non-muscle-invasive urothelial bladder carcinoma (NMIBC). OBJECTIVE: To explore whether urothelial carcinoma of the upper urinary tract (UUT) and/or prostatic urethra may be a cause for BCG failure. DESIGN, SETTING, AND PARTICIPANTS: Retrospective analysis of 110 patients with high-risk NMIBC repeatedly treated with intravesical BCG, diagnosed with disease recurrence, and followed for a median time of 9.1 yr. INTERVENTION: Two or more intravesical BCG induction courses without maintenance. OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: Primary outcome was pattern of disease recurrence (BCG failure) within the urinary tract categorised into UUT and/or urethral carcinoma (with or without intravesical recurrence), and intravesical recurrence alone. Secondary outcome was survival. Predictors of UUT and/or urethral carcinoma and the effect of pattern of disease recurrence on cancer-specific survival were assessed with multivariable Cox regression analysis adjusting for multiple clinical and tumour characteristics. RESULTS AND LIMITATIONS: Of the 110 patients, 57 (52%) had UUT and/or urethral carcinoma (with or without intravesical recurrence), and 53 (48%) had intravesical recurrence alone. In patients with UUT and/or urethral carcinoma, bladder carcinoma in situ (Tis) before the first and second BCG course was present in 42 of 57 (74%) and 47 of 57 (82%) patients, respectively. On multivariable analysis, bladder Tis before the first and/or second BCG course was the only independent predictor of UUT and/or urethral carcinoma. Of the 110 patients, 69 (63%) were alive at last follow-up visit, 18 (16%) had died due to metastatic urothelial carcinoma, and 23 (21%) had died of other causes. Pattern of disease recurrence within the urinary tract was not an independent predictor of cancer-specific survival. Main study limitations were retrospective design and limited power for survival analysis. CONCLUSIONS: In our patients with high-risk NMIBC failing after two or more courses of intravesical BCG, UUT and/or urethral carcinoma was detected in >50% of the cases during follow-up. The vast majority of these patients had bladder Tis before the first and/or second BCG course. In patients experiencing the so-called BCG failure, a diagnostic work-up of UUT and prostatic urethra should always be performed to exclude urothelial carcinoma before additional intravesical therapy or even a radical cystectomy is considered.

**TÍTULO / TITLE:** - Childhood Height and Birth Weight in Relation to Future Prostate Cancer Risk: A Cohort Study Based on the Copenhagen School Health Records Register.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov 27.

- Enlace al texto completo (gratis o de pago) [1158/1055-9965.EPI-13-0712](#)

**AUTORES / AUTHORS:** - Cook MB; Gamborg M; Aarestrup J; Sorensen TI; Baker JL

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH, DHHS, Bethesda, Maryland; Institute of Preventive Medicine, Bispebjerg and Frederiksberg Hospital, The Capital Region; and The Novo Nordisk Foundation Center for Basic Metabolic Research, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark.

**RESUMEN / SUMMARY:** - BACKGROUND: Adult height has been positively associated with prostate cancer risk. However, the exposure window of importance is currently unknown and assessments of height during earlier growth periods are scarce. In addition, the association between birth weight and prostate cancer remains undetermined. We assessed these relationships in a cohort of the Copenhagen School Health Records Register (CSHRR). METHODS: The CSHRR comprises 372,636 school children. For boys born between the 1930s and 1969, birth weight and annual childhood heights-measured between ages 7 and 13 years-were analyzed in relation to prostate cancer risk. Cox proportional hazards regression models were used to estimate hazard ratios (HRs) and 95% confidence intervals (CI). RESULTS: There were 125,211 males for analysis, 2,987 of who were subsequently diagnosed with prostate cancer during 2.57 million person-years of follow-up. Height z-score was significantly associated with prostate cancer risk at all ages (HRs, 1.13 to 1.14). Height at age 13 years was more important than height change (P = 0.024) and height at age 7 years (P = 0.024), when estimates from mutually adjusted models were compared. Adjustment of birth weight did not alter the estimates. Birth weight was not associated with prostate cancer risk. CONCLUSIONS: The association between childhood height and prostate cancer risk was driven by height at age 13 years. IMPACT: Our findings implicate late childhood, adolescence, and adulthood growth periods as containing the exposure window(s) of interest that underlies the association between height and prostate cancer. The causal factor may not be singular given the complexity of both human growth and carcinogenesis. Cancer Epidemiol Biomarkers Prev; 22(12); 1-9. ©2013 AACR.

[242]

**TÍTULO / TITLE:** - Steroidogenic Factor 1 Promotes Aggressive Growth of Castration Resistant Prostate Cancer Cells By Stimulating Steroid Synthesis and Cell Proliferation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocrinology. 2013 Nov 21.

- Enlace al texto completo (gratis o de pago) [1210/en.2013-1583](#)

**AUTORES / AUTHORS:** - Lewis SR; Hedman CJ; Ziegler T; Ricke WA; Jorgensen JS

**INSTITUCIÓN / INSTITUTION:** - 1Department of Comparative Biosciences, University of Wisconsin, Madison, WI, USA;

**RESUMEN / SUMMARY:** - The dependence of prostate cancer on androgens provides a targeted means of treating advanced disease. Unfortunately, androgen deprivation therapies eventually become ineffective, leading to deadly castration resistant prostate cancer (CRPC). One of many factors implicated in the transition to CRPC is the onset of de novo steroidogenesis. While re-activation of steroid receptors likely plays a pivotal role in aggressive CRPC, little is understood regarding the mechanisms whereby prostate cancer cells initiate and maintain steroidogenesis. We hypothesize that Steroidogenic Factor 1 (SF1, NR5A1, AD4BP), a key regulator of steroidogenesis in normal endocrine tissues, is expressed in CRPC where it stimulates aberrant steroidogenesis and fuels aggressive growth. Notably, SF1 is not expressed in normal prostate tissue. Our results indicated that SF1 was absent in benign cells, but present in aggressive prostate cancer cell lines. Introduction of ectopic SF1 expression in benign human prostate epithelial cells (BPH-1) stimulated increased steroidogenic enzyme expression, steroid synthesis, and cell proliferation. In contrast, data from an aggressive human prostate cancer cell line (BCaPT10) demonstrated that SF1 was required for steroid-mediated cell growth as BCaPT10 cell growth was diminished by abiraterone treatment and shRNA-mediated knockdown of SF1. SF1-depleted cells also exhibited defective centrosome homeostasis. Finally, whereas xenograft experiments in castrated hosts with BCaPT10 control transplants grew large, invasive tumors, BCaPT10-shSF1 knockdown transplants failed to grow. Altogether, we conclude that SF1 stimulates steroid accumulation and stabilizes centrosome homeostasis to mediate aggressive prostate cancer cell growth within a castrate environment. These findings present a new molecular mechanism and therapeutic target for deadly CRPC.

[243]

**TÍTULO / TITLE:** - Identification of a cyclin D1 network in prostate cancer that antagonizes epithelial-mesenchymal restraint.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Res. 2013 Nov 26.

- [Enlace al texto completo \(gratis o de pago\) 1158/0008-5472.CAN-13-](#)

[1313](#)

**AUTORES / AUTHORS:** - Ju X; Casimiro MC; Gormley M; Meng H; Jiao X; Katiyar S; Crosariol M; Chen K; Wang M; Quong AA; Lisanti MP; Ertel A; Pestell RG

**INSTITUCIÓN / INSTITUTION:** - Cancer Biology and Medical Oncology, Kimmel Cancer Center.

**RESUMEN / SUMMARY:** - Improved clinical management of prostate cancer (PCa) has been impeded by an inadequate understanding of molecular genetic elements governing tumor progression. Gene signatures have provided improved prognostic indicators of human PCa. The TGFbeta/BMP-SMAD4 signaling pathway, which induces epithelial mesenchymal transition (EMT), is known to constrain prostate cancer progression induced by Pten deletion. Herein, cyclin D1 inactivation reduced cellular proliferation in the murine prostate in vivo and in isogenic oncogene-transformed prostate cancer cell lines. The in vivo cyclin D1-mediated molecular signature predicted poor outcome of recurrence free survival for prostate cancer patients (K-means hazard ratio 3.75, P-value=0.02) and demonstrated that endogenous cyclin D1 restrains TGFbeta, Snail, Twist and Goosecoid signaling. Endogenous cyclin D1 enhanced Wnt

and ES cell gene expression and expanded a prostate stem cell population. In ChIP-Seq, cyclin D1 occupied genes governing stem cell expansion and induced their transcription. The coordination of EMT restraining and stem cell expanding gene expression by cyclin D1 in the prostate may contribute to its strong prognostic value for poor outcome in biochemical free recurrence in human prostate cancer.

[244]

**TÍTULO / TITLE:** - Circadian regulation of mTOR by the ubiquitin pathway in renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Res. 2013 Nov 19.

●● Enlace al texto completo (gratis o de pago) [1158/0008-5472.CAN-12-3241](#)

**AUTORES / AUTHORS:** - Okazaki H; Matsunaga N; Fujioka T; Okazaki F; Akagawa Y; Tsurudome Y; Ono M; Kuwano M; Koyanagi S; Ohdo S

**INSTITUCIÓN / INSTITUTION:** - Pharmaceutics, Kyushu University.

**RESUMEN / SUMMARY:** - Circadian clock systems regulate many biological functions, including cell division and hormone secretion in mammals. In this study, we explored the effects of circadian control on the pivot cell growth regulatory mTOR, the activity of which is deregulated in tumor cells compared to normal cells. Specifically, we investigated whether the anti-tumor effect of an mTOR inhibitor could be improved by changing its dosing schedule in RenCa tumor-bearing mice. Active, phosphorylated mTOR displayed a 24h rhythm and levels of total mTOR protein (but not mRNA) also showed a circadian rhythm in RenCa tumor masses. Through investigations of the oscillation mechanism for mTOR expression, we identified the ubiquitination factor Fbxw7 as a mTOR regulator that oscillated in its expression in a manner opposite from mTOR. Fbxw7 transcription was regulated by the circadian regulator D-site binding protein (DBP). Notably, administration of the mTOR inhibitor everolimus during periods of elevated mTOR improved survival in tumor-bearing mice. Our findings demonstrate that the circadian oscillation of mTOR activity is regulated by circadian clock systems which influence the anti-tumor effect of mTOR inhibitors.

[245]

**TÍTULO / TITLE:** - Safety and antitumor efficacy of 153Sm-EDTMP and docetaxel administered sequentially to patients with metastatic castration-resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nucl Med Commun. 2014 Jan;35(1):88-94. doi: 10.1097/MNM.000000000000023.

●● Enlace al texto completo (gratis o de pago) [1097/MNM.000000000000023](#)

**AUTORES / AUTHORS:** - Borso E; Boni G; Pastina I; Lorenzoni A; Cianci C; Federici F; Mazzarri S; Orlandini C; Francesca F; Selli C; Ricci S; Rubello D; Mariani G

**INSTITUCIÓN / INSTITUTION:** - aRegional Center of Nuclear Medicine dDivision of Urology, University of Pisa bDivision of Medical Oncology cDivision of Urology,

University Hospital of Pisa, Pisa eDepartment of Nuclear Medicine & PET/CT Centre, 'Santa Maria della Misericordia' Hospital, Rovigo, Italy.

**RESUMEN / SUMMARY:** - BACKGROUND: Bone metastases are responsible for most of the morbidity associated with metastatic castration-resistant prostate cancer (mCRPC). Bone-seeking radiopharmaceuticals have been approved for palliation of painful skeletal metastases, but their clinical use is limited by concerns of toxicities both when administered alone and especially when combined with chemotherapy agents. OBJECTIVE: We investigated whether docetaxel administered to mCRPC patients after treatment with samarium-153-labeled ethylene-diamine-tetra-methylene-phosphonic acid (Sm-EDTMP) has increased toxicity and/or reduced antitumor efficacy. MATERIALS AND METHODS: Thirty mCRPC patients with skeletal metastases were enrolled. Patients received standard therapy with docetaxel (75 mg/m intravenously every 21 days for at least six cycles) on average 6 weeks after Sm-EDTMP (37 MBq/kg). Patients were monitored for the presence of toxicities, and antitumor efficacy was assessed by changes in serum prostate-specific antigen levels. Besides standard descriptive statistical analysis, progression-free survival and overall survival were defined using the Kaplan-Meier method. RESULTS: Over 80% of the patients showed favorable biochemical responses. Median time to progression was 9.1 months (mean 9.8, 95% confidence interval 7.8-9.9), and median overall survival was 19.9 months (mean 24.5, 95% confidence interval 16.9-22.8); five patients were still alive over 5 years after enrollment. No additional hematological toxicities were observed when docetaxel was administered after Sm-EDTMP other than those expected when administering the agent alone. CONCLUSION: Prior administration of Sm-EDTMP does not cause additional toxicities for subsequent treatment with docetaxel and does not reduce the antitumor efficacy of the latter. This work justifies further investigations on the possible synergistic effects of combined strategies with the two agents.

[246]

**TÍTULO / TITLE:** - Re: does benign prostatic hyperplasia treatment with alpha-blockers affect prostate cancer risk?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2096. doi: 10.1016/j.juro.2013.08.042. Epub 2013 Aug 26.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.042](#)

**AUTORES / AUTHORS:** - Kaplan SA

[247]

**TÍTULO / TITLE:** - Association of Metabolic Syndrome and Benign Prostatic Hyperplasia in Chinese Patients of Different Age Decades.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [1159/000354026](#)

**AUTORES / AUTHORS:** - Pan JG; Jiang C; Luo R; Zhou X

**INSTITUCIÓN / INSTITUTION:** - The Second Affiliated Hospital of Guangzhou Medical University, Guangzhou, China.

**RESUMEN / SUMMARY:** - Objectives: To evaluate the relationship between metabolic syndrome (MetS) and annual prostate growth rates in Chinese patients of different age decades with benign prostatic hyperplasia (BPH). Methods: We retrospectively analyzed the clinical data obtained from 1,052 Chinese men with BPH. Overnight fasting venous blood specimens were collected and serum levels of prostate-specific antigen, fasting blood glucose, high-density lipoprotein cholesterol, total cholesterol and triglyceride were recorded. We divided age into four groups: 50 <= age <= 60, 60 < age <= 70, 70 < age <= 80 and 80 < age <= 90. Pearson's correlation coefficient was used to test the linearity of the relationships between each of the MetS components and prostate volume and annual prostate growth rates generally and in different age decades. Results: The median total prostate volume (69.01 ml) and median annual prostate growth rate (1.92 ml/year) were significantly higher in the MetS group compared with the non-MetS group (57.26 ml and 1.23 ml/year). Significant positive correlations were also found in total prostate volume and different age decades, while negative correlations were seen in annual prostate growth rate and different age decades. Conclusions: MetS is associated with an increased risk of total volume and annual prostate growth rate in BPH patients of different age decades. © 2013 S. Karger AG, Basel.

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**TÍTULO / TITLE:** - Outcomes of Artificial Urinary Sphincter Implantation in the Irradiated Patient.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 16. doi: 10.1111/bju.12518.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12518](#)

**AUTORES / AUTHORS:** - Sathianathan N; Moon D; McGuigan S

**INSTITUCIÓN / INSTITUTION:** - Monash University, Melbourne, Australia.

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**RESUMEN / SUMMARY:** - OBJECTIVE: To present the outcomes of men undergoing artificial urinary sphincter implantation and determine the impact a past history of radiation therapy has on the outcomes of prosthetic surgery for stress urinary incontinence. PATIENTS AND METHODS: A cohort of 77 consecutive men undergoing artificial urinary sphincter implantation for stress incontinence after prostate cancer surgery, including 29 who had also been irradiated, were included in a prospective database and followed up for a mean period of 21.2 months. Continence rates, and incidence of complications, revision and cuff erosion were evaluated with results in irradiated men compared to those who had undergone radical prostatectomy alone. The effect of coexisting hypertension, diabetes mellitus and surgical approach on outcomes were also examined. RESULTS: Overall the rate of social continence (0-1 pad/day) was 87% and similar in irradiated and non-irradiated men (86.2 vs. 87.5% respectively). Likewise, the incidence of infection (3.4 vs. 0%), erosion (3.4 vs. 2.0%) and revision surgery (10.3 vs. 12.5%) were not significantly different. There was a far greater incidence of co-existing urethral stricture disease in irradiated patients (62.1 vs. 10.4%) which often complicated management, however AUS implantation was still feasible in these men and in four such cases a transcorporal cuff placement was utilized. There were poorer outcomes in diabetic patients, and increased reoperation rate in those men who had a transverse scrotal rather than perineal surgical approach

although these did not reach statistical significance. CONCLUSION: Prior irradiation may increase the complexity of treatment due to a greater incidence of coexisting urethral stricture disease, however these patients are still able to achieve a level of social continence similar to non-irradiated men with no discernable increase in complication rates, cuff erosion or the need for revision surgery. Artificial urinary sphincter implantation remains the gold standard for management of moderate-severe stress incontinence in both irradiated and non-irradiated men following prostate cancer treatment.

[249]

**TÍTULO / TITLE:** - Using Patient-Reported Outcomes to Assess and Improve Prostate Cancer Brachytherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Sep 20. doi: 10.1111/bju.12464.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12464](#)

**AUTORES / AUTHORS:** - Talcott JA; Manola J; Chen RC; Clark JA; Kaplan I; D'Amico AV; Zietman AL

**INSTITUCIÓN / INSTITUTION:** - Massachusetts General Hospital Cancer Center, Boston, MA, and Continuum Cancer Centers of New York, New York, NY; Albert Einstein School of Medicine, Bronx, NY; Harvard Medical School, Boston, MA.

**RESUMEN / SUMMARY:** - OBJECTIVE: To describe a successful quality improvement process that arose from unexpected differences in control groups' short-term patient-reported outcomes (PROs) within a comparative effectiveness study of a prostate brachytherapy technique intended to reduce urinary morbidity. PATIENTS AND METHODS: Patients planning prostate brachytherapy at one of three institutions were enrolled in a prospective cohort study. Patients were surveyed using a validated instrument to assess treatment-related toxicity before treatment and at prespecified intervals. Unexpectedly, urinary PROs were worse in one of two standard brachytherapy technique control populations (US-BT1 and US-BT2 ). Therefore, we collaboratively reviewed treatment procedures, identified a discrepancy in technique, made a corrective modification, and evaluated the change. RESULTS: The patient groups were demographically and demographically similar. In the first preliminary analysis, US-BT2 patients reported significantly more short-term post-treatment urinary symptoms than US-BT1 patients. The study's treating physicians reviewed the US-BT1 and US-BT2 treatment protocols and found that they differed in whether they used an indwelling urinary catheter. After adopting the US-BT1 approach, short-term urinary morbidity in US-BT2 patients decreased significantly. Brachytherapy procedures were otherwise unchanged. CONCLUSION: Many procedures in cancer treatments are not evaluated, resulting in practice variation and suboptimal outcomes. Patients, the primary medical consumers, provide little direct input in evaluations of their care. We used PROs, a sensitive and valid measure of treatment-related toxicity, for quality assessment and quality improvement (QA/QI) of prostate brachytherapy. This serendipitous patient-centered QA/QI process may be a useful model for empirically evaluating complex cancer treatment procedures and for screening for substandard care.

[250]

**TÍTULO / TITLE:** - Metastatic castration-resistant prostate cancer: new therapies, novel combination strategies and implications for immunotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Nov 25. doi: 10.1038/onc.2013.497.

●● Enlace al texto completo (gratis o de pago) [1038/onc.2013.497](#)

**AUTORES / AUTHORS:** - Drake CG; Sharma P; Gerritsen W

**INSTITUCIÓN / INSTITUTION:** - Department of Oncology, Johns Hopkins Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD, USA.

**RESUMEN / SUMMARY:** - For the past decade, docetaxel has remained the global standard of care for frontline treatment of metastatic castration-resistant prostate cancer (mCRPC). Until recently, there were limited options for patients with mCRPC following docetaxel failure or resistance, but now the approved treatment choices for these patients have expanded to include abiraterone acetate, cabazitaxel and enzalutamide. Additionally, the radioactive therapeutic agent radium-223 dichloride has been recently approved in patients with CRPC with bone metastases. Although each of these agents has been shown to convey significant survival benefit as a monotherapy, preclinical findings suggest that combining such innovative strategies with traditional treatments may achieve additive or synergistic effects, further augmenting patient benefit. This review will discuss the transformation of the post-docetaxel space in mCRPC, highlighting the spectrum of newly approved agents in this setting in the USA and the European Union, as well as summarizing treatments with non-chemotherapeutic mechanisms of action that have demonstrated promising results in recent phase 3 trials. Lastly, this review will address the potential of combinatorial regimens in mCRPC, including the pairing of novel immunotherapeutic approaches with chemotherapy, radiotherapy or androgen ablation. Oncogene advance online publication, 25 November 2013; doi:10.1038/onc.2013.497.

[251]

**TÍTULO / TITLE:** - Association of T-cell co-regulatory protein expression with clinical outcomes following radical cystectomy for urothelial carcinoma of the bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Surg Oncol. 2013 Sep 18. pii: S0748-7983(13)00762-2. doi: 10.1016/j.ejso.2013.08.023.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejso.2013.08.023](#)

**AUTORES / AUTHORS:** - Xylinas E; Robinson BD; Kluth LA; Volkmer BG; Hautmann R; Kufer R; Zerbib M; Kwon E; Thompson RH; Boorjian SA; Shariat SF

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Weill Cornell Medical College, New York, NY, USA; Inserm U955 Equipe 07, Université Paris Est Créteil, Créteil, France; Department of Urology, Cochin Hospital, APHP, Paris Descartes University, Paris, France.

**RESUMEN / SUMMARY:** - PURPOSE: Expression of T-cell co-regulatory proteins has been associated with worse outcomes in patients with UCB. We aimed to confirm these findings. MATERIALS AND METHODS: The study comprised tissue microarrays from 302 consecutive UCB patients treated with RC and lymphadenectomy between 1988 and 2003, 117 matched lymph nodes, and 50 cases of adjacent normal urothelium controls, which were evaluated for B7-H1, B7-H3, and PD-1 protein expression by

immunohistochemistry. RESULTS: B7-H3 and PD-1 expression were increased in cancers compared to adjacent normal urothelium (58.6% vs 6% and 65% vs 0%, respectively; both p values < 0.001). Meanwhile, B7-H1 was expressed in 25% of cancers (n = 76). Expression of B7-H3, B7-H1, and PD-1 were highly correlated between the primary tumors and metastatic nodes, with concordance rates of 90%, 86%, and 78% for B7H3, B7H1 and PD-1, respectively. Expression was not associated with clinicopathologic features, disease recurrence, cancer-specific or overall mortality. However, for the subgroup of patients with organ-confined disease (n = 96), B7-H1 expression was associated with an increased risk of overall mortality (p = 0.02) on univariate and trended toward an association on multivariate analyses (p = 0.06). CONCLUSIONS: B7-H1, B7-H3 and PD-1 are altered in a large proportion of UCB. B7-H1 and PD-1 expression are differentially upregulated in cancer versus normal urothelium. High correlation between expression in LN and expression in RC specimens was observed. While expression was not associated with clinicopathologic features or standard outcomes in all patients, B7-H1 expression predicted overall mortality after RC in the subset of patients with organ-confined UCB.

[252]

**TÍTULO / TITLE:** - Acacetin (5,7-dihydroxy-4'-methoxyflavone) exhibits in vitro and in vivo anticancer activity through the suppression of NF-kappaB/Akt signaling in prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Mol Med. 2013 Nov 27. doi: 10.3892/ijmm.2013.1571.

●● [Enlace al texto completo \(gratis o de pago\) 3892/ijmm.2013.1571](#)

**AUTORES / AUTHORS:** - Kim HR; Park CG; Jung JY

**INSTITUCIÓN / INSTITUTION:** - Department of Companion and Laboratory Animal Science, Kongju National University, Yesan 340-702, Republic of Korea.

**RESUMEN / SUMMARY:** - Acacetin (5,7-dihydroxy-4'-methoxyflavone) is a flavonoid compound with antimutagenic, antiparasitic, antiperoxidant, anti-inflammatory and anticancer effects. However, the molecular targets and pathways underlying the anticancer effects of acacetin are yet to be elucidated. In this study, we investigated whether acacetin induces apoptosis in the human prostate cancer cell line, DU145. The results of 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) assays revealed that cell viability decreased in a dose- and time-dependent manner in response to acacetin. 4',6-Diamidino-2-phenylindole (DAPI) staining revealed that chromatin condensation significantly increased in a dose-dependent manner. Flow cytometric analysis indicated that acacetin suppressed the viability of DU145 cells by inducing apoptosis. Western blot analysis of various markers of signaling pathways revealed that acacetin targets the Akt and nuclear factor (NF)-kappaB signaling pathways by inhibiting the phosphorylation of I-kappaBalpha and NF-kappaB in a dose-dependent manner. Consistent with its ability to induce apoptosis, the acacetin-mediated inhibition of the pro-survival pathway, Akt, and of the NF-kappaB pathway was accompanied by a marked reduction in the levels of the NF-kappaB-regulated anti-apoptotic proteins, Bcl-2 and X-linked inhibitor of apoptosis protein (XIAP), as well as of the proliferative protein, cyclooxygenase (COX)-2. We further evaluated the effects of acacetin on prostate cancer using mice subcutaneously injected with DU145 prostate cancer cells. The acacetin-treated nude mice bearing DU145 tumor xenografts

exhibited significantly reduced tumor size and weight, due to the effects of acacetin on cancer cell apoptosis, as determined by terminal deoxyribonucleotide transferase-mediated dUTP nick end-labeling (TUNEL) assay. Our findings suggest that acacetin exerts antitumor effects by targeting the Akt/NF-kappaB signaling pathway. Further investigations on this flavonoid are warranted to evaluate its potential use in the prevention and therapy of prostate cancer.

[253]

**TÍTULO / TITLE:** - Wilms' tumor 1 (Wt1) regulates pleural mesothelial cell plasticity and transition into myofibroblasts in idiopathic pulmonary fibrosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - FASEB J. 2013 Nov 21.

●● [Enlace al texto completo \(gratis o de pago\) 1096/fj.13-236828](#)

**AUTORES / AUTHORS:** - Karki S; Surolia R; Hock TD; Guroji P; Zolak JS; Duggal R; Ye T; Thannickal VJ; Antony VB

**INSTITUCIÓN / INSTITUTION:** - \*Department of Medicine, Division of Pulmonary and Critical Care, and daggerDepartment of Neurobiology, University of Alabama at Birmingham, Birmingham, Alabama, USA.

**RESUMEN / SUMMARY:** - Pleural mesothelial cells (PMCs), which are derived from the mesoderm, exhibit an extraordinary capacity to undergo phenotypic changes during development and disease. PMC transformation and trafficking has a newly defined role in idiopathic pulmonary fibrosis (IPF); however, the contribution of Wilms' tumor 1 (Wt1)-positive PMCs to the generation of pathognomonic myofibroblasts remains unclear. PMCs were obtained from IPF lung explants and healthy donor lungs that were not used for transplantation. Short hairpin Wt1-knockdown PMCs (sh Wt1) were generated with Wt1 shRNA, and morphologic and functional assays were performed in vitro. Loss of Wt1 abrogated the PMC phenotype and showed evidence of mesothelial-to-mesenchymal transition (MMT), with a reduced expression of E-cadherin and an increase in the profibrotic markers alpha-smooth muscle actin (alpha-SMA) and fibronectin, along with increased migration and contractility, compared with that of the control. Migration of PMCs in response to active transforming growth factor (TGF)-beta1 was assessed by live-cell imaging with 2-photon microscopy and 3D imaging, of Wt1-EGFP transgenic mice. Lineage-tracing experiments to map the fate of Wt1+ PMCs in mouse lung in response to TGF-beta1 were also performed by using a Cre-loxP system. Our results, for the first time, demonstrate that Wt1 is necessary for the morphologic integrity of pleural membrane and that loss of Wt1 contributes to IPF via MMT of PMCs into a myofibroblast phenotype.-Karki, S., Surolia, R., Hock, T. D., Guroji, P., Duggal, R., Ye, T., Thannickal, V., J., Antony, V. B. Wilms' tumor 1 (Wt1) regulates pleural mesothelial cell plasticity and transition into myofibroblasts in idiopathic pulmonary fibrosis.

[254]

**TÍTULO / TITLE:** - Lymphomas and lymphoproliferative disorders clinically presenting as renal carcinoma: a clinicopathological study of 14 cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathology. 2013 Dec;45(7):657-63. doi: 10.1097/PAT.0000000000000006.

●● Enlace al texto completo (gratis o de pago)

[1097/PAT.0000000000000006](https://doi.org/10.1097/PAT.0000000000000006)

**AUTORES / AUTHORS:** - Chen L; Richendollar B; Bunting S; Campbell S; Zhou M

**INSTITUCIÓN / INSTITUTION:** - \*Pathology and Laboratory Medicine Institute  
daggerGlickman Urological and Kidney Institute, Cleveland Clinic, Cleveland, Ohio, USA; current addresses: double daggerDepartment of Laboratory Medicine and Pathology, Mayo Clinic, Scottsdale, AZ section signDeKalb Medical Center, Decatur, GA ||Department of Pathology, Emory University School of Medicine, Atlanta, GA paragraph signDepartment of Pathology, New York University Langone Medical Center, New York, NY, USA.

**RESUMEN / SUMMARY:** - AIMS: Although uncommon, lymphomas and lymphoproliferative disorders (LPDs) that manifest as renal or perirenal masses can mimic primary renal cancers upon clinical and radiological evaluations. However, such distinction is critical as the management of these diseases are drastically different. This study reports the clinical, radiological and pathological features of 14 lymphomas/LPDs that were initially managed as primary renal carcinomas. METHODS: The surgical pathology file was queried for kidney resections or biopsies with a diagnosis of lymphoma or LPD. The clinical symptomatology, imaging results, pathology data, treatment regimens and outcome data were obtained by electronic patient data search and/or chart review. RESULTS: Lymphomas/LPDs accounted for only 29 of 5490 (0.5%) of renal neoplasms diagnosed by pathology over a 27 year period. Of these 29 cases, 14 had a presumptive clinical diagnosis of renal carcinoma prior to nephrectomy or biopsy. Eleven of 14 (78.6%) had concurrent retroperitoneal, periaortic or distant adenopathy. Only two cases had inferior vena caval invasion. On pathological examination, the majority of these cases were mature B-cell neoplasms; however, three of 14 cases were initially interpreted as poorly differentiated carcinoma on routine histological sections. Upon staging, all 14 cases had nodal and/or additional extranodal involvement while only two of 14 cases demonstrated vascular invasion. CONCLUSIONS: Lymphomas/LPDs should always be kept in the differential diagnosis for unusual renal or perirenal masses. Extensive regional or distant adenopathy without vascular invasion favours a clinical diagnosis of LPD, while the presence of both regional adenopathy and vascular invasion should raise clinical suspicion for renal carcinoma.

[255]

**TÍTULO / TITLE:** - Beyond the androgen receptor: New approaches to treating metastatic prostate cancer. Report of the 2013 Prouts Neck Prostate Cancer Meeting.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Nov 19. doi: 10.1002/pros.22753.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22753](https://doi.org/10.1002/pros.22753)

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**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The James Buchanan Brady Urological Institute, Baltimore, Maryland; Department of Oncology, The Johns Hopkins School of Medicine, Baltimore, Maryland; Department of Pharmacology and Molecular Sciences, The Johns Hopkins School of Medicine, Baltimore, Maryland.

**RESUMEN / SUMMARY:** - INTRODUCTION: The Prouts Neck Meetings on Prostate Cancer began in 1985 through the efforts of the Organ Systems Branch of the National Cancer Institute to stimulate new research and focused around specific questions in prostate tumorigenesis and therapy. METHODS: These meetings were think tanks, composed of around 75 individuals, and divided equally between young investigators and senior investigators. Over the years, many new concepts related to prostate cancer resulted from these meetings and the prostate cancer community has sorely missed them since the last one in 2007. RESULTS: We report here the first of a new series of meetings. The 2013 meeting focused on defining how the field of treatment for metastatic prostate cancer needs to evolve to impact survival and was entitled: "Beyond AR: New Approaches to Treating Metastatic Prostate Cancer." As castrate resistant prostate cancers escape second generation anti-androgen agents, three phenotypes/genotypes of CRPC appear to be increasing in prevalence and remain resistant to treatment: NeuroEndocrine Prostate Cancer, Persistent AR-Dependent Prostate Cancer, and Androgen Receptor Pathway Independent Prostate Cancer. DISCUSSION: It is clear that new treatment paradigms need to be developed for this diverse group of diseases. The Prouts Neck 2013 Meeting on Prostate Cancer helped to frame the current state of the field and jumpstart ideas for new avenues of treatment. Prostate © 2013 Wiley Periodicals, Inc.

[256]

**TÍTULO / TITLE:** - miR-200b and cancer/testis antigen CAGE form a feedback loop to regulate a cancer cell line's invasion, tumorigenic, and angiogenic responses to microtubule-targeting drugs.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Biol Chem. 2013 Oct 30.

●● [Enlace al texto completo \(gratis o de pago\) 1074/jbc.M113.502047](#)

**AUTORES / AUTHORS:** - Kim Y; Park D; Kim H; Choi M; Lee H; Lee YS; Choe J; Kim YM; Jeoung D

**INSTITUCIÓN / INSTITUTION:** - kangwon National University, Korea, Republic of;

**RESUMEN / SUMMARY:** - Cancer/testis antigen CAGE has been known to be involved in various cellular processes, such as proliferation, cell motility, and anti-cancer drug-resistance. However, the mechanism of the expression regulation of CAGE remains unknown. Target scan analysis predicted the binding of miR-200b to CAGE promoter sequences. The expression of CAGE showed an inverse relationship with miR-200b in various cancer cell lines. miR-200b was shown to bind to 3'-UTR of CAGE, and regulated the expression of CAGE at the transcriptional level. miR-200b also enhanced the sensitivities to microtubule-targeting drugs in vitro. miR-200b and CAGE showed opposite regulations on invasion potential and responses to microtubule-targeting drugs. Xenograft experiments showed that miR-200b had negative effects on the tumorigenic and metastatic potential of cancer cells. The effect of miR-200b on metastatic potential involved the expression regulation of CAGE by miR-200b. miR-200b decreased tumorigenic potential of a cancer cell line resistant to microtubule-targeting drugs in a manner associated with the down-regulation of CAGE. CHIP assays showed the direct regulation of miR-200b by CAGE. CAGE enhanced the invasion potential of a cancer cell line stably expressing miR-200b. miR-200b exerted a negative regulation on tumor-induced angiogenesis. The down-regulation of CAGE led

to the decreased expression of PAI-1, a TGFbeta-responsive protein involved in angiogenesis, and VEGF. CAGE mediated tumor-induced angiogenesis, and was necessary for VEGF-promoted angiogenesis. Human recombinant CAGE protein displayed angiogenic potential. Thus, miR-200b and CAGE form a feedback regulatory loop and regulate the response to microtubule-targeting drugs, as well as the invasion, tumorigenic potential, and angiogenic potential.

[257]

**TÍTULO / TITLE:** - Transcriptional and post-translational regulation of Bim controls apoptosis in melatonin-treated human renal cancer Caki cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pineal Res. 2013 Oct 12. doi: 10.1111/jpi.12102.

●● Enlace al texto completo (gratis o de pago) [1111/jpi.12102](#)

**AUTORES / AUTHORS:** - Park EJ; Woo SM; Min KJ; Kwon TK

**INSTITUCIÓN / INSTITUTION:** - Department of Immunology, School of Medicine, Keimyung University, Daegu, Korea.

**RESUMEN / SUMMARY:** - Melatonin (N-acetyl-5-methoxytryptamine) has recently gained attention as an anticancer agent and for combined cancer therapy. In this study, we investigated the underlying molecular mechanisms of the effects of melatonin on cancer cell death. Treatment with melatonin induced apoptosis and upregulated the expression of the pro-apoptotic protein Bcl-2-interacting mediator of cell death (Bim) in renal cancer Caki cells. Furthermore, downregulation of Bim expression by siRNA markedly reduced melatonin-mediated apoptosis. Melatonin increased Bim mRNA expression through the induction of Sp1 and E2F1 expression and transcriptional activity. We found that melatonin also modulated Bim protein stability through the inhibition of proteasome activity. However, melatonin-induced Bim upregulation was independent of melatonin's antioxidant properties and the melatonin receptor. Taken together, our results suggest that melatonin induces apoptosis through the upregulation of Bim expression at the transcriptional level and at the post-translational level.

[258]

**TÍTULO / TITLE:** - Detection and characterization of invasive circulating tumor cells (ictcs) derived from men with metastatic castration resistant prostate cancer (mCRPC).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Oct 25. doi: 10.1002/ijc.28561.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28561](#)

**AUTORES / AUTHORS:** - Friedlander TW; Ngo VT; Dong H; Premasekharan G; Weinberg V; Doty S; Zhao Q; Gilbert EG; Ryan CJ; Chen WT; Paris PL

**INSTITUCIÓN / INSTITUTION:** - Division of Genitourinary Medical Oncology, UCSF Helen Diller Family Comprehensive Cancer Center, University of California, San Francisco.

**RESUMEN / SUMMARY:** - The Vitatex cell-adhesion matrix (CAM) platform allows for isolation of invasive circulating tumor cells (iCTCs). Here we sought to determine the utility of prostate-specific membrane antigen (PSMA) as a mCRPC iCTC biomarker, to identify solitary cells and clusters of iCTCs expressing either epithelial, mesenchymal, or stem cell markers, and to explore the feasibility of iCTC epigenomic analysis. CTCs

were isolated and enumerated simultaneously using the Vitatex and CellSearch platforms in 23 men with mCRPC. CAM-avid iCTCs were identified as nucleated cells capable of CAM uptake, but without detectable expression of hematopoietic lineage (HL) markers including CD45. iCTCs were enumerated immunocytochemically (ICC) and by flow cytometry. Whole genome methylation status was determined for iCTCs using the Illumina HumanMethylation27 BeadChip. 34 samples were collected for iCTC analysis. A median of 27 (range 0-800) and 23 (range 2-390) iCTCs/ml were detected by ICC and flow, respectively. In a subset of 20 samples, a median of 7 CTCs/ml (range 0-85) were detected by the CellSearch platform compared to 26 by the CAM platform. iCTC clusters were observed in 23% of samples. iCTCs expressing PSMA as well as markers of EMT and stemness were detectable. The iCTC methylation profile highly resembled mCRPC. More CTCs were recovered using the CAM platform than the CellSearch platform, and the CAM platform allowed for the detection of iCTC clusters, iCTCs expressing EMT and stem-cell markers, and characterization of the iCTC methylome. Correlation with clinical data in future studies may yield further insight into the functional significance of these findings. © 2013 Wiley Periodicals, Inc.

[259]

**TÍTULO / TITLE:** - Sequential use of mammalian target of rapamycin inhibitors in patients with metastatic renal cell carcinoma following failure of tyrosine kinase inhibitors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med Oncol. 2013 Dec;30(4):745. doi: 10.1007/s12032-013-0745-y. Epub 2013 Oct 13.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s12032-013-0745-y](#)

**AUTORES / AUTHORS:** - Kumano M; Miyake H; Harada K; Fujisawa M

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Kobe University Graduate School of Medicine, Kobe, Japan.

**RESUMEN / SUMMARY:** - The aim of the study is to evaluate the clinical experience of the sequential use of mammalian target of rapamycin inhibitors (mTORIs) for metastatic renal cell carcinoma (mRCC) refractory to tyrosine kinase inhibitors (TKIs). This study retrospectively investigated the clinical outcomes in a total of 83 consecutive Japanese patients with mRCC who were treated with either everolimus or temsirolimus following the failure of sorafenib and/or sunitinib. Of the 83 patients, 15, 61, and 7 were classified into favorable-, intermediate-, and poor-risk groups, respectively, according to the Memorial Sloan-Kettering Cancer Center model, and 47 and 36 patients were administered mTORIs as second- and third-line therapy, respectively. As the best responses to mTORIs, 6, 53, and 24 were judged to have a partial response, stable disease, and progressive disease, respectively. The median progression-free survival (PFS) and overall survival (OS) of these patients following the introduction of mTORIs were 5.8 and 20.4 months, respectively. Of the several factors examined, liver metastasis and pretreatment C-reactive protein (CRP) level were shown to be independently associated with PFS, while only pretreatment CRP level had an independent impact on OS. Adverse events related to mTORIs corresponding to  $\geq$  grade 3 were observed in 26 patients, including anemia in 7, pneumonitis in 7, neutropenia in 4, and stomatitis in 3. Despite the low response rate, mTORIs are well

tolerated and could provide comparatively favorable prognostic outcomes in Japanese patients with mRCC after the failure of TKIs.

[260]

**TÍTULO / TITLE:** - Holmium laser enucleation of the prostate is safe in patients with prostate cancer and lower urinary tract symptoms - a retrospective feasibility study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 22.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013.0432](#)

**AUTORES / AUTHORS:** - Becker A; Placke AK; Kluth LA; Schwarz R; Isbarn H; Chun FK; Heuer R; Schlomm T; Seiler D; Engel O; Fisch M; Graefen M; Ahyai SA

**INSTITUCIÓN / INSTITUTION:** - University Medical Centre Hamburg-Eppendorf, Urology, Hamburg, Hamburg, Germany ; [andreasbeckeruke@googlemail.com](mailto:andreasbeckeruke@googlemail.com).

**RESUMEN / SUMMARY:** - ABSTRACT Objective To evaluate the outcome of Holmium laser enucleation of the prostate (HoLEP) in the known presence of Prostate Cancer PCa and concomitant lower urinary tract symptoms (LUTS). Patients and methods We retrospectively identified 62 patients who underwent HoLEP for LUTS in the known presence of PCa at our center. Perioperative data were assessed including complications, functional outcomes and quality of life (QoL). Giving respect to different disease characteristics, patients were stratified according to treatment strategy setting into palliative- (I), radiation - (II) and surveillance- (III) patients and compared accordingly. Results Median follow up (FU) of the entire study cohort was 27 months (range: 2-65 months). Medians of functional parameters (international prostate symptom score (IPSS): 18.5 vs. 4.5, QoL: 4 vs. 1, maximal flow rate: 9.0 vs. 18.8ml/s and residual urine: 100 vs. 0ml, all p<0.05) improved significantly in all groups. Perioperative complications were low and without any statistically significant difference between the groups. Postoperatively, voiding was successful in 90.3% of all patients; at last FU 17% suffered some degree of urinary incontinence. Treatment strategy groups showed comparable functional outcomes after HoLEP. Conclusion In the presence of PCa and LUTS HoLEP represents a feasible, safe and effective treatment option for patients unfit or without indication for radical prostatectomy. This applies as well in a palliative situation of advanced, obstructive PCa as for patients with LUTS who are scheduled for RT or surveillance in presumably indolent disease.

[261]

**TÍTULO / TITLE:** - Single session of high-intensity focused ultrasound for localized prostate cancer: treatment outcomes and potential effect as a primary therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Nov 23.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1215-z](#)

**AUTORES / AUTHORS:** - Komura K; Inamoto T; Takai T; Uchimoto T; Saito K; Tanda N; Kono J; Minami K; Uehara H; Fujisue Y; Takahara K; Hirano H; Nomi H; Watsuji T; Kiyama S; Azuma H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Osaka Medical College, 2-7 Daigaku-machi, Takatsuki City, Osaka, 569-8686, Japan, [uro051@poh.osaka-med.ac.jp](mailto:uro051@poh.osaka-med.ac.jp).

**RESUMEN / SUMMARY:** - PURPOSE: To investigate the treatment outcomes of a single-session high-intensity focused ultrasound (HIFU) using the Sonablate® for patients with localized prostate cancer. METHODS: Biochemical failure was defined according to the Stuttgart definition [a rise of 1.2 ng/ml or more above the nadir prostate-specific antigen (PSA)] and the Phoenix definition (a rise of 2 ng/ml or more above the nadir PSA). Disease-free survival rate was defined using the Phoenix criteria and positive follow-up biopsy. RESULTS: A total of 171 patients were identified. Fifty-two (30.4 %) patients were identified to be with D'Amico low risk, 47 (27.5 %) with intermediate risk, and 72 (42.1 %) with high risk. In the median follow-up time of 43 months, there was 44 (25.7 %) and 36 (21.1 %) patients experienced biochemical failure for Stuttgart and Phoenix definition with mean (+/-SD) time to failure of 17.8 +/- 2.1 and 19.4 +/- 2.3 months, respectively. A total of 44 (25.7 %) patients were diagnosed as disease failure. Cox multivariate analysis revealed PSA nadir level (PSA cutoff = 0.2 ng/ml; HR = 9.472, 95 % CI 4.527-19.820, p < 0.001) and D'amico risk groups [HR = 3.132 (95 % CI 1.251-6.389), p = 0.033] were the predictor for failure in single-session HIFU. CONCLUSIONS: Single-session HIFU treatment using the Sonablate® seems to be potentially curative approach. When treated carefully with neoadjuvant hormonal therapy or preoperative transurethral resection of the prostate, higher-risk disease might be able to choose this minimally invasive procedure as primary therapy.

[262]

**TÍTULO / TITLE:** - A case of penile squamous cell carcinoma treated with a combination of anti-epidermal growth factor receptor antibody and chemotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Drugs. 2014 Jan;25(1):123-5. doi: 10.1097/CAD.0000000000000024.

●● Enlace al texto completo (gratis o de pago)

[1097/CAD.0000000000000024](#)

**AUTORES / AUTHORS:** - Men HT; Gou HF; Qiu M; He JP; Cheng K; Chen Y; Ge J; Liu JY

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology, Cancer Center, The State Key Laboratory of Biotherapy, West China Hospital, West China Medical School, Sichuan University, Chengdu, China.

**RESUMEN / SUMMARY:** - Our previous study showed that the features of epidermal growth factor receptor (EGFR)-RAS signaling in penile squamous cell carcinoma (SCC) suggested potential benefits of anti-EGFR monoclonal antibodies (mAbs) for penile SCC. Here, we report, for the first time, a combination of nimotuzumab (an EGFR mAb) with chemotherapy that resulted in a partial response in a 44-year-old patient with penile SCC, who developed bilateral inguinal node metastasis after primary partial penile amputation. The literature of case reports of anti-EGFR mAbs in penile SCC was also reviewed.

[263]

**TÍTULO / TITLE:** - The Impact of Physical Activity on Psychosocial Outcomes in Men Receiving Androgen Deprivation Therapy for Prostate Cancer: A Systematic Review.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Health Psychol. 2013 Nov 18.

●● Enlace al texto completo (gratis o de pago) [1037/hea0000006](#)

**AUTORES / AUTHORS:** - Chipperfield K; Brooker J; Fletcher J; Burney S

**RESUMEN / SUMMARY:** - Objective: Depression, anxiety, and cognitive dysfunction are common complaints in men with prostate cancer (PCa) receiving androgen deprivation therapy (ADT). Consequently, the quality of life (QoL) of these men is negatively impacted. This systematic review evaluated the effectiveness of physical activity (PA) as an intervention to improve depression and anxiety symptoms, cognitive function, and QoL in patients receiving ADT for PCa. Methods: Inclusion criteria and search strategy were defined and documented in a protocol registered with the International Prospective Register of Systematic Reviews (Registration # CRD42012002666). Due to the limited number of studies examining these outcomes in this patient group, no limitations were placed on study designs included. A systematic search of Ovid MEDLINE, PsycINFO, EMBASE, Informit, Scopus, Cochrane Library, and CINAHL databases identified 7 relevant peer-reviewed studies: 4 clinical PA interventions, 2 pilot studies, and 1 cross-sectional survey. Data extraction and risk of bias assessment tools developed by the Cochrane Collaboration were used to evaluate evidence. Results: Existing data suggest that PA improved QoL in men with PCa receiving ADT. The existing evidence, however, is not sufficiently robust to determine the adequacy of PA as an intervention to improve depression, anxiety, and cognitive function outcomes in this patient group. Conclusions: Despite the lack of studies conducted, preliminary findings support the utility of PA for improving QoL in men undergoing ADT for PCa. A clear gap in the current literature was identified, confirming the need for further clinical trials in which depression, anxiety, and cognitive function are evaluated. (PsycINFO Database Record © 2013 APA, all rights reserved).

[264]

**TÍTULO / TITLE:** - Architectural heterogeneity and cribriform pattern predict adverse clinical outcome for Gleason grade 4 prostatic adenocarcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Surg Pathol. 2013 Dec;37(12):1855-61. doi: 10.1097/PAS.0b013e3182a02169.

●● Enlace al texto completo (gratis o de pago)

[1097/PAS.0b013e3182a02169](#)

**AUTORES / AUTHORS:** - Dong F; Yang P; Wang C; Wu S; Xiao Y; McDougal WS; Young RH; Wu CL

**INSTITUCIÓN / INSTITUTION:** - Departments of \*Pathology double daggerUrology, Massachusetts General Hospital, Boston, MA daggerDepartment of Pathology, First Affiliated Hospital, Sun Yat-sen University, Guangzhou, People's Republic of China.

**RESUMEN / SUMMARY:** - Gleason grade 4 defines a group of prostatic adenocarcinomas with a variety of architectural patterns, including poorly formed glands, fused glands, and cribriform pattern. To address the relative contribution to clinical prognosis by these distinct patterns, the histology of 241 consecutive radical prostatectomy specimens with the highest Gleason grade of 4 was reviewed. The presence of poorly formed glands, fused glands, and cribriform pattern was recorded for each case, and the types of architectural patterns present were associated with

patient outcome. In this population, prostatic adenocarcinomas demonstrated architectural heterogeneity, with 17% of cases exhibiting a single Gleason grade 4 pattern, and 41% of cases exhibiting all 3 morphologic patterns. Patients exhibiting all 3 architectural patterns had lower rates of biochemical disease-free survival (66% vs. 76% at 5 y; log rank  $P=0.006$ ). Twenty-two of 165 patients (13.3%) with cribriform pattern adenocarcinoma developed metastasis, whereas 2 of 76 patients (2.6%) without cribriform pattern developed metastasis at a median postoperative follow-up of 10.0 years. The presence of a cribriform pattern was an independent predictor for biochemical recurrence (hazard ratio 2.41; 95% confidence interval, 1.34-4.32;  $P=0.003$ ) as well as metastasis after radical prostatectomy (hazard ratio 5.62; 95% confidence interval, 1.29-24.5;  $P=0.02$ ). These results suggest that the morphologic subclassification of distinct Gleason grade 4 architectural patterns provides prognostic information beyond the current Gleason classification system.

[265]

**TÍTULO / TITLE:** - Adding Cyclooxygenase-2 inhibitor to alpha blocker for patients with benign prostate hyperplasia and elevated serum prostate specific antigen could not improve prostate biopsy detection rate but improve lower urinary tract symptoms.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Clin Pract. 2013 Dec;67(12):1327-33. doi: 10.1111/ijcp.12220.

●● Enlace al texto completo (gratis o de pago) [1111/ijcp.12220](#)

**AUTORES / AUTHORS:** - Jhang JF; Jiang YH; Kuo HC

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Buddhist Tzu Chi General Hospital and Tzu Chi University, Hualien, Taiwan.

**RESUMEN / SUMMARY:** - AIMS: To investigate the impact of cyclooxygenase-2 (COX-2) inhibitor with alpha-adrenoceptor blocker (alpha-blocker) for men with benign prostatic hyperplasia (BPH) and lower urinary tract symptoms (LUTS) for detecting prostate cancer in men with elevated prostate specific antigen (PSA). MATERIALS AND METHODS: Male patients with clinical BPH, elevated serum PSA ( $> 4$  ng/ml), and significant LUTS (International Prostate Symptom Score [IPSS]  $\geq 8$ ) were randomly assigned to receive doxazosin 4 mg daily plus celecoxib 200 mg daily (study group) or doxazosin 4 mg daily alone (control group) for 3 months. Patients were investigated for the changes in IPSS, maximum flow rate ( $Q_{max}$ ), voided volume, postvoid residual (PVR) volume and serum PSA from baseline to 3 months after treatment. After the 3-month therapy, prostate biopsy was performed in the patients whose PSA were still higher than 4 ng/ml. RESULTS: A total of 82 patients completed the study. The improvement in IPSS-voiding was significantly greater in the study group than control group ( $p = 0.034$ ). In the study group, patients with prostatic hyperplasia or inflammation on the prostate biopsy had a significantly better result than in patients with prostatic adenocarcinoma, typically in the changes of  $Q_{max}$  and voided volume ( $p = 0.012$  and  $p = 0.005$ , respectively). The PSA level in the study group showed significant improvement after treatment ( $p < 0.01$ ). However, prostate cancer detection rate failed to show any significant difference between the patients whose PSA levels decreased or not ( $6/21 = 29\%$  vs.  $5/24 = 20\%$ , respectively,  $p = 0.447$ ).

CONCLUSIONS: Treatment with COX-2 inhibitor and alpha-blocker for 3 months could not improve prostatic cancer detection rate. But it could increase therapeutic

effectiveness of LUTS in men with BPH and elevated PSA levels. The changes in Qmax and voided volume after combination treatment were significantly greater in patients with prostatic hyperplasia or inflammation than adenocarcinoma.

[266]

**TÍTULO / TITLE:** - Atorvastatin inhibited Rho-associated kinase 1 (ROCK1) and focal adhesion kinase (FAK) mediated adhesion and differentiation of CD133(+)CD44(+) prostate cancer stem cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Biophys Res Commun. 2013 Nov 22;441(3):586-92. doi: 10.1016/j.bbrc.2013.10.112. Epub 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbrc.2013.10.112](#)

**AUTORES / AUTHORS:** - Rentala S; Chintala R; Guda M; Chintala M; Komarraju AL; Mangamoori LN

**INSTITUCIÓN / INSTITUTION:** - Department of Biotechnology, GITAM University, Visakhapatnam, Andhra Pradesh, India. Electronic address: [dr.rsn79@gmail.com](mailto:dr.rsn79@gmail.com).

**RESUMEN / SUMMARY:** - Prostate cancer has become a global health concern and is one of the leading causes of cancer death of men after lung and gastric cancers. It has been suggested that the 3-hydroxy-3-methyl-glutarylcoenzyme-CoA (HMG-CoA) reductase inhibitor atorvastatin shows anticancer activity in prostate cancer cell lines. To this end, we analyzed the influence of atorvastatin on the cell adhesion and differentiation of CD133(+)CD44(+) cells derived from prostate cancer biopsies and peripheral blood. CD133(+)CD44(+) cells were treated with atorvastatin (16-64µM) for different time periods. Cell adhesion to endothelial cell monolayers and differentiation into prostate cancer cells were evaluated. alpha1, beta1 and alpha2beta1 integrins adhesion receptors and the downstream target of atorvastatin Rho-dependent kinase (ROCK) and focal adhesion kinase (FAK) were analyzed by Western blot. Further blocking studies with the ROCK inhibitor H1152, anti-FAK antibody and anti-integrin alpha1 and beta1 antibodies were carried out. Atorvastatin treatment inhibited dose-dependently cell attachment to endothelium and differentiation. The inhibitory effect of atorvastatin on cell adhesion was associated with decreased expression of integrins alpha1 and beta1 and phosphorylated MYPT1 and FAK. Furthermore, atorvastatin strongly reduced ROCK1 and FAK mediated differentiation of CD133(+)CD44(+) cells, which was confirmed by antibody treatment. Atorvastatin modified the expression of cell adhesion molecules and differentiation markers. These beneficial effects of atorvastatin may be mediated by ROCK and FAK signaling pathway. The data presented may point to novel treatment options for prostate cancer.

[267]

**TÍTULO / TITLE:** - Targeted next generation sequencing and non-coding RNA expression analysis of clear cell papillary renal cell carcinoma suggests distinct pathological mechanisms from other renal tumour subtypes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pathol. 2013 Oct 23. doi: 10.1002/path.4296.

●● Enlace al texto completo (gratis o de pago) [1002/path.4296](#)

**AUTORES / AUTHORS:** - Lawrie CH; Larrea E; Larrinaga G; Goicoechea I; Arestin M; Fernandez-Mercado M; Hes O; Caceres F; Manterola L; Lopez JI

**INSTITUCIÓN / INSTITUTION:** - Oncology area, Biodonostia Research Institute, San Sebastian, España; Nuffield Department of Clinical Laboratory Sciences, University of Oxford, Oxford, UK; IKERBASQUE, Basque Foundation for Science, Bilbao, España.

**RESUMEN / SUMMARY:** - Clear cell tubulopapillary renal cell carcinoma (CCPRCC) is a recently described rare renal malignancy that displays characteristic gross, microscopic and immunohistochemical differences from other renal tumour types. However, CCPRCC remains a very poorly understood entity. We therefore sought to elucidate some of the molecular mechanisms involved in this neoplasm by carrying out targeted next generation sequencing (NGS) to identify associated mutations, and in addition examined the expression of non-coding (nc)RNAs. We identified multiple somatic mutations in CCPRCC cases including a recurrent (3 of 14 cases (21%)) non-synonymous T992I mutation in the MET proto-oncogene, a gene associated with epithelial-to-mesenchymal transition (EMT). Using a microarray approach we found that the expression of mature (n = 1105) and pre-miRNAs (n = 1105), as well as snoRNA and scaRNAs (n = 2214) in CCPRCC cases differed from that of clear cell renal cell carcinoma (CCRCC) or papillary renal cell carcinoma (PRCC) tumours. Surprisingly, and unlike other renal tumour subtypes, we found that all five members of the miR-200 family were over-expressed in CCPRCC cases. As these miRNAs are intimately involved with EMT, we stained CCPRCC cases for E-cadherin, vimentin and beta-catenin and found tumour cells of all cases were positive for all three markers, a combination rarely reported in other renal tumours that could have diagnostic implications. Taken together with the mutational analysis, these data suggest that EMT in CCPRCC tumour cells is incomplete or blocked, consistent with the indolent clinical course typical of this malignancy. In summary, as well as describing a novel pathological mechanism in renal carcinomas, this work adds to the mounting evidence that CCPRCC should be formally considered a distinct entity.

[268]

**TÍTULO / TITLE:** - Quantifying Vascular Heterogeneity Using Microbubble Disruption-Replenishment Kinetics in Patients With Renal Cell Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Invest Radiol. 2013 Nov 11.

●● Enlace al texto completo (gratis o de pago) [1097/RLI.0000000000000003](#)

**AUTORES / AUTHORS:** - Hudson JM; Williams R; Karshafian R; Milot L; Atri M; Burns PN; Bjarnason GA

**INSTITUCIÓN / INSTITUTION:** - From the \*Department of Medical Biophysics, University of Toronto; daggerImaging Research, Sunnybrook Research Institute; double daggerDepartment of Physics, Ryerson University; section signMedical Imaging, Sunnybrook Health Sciences Centre; parallelDepartment of Medical Imaging, Toronto General Hospital; and paragraph signMedical Oncology, Sunnybrook Odette Cancer Centre, Toronto, Ontario, Canada.

**RESUMEN / SUMMARY:** - PURPOSE: The purposes of this study were to establish the physiological interpretation of the shape parameter of the dynamic contrast-enhanced ultrasound (DCE-US) lognormal perfusion model and to evaluate the clinical significance of the parameter in a sample of patients undergoing antiangiogenic

therapy for metastatic renal cell carcinoma (mRCC). MATERIALS AND METHODS: The physiological interpretation of the lognormal shape parameter was explored using computer simulations of disruption-replenishment in fractal models of the microcirculation generated by a piecewise iterative algorithm in MATLAB. Architectural variety was accomplished by introducing random perturbations to the diameter, length, and branching angles to the growing vascular tree. The shape parameter was extracted from the time-intensity curves and compared with the transit time distributions calculated directly from the simulations. Dynamic contrast-enhanced ultrasound data were obtained from 31 consenting patients with mRCC being treated with antiangiogenic therapy. Lognormal parameters related to the blood volume, mean flow speed, and vascular morphology/heterogeneity extracted before, during, and after therapy were correlated with progression-free survival (PFS). Cox proportional hazard ratios were calculated alongside receiver operator characteristics for different combinations of the vascular parameters to determine their ability to distinguish patients who would progress early (less than the median PFS) versus late (greater than the median PFS). RESULTS: The lognormal shape parameter correlated strongly to the width of the transit time distribution calculated directly from the simulations, and by extension, to the morphology/heterogeneity of the microvascular network (Spearman  $r = 0.80$ ,  $P < 0.001$ ,  $n = 28$ ). Shorter time to progression was predicted by higher baseline heterogeneity ( $P = 0.003$ ) and a reduction in tumor blood volume less than 43% ( $P = 0.002$ ) after 2 weeks of treatment. Combining baseline parameters with changes that occur shortly after starting treatment increased the sensitivity and specificity of DCE-US to identify which patients would progress/resist therapy early versus late compared with when the vascular parameters were considered in isolation. CONCLUSIONS: The DCE-US shape parameter from the lognormal perfusion model is representative of microvascular morphology/heterogeneity and may be used to noninvasively characterize the vascular architecture of cancer lesions. A more abnormal flow distribution at baseline predicts for poorer outcome for patients treated with antiangiogenic therapy for metastatic renal cell cancer. Combining pretreatment and on-treatment measurements of vascularity can improve the performance of DCE-US to predict which patients will progress earlier versus later when on antiangiogenic therapy for mRCC.

[269]

**TÍTULO / TITLE:** - Bradykinin promotes vascular endothelial growth factor expression and increases angiogenesis in human prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Pharmacol. 2013 Nov 10. pii: S0006-2952(13)00683-7. doi: 10.1016/j.bcp.2013.10.016.

●● Enlace al texto completo (gratis o de pago) [1016/j.bcp.2013.10.016](#)

**AUTORES / AUTHORS:** - Yu HS; Wang SW; Chang AC; Tai HC; Yeh HI; Lin YM; Tang CH

**INSTITUCIÓN / INSTITUTION:** - Graduate Institute of Basic Medical Science, China Medical University, Taichung, Taiwan.

**RESUMEN / SUMMARY:** - Prostate cancer is the most commonly diagnosed malignancy in men and shows a tendency for metastasis to distant organs. Angiogenesis is required for metastasis. Bradykinin (BK) is an inflammatory mediator involved in tumor

growth and metastasis, but its role in vascular endothelial growth factor (VEGF) expression and angiogenesis in human prostate cancer remains unknown. The aim of this study was to examine whether BK promotes prostate cancer angiogenesis via VEGF expression. We found that exogenous BK increased VEGF expression in prostate cancer cells and further promoted tube formation in endothelial progenitor cells and human umbilical vein endothelial cells. Pretreatment of prostate cancer with B2 receptor antagonist or small interfering RNA (siRNA) reduced BK-mediated VEGF production. The Akt and mammalian target of rapamycin (mTOR) pathways were activated after BK treatment, and BK-induced VEGF expression was abolished by the specific inhibitor and siRNA of the Akt and mTOR cascades. BK also promoted nuclear factor-kappaB (NF-kappaB) and activator protein 1 (AP-1) activity. Importantly, BK knockdown reduced VEGF expression and abolished prostate cancer cell conditional medium-mediated angiogenesis. Taken together, these results indicate that BK operates through the B2 receptor, Akt, and mTOR, which in turn activate NF-kappaB and AP-1, activating VEGF expression and contributing to angiogenesis in human prostate cancer cells.

[270]

**TÍTULO / TITLE:** - Thromboelastography Identifies Hypercoagulability and Predicts Thromboembolic Complications in Patients with Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Thromb Res. 2013 Oct 12. pii: S0049-3848(13)00464-7. doi: 10.1016/j.thromres.2013.10.007.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.thromres.2013.10.007](#)

**AUTORES / AUTHORS:** - Toukh M; Siemens DR; Black A; Robb S; Leveridge M; Graham CH; Othman M

**INSTITUCIÓN / INSTITUTION:** - Department of Biomedical and Molecular Sciences, Queen's University, Kingston, Ontario, Canada.

**RESUMEN / SUMMARY:** - Cancer patients are at higher risk for thromboembolism compared to the normal population. This may be related to tumour burden and/or enhanced by systemic therapy. While there is ample evidence regarding venous thromboembolism, systematic studies investigating arterial thrombotic events are scarce. Conventional coagulation tests have limited capacity in evaluating the coagulability or the need for anticoagulant prophylaxis. In this pilot study, we investigated whether assessment of global haemostasis using thromboelastography (TEG) and quantification of plasma pro-coagulant microparticles can help determine the risk of adverse thrombotic events in patients with prostate cancer (PCa). Thirty two patients were recruited a priori into three groups: 11 men on 'watchful waiting' following recurrent disease after definitive treatment (Group A); 10 patients with metastatic disease on Androgen deprivation therapy (ADT) (Group B); and 11 with castration resistant cancer (Group C) and followed up over a period of 12 months. These patients were compared to a control group composed of 8 men with negative prostate biopsy. Whole blood TEG and plasma tissue factor-carrying microparticles (TF-MPs) in addition to basic coagulation testing, plasma fibrinogen and d-dimer were performed. 22/32 (68.8%) of the patients demonstrated hypercoagulable TEG traces. Hypercoagulability was marked in group B compared to the control. Plasma MPs were significantly elevated in patients compared to the controls with significant increase in

group B. All other coagulation tests were normal. Seven of the 22 hypercoagulable patients (31.8%) developed one or more thromboembolic events over 12 months follow up period. The data in this pilot study show that PCa patients are hypercoagulable, particularly those with advanced disease on ADT and that this hypercoagulability can be identified by TEG. While this needs to be verified in a larger study, the data indicate TEG may aid in thrombosis risk stratification and determining the subsequent need for anticoagulant prophylaxis in PCa patients.

[271]

**TÍTULO / TITLE:** - A simple immunofixation test for induced C3 degradation in disease states (including C3 nephritic factor) and its correlation with kidney biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Immunol Methods. 2013 Nov 12. pii: S0022-1759(13)00289-5. doi: 10.1016/j.jim.2013.10.009.

●● Enlace al texto completo (gratis o de pago) [1016/j.jim.2013.10.009](#)

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**RESUMEN / SUMMARY:** - Complement dysregulation from an uncontrolled activation of the alternate pathway can be mediated by C3 Nephritic Factor and results in C3 glomerulopathy. Identification of C3 degradation products C3c and C3d in patient serum provides evidence of uncontrolled complement activation. It is possible to detect C3c and C3d in patient serum by an immunofixation assay which induces in vitro C3 degradation. The clinical performance of the immunofixation assay has been assessed by comparing the assay results with findings from immunostaining of kidney biopsies. The immunofixation assay is a simple and reliable technique for detection of C3 degradation on a widely available platform and can be used to provide corroborative evidence of acquired complement dysregulation in patients with C3 glomerulopathy.

[272]

**TÍTULO / TITLE:** - Shortened Isoforms of the Androgen Receptor Are Regulated by the Cytoprotective Heat-shock Protein HSPB1 and the Tumor-suppressive MicroRNA miR-1 in Prostate Cancer Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):4921-6.

**AUTORES / AUTHORS:** - Stope MB; Bradl J; Peters S; Streitborger A; Weiss M; Zimmermann U; Walther R; Lillig CH; Burchardt M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University Medicine Greifswald, Ferdinand-Sauerbruch-Str., D-17475 Greifswald, Germany, [matthias.stope@uni-greifswald.de](mailto:matthias.stope@uni-greifswald.de).

**RESUMEN / SUMMARY:** - BACKGROUND: Shortened, constitutively active androgen receptor (AR) isoforms have been characterized and linked to tumor progression and chemoresistance in prostate cancer (PCa). We examined the regulation of shortened AR isoforms by a newly-identified AR regulatory signaling pathway involving heat-shock protein HSPB1 and microRNA miR-1. MATERIALS AND METHODS: HSPB1

and miR-1 were modulated by overexpression and knock-down approaches utilizing the model PCa system, 22Rv1. Subsequently, AR isoform expression levels were quantified by western blot analysis. RESULTS: HSPB1 was identified as an inducer and miR-1 as an inhibitor of AR variants, with no detectable discrimination between long and short AR isoform regulation. CONCLUSION: In 22Rv1 cells, all AR isoforms were co-regulated by the cytoprotective factor HSPB1 and the tumor suppressor miR-1. Notably, our data provide evidence that HSPB1 inhibition is able to target expression of long as well as of short AR isoforms.

[273]

**TÍTULO / TITLE:** - Clinical Outcome of Paclitaxel and Carboplatin as Second-Line Chemotherapy for Advanced Urothelial Carcinoma Resistant to First-Line Therapy with Gemcitabine and Cisplatin.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [1159/000354149](#)

**AUTORES / AUTHORS:** - Terakawa T; Miyake H; Yokoyama N; Miyazaki A; Tanaka H; Inoue T; Fujisawa M

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Hyogo Cancer Center, Akashi, Japan.

**RESUMEN / SUMMARY:** - Objective: The objective was to investigate the efficacy and tolerability of combined therapy with paclitaxel and carboplatin (TC) in patients with advanced urothelial carcinoma after the failure of first-line chemotherapy with gemcitabine and cisplatin (GC). Patients and Methods: This was a retrospective study including a total of 16 patients with advanced urothelial carcinoma who showed evidence of progressive and/or recurrent disease after first-line therapy with GC and subsequently received second-line chemotherapy consisting of paclitaxel (175 mg/m<sup>2</sup>) and carboplatin (area under the curve 5). TC therapy was repeated every 3 weeks and was continued until disease progression or intolerable toxicity was observed. Results: The baseline patient characteristics were rather favorable; only 3 of 16 patients had liver metastases and 7 patients had an Eastern Cooperative Oncology Group performance status of 0. Of these, response to TC therapy was achieved in 5 (31.3%), including 2 with complete and 3 with partial response. The median progression-free and overall survival times in the 16 patients were 7.9 and 17.3 months, respectively. Conclusions: TC therapy appeared to show modest activity with acceptable tolerability in patients refractory to GC therapy; therefore, TC chemotherapy might be considered as an alternative option as a second-line regimen for advanced urothelial carcinoma following GC therapy. © 2013 S. Karger AG, Basel.

[274]

**TÍTULO / TITLE:** - Epidermal Growth Factor Receptor-targeted Therapy in Squamous Cell Carcinoma of the Penis: A Report of 3 Cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 12. pii: S0090-4295(13)01244-2. doi: 10.1016/j.urology.2013.08.074.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.074](#)

**AUTORES / AUTHORS:** - Brown A; Ma Y; Danenberg K; Schuckman AK; Pinski JK; Pagliaro LC; Quinn DI; Dorff TB

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, University of Southern California, Keck School of Medicine, Los Angeles, CA.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To describe 3 cases of advanced refractory penile cancer treated with targeted therapy against the epidermal growth factor receptor (EGFR). **MATERIALS AND METHODS:** We identified 3 patients with advanced penile cancer who had disease progression after platinum chemotherapy refractory and who subsequently received EGFR-targeted therapy. Their tumor tissue was evaluated for expression of EGFR by immunohistochemistry and messenger ribonucleic acid quantitation and was also tested for the presence of human papillomavirus deoxyribonucleic acid by line hybridization. K-ras mutation was evaluated by polymerase chain reaction for 6 mutations in codon 12 and 1 mutation in codon 13. **RESULTS:** One patient responded to cetuximab and remains disease-free 42 months after presentation. One patient responded to panitumumab, then suffered relapse. One other progressed through EGFR-targeted therapy. EGFR expression by immunohistochemistry was 1-2+ in all cases, and messenger ribonucleic acid expression ranged from 4.08 to 7.33. No K-ras mutations or human papillomavirus deoxyribonucleic acid was detected. **CONCLUSION:** We report 3 cases in which EGFR-targeted therapy was used to treat platinum-refractory penile cancer patients. Because 2 of the 3 had clinical benefit, future prospective trials of EGFR-targeted therapy in penile cancer are warranted.

[275]

**TÍTULO / TITLE:** - Doppler spectral waveform parameters at neurovascular bundle vessels in patients with prostate biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 29.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013.0383](#)

**AUTORES / AUTHORS:** - Tsai YS; Jou YC; Chen CH; Chang CC; Yang WH; Lai J; Tzai TS

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**RESUMEN / SUMMARY:** - **Introduction and Objectives:** There is a need to improve pre-screening determination of prostate cancer in order to better select patients who need biopsy. Such a strategy properly implemented, will decrease the number of negative biopsies for prostate cancer and in turn better balance the risks and morbidity for patients recommended for biopsy. The aim of study is to investigate Doppler spectral waveform parameters of NVB vessels and determine differences between benign and malignant pathologies. **Patients and Methods:** We performed a prospective analysis involving 292 patients who received prostate biopsy for elevated PSA values or abnormal digital rectal examination, as well as 174 patients with symptomatic benign prostatic hyperplasia. DSW parameters [peak-systolic velocity (PSV), end-diastolic velocity (EDV), and resistive index (RI)] were measured at bilateral NVB vessels via Doppler transrectal ultrasound at the right lateral decubitus position, compared and analyzed among patients with benign versus malignant histology for each side.

Results: Overall, both of PSV and EDV at malignant sides were significantly higher than those at benign sides, as well as lower RI (all p values < 0.05, unpaired t-test). In subgroup analysis with 93 patients of serum PSA between 10 and 20 ng/ml and 56 patients with one-side malignancy, higher EDV and lower RI were significantly associated with malignancies (all p, <0.05). The values of PSV and EDV rather than RI might be influenced by the patients' position and RI by the prostate volume. Conclusions: In this study, DSW parameters (mainly EDV and RI) at NVB vessels were significantly associated with prostate cancer, particularly in patients with serum PSA of 10-20 ng/ml. It should be in caution that the patients' position and prostate volume may influence the Doppler signal as demonstrated in the current study. These findings can provide more diagnostic information before prostate biopsy.

[276]

**TÍTULO / TITLE:** - Genetic variations in VDR associated with prostate cancer risk and progression in a Korean population.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Gene. 2014 Jan 1;533(1):86-93. doi: 10.1016/j.gene.2013.09.119. Epub 2013 Oct 9.

●● Enlace al texto completo (gratis o de pago) [1016/j.gene.2013.09.119](#)

**AUTORES / AUTHORS:** - Oh JJ; Byun SS; Lee SE; Hong SK; Jeong CW; Kim D; Kim HJ; Myung SC

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, CHA Bundang Medical Center, CHA University, Seongnam, South Korea; CHA Cancer Research Center, CHA University, Seoul, South Korea.

**RESUMEN / SUMMARY:** - Low levels of vitamin D are implicated as a potential risk factor for prostate cancer, and the vitamin D receptor (VDR) gene may be important in the onset and progression of prostate cancer. In this study, sequence variants in the VDR gene were investigated in a Korean study cohort to determine whether they are associated with prostate cancer risk. We evaluated the association between 47 single nucleotide polymorphisms (SNPs) in the VDR gene and prostate cancer risk as well as clinical characteristics (prostate-specific antigen level, clinical stage, pathological stage and Gleason score) in Korean men (272 prostate cancer patients and 173 benign prostatic hyperplasia patient who underwent a prostate biopsy, which was negative for malignancy) using unconditional logistic regression. The statistical analysis suggested that two VDR sequence variants (rs2408876 and rs2239182) had a significant association with prostate cancer risk (odds ratio [OR]. 1.41; p=0.03; OR, 0.73; p=0.05, respectively). Logistic analyses of the VDR polymorphisms with several prostate cancer related factors showed that several SNPs were significant; nine SNPs to PSA level, three to clinical stage, two to pathological stage, and three SNPs to the Gleason score. The results suggest that some VDR gene polymorphisms in Korean men might not only be associated with prostate cancer risk but also significantly related to prostate cancer-related risk factors such as PSA level, tumor stage, and Gleason score. However, current limitation for small cohort with not-healthy control group might have false positive effects; therefore it should be overcome via further large-scale validating studies.

[277]

**TÍTULO / TITLE:** - Impact of Androgen Deprivation Therapy on Mental and Emotional Well-Being in Men with Prostate Cancer: Analysis from the CaPSURE (Cancer of the Prostate Strategic Urologic Research Endeavor) registry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 29. pii: S0022-5347(13)05837-0. doi: 10.1016/j.juro.2013.10.098.

- Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.098](#)

**AUTORES / AUTHORS:** - Cary KC; Singla N; Cowan JE; Carroll PR; Cooperberg MR

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of California San Francisco; UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA. Electronic address: [clintcary20@gmail.com](mailto:clintcary20@gmail.com).

**RESUMEN / SUMMARY:** - BACKGROUND:: While ADT can delay cancer progression and reduce tumor burden, its use can be limited by adverse side effects. The current study evaluated the effect of ADT on mental and emotional well-being in men with non-metastatic prostate cancer. METHODS:: Participants were enrolled in the national CaPSURE registry and treated by RP, EBRT, or BT with no ADT (local); local with ADT (combination); or primary ADT (PADT). Emotional quality of life (QoL) was evaluated by SF-36 social function, role emotional, vitality, and mental health subscales before and up to 24 months after treatment. Subscales were assessed as continuous scores and as clinically meaningful declines of at least one half standard deviation since pre-treatment. Associations between treatment and QoL changes over time were evaluated with mixed modeling. QoL declines were evaluated with logistic regression. RESULTS:: Among 3,068 men, the combination and PADT groups were older, single, with less education, and higher clinical CAPRA risk than the local group, all  $p < 0.01$ . ADT exposure was associated with significant changes over time in adjusted role emotional (-8.4 points,  $p=0.01$ ) and vitality (-9.2 points,  $p=0.02$ ) scores. Treatment group was not associated with any clinically meaningful QoL declines. A potential limitation is the observational nature of the study. CONCLUSIONS:: ADT use was associated with changes in mental and emotional well-being but did not result in clinically meaningful declines at 24 months. Patients must be counseled on possible ADT-related QoL changes, as well as interventions to attenuate these effects, prior to treatment for prostate cancer.

[278]

**TÍTULO / TITLE:** - Prognostic impact of NDRG2 and NDRG3 in prostate cancer patients undergoing radical prostatectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histol Histopathol. 2013 Nov 13.

**AUTORES / AUTHORS:** - Ren GF; Tang L; Yang AQ; Jiang WW; Huang YM

**INSTITUCIÓN / INSTITUTION:** - Department of Nutrition and Food Hygiene, School of Public Health, Central South University, Changsha, China. [guofren@163.com](mailto:guofren@163.com).

**RESUMEN / SUMMARY:** - Aim: To investigate the clinicopathologic significance of NDRG2 and NDRG3, and their involvement in recurrence-free survival (RFS) and overall survival (OS) of prostate cancer (PCa). Methods: NDRG2 and NDRG3 expression in 206 pairs of primary PCa and corresponding noncancerous prostate tissue samples from the same specimens were detected by immunohistochemistry.

The association of NDRG2 and NDRG3 expression with the clinicopathologic features and with the prognosis of PCa was subsequently assessed. Results: In PCa tissues, NDRG2 expression was significantly downregulated, while NDRG3 expression was significantly upregulated (both  $P=0.001$ ), compared with those in corresponding noncancerous prostate tissues. In addition, the downregulation of NDRG2 in PCa tissues was significantly correlated with advanced pathological stage ( $P=0.001$ ), positive metastatic status ( $P=0.001$ ) and high Gleason score ( $P=0.003$ ), while the upregulation of NDRG3 in PCa tissues was significantly correlated with advanced pathological stage ( $P=0.006$ ), positive metastatic status ( $P=0.001$ ) and lymph node status ( $P=0.002$ ). Furthermore, multivariate survival analysis showed low NDRG2 and high NDRG3 immunoreactivities were both significantly associated with short RFS and short OS in PCa independently of routine clinicopathological predictors. Conclusion: Our data offer convincing evidence for the first time that the aberrant expression of NDRG2 and NDRG3 may contribute to the malignant progression of PCa. More importantly, both the downregulation of NDRG2 and the upregulation of NDRG3 may be efficient prognostic indicators for PCa.

[279]

**TÍTULO / TITLE:** - CD4(+)CD25(+) regulatory T cells-derived exosomes prolonged kidney allograft survival in a rat model.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cell Immunol. 2013 Sep-Oct;285(1-2):62-8. doi: 10.1016/j.cellimm.2013.06.010. Epub 2013 Jun 28.

●● Enlace al texto completo (gratis o de pago) [1016/j.cellimm.2013.06.010](http://1016/j.cellimm.2013.06.010)

**AUTORES / AUTHORS:** - Yu X; Huang C; Song B; Xiao Y; Fang M; Feng J; Wang P

**INSTITUCIÓN / INSTITUTION:** - Department of Nephrology, 422 Hospital of PLA, Zhanjiang, Jiangsu 52400, China; Department of Urology, Xinqiao Hospital, Third Military Medical University, ChongQing 400037, China.

**RESUMEN / SUMMARY:** - CD4(+)CD25(+) regulatory T cells (Tregs) are negative regulators of the immune system that induce and maintain immune tolerance. Exosomes are natural products released from many sources and play a role in antigen presentation, immunoregulation, and signal transduction. In order to determine whether exosomes can be released from Tregs and participate in transplantation tolerance, we isolated and purified Tregs-derived exosomes and established a rat model of kidney transplantation. We then transferred the autologous exosomes into recipients to observe the effect of transplantation tolerance in vivo and in vitro. From in vivo study, serum analysis and histology showed that the function of exosomes can postpone allograft rejection and prolong the survival time of transplanted kidney. From in vitro study, exosomes possessed the capacity to suppress T cells proliferation. Taken together, these results suggest that the Tregs-derived exosomes have a suppressive role on acute rejection and inhibit T cells proliferation, especially exosomes derived from donor-type Tregs, which imply that the Tregs-derived exosomes are one of far-end regulation mechanisms of Tregs. Thus, exosomes released from Tregs could be considered as a possible immunosuppressive reagent for the treatment of transplant rejection.

[280]

**TÍTULO / TITLE:** - Diagnostic Accuracy of 18F Choline PET/CT using Time-of-Flight Reconstruction Algorithm in Prostate Cancer Patients With Biochemical Recurrence.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Oct 3.

- Enlace al texto completo (gratis o de pago)

[1097/RLU.0b013e3182a23d37](#)

**AUTORES / AUTHORS:** - Hausmann D; Bittencourt LK; Attenberger UI; Sertdemir M; Weidner A; Busing KA; Brade J; Wenz F; Schoenberg SO; Dinter DJ

**INSTITUCIÓN / INSTITUTION:** - From the \*Institute of Clinical Radiology and Nuclear Medicine, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany; daggerCDPI Clinics-Abdominal and Pelvic Imaging, Rio de Janeiro Federal University, Rio de Janeiro, Brazil; double daggerInstitute of Medical Statistics; and section signDepartment of Radiation Oncology, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany.

**RESUMEN / SUMMARY:** - **PURPOSE:** Image quality (IQ) of PET in voluminous body regions can be limited, which impairs the assessment of small metastatic lesions. Time-of-flight (TOF) reconstruction algorithm may deliver an increase of spatial resolution. The purpose of this study was to evaluate the impact of TOF on IQ, lesion detection rate, lesion volume (V) and SUVmax in F choline PET/CT of prostate cancer patients with biochemical recurrence compared to standard PET/CT reconstruction (standard). **PATIENTS AND MATERIALS:** During a period of 9 months, 32 patients with prostate cancer (mean [SD] age, 71 [7.8] years) and biochemical recurrence were included in this prospective institutional review board-approved study. Each patient underwent a state-of-the-art 3-dimensional F choline PET/CT. A total of 76 lesions were assessed by 2 board-certified nuclear medicine physicians and a third-year resident. Lesion volume and SUVmax of local recurrence, lymph nodes, and organ metastases were compared between TOF and standard. Image quality and lesion demarcation were rated according to a 5-point Likert-type scale. Interobserver agreement was assessed. **RESULTS:** Eight additional lesions were detected using TOF (SUVmax, 3.64 [0.95]; V, 0.58 cm [0.50]). Image quality was reduced (IQ standard, 1.28; TOF, 1.77;  $P < 0.01$ ) in calculated TOF images, although quality of lesion demarcation was improved (lesion demarcation: standard, 1.66; TOF, 1.26;  $P < 0.01$ ). SUVmax was significantly increased in TOF images (SUVmax standard, 6.9 [4.1]; TOF, 8.1 [4.1];  $P < 0.01$ ), whereas V did not show significant differences (V standard, 5.3 [10.4] cm; TOF, 5.4 [10.3] cm;  $P = 0.41$ ). Interobserver agreement was good for combined ratings (1 + 2 and 3 + 4). **CONCLUSIONS:** Application of TOF seems to be of additional value to detect small metastatic lesions in patients with prostate cancer and biochemical recurrence, which may have further clinical implications for secondary treatment.

[281]

**TÍTULO / TITLE:** - Technique survival in home haemodialysis: a composite success rate and its risk predictors in a prospective longitudinal cohort from a tertiary renal network programme.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Oct;28(10):2612-20. doi: 10.1093/ndt/gft294.

●● Enlace al texto completo (gratis o de pago) [1093/ndt/gft294](https://doi.org/10.1093/ndt/gft294)

**AUTORES / AUTHORS:** - Jayanti A; Nikam M; Ebah L; Dutton G; Morris J; Mitra S

**INSTITUCIÓN / INSTITUTION:** - Manchester Royal Infirmary, Biomedical Research Centre, University of Manchester, Manchester, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: Resurgence of interest in home haemodialysis (HHD) is, in part, due to emerging evidence of the benefits of extended HD regimens, which are most feasibly provided in the home setting. Although specific HHD therapy established at home such as nocturnal HD (NHD) has been reported from individual programmes, little is known about overall HHD success. METHODS: The study included 166 patients who were accepted in the Manchester (UK) HHD training programme through liberal selection criteria. All patients were followed up prospectively until a switch to alternative modality, to include 4528 patient-months of follow-up and about 81 508 HHD sessions during an 8-year period (January 2004-December 2011). Twenty-four patients switched to an alternative modality during the period. Combined technique survival (HHDc) as a composite of training (HHDtr) and at home (HHDhome) was analysed and clinical predictors of HHD modality failure since the commencement of the programme were calculated using Cox regression analysis. Technology-related interruptions to dialysis over a 12-month period and patient-reported reasons for quitting the programme were analysed. RESULTS: Technique survival at 1, 2 and 5 years was 90.2, 87.4, 81.5% (HHDc) and 98.4, 95.4 and 88.9% (HHDhome) when censored for training phase exits, death and transplantation. The combined HHDc modality switch rate is 1 in 192 patient-months of dialysis follow-up. Age >60 years, diabetes, cardiac failure, unit decrease in Hb and increasing score of age-adjusted Charlson—comorbidity index were significantly associated with technique failure. Significant clinical predictors of HHD technique failure in a multivariate model were diabetes (P = 0.002) and cardiac failure (P = 0.05). The majority (61%) switched to an alternative modality for non-medical reasons. The composite of operator error and mechanical breakdown resulting in temporary HHD technique failure was 0.7% per year. CONCLUSIONS: HHD training and technique failure rate are low. Technical errors are infrequent too. Diabetes and cardiac failure are associated with significant risk of technique failure. Although absolute rates are low, training failure is proportionally quite significant, highlighting the importance of reporting the composite technique failure rate (to include early HHD training phase) in HHD programmes.

[282]

**TÍTULO / TITLE:** - Intratumoral hypoxia as the genesis of genetic instability and clinical prognosis in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Adv Exp Med Biol. 2014;772:189-204. doi: 10.1007/978-1-4614-5915-6\_9.

●● Enlace al texto completo (gratis o de pago) [1007/978-1-4614-5915-6\\_9](https://doi.org/10.1007/978-1-4614-5915-6_9)

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**RESUMEN / SUMMARY:** - Intratumoral hypoxia is prevalent in many solid tumors and is a marker of poor clinical prognosis in prostate cancer. The presence of hypoxia is associated with increased chromosomal instability, gene amplification, downregulation of DNA damage repair pathways, and altered sensitivity to agents that damage DNA. These genomic changes could also lead to oncogene activation or tumor suppressor gene inactivation during prostate cancer progression. We review here the concept of repair-deficient hypoxic tumor cells that can adapt to low oxygen levels and acquire an aggressive “unstable mutator” phenotype. We speculate that hypoxia-induced genomic instability may also be a consequence of aberrant mitotic function in hypoxic cells, which leads to increased chromosomal instability and aneuploidy. Because both hypoxia and aneuploidy are prognostic factors in prostate cancer, a greater understanding of these biological states in prostate cancer may lead to novel prognostic and predictive tests and drive new therapeutic strategies in the context of personalized cancer medicine.

[283]

**TÍTULO / TITLE:** - Hypofractionation with VMAT versus 3DCRT in post-operative patients with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4537-43.

**AUTORES / AUTHORS:** - Alongi F; Cozzi L; Fogliata A; Iftode C; Comito T; Clivio A; Villa E; Lobefalo F; Navarra P; Reggiori G; Mancosu P; Clerici E; Tomatis S; Taverna G; Graziotti P; Scorsetti M

**INSTITUCIÓN / INSTITUTION:** - Humanitas Cancer Center, Istituto Clinico Humanitas, Via Manzoni 56, 20089, Rozzano, Milano, Italy. [filippo.alongi@humanitas.it](mailto:filippo.alongi@humanitas.it)

**RESUMEN / SUMMARY:** - AIMS: To retrospectively evaluate and compare the incidence of acute genitourinary (aGU), upper gastrointestinal (uGI) and rectal (IGI) injuries after radiotherapy with hypo-fractionation by volumetric modulation arc therapy (VMAT, the Hypo-RapidArc group) and conventional fractionation by three-dimensional conformal radiotherapy (3DCRT) in patients with localized prostate cancer treated, after radical prostatectomy, with prostatic bed irradiation. PATIENTS AND METHODS: Between 2007 and 2012, 84 consecutive patients with clinically localized prostate cancer submitted to radical prostatectomy were also treated with irradiation to the prostate bed. Forty-five received 3DCRT and 39 Hypo-RapidArc. The median age was 67 and 69 years for 3DCRT and Hypo-RapidArc groups respectively. The median dose to the prostatic bed was 70 Gy in both groups: 2 Gy/fraction in the 3DCRT group and 2.5 Gy/fraction in the Hypo-RapidArc group. After radical prostatectomy, the median time-to-RT was 15 and 16 months respectively. Acute and late toxicities were scored according to the Radiation Therapy and Oncology Group/European Organization for Research and Treatment of Cancer system. RESULTS: Grade 2aGU was recorded in 16% of cases in the 3DRCT group and in 10% in the Hypo-RapidArc group. No acute grade 2 upper gastrointestinal (uGI) toxicities were found in the 3DCRT versus 5% in the Hypo-RapidArc group. The incidence of grade 2 lower gastrointestinal (IGI) toxicities was 22% in the 3DCRT group versus 15% in the Hypo-RapidArc group. No grade 3 or greater toxicities were found in either group. In both groups, good planning target volume coverage was achieved: V95% was recorded as 96.3 +/- 3.6% (mean +/- standard deviation) and 95.7 +/- 8.9 for the 3DRCT and the

Hypo-RapidArc groups, respectively. The mean rectal volume dose receiving at least 70 Gy was 9.1 +/- 10.8% and 0.1 +/- 0.6% respectively. The mean dose to the bladder was 49.5 +/- 12.3 Gy and 37.2 +/- 5.2 Gy respectively. Significant correlation between late rectal toxicity and the maximum dose to the rectum, V70Gy, was found in the 3DCRT group, while no significant correlations were found for acute toxicity. CONCLUSION: The results presented in this study demonstrate the feasibility of a moderate hypo-fractionation regimen with RapidArc in the postoperative setting. Longer-term data are needed to confirm late toxicity profiles.

[284]

**TÍTULO / TITLE:** - Abiraterone Acetate: A Review of Its Use in Patients with Metastatic Castration-Resistant Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Drugs. 2013 Nov 23.

●● Enlace al texto completo (gratis o de pago) [1007/s40265-013-0150-z](#)

**AUTORES / AUTHORS:** - Hoy SM

**INSTITUCIÓN / INSTITUTION:** - Adis, 41 Centorian Drive, Private Bag 65901, Mairangi Bay, North Shore, 0754, Auckland, New Zealand, [demail@springer.com](mailto:demail@springer.com).

**RESUMEN / SUMMARY:** - Abiraterone acetate (Zytiga®) is an orally administered, selective inhibitor of the 17alpha-hydroxylase and C17,20-lyase enzymatic activities of cytochrome P450 (CYP) 17. CYP17 is required for androgen biosynthesis, with androgen receptor signalling crucial in the progression from primary to metastatic prostate cancer. Abiraterone acetate is approved in the European Union and the US, in combination with prednisone or prednisolone, for the treatment of men with metastatic castration-resistant prostate cancer (CRPC). When administered in combination with prednisone in a placebo-controlled, multinational phase III study, abiraterone acetate significantly prolonged overall survival and radiographic progression-free survival (rPFS) in men with metastatic CRPC who had previously received docetaxel. In men with metastatic CRPC who had not previously received chemotherapy participating in a placebo-controlled, multinational phase III study, there was a strong trend towards an overall survival benefit, a significant prolongation in rPFS and significant delays in clinical decline, the need for chemotherapy and the onset of pain observed. Given the nature of the therapy, the overall tolerability profile of abiraterone acetate, in combination with prednisone, was acceptable in men with metastatic CRPC. Abiraterone acetate is associated with hypokalaemia, hypertension, and fluid retention or oedema, secondary to its mechanism of action, and with cardiac adverse events and hepatotoxicity; however, in the phase III studies the incidences of the most frequently reported grade 3 or 4 adverse events of special interest were relatively low. Although the final overall survival data in men with metastatic CRPC who have not previously received chemotherapy are awaited, current evidence indicates that abiraterone acetate is a useful option for the treatment of metastatic CRPC.

[285]

**TÍTULO / TITLE:** - Clinical and pathological impact of VHL, PBRM1, BAP1, SETD2, KDM6A, and JARID1c in clear cell renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Genes Chromosomes Cancer. 2014 Jan;53(1):38-51. doi: 10.1002/gcc.22116. Epub 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1002/gcc.22116](http://1002/gcc.22116)

**AUTORES / AUTHORS:** - Gossage L; Murtaza M; Slatter AF; Lichtenstein CP; Warren A; Haynes B; Marass F; Roberts I; Shanahan SJ; Claas A; Dunham A; May AP; Rosenfeld N; Forsheo T; Eisen T

**INSTITUCIÓN / INSTITUTION:** - Cancer Research UK Cambridge Institute, Li Ka Shing Centre, University of Cambridge, Robinson Way, Cambridge CB2 0RE, UK.

**RESUMEN / SUMMARY:** - VHL is mutated in the majority of patients with clear cell renal cell carcinoma (ccRCC), with conflicting clinical relevance. Recent studies have identified recurrent mutations in histone modifying and chromatin remodeling genes, including BAP1, PBRM1, SETD2, KDM6A, and JARID1c. Current evidence suggests that BAP1 mutations are associated with aggressive disease. The clinical significance of the remaining genes is unknown. In this study, targeted sequencing of VHL and JARID1c (entire genes) and coding regions of BAP1, PBRM1, SETD2, and KDM6A was performed on 132 ccRCCs and matched normal tissues. Associations between mutations and clinical and pathological outcomes were interrogated. Inactivation of VHL (coding mutation or promoter methylation) was seen in 75% of ccRCCs. Somatic noncoding VHL alterations were identified in 29% of ccRCCs and may be associated with improved overall survival. BAP1 (11%), PBRM1 (33%), SETD2 (16%), JARID1c (4%), and KDM6A (3%) mutations were identified. BAP1-mutated tumors were associated with metastatic disease at presentation (P = 0.023), advanced clinical stage (P = 0.042) and a trend towards shorter recurrence free survival (P = 0.059) when compared with tumors exclusively mutated for PBRM1. Our results support those of recent publications pointing towards a role for BAP1 and PBRM1 mutations in risk stratifying ccRCCs. Further investigation of noncoding alterations in VHL is warranted. © 2013 Wiley Periodicals, Inc.

[286]

**TÍTULO / TITLE:** - Importance of 5alpha-Reductase Gene Polymorphisms on Circulating and Intraprostatic Androgens in Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-1100](http://1158/1078-0432.CCR-13-1100)

**AUTORES / AUTHORS:** - Levesque E; Laverdiere I; Lacombe L; Caron P; Rouleau M; Turcotte V; Tetu B; Fradet Y; Guillemette C

**INSTITUCIÓN / INSTITUTION:** - Pharmacogenomics Laboratory, Laval University.

**RESUMEN / SUMMARY:** - Purpose. Polymorphisms in the genes SRD5A1 and SRD5A2 encoding androgen biosynthetic 5-alpha-reductase enzymes have been associated with an altered risk of biochemical recurrence after radical prostatectomy in localized prostate cancer (PCa). Experimental Design. To gain potential insights into SRD5A biological effects, we examined the relationship between SRD5A prognostic markers and endogenous sex-steroid levels measured by mass spectrometry in plasma samples and corresponding prostatic tissues of PCa patients. Results. We report that five of the seven SRD5A markers differentially affect sex-steroid profiles of dihydrotestosterone and its metabolites in both the circulation and prostatic tissues of

PCa patients. Remarkably, a 32% increase in intraprostatic testosterone levels was observed in the presence of the high-risk SRD5A rs2208532 polymorphism. Moreover, SRD5A2 markers were associated predominantly with circulating levels of inactive glucuronides. Indeed, the rs12470143 SRD5A2 protective allele was associated with high circulating androstane-3 $\alpha$ , 17 $\beta$ -diol 3-glucuronide (3 $\alpha$ -diol-17G) levels as opposed to lower levels of both 3 $\alpha$ -diol-17G and androsterone-glucuronide observed with the rs2208532 SRD5A2 risk allele. Moreover, SRD5A2 rs676033 and rs523349 (V89L) risk variants, in strong linkage disequilibrium, were associated with higher circulating levels of 3 $\alpha$ -diol-3G. The SRD5A2 rs676033 variant further correlated with enhanced intraprostatic exposure to 5 $\alpha$ -reduced steroids (dihydrotestosterone and its metabolite 3 $\beta$ -diol). Similarly, the SRD5A1 rs166050C risk variant was associated with greater prostatic exposure to androsterone whereas no association was noted with circulating steroids. Conclusions. Our data support the association of 5 $\alpha$ -reductase germline polymorphisms with the hormonal milieu in PCa patients. Further studies are needed to evaluate if these variants influence 5 $\alpha$ -reductase inhibitor efficacy.

[287]

**TÍTULO / TITLE:** - TMPRSS2-ERG gene fusions induce prostate tumorigenesis by modulating microRNA miR-200c.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Nov 4. doi: 10.1038/onc.2013.461.

●● [Enlace al texto completo \(gratis o de pago\) 1038/onc.2013.461](#)

**AUTORES / AUTHORS:** - Kim J; Wu L; Zhao JC; Jin HJ; Yu J

**INSTITUCIÓN / INSTITUTION:** - Division of Hematology/Oncology, Department of Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA.

**RESUMEN / SUMMARY:** - Chromosomal translocations that juxtapose the androgen-sensitive transmembrane protease, serine 2 (TMPRSS2) gene promoter to the oncogenic ETS-family transcription factor ERG result in excessive ERG overexpression in approximately 50% of prostate cancer (PCa) patients. Although numerous studies have investigated ERG-downstream genes, such studies have not attempted to examine miRNAs, which however are emerging to be important regulators of cancer. Through bioinformatics analysis of ChIP-Seq ERG data and miRNA expression profiling data we nominated miR-200c as a direct target of ERG. Experimentation of PCa cells with ERG overexpression or knockdown demonstrated that ERG directly repressed miR-200c expression by physically binding to the erythroblast transformation-specific (ETS) motif within its promoter. Consequently, miR-200c was downregulated in ERG-positive PCa, and miR-200c target gene expression was restored. In addition, the expression pattern of miR-200c target genes predicted ERG status in clinical PCa specimens. Furthermore, miR-200c was found to be important in modulating ZEB1 upregulation by ERG. Most importantly, miR-200c reconstitution fully reversed ERG-induced epithelial-to-mesenchymal transition (EMT), cell migration and invasion. Therefore, our study report miR-200c as the first miRNA target of ERG and a critical inhibitor of PCa cell motility. Therapeutic delivery of miR-200c may provide personalized treatment for patients with the molecular subtype of PCa that harbors TMPRSS2-ERG gene fusions. Oncogene advance online publication, 4 November 2013; doi:10.1038/onc.2013.461.

[288]

**TÍTULO / TITLE:** - Variation in chromatin accessibility in human kidney cancer links H3K36 methyltransferase loss with widespread RNA processing defects.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Genome Res. 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1101/gr.158253.113](#)

**AUTORES / AUTHORS:** - Simon JM; Hacker KE; Singh D; Brannon AR; Parker JS; Weiser M; Ho TH; Kuan PF; Jonasch E; Furey TS; Prins JF; Lieb JD; Rathmell WK; Davis IJ

**INSTITUCIÓN / INSTITUTION:** - University of North Carolina at Chapel Hill;

**RESUMEN / SUMMARY:** - Comprehensive sequencing of human cancers has identified recurrent mutations in genes encoding chromatin regulatory proteins. For clear cell renal cell carcinoma (ccRCC), three of the five commonly mutated genes encode the chromatin regulators PBRM1, SETD2, and BAP1. How these mutations alter the genomic landscape in ccRCC or other cancers is not understood. Here, we identified alterations in chromatin organization and transcription associated with mutations in chromatin regulators in a large cohort of primary human kidney tumors. By associating variation in chromatin organization with mutations in SETD2, which encodes the enzyme responsible for H3K36 trimethylation, we found that changes in chromatin accessibility occurred primarily within actively transcribed genes. This increase in chromatin accessibility was linked with widespread alterations in RNA processing, including intron retention and aberrant splicing, affecting approximately 25% of all expressed genes. Further, decreased nucleosome occupancy proximal to misspliced exons was observed in tumors lacking H3K36me3. These results directly link mutations in SETD2 to chromatin accessibility changes and RNA processing defects in cancer. Detecting the functional consequences of specific mutations in chromatin regulatory proteins in primary human samples could ultimately inform the therapeutic application of an emerging class of chromatin-targeted compounds.

[289]

**TÍTULO / TITLE:** - Molecular Pathology and Prostate Cancer Therapeutics: From Biology to Bedside.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pathol. 2013 Sep 20. doi: 10.1002/path.4272.

●● Enlace al texto completo (gratis o de pago) [1002/path.4272](#)

**AUTORES / AUTHORS:** - Rodrigues DN; Butler LM; Estelles DL; de Bono JS

**INSTITUCIÓN / INSTITUTION:** - Prostate Cancer Targeted Therapy Group and Drug Development Unit, The Royal Marsden NHS Foundation Trust and The Institute of Cancer Research, Downs Road, Sutton, Surrey, UK, SM2 5PT.

**RESUMEN / SUMMARY:** - Prostate cancer (PCa) is the second most commonly diagnosed malignancy and has an extremely heterogeneous clinical behavior. The vast majority of PCas are hormonally driven diseases in which androgen signalling plays a central role. The realization that castration resistant prostate cancer (CRPC) continues to rely on androgen signalling prompted the development of new, effective androgen blocking agents. As the understanding of the molecular biology of PCas evolves, it is

hoped that stratification of prostate tumours into distinct molecular entities, each with its own set of vulnerabilities, will be a feasible goal. Around half of PCas harbour rearrangements involving a member of the ETS transcription factor family. Tumours without this rearrangement include SPOP mutant as well as SPINK1 overexpressing subtypes. As the number of targeted therapy agents increases, it is crucial to determine which patients will benefit from these interventions and molecular pathology will be key in this respect. In addition to directly targeting cells, therapies that modify the tumour microenvironment have also been successful in prolonging the life of PCa patients. Understanding the molecular aspects of PCa therapeutics will allow pathologists to provide core recommendations for patient management.

[290]

**TÍTULO / TITLE:** - The Prevalence of the HOXB13 G84E Prostate Cancer Risk Allele in Men Treated with Radical Prostatectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 21. doi: 10.1111/bju.12522.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12522](#)

**AUTORES / AUTHORS:** - Beebe-Dimmer J; Isaacs WB; Zuhlke KA; Yee C; Walsh PC; Isaacs SD; Johnson AM; Ewing CE; Humphreys EB; Chowdhury WH; Montie JE; Cooney KA

**INSTITUCIÓN / INSTITUTION:** - Wayne State University Department of Oncology, Detroit MI 48201; Barbara Ann Karmanos Cancer Institute Population Studies and Disparities Research Program, Detroit MI 48201.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** To determine the prevalence and clinical correlates of the G84E mutation in the homeobox transcription factor (or HOXB13) gene using DNA samples from 9,559 men with prostate cancer undergoing radical prostatectomy. **PATIENTS AND METHODS:** DNA samples from men treated with radical prostatectomy at the University of Michigan and John Hopkins University were genotyped for G84E and confirmed by Sanger sequencing. The frequency and distribution of this allele was determined according to specific patient characteristics (family history, age at diagnosis, pathologic Gleason grade and stage). **RESULTS:** 128 of 9,559 patients were heterozygous carriers of G84E (1.3%). Patients who possessed the variant were more likely to have a family history of prostate cancer (46.0% vs. 35.4%  $p=0.006$ ). G84E carriers were also more likely diagnosed at a younger age compared to non-carriers (55.2 years vs. 58.1 years;  $p<0.0001$ ). No difference in the proportion of patients diagnosed with high-grade or advanced stage tumors by carrier status was observed. **CONCLUSION:** In our study, carriers of the rare G84E variant in HOXB13 were both younger at the time of diagnosis and more likely to have a family history of prostate cancer compared to homozygotes for the wild-type allele. No significant differences in allele frequency were detected according to select clinical characteristics of prostate cancer. Further investigation is required to evaluate the role of HOXB13 in prostate carcinogenesis.

[291]

**TÍTULO / TITLE:** - Cabozantinib inhibits prostate cancer growth and prevents tumor-induced bone lesions.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-0839](#)

**AUTORES / AUTHORS:** - Dai J; Zhang H; Karatsinides A; Keller JM; Kozloff K; Aftab DT; Schimmoller F; Keller ET

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Michigan.

**RESUMEN / SUMMARY:** - **PURPOSE:** Cabozantinib, an orally available multi-tyrosine kinase inhibitor with activity against MET and vascular endothelial growth factor receptor 2 (VEGFR2), induces resolution of bone scan lesions in men with castration-resistant prostate cancer bone metastases. The purpose of this study was to determine whether cabozantinib elicited a direct anti-tumor effect, an indirect effect through modulating bone, or both. **EXPERIMENTAL DESIGN:** Using human prostate cancer xenograft studies in mice we determined cabozantinib's impact on tumor growth in soft tissue and bone. In vitro studies with cabozantinib were performed using (1) prostate cancer cell lines to evaluate its impact on cell growth, invasive ability and MET and (2) osteoblast cell lines to evaluate its impact on viability and differentiation and VEGFR2. **RESULTS:** Cabozantinib inhibited progression of multiple prostate cancer cell lines (Ace-1, C4-2B, and LuCaP 35) in bone metastatic and soft tissue murine models of prostate cancer, except for PC-3 prostate cancer cells in which it inhibited only subcutaneous growth. Cabozantinib directly inhibited prostate cancer cell viability and induced apoptosis in vitro and in vivo and inhibited cell invasion in vitro. Cabozantinib had a dose-dependent biphasic effect on osteoblast activity and inhibitory effect on osteoclast production in vitro, that was reflected in vivo. It blocked MET and VEGFR2 phosphorylation in prostate cancer cells and osteoblast-like cells, respectively. **CONCLUSION:** These data indicate that cabozantinib has direct anti-tumor activity; and that its ability to modulate osteoblast activity may contribute to its anti-tumor efficacy.

[292]

**TÍTULO / TITLE:** - Estrogen receptor beta upregulates FOXO3a and causes induction of apoptosis through PUMA in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Sep 30. doi: 10.1038/onc.2013.384.

●● Enlace al texto completo (gratis o de pago) [1038/onc.2013.384](#)

**AUTORES / AUTHORS:** - Dey P; Strom A; Gustafsson JA

**INSTITUCIÓN / INSTITUTION:** - Department of Biology and Biochemistry, Center for Nuclear Receptors and Cell Signaling, University of Houston, Houston, TX, USA.

**RESUMEN / SUMMARY:** - Estrogen receptor beta (ERbeta) is emerging as a critical factor in understanding prostate cancer biology. Although reduced in prostate cancer above Gleason grade 3, ERbeta is a potential drug target at the initial stage of the disease. In human prostate cancer cells, we found that ERbeta causes apoptosis by increasing the expression of pro-apoptotic factor p53-upregulated modulator of apoptosis (PUMA), independent of p53, but dependent on the forkhead transcription factor class-O family member, FOXO3a. FOXO3a has previously been shown to induce PUMA after growth factor withdrawal and inhibition of the Akt pathway. Surprisingly, the phosphorylation of FOXO3a remained unchanged, while the mRNA

and total protein levels of FOXO3a were increased in response to ERbeta expression or treatment of PC3, 22Rv1 and LNCaP cells with the ERbeta-specific ligands 3beta-Adiol (5alpha-androstane-3beta,17beta-diol), DPN (diarylpropionitrile) or 8beta-VE2 (8-vinylestra-1,3,5 (10)-triene-3,17beta-diol). Knockdown of FOXO3a or ERbeta expression abolished the increase of PUMA in response to 3beta-Adiol in LNCaP and PC3 cells, suggesting that FOXO3a mediates the apoptotic effect of 3beta-Adiol-activated ERbeta. Moreover, the ventral prostate of ERbeta-/- mice had decreased expression of FOXO3a and PUMA compared with the ERbeta+/+ mice, indicating a relationship between ERbeta and FOXO3a expression. The regulation of FOXO3a by ERbeta in normal basal epithelial cells indicates a function of ERbeta in cell differentiation and maintenance of cells in a quiescent state. In addition, the expression of ERbeta, FOXO3a and PUMA is comparable and higher in benign prostatic hyperplasia than in prostate cancer Gleason grade 4 or higher, where there is substantial loss of ERbeta, FOXO3a and PUMA. We conclude that ERbeta induces apoptosis of prostate cancer cells by increasing transcription of FOXO3a, leading to an increase of PUMA and subsequent triggering of apoptosis via the intrinsic pathway involving caspase-9. Furthermore, we conclude that ligands specifically activating ERbeta could be useful pharmaceuticals in the treatment of prostate cancer. Oncogene advance online publication, 30 September 2013; doi:10.1038/onc.2013.384.

[293]

**TÍTULO / TITLE:** - Enrichment of human prostate cancer cells with tumor initiating properties in mouse and zebrafish xenografts by differential adhesion.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 24. doi: 10.1002/pros.22740.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pros.22740](#)

**AUTORES / AUTHORS:** - Bansal N; Davis S; Tereshchenko I; Budak-Alpdogan T; Zhong H; Stein MN; Kim IY; Dipaola RS; Bertino JR; Sabaawy HE

**INSTITUCIÓN / INSTITUTION:** - Rutgers Cancer Institute of New Jersey, New Brunswick, New Jersey.

**RESUMEN / SUMMARY:** - BACKGROUND: Prostate tumor-initiating cells (TICs) have intrinsic resistance to current therapies. TICs are commonly isolated by cell sorting or dye exclusion, however, isolating TICs from limited primary prostate cancer (PCa) tissues is inherently inefficient. We adapted the collagen adherence feature to develop a combined immunophenotypic and time-of-adherence assay to identify human prostate TICs. METHODS: PCa cells from multiple cell lines and primary tissues were allowed to adhere to several matrix molecules, and fractions of adherent cells were examined for their TIC properties. RESULTS: Collagen I rapidly-adherent PCa cells have significantly higher clonogenic, migration, and invasion abilities, and initiated more tumor xenografts in mice when compared to slowly-adherent and no-adherent cells. To determine the relative frequency of TICs among PCa cell lines and primary PCa cells, we utilized zebrafish xenografts to define the tumor initiation potential of serial dilutions of rapidly-adherent alpha2beta1hi /CD44hi cells compared to non-adherent cells with alpha2beta1low /CD44low phenotype. Tumor initiation from rapidly-adherent alpha2beta1hi /CD44hi TICs harboring the TMPRSS2:ERG fusion generated xenografts comprising of PCa cells expressing Erg, AMACR, and PSA. Moreover, PCa-cell dissemination was consistently observed in the immune-permissive zebrafish

microenvironment from as-few-as 3 rapidly-adherent alpha2beta1hi /CD44hi cells. In zebrafish xenografts, self-renewing prostate TICs comprise 0.02-0.9% of PC3 cells, 0.3-1.3% of DU145 cells, and 0.22-14.3% of primary prostate adenocarcinomas. CONCLUSION: Zebrafish PCa xenografts were used to determine that the frequency of prostate TICs varies among PCa cell lines and primary PCa tissues. These data support a paradigm of utilizing zebrafish xenografts to evaluate novel therapies targeting TICs in prostate cancer. Prostate © 2013 Wiley Periodicals, Inc.

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[294]

**TÍTULO / TITLE:** - Serum prolidase activity, oxidative stress, and antioxidant enzyme levels in patients with renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Toxicol Ind Health. 2013 Sep 30.

●● Enlace al texto completo (gratis o de pago) [1177/0748233713498924](#)

**AUTORES / AUTHORS:** - Pirincci N; Kaba M; Gecit I; Gunes M; Yuksel MB; Tanik S; Arslan A; Demir H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Yuzuncu Yil University, Van, Turkey.

**RESUMEN / SUMMARY:** - Objectives: Prolidase is a member of the matrix metalloproteinase family. It plays a vital role in collagen turnover, matrix remodeling, and cell growth. Reactive oxygen species (ROS) have been implicated in the pathogenesis of various diseases, including cancers. Oxidative stress can cause tumor angiogenesis and may be carcinogenic. However, the relationship between antioxidant capacity and various cancers has been researched in several clinical trials. In our study, we aimed to identify serum prolidase activity, oxidative stress, and antioxidant enzyme levels in patients with renal tumors and to evaluate their relationships with each other. Materials and METHODS: A total of 37 male patients with renal cell cancer and with a mean age of 56.28 +/- 3.1 were included in the study. The control group comprising 36 male patients (mean age 56.31 +/- 2.9) was randomly selected among the volunteers. Serum samples for measurement of superoxide dismutase (SOD), glutathione peroxidase (GSHPx), glutathione-S-transferase (GST), malondialdehyde (MDA), glutathione (GSH), and prolidase levels were kept at -20 degrees C until they were used. RESULTS: Serum prolidase activity and MDA levels were significantly higher in renal cancer patients than in controls (all, p < 0.05), while SOD, GSHPx, and GST levels were significantly lower (p < 0.05). CONCLUSION: Our results indicate that increased prolidase seems to be related to increased oxidative stress along with decreased antioxidant levels in renal cancer.

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[295]

**TÍTULO / TITLE:** - Functional Status and Survival After Kidney Transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplantation. 2013 Oct 8.

●● Enlace al texto completo (gratis o de pago) [1097/TP.0b013e3182a89338](#)

**AUTORES / AUTHORS:** - Reese PP; Bloom RD; Shults J; Thomasson A; Mussell A; Rosas SE; Johansen KL; Abt P; Levine M; Caplan A; Feldman HI; Karlawish J

**INSTITUCIÓN / INSTITUTION:** - 1 Renal-Electrolyte and Hypertension Division, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA. 2 Center for Clinical Epidemiology and Biostatistics, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA. 3 Leonard Davis Institute of Health Economics, University of Pennsylvania, Philadelphia, PA. 4 Department of Medical Ethics and Health Policy, University of Pennsylvania, Philadelphia, PA. 5 Department of Biostatistics, University of Pennsylvania, Philadelphia, PA. 6 Philadelphia Veteran Affairs Medical Center, Philadelphia, PA. 7 Division of Nephrology, University of California-San Francisco, San Francisco, CA. 8 Department of Surgery, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA. 9 Division of Medical Ethics, New York University, New York, NY. 10 Division of Geriatrics, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA. 11 Address correspondence to: Peter P. Reese, M.D., M.S.C.E., Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania School of Medicine, 917 Blockley Hall, 423 Guardian Drive, Philadelphia, PA 19104.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Older patients constitute a growing proportion of U.S. kidney transplant recipients and often have a high burden of comorbidities. A summary measure of health such as functional status might enable transplant professionals to better evaluate and counsel these patients about their prognosis after transplant. **METHODS:** We linked United Network for Organ Sharing registry data about posttransplantation survival with pretransplantation functional status data (physical function [PF] scale of the Medical Outcomes Study Short Form-36) among individuals undergoing kidney transplant from June 1, 2000 to May 31, 2006. We examined the relationship between survival and functional status with multivariable Cox regression, adjusted for age. Using logistic regression models for 3-year survival, we also estimated the reduction in deaths in the hypothetical scenario that recipients with poor functional status in this cohort experienced modest improvements in function. **RESULTS:** The cohort comprised 10,875 kidney transplant recipients with a mean age of 50 years; 14% were  $\geq 65$ . Differences in 3-year mortality between highest and lowest PF groups ranged from 3% among recipients  $< 35$  years to 14% among recipients  $\geq 65$  years. In multivariable Cox regression, worse PF was associated with higher mortality (hazard ratio, 1.66 for lowest vs. highest PF quartiles;  $P < 0.001$ ). Interactions between PF and age were nonsignificant. We estimated that 11% fewer deaths would occur if kidney transplant recipients with the lowest functional status experienced modest improvements in function. **CONCLUSIONS:** Across a wide age range, functional status was an independent predictor of posttransplantation survival. Functional status assessment may be a useful tool with which to counsel patients about posttransplantation outcomes.

[296]

**TÍTULO / TITLE:** - Genetic Variation in KLK2 and KLK3 Is Associated with Concentrations of hK2 and PSA in Serum and Seminal Plasma in Young Men.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Chem. 2013 Nov 22.

●● [Enlace al texto completo \(gratis o de pago\) 1373/clinchem.2013.211219](#)

**AUTORES / AUTHORS:** - Savblom C; Hallden C; Cronin AM; Sall T; Savage C; Vertosick EA; Klein RJ; Giwercman A; Lilja H

**INSTITUCIÓN / INSTITUTION:** - Department of Laboratory Medicine, Division of Clinical Chemistry, and.

**RESUMEN / SUMMARY:** - BACKGROUND: Genetic variants in KLK2 and KLK3 have been associated with increased serum concentrations of their encoded proteins, human kallikrein-related peptidase 2 (hK2) and prostate-specific antigen (PSA), and with prostate cancer in older men. Low PSA concentrations in seminal plasma (SP) have been associated with low sperm motility. To evaluate whether KLK2 and KLK3 genetic variants affect physiological prostatic secretion, we studied the association of SNPs with hK2 and PSA concentrations in SP and serum of young, healthy men. METHODS: Leukocyte DNA was extracted from 303 male military conscripts (median age 18.1 years). Nine SNPs across KLK2-KLK3 were genotyped. We measured PSA and hK2 in SP and serum using immunofluorometric assays. The association of genotype frequencies with hK2 and PSA concentrations was tested with the Kruskal-Wallis test. RESULTS: Four KLK2 SNPs (rs198972, rs198977, rs198978, and rs80050017) were strongly associated with hK2 concentrations in SP and serum, with individuals homozygous for the major alleles having 3- to 7-fold higher concentrations than the intermediate concentrations found in other homozygotes and heterozygotes (all  $P < 0.001$ ). Three of these SNPs were significantly associated with percentage of free PSA (%fPSA) in serum (all  $P < 0.007$ ). Three KLK3 SNPs showed associations with PSA in SP, and the rs1058205 SNP was associated with total PSA in serum ( $P = 0.001$ ) and %fPSA ( $P = 0.015$ ). CONCLUSIONS: Associations observed in young, healthy men between the SP and serum concentrations of hK2 and PSA and several genetic variants in KLK2 and KLK3 could be useful to refine models of PSA cutoff values in prostate cancer testing.

[297]

**TÍTULO / TITLE:** - Reflex fluorescence in situ hybridization assay for suspicious urinary cytology in bladder cancer patients with negative surveillance cystoscopy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12516.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12516](#)

**AUTORES / AUTHORS:** - Kim PH; Sukhu R; Cordon BH; Sfakianos JP; Sjoberg DD; Hakimi AA; Dalbagni G; Lin O; Herr HW

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Urology Service, Memorial Sloan-Kettering Cancer Center, New York, NY.

**RESUMEN / SUMMARY:** - OBJECTIVE: To assess the ability of reflex UroVysion fluorescence in situ hybridization (FISH) testing to predict recurrence and progression in non-muscle invasive bladder cancer (NMIBC) patients with suspicious cytology but negative cystoscopy. PATIENTS AND METHODS: Patients on NMIBC surveillance were followed with office cystoscopy and urinary cytology every three-to-six months. Between March 2007 and February 2012, 500 consecutive patients with suspicious cytology underwent reflexive FISH analysis. Clinical and pathologic data were reviewed retrospectively. Predictors for recurrence, progression, and findings on subsequent cystoscopy (within two-to-six months after FISH) were evaluated using univariate and multivariate Cox regression. RESULTS: 243 patients with suspicious cytology also had negative surveillance cystoscopy. Positive FISH was a significant predictor for recurrence (hazard ratio 2.35, 95% confidence interval [CI] 1.42, 3.90,  $p=0.001$ ) in

multivariate analysis and for progression (hazard ratio 3.01, 95% CI 1.10, 8.21, p=0.03) in univariate analysis, compared to negative FISH. However, positive FISH was not significantly associated with evidence of tumor on subsequent surveillance cystoscopy compared to negative FISH (odds ratio 0.8, 95% CI 0.26, 2.74, p=1). CONCLUSION: Positive FISH predicts for recurrence and progression in NMIBC surveillance patients with suspicious cytology but negative cystoscopy. However, an association was not found between FISH result and tumor recurrence in the immediate follow-up period. Reflex FISH testing for suspicious cytology may have limited ability to modify surveillance strategies in NMIBC.

[298]

**TÍTULO / TITLE:** - Fractionated *Ocimum gratissimum* Leaf Extract Inhibit Prostate Cancer (PC3.AR) Cells Growth by Reducing Androgen Receptor and Survivin Levels.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Health Care Poor Underserved. 2013 Nov;24(4 Suppl):61-9. doi: 10.1353/hpu.2014.0006.

●● Enlace al texto completo (gratis o de pago) [1353/hpu.2014.0006](http://1353/hpu.2014.0006)

**AUTORES / AUTHORS:** - Ekunwe SI; Hall SM; Luo X; Wang H; Begonia GB

**RESUMEN / SUMMARY:** - In this study, the antiproliferative activity of the organic solvent-soluble and aqueous extracts of *Ocimum gratissimum* leaf against the prostate cancer cells PC3.AR were evaluated by their inhibitory effects on the Androgen Receptor (AR) and Survivin protein. Two organic solvent-soluble extracts P2 and P3-2, and a water-soluble extract, PS/PT1, were found to reduce AR and Survivin levels in a time-dependent manner. In addition, extract PS/PT1, also exhibited the inhibitory activity in a dose-dependent manner. This is the first time that the inhibitory effects of *O. gratissimum* extracts have been evaluated on the Androgen Receptor (AR) and Survivin protein. The results encouraged the further studies of *O. gratissimum* as a potential treatment of prostate cancer.

[299]

**TÍTULO / TITLE:** - Src-dependent Tks5 phosphorylation regulates invadopodia-associated invasion in prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 30. doi: 10.1002/pros.22735.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22735](http://1002/pros.22735)

**AUTORES / AUTHORS:** - Burger KL; Learman BS; Boucherle AK; Sirintrapun SJ; Isom S; Diaz B; Courtneidge SA; Seals DF

**INSTITUCIÓN / INSTITUTION:** - Department of Cancer Biology, Wake Forest Comprehensive Cancer Center, Wake Forest School of Medicine, Winston-Salem, North Carolina.

**RESUMEN / SUMMARY:** - BACKGROUND: The Src tyrosine kinase substrate and adaptor protein Tks5 had previously been implicated in the invasive phenotype of normal and transformed cell types via regulation of cytoskeletal structures called podosomes/invadopodia. The role of Src-Tks5 signaling in invasive prostate cancer, however, had not been previously evaluated. METHODS: We measured the relative

expression of Tks5 in normal (n = 20) and cancerous (n = 184, from 92 patients) prostate tissue specimens by immunohistochemistry using a commercially available tumor microarray. We also manipulated the expression and activity of wild-type and mutant Src and Tks5 constructs in the LNCaP and PC-3 prostate cancer cell lines in order to ascertain the role of Src-Tks5 signaling in invadopodia development, matrix-remodeling activity, motility, and invasion. RESULTS: Our studies demonstrated that Src was activated and Tks5 upregulated in high Gleason score prostate tumor specimens and in invasive prostate cancer cell lines. Remarkably, overexpression of Tks5 in LNCaP cells was sufficient to induce invadopodia formation and associated matrix degradation. This Tks5-dependent increase in invasive behavior further depended on Src tyrosine kinase activity and the phosphorylation of Tks5 at tyrosine residues 557 and 619. In PC-3 cells we demonstrated that Tks5 phosphorylation at these sites was necessary and sufficient for invadopodia-associated matrix degradation and invasion. CONCLUSIONS: Our results suggest a general role for Src-Tks5 signaling in prostate tumor progression and the utility of Tks5 as a marker protein for the staging of this disease. Prostate © 2013 Wiley Periodicals, Inc.

[300]

**TÍTULO / TITLE:** - The cost implications of prostate cancer screening in the Medicare population.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Oct 4. doi: 10.1002/cncr.28373.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28373](#)

**AUTORES / AUTHORS:** - Ma X; Wang R; Long JB; Ross JS; Soulos PR; Yu JB; Makarov DV; Gold HT; Gross CP

**INSTITUCIÓN / INSTITUTION:** - Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, Connecticut; Cancer Outcomes, Public Policy and Effectiveness Research Center, Yale University, New Haven, Connecticut.

**RESUMEN / SUMMARY:** - BACKGROUND: Recent debate about prostate-specific antigen (PSA)-based testing for prostate cancer screening among older men has rarely considered the cost of screening. METHODS: A population-based cohort of male Medicare beneficiaries aged 66 to 99 years, who had never been diagnosed with prostate cancer at the end of 2006 (n = 94,652), was assembled, and they were followed for 3 years to assess the cost of PSA screening and downstream procedures (biopsy, pathologic analysis, and hospitalization due to biopsy complications) at both the national and the hospital referral region (HRR) level. RESULTS: Approximately 51.2% of men received PSA screening tests during the 3-year period, with 2.9% undergoing biopsy. The annual expenditures on prostate cancer screening by the national fee-for-service Medicare program were \$447 million in 2009 US dollars. The mean annual screening cost at the HRR level ranged from \$17 to \$62 per beneficiary. Downstream biopsy-related procedures accounted for 72% of the overall screening costs and varied significantly across regions. Compared with men residing in HRRs that were in the lowest quartile for screening expenditures, men living in the highest HRR quartile were significantly more likely to be diagnosed with prostate cancer of any stage (incidence rate ratio [IRR] = 1.20, 95% confidence interval [CI] = 1.07-1.35) and localized cancer (IRR = 1.30, 95% CI = 1.15-1.47). The IRR for regional/metastasized cancer was also elevated, although not statistically significant (IRR = 1.31, 95% CI =

0.81-2.11). CONCLUSIONS: Medicare prostate cancer screening-related expenditures are substantial, vary considerably across regions, and are positively associated with rates of cancer diagnosis. Cancer 2013. Esta es una cita bibliográfica que va por delante de la publicación en papel. La fecha indicada en la cita provista, NO corresponde con la fecha o la cita bibliográfica de la publicación en papel. La cita bibliográfica definitiva (con el volumen y su paginación) saldrá en 1 ó 2 meses a partir de la fecha de la emisión electrónica-online. \*\*\* This is a bibliographic record ahead of the paper publication. The given date in the bibliographic record does not correspond to the date or the bibliographic citation on the paper publication. The publisher will provide the final bibliographic citation (with the volume, and pagination) within 1 or 2 months from the date the record was published online. © 2013 American Cancer Society.

[301]

**TÍTULO / TITLE:** - Exposure-Toxicity Relationship of Sorafenib in Japanese Patients with Renal Cell Carcinoma and Hepatocellular Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Pharmacokinet. 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago) [1007/s40262-013-0108-z](#)

**AUTORES / AUTHORS:** - Fukudo M; Ito T; Mizuno T; Shinsako K; Hatano E; Uemoto S; Kamba T; Yamasaki T; Ogawa O; Seno H; Chiba T; Matsubara K

**INSTITUCIÓN / INSTITUTION:** - Department of Clinical Pharmacology and Therapeutics, Kyoto University Hospital, Faculty of Medicine, Kyoto University, Sakyo-ku, Kyoto, 606-8507, Japan, [mfukudo@kuhp.kyoto-u.ac.jp](mailto:mfukudo@kuhp.kyoto-u.ac.jp).

**RESUMEN / SUMMARY:** - BACKGROUND AND OBJECTIVES: Sorafenib has various adverse events that can cause treatment discontinuation or dose reduction. The aim of this study was to compare the safety profile between renal cell carcinoma (RCC) and hepatocellular carcinoma (HCC) patients receiving sorafenib under real-life practice conditions. Furthermore, we investigated the relationship between sorafenib exposure and clinical outcomes. METHODS: A total of 91 Japanese cancer patients (RCC, n = 21; HCC, n = 70) treated with sorafenib were enrolled. Toxicity was graded according to the National Cancer Institute Common Toxicity Criteria for Adverse Events (NCI-CTCAE) version 4.0. Single blood samples were collected at each clinic visit and serum sorafenib concentrations were measured by liquid chromatography-tandem mass spectrometry (LC-MS/MS). The incidence of adverse events was analyzed according to cancer type and sorafenib concentration. RESULTS: Hand-foot skin reaction (HFSR) was the most common adverse event among RCC (76 %) and HCC (66 %) patients. Elevations in hepatic transaminases and pancreatic amylase developed more frequently in patients with RCC than in those with HCC (p < 0.05), while hyperbilirubinemia and thrombocytopenia were observed more often in HCC patients than in RCC patients (p < 0.05). Pharmacokinetic data were available from 52 patients (RCC, n = 16; HCC, n = 36). HCC patients showed significantly higher dose-normalized concentrations than RCC patients (p = 0.0184). Sorafenib concentrations were significantly greater in patients with grade  $\geq$ 2 HFSR and hypertension than in those not experiencing the adverse events (p = 0.0045 and 0.0453, respectively). Furthermore, receiver operating characteristic curves revealed optimal cutoff concentrations of sorafenib to predict grade  $\geq$ 2 HFSR (5.78  $\mu$ g/mL) and

hypertension (4.78 mug/mL). In addition, a trend of prolonged overall survival was observed in HCC patients who achieved a maximal sorafenib concentration of  $\geq 4.78$  mug/mL during treatment compared with those who did not achieve the threshold concentration (12.0 vs. 6.5 months; log-rank  $p = 0.0824$ ). CONCLUSIONS: The results of this study suggest that the safety and pharmacokinetic profiles of sorafenib differ between Japanese cancer patients with RCC and HCC. Furthermore, the serum sorafenib concentration could be used as a guide to avoiding the development of severe HFSR while allowing prediction of the incidence of grade  $\geq 2$  hypertension in patients with RCC and HCC, and may potentially be related to the clinical efficacy of sorafenib for HCC.

[302]

**TÍTULO / TITLE:** - Prognostic and diagnostic implications of EpCAM expression in renal tumours: A retrospective clinicopathological study of 948 cases using tissue microarrays.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 8. doi: 10.1111/bju.12487.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12487](#)

**AUTORES / AUTHORS:** - Zimpfer A; Maruschke M; Rehn S; Kundt G; Litzenberger A; Dammert F; Zettl H; Stephan C; Hakenberg OW; Erbersdobler A

**INSTITUCIÓN / INSTITUTION:** - Institute of Pathology, University of Rostock, Strepelstr. 14, 18055 Rostock, Germany.

[303]

**TÍTULO / TITLE:** - Is amisulpride safe when prescribed to breast and prostate cancer patients?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med Hypotheses. 2013 Dec;81(6):1146-50. doi: 10.1016/j.mehy.2013.08.031. Epub 2013 Sep 18.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.mehy.2013.08.031](#)

**AUTORES / AUTHORS:** - Pasquini M; Berardelli I; Calabro F; Roselli V; Hefner S; Biondi M

**INSTITUCIÓN / INSTITUTION:** - Department of Neurology and Psychiatry, Sapienza University of Rome, Italy; Department of Medical Oncology, San Camillo and Forlanini Hospitals, Rome, Italy.

**RESUMEN / SUMMARY:** - In the last decades, the potential association between antidepressants and cancer risk has been increasingly investigated. Fundamental researches, performed on animal models and cell tumoral lines, have highlighted several biological mechanisms possibly supporting this association. Nevertheless, the epidemiological studies investigating the risk of cancer in patients receiving selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs) have provided conflicting and inconclusive results. Therefore, the prescription of several antidepressants in oncologic patients still remains a matter of discussion. The aim of this review is to present and discuss available evidence concerning the association between the risk of breast and prostate cancer and the use of antidepressant medications. Thus, consistencies, differences, and contradictions of available data are

reported. A special focus is addressed to amisulpiride, a widely prescribed drug still poorly investigated with regard to the risk of cancer occurrence and recurrence. Overall, there is no definitive evidence of increased risk of breast and prostate cancer among patients exposed to SSRIs and TCAs. The association between amisulpiride and cancer risk has been to date scarcely explored and considered in clinical settings. Nevertheless, the hyperprolactinemia frequently resulting from its adoption has been repeatedly associated, to increased cancer risk and poorer prognosis in cancer patients. Thus, the use of amisulpiride among cancer patients should be carefully considered.

[304]

**TÍTULO / TITLE:** - A urologic oncology roundtable discussion: how to choose among the available therapies for the treatment of castration-resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Postgrad Med. 2013 Nov;125(6):114-6. doi: 10.3810/pgm.2013.11.2718.

- Enlace al texto completo (gratis o de pago) [3810/pgm.2013.11.2718](#)

**AUTORES / AUTHORS:** - Ryan C; Shore ND; Concepcion R

**INSTITUCIÓN / INSTITUTION:** - Helen Diller Family Comprehensive Cancer Center, University of California, San Francisco, San Francisco, CA. [ryanc@medicine.ucsf.edu](mailto:ryanc@medicine.ucsf.edu).

**RESUMEN / SUMMARY:** - Results from a recent survey of 100 urologists and 100 oncologists who treat patients with castration-resistant prostate cancer (CRPC) identified a lack of physician confidence in choosing among the variety of new anticancer therapies available, and incorporating these therapies into their clinical decision-making process. In response to a survey conducted by Urologic Oncology, a physician roundtable discussion was convened and this companion summary article created to provide a knowledge-based perspective for optimizing CRPC treatment and improving communication between urologists and oncologists (<http://prostatecancer.urologiconcology.org/>). The participating experts described the importance of a documented testosterone level, despite androgen-deprivation therapy, and an increase in prostate-specific antigen level when diagnosing patients with CRPC. Recently published data and personal clinical experience in CRPC management using approved chemotherapeutics, immunotherapies, and oral agents were discussed, as were management of bone metastases and the overall survival improvement in patients undergoing treatment.

[305]

**TÍTULO / TITLE:** - Re: Use of advanced treatment technologies among men at low risk of dying from prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 1. doi: 10.1111/bju.12547.

- Enlace al texto completo (gratis o de pago) [1111/bju.12547](#)

**AUTORES / AUTHORS:** - Sammon JD; Trinh QD; Menon M

**INSTITUCIÓN / INSTITUTION:** - VUI Center for Outcomes Research Analytics & Evaluation, Henry Ford Health System, Detroit, MI, USA.

[306]

**TÍTULO / TITLE:** - Piperlongumine inhibits NF-kappaB activity and attenuates aggressive growth characteristics of prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 22. doi: 10.1002/pros.22739.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22739](#)

**AUTORES / AUTHORS:** - Ginzburg S; Golovine KV; Makhov PB; Uzzo RG; Kutikov A; Kolenko VM

**INSTITUCIÓN / INSTITUTION:** - Department of Urologic Oncology, Fox Chase Cancer Center, Philadelphia, PA.

**RESUMEN / SUMMARY:** - BACKGROUND: Elevated NF-kappaB activity has been previously demonstrated in prostate cancer cell lines as hormone-independent or metastatic characteristics develop. We look at the effects of piperlongumine (PL), a biologically active alkaloid/amide present in piper longum plant, on the NF-kappaB pathway in androgen-independent prostate cancer cells. METHODS: NF-kappaB activity was evaluated using Luciferase reporter assays and Western blot analysis of p50 and p65 nuclear translocation. IL-6, IL-8, and MMP-9 levels were assessed using ELISA. Cellular adhesion and invasiveness properties of prostate cancer cells treated with PL were also assessed. RESULTS: NF-kappaB DNA-binding activity was directly down-regulated with increasing concentrations of PL, along with decreased nuclear translocation of p50 and p65 subunits. Expression of IL-6, IL-8, MMP-9, and ICAM-1 was attenuated, and a decrease of cell-to-matrix adhesion and invasiveness properties of prostate cancer cells were observed. CONCLUSIONS: PL-mediated inhibition of NF-kappaB activity decreases aggressive growth characteristics of prostate cancer cells in vitro. Prostate © 2013 Wiley Periodicals, Inc.

[307]

**TÍTULO / TITLE:** - Clinicopathologic Analysis of Choriocarcinoma as a Pure or Predominant Component of Germ Cell Tumor of the Testis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Surg Pathol. 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago)

[1097/PAS.0b013e3182a2926e](#)

**AUTORES / AUTHORS:** - Alvarado-Cabrero I; Hernandez-Toriz N; Paner GP

**INSTITUCIÓN / INSTITUTION:** - Departments of \*Pathology daggerUrology, Mexican Oncology Hospital, IMSS, Mexico City, Mexico double daggerDepartments of Pathology and Surgery, Section of Urology, University of Chicago, Chicago, IL.

**RESUMEN / SUMMARY:** - Although well recognized in the literature, the contemporary clinicopathologic data regarding choriocarcinoma (CC) as a pure or the predominant component of a testicular germ cell tumor (GCT) are limited. Herein, we present a series of pure CC and predominant CC in mixed GCT of the testis obtained from a single oncology institution. A comprehensive histologic review of 1010 orchiectomies from 1999 to 2011 yielded 6 (0.6%) pure CC and 9 (0.9%) mixed GCT cases with a predominant CC component. Patients' ages ranged from 20 to 39 years (median 29 y). All patients had markedly elevated serum beta-hCG levels (median 199,000 IU/mL) at presentation. All tumors were unilateral and involved the right (9/15) and left (6/15)

testis. The mean tumor size was 6.5 cm (range, 1.5 to 8 cm). Histology was similar for pure CCs and the CC component of mixed GCTs. CC commonly showed expansile hemorrhagic nodular cysts surrounded by variable layers of neoplastic trophoblastic cells (mononucleated trophoblasts and syncytiotrophoblasts). The syncytiotrophoblasts usually covered columns of mononucleated trophoblasts and occasionally formed plexiform aggregates and pseudovillous protrusions. Immunohistochemical stains suggested a mixture of cytotrophoblasts (p63, HPL) and intermediate trophoblasts (p63, HPL weak +/-) in the columns of mononucleated cells. In the 9 mixed GCTs, CC comprised 50% to 95% (7/9 were  $\geq 80\%$  CC) of the tumor; 7 were combined with 1, and 2 were combined with 2 other GCT components. The non-CC components included teratoma (5/9), seminoma (2/9), yolk sac tumor (2/9), and embryonal carcinoma (2/9). Lymphovascular invasion, spermatic cord invasion, and tunica vaginalis invasion were present in 15/15, 5/15, and 1/12 cases, respectively. In mixed GCTs, these locally aggressive features were attributed to the CC component, except in 1 tumor in which it was also exhibited by the embryonal carcinoma component. Lymphovascular invasion was multifocal to widespread in 73% of tumors. The stages of the 15 tumors were: pT2 (10), pT3 (5); NX (1), N1 (4), N2 (5), N3 (5); and M1a (2) and M1b (13). Distant organ metastasis mostly involved the lungs (11) and liver (10). Follow-up information was available in 14 patients, all of whom received cisplatin-based chemotherapy. All 6 pure CC patients were dead of disease (range, 6 to 14 mo, median 9.5 mo). Follow-up of 8 patients with predominant CC (range, 10 to 72 mo, median 27 mo) showed that 5 died of the disease, and 1 was alive with disease and 2 were alive with no evidence of disease at 60 and 72 months of follow-up, respectively; these latter 2 patients were the only ones with M1a disease on presentation. This series confirms the proclivity for high-stage presentation including presence of distant metastasis, hematogenous spread, and poor outcome of testicular CC. Mixed GCT with a predominant CC component has similar tendency for high-stage presentation, marked elevation of serum beta-hCG levels, and aggressive behavior compared with pure CC. This study also showed that distant metastasis by CC when only involving the lungs (M1a) may not be uniformly fatal with chemotherapy. The mononucleated trophoblastic columns in testicular CC appear to be a mixture of cytotrophoblasts and intermediate trophoblasts, similar to that described in gestational CC.

[308]

**TÍTULO / TITLE:** - Impact of S100A8/A9 expression on prostate cancer progression in vitro and in vivo.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cell Physiol. 2013 Oct 10. doi: 10.1002/jcp.24489.

●● [Enlace al texto completo \(gratis o de pago\) 1002/jcp.24489](#)

**AUTORES / AUTHORS:** - Grebhardt S; Muller-Decker K; Bestvater F; Hershinkel M; Mayer D

**INSTITUCIÓN / INSTITUTION:** - Hormones and Signal Transduction Group, DKFZ-ZMBH Alliance, German Cancer Research Center, Heidelberg, Germany.

**RESUMEN / SUMMARY:** - The proinflammatory S100A8/A9 proteins, which are expressed in myeloid cells under physiological conditions, are strongly expressed in human prostate cancer epithelial cells. Their role in the tumor cells and in tumor progression is largely unclear. We established a prostate cancer epithelial cell line (PC-

3 TO-A8/A9) expressing S100A8 and S100A9 simultaneously under doxycycline control, to study the role of S100A8/A9 on tumor growth and infiltration of immune cells in subcutaneous xenografts in male NMRI nu/nu mice. Colonization of distant organs was studied after intracardial injection of the tumor cells in male NOD/SCID mice. PC-3 TO-A8/A9 cells grown in vitro and subcutaneous xenografts in mice not treated with doxycycline expressed high levels of S100A8/A9 mRNA and protein, whereas doxycycline treatment suppressed S100A8/A9 expression. S100A8/A9 expression did not significantly alter growth rate and invasion of the subcutaneous tumors into surrounding tissues. However, S100A8/A9 expression caused increased infiltration of immune cells, especially neutrophils. In intracardially injected mice sporadic tumor settlement was observed in muscle and lymph nodes. Colonies of tumor cells and micro-metastases were observed in the lung of 64.3% (9 out of 14) of mice not treated with doxycycline and in 33.3% (5 out of 15) of mice treated with doxycycline. Our data demonstrate for the first time that S100A8/A9 expression in epithelial cancer cells causes enhanced infiltration of immune cells, especially neutrophils, and stimulates settlement of the cancer cells in the lung. *J. Cell. Physiol.* © 2013 Wiley Periodicals, Inc.

[309]

**TÍTULO / TITLE:** - Management of Renal Masses in Transplant Allografts at an Australian Kidney-Pancreas Transplant Unit.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplantation. 2013 Nov 7.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1097/01.TP.0000437333.38786.fd](#)

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**RESUMEN / SUMMARY:** - BACKGROUND: A shift towards partial nephrectomy (PN) in the management of small renal cell carcinoma (RCC) in recent years has prompted a parallel change in the management of rare cases of transplant allograft RCC. There are currently no guidelines on the management of allograft RCC. We present our center experience and review the latest evidence for management of RCC in renal transplant allografts. METHODS: We performed a retrospective review of the transplant patient registry of a kidney-pancreas transplant center between 1984 and 2012. All confirmed allograft kidney RCC cases were included in this series. MEDLINE search of current literature on renal allograft RCC and selection of appropriate studies were conducted. RESULTS: A total of 1,241 patients had received either a living, cadaveric, or combined kidney-pancreas transplant at our center, and four cases of allograft RCC were identified. The first case underwent a radical nephrectomy given the central location of the tumor and his young age. The second case underwent an open PN in the setting of a central tumor with minimal morbidity. The third case involved multiple renal lesions that were subsequently treated with radiofrequency ablation (RFA). The fourth case underwent a non-ischemic open PN in the setting of a midpole tumor with minimal morbidity. There have been no cases of local recurrence or metastatic

progression at median 21.5 months' follow-up. CONCLUSION: We have shown the safety and efficacy of minimally invasive techniques such as PN and RFA in a variety of tumors. We consider PN as an appropriate therapy for localized, clinical T1 allograft RCC tumors.

[310]

**TÍTULO / TITLE:** - Metformin targets c-MYC oncogene to prevent prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Carcinogenesis. 2013 Dec;34(12):2823-32. doi: 10.1093/carcin/bgt307. Epub 2013 Oct 15.

●● Enlace al texto completo (gratis o de pago) [1093/carcin/bgt307](#)

**AUTORES / AUTHORS:** - Akinyeke T; Matsumura S; Wang X; Wu Y; Schaffer ED; Saxena A; Yan W; Logan SK; Li X

**INSTITUCIÓN / INSTITUTION:** - Department of Basic Science and Craniofacial Biology, New York University College of Dentistry, New York, NY 10010-4086, USA.

**RESUMEN / SUMMARY:** - Prostate cancer (PCa) is the second leading cause of cancer-related death in American men and many PCa patients develop skeletal metastasis. Current treatment modalities for metastatic PCa are mostly palliative with poor prognosis. Epidemiological studies indicated that patients receiving the diabetic drug metformin have lower PCa risk and better prognosis, suggesting that metformin may have antineoplastic effects. The mechanism by which metformin acts as chemopreventive agent to impede PCa initiation and progression is unknown. The amplification of c-MYC oncogene plays a key role in early prostate epithelia cell transformation and PCa growth. The purpose of this study is to investigate the effect of metformin on c-myc expression and PCa progression. Our results demonstrated that (i) in Hi-Myc mice that display murine prostate neoplasia and highly resemble the progression of human prostate tumors, metformin attenuated the development of prostate intraepithelial neoplasia (PIN, the precancerous lesion of prostate) and PCa lesions. (ii) Metformin reduced c-myc protein levels in vivo and in vitro. In Myc-CaP mouse PCa cells, metformin decreased c-myc protein levels by at least 50%. (iii) Metformin selectively inhibited the growth of PCa cells by stimulating cell cycle arrest and apoptosis without affecting the growth of normal prostatic epithelial cells (RWPE-1). (iv) Reduced PIN formation by metformin was associated with reduced levels of androgen receptor and proliferation marker Ki-67 in Hi-Myc mouse prostate glands. Our novel findings suggest that by downregulating c-myc, metformin can act as a chemopreventive agent to restrict prostatic neoplasia initiation and transformation. Summary: Metformin, an old antidiabetes drug, may inhibit prostate intraepithelial neoplasia transforming to cancer lesion via reducing c-MYC, an 'old' overexpressed oncogene. This study explores chemopreventive efficacy of metformin in prostate cancer and its link to cMYC in vitro and in vivo.

[311]

**TÍTULO / TITLE:** - Rapid ex vivo imaging of PAll prostate to bone tumor with SWIFT-MRI.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Magn Reson Med. 2013 Oct 23. doi: 10.1002/mrm.24979.

●● Enlace al texto completo (gratis o de pago) [1002/mrm.24979](https://doi.org/10.1002/mrm.24979)

**AUTORES / AUTHORS:** - Luhach I; Idiyatullin D; Lynch CC; Corum C; Martinez GV; Garwood M; Gillies RJ

**INSTITUCIÓN / INSTITUTION:** - Departments of Cancer Imaging and Metabolism, H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida, USA; Department of Mathematics & Statistics, University of South Florida, Tampa, Florida, USA.

**RESUMEN / SUMMARY:** - PURPOSE: The limiting factor for MRI of skeletal/mineralized tissue is fast transverse relaxation. A recent advancement in MRI technology, SWIFT (Sweep Imaging with Fourier Transform), is emerging as a new approach to overcome this difficulty. Among other techniques like UTE, ZTE, and WASPI, the application of SWIFT technology has the strong potential to impact preclinical and clinical imaging, particularly in the context of primary or metastatic bone cancers because it has the added advantage of imaging water in mineralized tissues of bone allowing MRI images to be obtained of tissues previously visible only with modalities such as computed tomography (CT). The goal of the current study is to examine the feasibility of SWIFT for the assessment of the prostate cancer induced changes in bone formation (osteogenesis) and destruction (osteolysis) in ex vivo specimens. METHODS: A luciferase expressing prostate cancer cell line (PAILI) or saline control was inoculated directly into the tibia of 6-week-old immunocompromised male mice. Tumor growth was assessed weekly for 3 weeks before euthanasia and dissection of the tumor bearing and sham tibias. The ex vivo mouse tibia specimens were imaged with a 9.4 Tesla (T) and 7T MRI systems. SWIFT images are compared with traditional gradient-echo and spin-echo MRI images as well as CT and histological sections. RESULTS: SWIFT images with nominal resolution of 78 μm are obtained with the tumor and different bone structures identified. Prostate cancer induced changes in the bone microstructure are visible in SWIFT images, which is supported by spin-echo, high resolution CT and histological analysis. CONCLUSION: SWIFT MRI is capable of high-quality high-resolution ex vivo imaging of bone tumor and surrounding bone and soft tissues. Furthermore, SWIFT MRI shows promise for in vivo bone tumor imaging, with the added benefits of nonexposure to ionizing radiation, quietness, and speed. Magn Reson Med 000:000-000, 2013. © 2013 Wiley Periodicals, Inc.

[312]

**TÍTULO / TITLE:** - Efficacy and Safety of the Coadministration of Tadalafil Once Daily with Finasteride for 6 Months: A Randomized, Double-Blind, Placebo Controlled Study in Men with Lower Urinary Tract Symptoms and Prostatic Enlargement Secondary to Benign Prostatic Hyperplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 2. pii: S0022-5347(13)05558-4. doi: 10.1016/j.juro.2013.09.059.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.09.059](https://doi.org/10.1016/j.juro.2013.09.059)

**AUTORES / AUTHORS:** - Casabe A; Roehrborn CG; Da Pozzo LF; Zepeda S; Henderson RJ; Sorsaburu S; Hennes C; Wong DG; Viktrup L

**INSTITUCIÓN / INSTITUTION:** - Instituto Medico Especializado, Buenos Aires, Argentina.

**RESUMEN / SUMMARY:** - PURPOSE: Medical treatment for men with lower urinary tract symptoms and prostatic enlargement secondary to benign prostatic hyperplasia is

5alpha-reductase inhibitor monotherapy or coadministration with an alpha-blocker. We assessed the effects of tadalafil 5 mg coadministered with finasteride 5 mg during 26 weeks on lower urinary tract symptoms and sexual symptoms. MATERIALS AND METHODS: We conducted an international, randomized, double-blind, parallel study of men (45 years old or older, 5alpha-reductase inhibitor naive, I-PSS [International Prostate Symptom Score] 13 or greater, prostate volume 30 ml or greater) treated with placebo/finasteride coadministration (350) or tadalafil/finasteride coadministration (345) for 26 weeks. Benign prostatic hyperplasia-lower urinary tract symptoms changes were assessed using the I-PSS. Erectile dysfunction improvements were assessed via IIEF-EF (International Index of Erectile Function-erectile function domain) in sexually active men with erectile dysfunction. Safety was assessed in terms of adverse events. RESULTS: Least squares mean changes from baseline in I-PSS after 4, 12 and 26 weeks of tadalafil/finasteride coadministration were -4.0, -5.2 and -5.5. Corresponding values for placebo/finasteride coadministration were -2.3, -3.8 and -4.5 ( $p \leq 0.022$  at all visits favoring tadalafil/finasteride coadministration). I-PSS subscores (storage and voiding) and quality of life index were also numerically improved with tadalafil/finasteride coadministration. Least squares mean changes from baseline in IIEF-EF with tadalafil/finasteride coadministration were 3.7 after 4 weeks, and 4.7 after 12 and 26 weeks. Corresponding values for placebo/finasteride coadministration were -1.1, 0.6 and -0.0 ( $p < 0.001$  at all visits favoring tadalafil/finasteride coadministration). Tadalafil/finasteride coadministration was well tolerated and most adverse events were mild/moderate. CONCLUSIONS: The coadministration of tadalafil/finasteride provides early improvement in lower urinary tract symptoms in men with benign prostatic hyperplasia and prostatic enlargement. Tadalafil/finasteride coadministration also improves erectile function in men who have comorbid erectile dysfunction.

[313]

**TÍTULO / TITLE:** - Adherence to the Mediterranean diet and risk of bladder cancer in the EPIC cohort study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Oct 31. doi: 10.1002/ijc.28573.

●● [Enlace al texto completo \(gratis o de pago\) 1002/ijc.28573](#)

**AUTORES / AUTHORS:** - Buckland G; Ros MM; Roswall N; Bueno-de-Mesquita HB; Travier N; Tjonneland A; Kiemeny LA; Sacerdote C; Tumino R; Ljungberg B; Gram IT; Weiderpass E; Skeie G; Malm J; Ehrnstrom R; Chang-Claude J; Mattiello A; Agnoli C; Peeters PH; Boutron-Ruault MC; Fagherazzi G; Clavel-Chapelon F; Nilsson LM; Amiano P; Trichopoulou A; Oikonomou E; Tsiotas K; Sanchez MJ; Overvad K; Quiros JR; Chirlaque MD; Barricarte A; Key TJ; Allen NE; Khaw KT; Wareham N; Riboli E; Kaaks R; Boeing H; Palli D; Romieu I; Romaguera D; Gonzalez CA

**INSTITUCIÓN / INSTITUTION:** - Unit of Nutrition, Environment and Cancer, Cancer Epidemiology Research Programme, Catalan Institute of Oncology (ICO-IDIBELL), Barcelona, España.

**RESUMEN / SUMMARY:** - There is growing evidence of the protective role of the Mediterranean diet (MD) on cancer. However, to date no epidemiological study has investigated the influence of the MD on bladder cancer. We evaluated the association between adherence to the MD and risk of urothelial cell bladder cancer (UCC), according to tumor aggressiveness, in the European Prospective Investigation into

Cancer and Nutrition (EPIC). The analysis included 477,312 participants, recruited from ten European countries between 1991 and 2000. Information from validated dietary questionnaires was used to develop a relative Mediterranean diet score (rMED), including nine dietary components. Cox regression models were used to assess the effect of the rMED on UCC risk, while adjusting for dietary energy and tobacco smoking of any kind. Stratified analyses were performed by sex, BMI, smoking status, European region and age at diagnosis. During an average follow-up of 11 years, 1,425 participants (70.9% male) were diagnosed with a first primary UCC. There was a negative but non-significant association between a high versus low rMED score and risk of UCC overall (HR: 0.84 [95% CI 0.69, 1.03]) and risk of aggressive (HR: 0.88 [95% CI 0.61, 1.28]) and non-aggressive tumors (HR: 0.78 [95% CI 0.54, 1.14]). Although there was no effect modification in the stratified analyses, there was a significant 34% (p = 0.043) decreased risk of UCC in current smokers with a high rMED score. In EPIC, the MD was not significantly associated with risk of UCC, although we cannot exclude that a MD may reduce risk in current smokers.

[314]

**TÍTULO / TITLE:** - Gene expression profiles in prostate cancer: Identification of candidate non-invasive diagnostic markers.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 24. pii: S0210-4806(13)00325-2. doi: 10.1016/j.acuro.2013.07.012.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.07.012](#)

**AUTORES / AUTHORS:** - Mengual L; Ars E; Lozano JJ; Buset M; Izquierdo L; Ingelmo-Torres M; Gaya JM; Algaba F; Villavicencio H; Ribal MJ; Alcaraz A

**INSTITUCIÓN / INSTITUTION:** - Laboratorio y Servicio de Urología, Hospital Clinic, Institut d'Investigacions Biomediques August Pi i Sunyer (IDIBAPS), Universitat de Barcelona, Barcelona, España. Electronic address: [lmengual@clinic.ub.es](mailto:lmengual@clinic.ub.es).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To analyze gene expression profiles of prostate cancer (PCa) with the aim of determining the relevant differentially expressed genes and subsequently ascertain whether this differential expression is maintained in post-prostatic massage (PPM) urine samples. **MATERIAL AND METHODS:** Forty-six tissue specimens (36 from PCa patients and 10 controls) and 158 urine PPM-urines (113 from PCa patients and 45 controls) were collected between December 2003 and May 2007. DNA microarrays were used to identify genes differentially expressed between tumour and control samples. Ten genes were technically validated in the same tissue samples by quantitative RT-PCR (RT-qPCR). Forty two selected differentially expressed genes were validated in an independent set of PPM-urines by qRT-PCR. **RESULTS:** Multidimensional scaling plot according to the expression of all the microarray genes showed a clear distinction between control and tumour samples. A total of 1047 differentially expressed genes (FDR $\leq$ .1) were identified between both groups of samples. We found a high correlation in the comparison of microarray and RT-qPCR gene expression levels (r=.928, P<.001). Thirteen genes maintained the same fold change direction when analyzed in PPM-urine samples and in four of them (HOXC6, PCA3, PDK4 and TMPRSS2-ERG), these differences were statistically significant (P<.05). **CONCLUSION:** The analysis of PCa by DNA microarrays provides

new putative mRNA markers for PCa diagnosis that, with caution, can be extrapolated to PPM-urines.

[315]

**TÍTULO / TITLE:** - Age-an independent prognostic factor of clinical outcome in renal malignancies: results of a large study over two decades.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1164-6](#)

**AUTORES / AUTHORS:** - Hupe MC; Merseburger AS; Lokeshwar VB; Eggers H; Rott H; Wegener G; Abbas M; Kuczyk MA; Herrmann TR

**INSTITUCIÓN / INSTITUTION:** - Department of Urology and Urologic Oncology, Hannover Medical School (OE 6240), Carl-Neuberg-Str. 1, 30625, Hannover, Germany, [marie.ch.hupe@googlemail.com](mailto:marie.ch.hupe@googlemail.com).

**RESUMEN / SUMMARY:** - PURPOSE: Age has been linked to outcome in renal cancer patients, but mainly in North American cohorts. In this study, we hypothesized that age is correlated with metastasis and cancer-specific survival in a German cohort regardless of types of treatments. METHODS: A total of 1,538 patients treated for renal malignancies between 1991 and 2010 were evaluated. Mean age and median age are 61.9 +/- 11.6 and 62.6 years. Clinicopathologic [tumor type, size, grade, stage and treatment (surgery, chemotherapy, radiation, immunotherapy)] and outcome parameters (metastasis and survival) were examined for an association with age using logistic regression and Cox proportional hazard model, and Kaplan-Meier plots. RESULTS: Age was associated with stage, metastasis, treatment, cancer-specific and overall mortality ( $p < 0.01$ ). The metastasis-free and cancer-free survival rates for patients  $>63$  years were lower than those for patients  $\leq 63$  years ( $p < 0.0001$ ). In a multivariate analysis, age was an independent prognostic factor of metastasis, cancer-specific and overall mortality ( $p < 0.0001$ ) even when data were stratified in different decades and treatment was included as one of the parameters. Patients  $>63$  years of age had 29-35 % higher risk of metastasis and cancer-specific mortality than younger patients. Median metastasis-free and cancer-specific survival for patients  $>63$  years of age (months: 84.4; 70.3) was ~50 % shorter than in patients  $\leq 63$  years (months: 151; 144.6). CONCLUSIONS: This large study shows that, despite advances in surgical and non-surgical treatment modalities over the two decades, age is an independent prognostic indicator of metastasis and cancer-specific mortality in renal cancer patients. Patients  $>63$  years have ~30 % increased risk for metastasis and ~50 % shorter cancer-specific survival.

[316]

**TÍTULO / TITLE:** - Frozen Section Analysis of Ureteral Margins in Patients Undergoing Radical Cystectomy for Bladder Cancer: Differential Impact of Carcinoma in situ in the Bladder on Reliability and Impact on Tumour Recurrence in the Upper Urinary Tract.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1159/000353230](#)

**AUTORES / AUTHORS:** - Loeser A; Katzenberger T; Vergho DC; Kocot A; Burger M; Riedmiller H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology and Paediatric Urology, Julius Maximilians University Medical Center, Wuerzburg, Germany.

**RESUMEN / SUMMARY:** - Background: Patients undergoing radical cystectomy (RC) for urothelial carcinoma of the bladder (UCB) are at risk for upper urinary tract recurrence (UUTR), especially in case of carcinoma in situ (CIS). Data on the impact of CIS in the urinary bladder on ureteral tumour involvement or UUTR are conflicting. We presently evaluate the accuracy of intraoperative frozen section analysis (FSA) of the ureteral margin, the incidence of ureteral tumour involvement and their impact on UUTR in patients undergoing RC for UCB with versus without CIS of the bladder. Material and Methods: Between 2003 and 2007, 243 patients underwent RC in our department. 176 of these for UCB, either without CIS (n = 117, group I) or solitary/concomitant CIS (n = 59, group II). FSA was performed. Patients were followed up for UUTR. Results: Overall, 403 ureteral margins - including re-resections - were analysed (group I, n = 232; group II, n = 171). One patient (0.85%) in group I and 21 patients (35.6%) in group II had tumour involvement of the ureter (p < 0.0001) at the time of RC. The false-negative rate of FSA compared to final histopathology was 0.4% (1/232) for group I and 2.9% (5/171) for group II, respectively. Mean duration of follow-up was 26 months (1-72). In group II, 2 patients (1.1%) had UUTR in the follow-up; both had initially positive and subsequently false-negative FSA. Conclusions: Tumour involvement of the ureter is found significantly more often in solitary or concomitant CIS of the bladder. Intraoperative ureteral FSA is accurate and should be recommended in these patients. Ureteral tumour involvement predisposes to UUTR especially with initial positive margins mandating careful follow-up. © 2013 S. Karger AG, Basel.

[317]

**TÍTULO / TITLE:** - Acquired resistance to temsirolimus in human renal cell carcinoma cells is mediated by the constitutive activation of signal transduction pathways through mTORC2.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Oct 29;109(9):2389-95. doi: 10.1038/bjc.2013.602. Epub 2013 Oct 3.

●● [Enlace al texto completo \(gratis o de pago\) 1038/bjc.2013.602](#)

**AUTORES / AUTHORS:** - Harada K; Miyake H; Kumano M; Fujisawa M

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Kobe University Graduate School of Medicine, Chuo-ku, Kobe 650-0017, Japan.

**RESUMEN / SUMMARY:** - Background: The objective of this study was to characterise the mechanism underlying acquired resistance to temsirolimus, an inhibitor of mammalian target of rapamycin (mTOR), in renal cell carcinoma (RCC). Methods: A parental human RCC cell line, ACHN (ACHN/P), was continuously exposed to increasing doses of up to 20 µM of temsirolimus, and a cell line resistant to temsirolimus (ACHN/R), showing a sixfold higher IC50 than that of ACHN/P, was developed. Results: Following treatment with temsirolimus, phosphorylation of S6 kinase in ACHN/P was markedly inhibited, whereas there was no detectable expression of phosphorylated S6 in ACHN/R before and after temsirolimus treatment. However, AKT and p44/42 mitogen-activated protein kinase (MAPK) were constitutively

phosphorylated even after temsirolimus treatment in ACHN/R, but not in ACHN/P. There was no significant difference between the sensitivities of ACHN/P and ACHN/R to KU0063794, a dual inhibitor of mTOR complex 1 (mTORC1) and mTORC2. Similar sensitivities to temsirolimus in ACHN/P and ACHN/R could be achieved by additional treatment with specific inhibitors of AKT- and MAPK-signaling pathways. Conclusion: The activation of signal transduction pathways via mTORC2, but not via mTORC1, may have an important role in the acquisition of a resistant phenotype to temsirolimus in RCC.

[318]

**TÍTULO / TITLE:** - Overexpression of the polarity protein PAR-3 in clear cell renal cell carcinoma is associated with poor prognosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Oct 17. doi: 10.1002/ijc.28548.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28548](#)

**AUTORES / AUTHORS:** - Dugay F; Goff XL; Rioux-Leclercq N; Chesnel F; Jouan F; Henry C; Cabillic F; Verhoest G; Vigneau C; Arlot-Bonnemains Y; Belaud-Rotureau MA

**INSTITUCIÓN / INSTITUTION:** - CNRS - UMR 6290 (IGDR), Rennes 1 University - BIOSIT, 2 Ave du Pr L Bernard, 35042, Rennes, France; Cytogenetic and Cellular Biology Laboratory, CHU, Pontchaillou, 35043, Rennes, France.

**RESUMEN / SUMMARY:** - The partition-defective 3 (PAR-3) protein is implicated in the development and maintenance of cell polarity and is associated with proteins that mediate the changes in cytoskeleton organization required for cell polarity establishment. In this work, we used two original primary cell lines (R-180 and R-305) derived from clear cell Renal Cell Carcinoma (ccRCC) surgical specimens of a patient with unfavorable clinical course (R-180 cells) and a patient with favorable prognosis (R-305 cells) to identify genetic and molecular features that may explain the survival difference of the two patients. The cytogenetic analysis of these cell lines revealed that the PARD3 gene was amplified only in the R-180 cell line that was derived from an aggressive ccRCC. PARD3 gene amplification was associated with overexpression of the encoded protein and altered cytoskeleton organization. Consistently, PARD3 knockdown in R-180 cells restored the cytoskeleton organization and reduced cell migration in comparison to non-transfected cells. Immunohistochemical analysis of ccRCC samples from a cohort of 96 patients with a follow-up of 6 years revealed that PAR-3 overexpression was correlated with poor survival. Our results suggest that PAR-3 has a role in the clinical aggressiveness of ccRCC, possibly by promoting cell migration. © 2013 Wiley Periodicals, Inc.

[319]

**TÍTULO / TITLE:** - The prostate cancer risk stratification (ProCaRS) project: Recursive partitioning risk stratification analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Nov 11. pii: S0167-8140(13)00403-9. doi: 10.1016/j.radonc.2013.07.020.

●● Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.07.020](#)

**AUTORES / AUTHORS:** - Rodrigues G; Lukka H; Warde P; Brundage M; Souhami L; Crook J; Cury F; Catton C; Mok G; Martin AG; Vigneault E; Morris J; Warner A; Gonzalez Maldonado S; Pickles T

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, London Health Sciences Centre, Canada. Electronic address: [george.rodriques@lhsc.on.ca](mailto:george.rodriques@lhsc.on.ca).

**RESUMEN / SUMMARY:** - BACKGROUND: The Genitourinary Radiation Oncologists of Canada (GUROC) published a three-group risk stratification (RS) system to assist prostate cancer decision-making in 2001. The objective of this project is to use the ProCaRS database to statistically model the predictive accuracy and clinical utility of a proposed new multi-group RS schema. METHODS: The RS analyses utilized the ProCaRS database that consists of 7974 patients from four Canadian institutions. Recursive partitioning analysis (RPA) was utilized to explore the sub-stratification of groups defined by the existing three-group GUROC scheme. 10-fold cross-validated C-indices and the Net Reclassification Index were both used to assess multivariable models and compare the predictive accuracy of existing and proposed RS systems, respectively. RESULTS: The recursive partitioning analysis has suggested that the existing GUROC classification system could be altered to accommodate as many as six separate and statistical unique groups based on differences in BFFS (C-index 0.67 and AUC 0.70). GUROC low-risk patients would be divided into new favorable-low and low-risk groups based on PSA 6 and PSA >6. GUROC intermediate-risk patients can be subclassified into low-intermediate and high-intermediate groups. GUROC high-intermediate-risk is defined as existing GUROC intermediate-risk with PSA >=10 AND either T2b/c disease or T1T2a disease with Gleason 7. GUROC high-risk patients would be subclassified into an additional extreme-risk group (GUROC high-risk AND (positive cores 87.5% OR PSA >30)). CONCLUSIONS: Proposed RS subcategories have been identified by a RPA of the ProCaRS database.

[320]

**TÍTULO / TITLE:** - Alefacept Promotes Immunosuppression-Free Renal Allograft Survival in Nonhuman Primates via Depletion of Recipient Memory T Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Transplant. 2013 Dec;13(12):3223-9. doi: 10.1111/ajt.12500. Epub 2013 Oct 24.

●● [Enlace al texto completo \(gratis o de pago\) 1111/ajt.12500](#)

**AUTORES / AUTHORS:** - Lee S; Yamada Y; Tonsho M; Boskovic S; Nadazdin O; Schoenfeld D; Cappetta K; Atif M; Smith RN; Cosimi AB; Benichou G; Kawai T

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Transplant Center, Massachusetts General Hospital, Harvard Medical School, Boston, MA.

**RESUMEN / SUMMARY:** - Renal allograft tolerance has been achieved in MHC-mismatched primates via nonmyeloablative conditioning beginning 6 days prior to planned kidney and donor bone marrow transplantation (DBMT). To extend the applicability of this approach to deceased donor transplantation, we recently developed a novel-conditioning regimen, the "delayed protocol" in which donor bone marrow (DBM) is transplanted several months after kidney transplantation. However, activation/expansion of donor-reactive CD8(+) memory T cells (TMEM) occurring during the interval between kidney and DBM transplantation impaired tolerance induction using this strategy. In the current study, we tested whether, Alefacept, a

fusion protein which targets LFA-3/CD2 interactions and selectively depletes CD2(high) CD8(+) effector memory T cells (TEM) could similarly induce long-term immunosuppression-free renal allograft survival but avoid the deleterious effects of anti-CD8 mAb treatment. We found that Alefacept significantly delayed the expansion of CD2(high) cells including CD8(+) TEM while sparing naive CD8(+) T and NK cells and achieved mixed chimerism and long-term immunosuppression-free renal allograft survival. In conclusion, elimination of CD2(high) T cells represents a promising approach to prevent electively the expansion/activation of donor-reactive TEM and promotes tolerance induction via the delayed protocol mixed chimerism approach.

[321]

**TÍTULO / TITLE:** - Renal carcinomas associated with Xp11.2 translocations/TFE3 gene fusions: Findings on MRI and computed tomography imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Magn Reson Imaging. 2013 Oct 17. doi: 10.1002/jmri.24349.

•• [Enlace al texto completo \(gratis o de pago\) 1002/jmri.24349](#)

**AUTORES / AUTHORS:** - Liu K; Xie P; Peng W; Zhou Z

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, The Affiliated Suzhou Hospital of Nanjing Medical University, Suzhou, Jiangsu, China; Department of Radiology, Fudan University Shanghai Cancer Center; Department of Oncology, Shanghai Medical College, Fudan University, Shanghai, China.

**RESUMEN / SUMMARY:** - **PURPOSE:** To retrospectively analyze MRI and computed tomographic (CT) findings from renal carcinomas associated with Xp11.2 translocations/TFE3 gene fusions (Xp11-RCC). **MATERIALS AND METHODS:** Institutional review board permission was obtained to review patient medical records, and the requirement for informed consent was waved . The clinical and MRI/CT features of five cases with Xp11-RCC that were confirmed by pathology were analyzed retrospectively. The image characteristics included the lesion location and size, contribution of cystic and solid components, intratumoral necrosis or hemorrhage, invasion of perinephric tissue and renal sinus, lymphadenopathy, major venous or arterial vascular invasion, pattern of the tumor growth, intratumor calcification and lipids, homogeneity of SI on T2-weighted images, attenuation and SI of the mass with respect to the normal renal cortex on precontrast and contrasted CT/MRI images, tumor SIs, tumor attenuations and tumor-to-cortex indices, homogeneity of enhancement on the contrasted images. **RESULTS:** The mean age was 32 years (range, 15-47 years). Most patients (4/5) were women. All tumors showed a cortical location. The average tumor size was 9 cm (range, 4-18 cm). Four tumors comprised a predominantly solid lesion with focal necrosis, and one tumor comprised a solid lesion with significant necrosis. All tumors showed intertumor hemorrhage, infiltrative growth and invasion of the perirenal adipose/renal sinus. Four cases showed retroperitoneal lymphadenopathy, of which one case showed simultaneous mediastinal and supraclavicular lymphadenopathy. All tumors from four cases showed mild hyperintensity on T1-weighted MRI images, and three tumors showed hypointensity on T2-weighted MRI images relative to the renal cortex except for 1 tumor that showed significant hemorrhage and a relative hyperintensity. For 3 cases who were imaged with CT, two tumors imaged using nonenhanced CT images showed mild hyperdensity relative to the renal cortex. Calcification was noted in all three tumors. All tumors

showed mild, persistent enhancement. CONCLUSION: Typical Xp11-RCC manifests as an advanced, solid renal mass with mild persistent enhancement, a prevalence of intertumor hemorrhage/calcification, and a cortical epicenter location. The predilection for children and young adults is a useful clinical feature when confirming a diagnosis of Xp11-RCC. J. Magn. Reson. Imaging 2013;00:000-000. © 2013 Wiley Periodicals, Inc.

[322]

**TÍTULO / TITLE:** - Prostate Cancer Progression Correlates with Increased Humoral Immune Response to a Human Endogenous Retrovirus GAG Protein.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 15;19(22):6112-25. doi: 10.1158/1078-0432.CCR-12-3580. Epub 2013 Sep 30.

●● [Enlace al texto completo \(gratis o de pago\) 1158/1078-0432.CCR-12-](#)

[3580](#)

**AUTORES / AUTHORS:** - Reis BS; Jungbluth AA; Frosina D; Holz M; Ritter E; Nakayama E; Ishida T; Obata Y; Carver B; Scher H; Scardino PT; Slovin S; Subudhi SK; Reuter VE; Savage C; Allison JP; Melamed J; Jager E; Ritter G; Old LJ; Gnjatic S

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Ludwig Institute for Cancer Research, New York Branch at Memorial Sloan-Kettering Cancer Center; Departments of Surgery, Medicine, Pathology, Biostatistics, and Immunology, Memorial Sloan-Kettering Cancer Center; NYU Langone Medical Center, New York; Department of Immunology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama; RIKEN Bioresource Center, Tsukuba, Ibaraki, Japan; and Klinik für Onkologie und Hamatologie, Krankenhaus Nordwest, Frankfurt, Germany.

**RESUMEN / SUMMARY:** - PURPOSE: Human endogenous retroviruses (HERV) encode 8% of the human genome. While HERVs may play a role in autoimmune and neoplastic disease, no mechanistic association has yet been established. We studied the expression and immunogenicity of a HERV-K GAG protein encoded on chromosome 22q11.23 in relation to the clinical course of prostate cancer. EXPERIMENTAL DESIGN: In vitro expression of GAG-HERV-K was analyzed in panels of normal and malignant tissues, microarrays, and cell lines, and effects of demethylation and androgen stimulation were evaluated. Patient sera were analyzed for seroreactivity to GAG-HERV-K and other self-antigens by ELISA and seromics (protein array profiling). RESULTS: GAG-HERV-K expression was most frequent in prostate tissues and regulated both by demethylation of the promoter region and by androgen stimulation. Serum screening revealed that antibodies to GAG-HERV-K are found in a subset of patients with prostate cancer (33 of 483, 6.8%) but rarely in male healthy donors (1 of 55, 1.8%). Autoantibodies to GAG-HERV-K occurred more frequently in patients with advanced prostate cancer (29 of 191 in stage III-IV, 21.0%) than in early prostate cancer (4 of 292 in stages I-II, 1.4%). Presence of GAG-HERV-K serum antibody was correlated with worse survival of patients with prostate cancer, with a trend for faster biochemical recurrence in patients with antibodies to GAG-HERV-K. CONCLUSIONS: Preferential expression of GAG-HERV-K ch22q11.23 in prostate cancer tissue and increased frequency of autoantibodies observed in patients with advanced prostate cancer make this protein one of the first bona fide retroviral cancer antigens in humans, with potential as a biomarker for progression and

biochemical recurrence rate of prostate cancer. Clin Cancer Res; 19(22); 6112-25.  
©2013 AACR.

[323]

**TÍTULO / TITLE:** - Perioperative Outcomes Following Surgical Resection of Renal Cell Carcinoma with Inferior Vena Cava Thrombus Extending Above the Hepatic Veins: A Contemporary Multicenter Experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov 7. pii: S0302-2838(13)01102-0. doi: 10.1016/j.eururo.2013.10.029.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.eururo.2013.10.029](#)

**AUTORES / AUTHORS:** - Abel EJ; Thompson RH; Margulis V; Heckman JE; Merrill MM; Darwish OM; Krabbe LM; Boorjian SA; Leibovich BC; Wood CG

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Wisconsin School of Medicine and Public Health, Madison, WI, USA. Electronic address: [abel@urology.wisc.edu](mailto:abel@urology.wisc.edu).

**RESUMEN / SUMMARY:** - BACKGROUND: Surgery for renal cell carcinoma (RCC) patients with inferior vena cava (IVC) thrombus above the hepatic veins is technically complex and associated with an increased risk of perioperative morbidity and mortality. However, minimal data exist that describe contemporary perioperative outcomes at major referral centers or the prognostic factors associated with poor outcomes. OBJECTIVE: To determine the preoperative predictors of major complications and 90-d mortality after surgery in RCC patients who have IVC thrombus above the hepatic veins. DESIGN, SETTING, AND PARTICIPANTS: We reviewed medical records of all RCC patients who had IVC tumor thrombus above hepatic veins and had had surgery between January 2000 and December 2012 at the Mayo Clinic, M.D. Anderson Cancer Center, University of Texas Southwestern Medical Center, and the University of Wisconsin Hospital. OUTCOME MEASUREMENT AND STATISTICAL ANALYSIS: Major complications recorded were defined as  $\geq 3A$  according to the Clavien-Dindo system within 90 d of surgery. Univariate and multivariate analyses were used to evaluate associations of preoperative variables with risk of major complications or 90-d mortality. RESULTS AND LIMITATIONS: A total of 162 patients were identified for study (level 3, 4 in 69, 93 patients, respectively, according to the Neves classification). Cardiopulmonary bypass was used in 60 of 162 patients (37.5%), and 40 patients (24.7%) had preoperative angioembolization. Major complications were reported in 55 patients (34.0%), with the most common being respiratory, cardiac, and hematologic issues. After multivariate analysis, preoperative systemic symptoms and level 4 thrombus were independently associated with increased risk of major complications. Mortality was reported in 17 patients (10.5%) within 90 d after surgery. After multivariate analysis, Eastern Cooperative Oncology Group (ECOG) performance status (PS) and low serum albumin were preoperative factors independently associated with increased risk of 90-d mortality. CONCLUSIONS: Contemporary perioperative mortality and major complication rates for RCC patients who have upper-level thrombus are 10% and 34%, respectively. Patients who have ECOG PS  $>1$  or low serum albumin have increased risk for perioperative mortality.

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**TÍTULO / TITLE:** - N-acetyltransferase 2 Phenotype, Occupation, and Bladder Cancer Risk: Results from the EPIC Cohort.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov;22(11):2055-65. doi: 10.1158/1055-9965.EPI-13-0119-T. Epub 2013 Oct 3.

●● [Enlace al texto completo \(gratis o de pago\) 1158/1055-9965.EPI-13-0119-T](#)

**AUTORES / AUTHORS:** - Pesch B; Gawrych K; Rabstein S; Weiss T; Casjens S; Rihs HP; Ding H; Angerer J; Illig T; Klopp N; Bueno-de-Mesquita B; Ros MM; Kaaks R; Chang-Claude J; Roswall N; Tjonneland A; Overvad K; Clavel-Chapelon F; Boutron-Ruault MC; Dossus L; Boeing H; Weikert S; Trichopoulos D; Palli D; Sieri S; Tumino R; Panico S; Quiros JR; Gonzalez C; Sanchez MJ; Dorronsoro M; Navarro C; Barricarte A; Ljungberg B; Johansson M; Ulmert D; Ehrnstrom R; Khaw KT; Wareham N; Key TJ; Ferrari P; Romieu I; Riboli E; Bruning T; Vineis P

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Institute for Prevention and Occupational Medicine of the German Social Accident Insurance (IPA), Institute of the Ruhr University, Bochum; German Research Center for Environmental Health, Neuherberg; German Cancer Research Center (DKFZ), Heidelberg; Department of Epidemiology, German Institute of Human Nutrition (DIfE), Potsdam-Rehbrücke, Nuthetal; Department of Urology, University Hospital Charité, Berlin, Germany; The National Institute for Public Health and the Environment, Bilthoven; Department of Gastroenterology and Hepatology, University Medical Centre, Utrecht, the Netherlands; Danish Cancer Society Research Centre, Danish Cancer Society, Copenhagen; Department of Public Health, Institute of Epidemiology and Social Medicine, Aarhus, Denmark; INSERM, Centre for Research in Epidemiology and Population Health, Gustave Roussy Institute, Villejuif; Genetic Epidemiology Group; Nutritional Epidemiology Group, International Agency for Research on Cancer (IARC/WHO), Lyon, France; Harvard School of Public Health, Boston, Massachusetts; Academy of Athens; Hellenic Health Foundation, Greece; Molecular and Nutritional Epidemiology Unit, Cancer Research and Prevention Institute (ISPO), Florence; Epidemiology and Prevention Unit, National Cancer Institute (IRCCS), Milano; Cancer Registry and Histopathology Unit, "Civile - M.P. Arezzo" Hospital, ASP Ragusa; Department of Clinical and Experimental Medicine, Federico II University, Medical School, Naples; HuGeF Foundation, Torino, Italy; Public Health and Health Planning Directorate, Asturias; Department of Epidemiology, Catalan Institute of Oncology, Barcelona; Andalusian School of Public Health; Consortium for Biomedical Research in Epidemiology and Public Health (CIBERESP), Granada; Public Health Division of Gipuzkoa, Basque Regional Health Department, San Sebastian; Department of Epidemiology, Murcia Regional Health Authority, Murcia; Navarra Public Health Institute, Consortium for Biomedical Research

**RESUMEN / SUMMARY:** - BACKGROUND: An association between N-acetyltransferase 2 (NAT2) slow acetylation and bladder cancer has been consistently observed in epidemiologic studies. However, evidence has been mainly derived from case-control studies and was sparse from cohort studies. We evaluated the association between NAT2 slow acetylation and bladder cancer in a case-control study nested in the European Prospective Investigation into Cancer and Nutrition. METHODS: Exposure to aromatic amines and polycyclic aromatic hydrocarbons (PAH) could be

assessed for 754 cases and 833 controls for whom occupational information was documented. A semiquantitative job-exposure matrix was applied to at-risk occupations to estimate the exposure as low, medium, or high based on tertiles of the distribution of the exposure score in controls. Using a comprehensive genotyping, NAT2 acetylation status could be categorized from 6-single-nucleotide polymorphism genotypes as slow or fast in 607 cases and 695 controls with DNA from archived blood samples. RESULTS: Occupational exposure to aromatic amines and PAH was associated with an increased bladder cancer risk [upper tertile of the distribution of the exposure score: OR = 1.37; 95% confidence interval (CI), 1.02-1.84, and OR = 1.50; 95% CI, 1.09-2.05, respectively]. NAT2 slow acetylation did not modify these risk estimates and was not itself associated with bladder cancer risk (OR = 1.02; 95% CI, 0.81-1.29). CONCLUSIONS: These findings confirm established or suspected occupational risk factors but not the anticipated role of NAT2 slow acetylation in bladder cancer. No interaction was detected between NAT2 and any exposure of interest, including smoking. IMPACT: Genetic testing for NAT2 would be inappropriate in occupational settings. Cancer Epidemiol Biomarkers Prev; 22(11); 2055-65. ©2013 AACR.

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**TÍTULO / TITLE:** - Decreased c-Abl activity in PC-3 and LNCaP prostate cancer cells overexpressing the early growth response-1 protein.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2014 Jan;31(1):422-7. doi: 10.3892/or.2013.2829. Epub 2013 Oct 31.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2829](#)

**AUTORES / AUTHORS:** - Parra E; Ferreira J; Gutierrez L

**INSTITUCIÓN / INSTITUTION:** - Laboratory of Experimental Biomedicine, University of Tarapaca, Campus Esmeralda, Iquique, Chile.

**RESUMEN / SUMMARY:** - Early growth response-1 (Egr-1) and the nonreceptor protein tyrosine kinase (c-Abl) are 2 response genes that can act as regulators of cell growth and apoptosis in response to stress. Both Egr-1 and c-Abl regulate cell proliferation and survival in different types of cancer cells. To study the effect of overexpression of EGR-1 on the activity of c-Abl in prostate cancer cells, human PC-3 and LNCaP cells were transfected with a control vector or a vector containing the murine Egr-1 cDNA and assessed for the expression of the c-Abl gene. Cells overexpressing Egr-1 were studied with respect to apoptosis (Annexin V)/DEVDase activity, Egr-1/c-Abl activation (western blotting) and cell proliferation (MTT assay). The cells were exposed to tumor necrosis factor alpha (TNF-alpha), a known inducer of Egr-1, to c-Abl inhibitor STI-571 and to small interfering RNA (siRNA)-Egr-1, respectively. The results from our studies strongly suggest that overexpression of Egr-1 decreased c-Abl activity independent of endogenous Egr-1 inhibition by siRNA-Egr-1.

[326]

**TÍTULO / TITLE:** - Tumor necrosis factor-like weak inducer of apoptosis (TWEAK) and kidney disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Opin Nephrol Hypertens. 2013 Nov 19.

- Enlace al texto completo (gratis o de pago)

[1097/01.mnh.0000437331.23794.81](https://doi.org/10.1097/01.mnh.0000437331.23794.81)

**AUTORES / AUTHORS:** - Ruiz-Ortega M; Ortiz A; Ramos AM

**INSTITUCIÓN / INSTITUTION:** - aIIS-Fundacion Jimenez Diaz bREDinREN  
cUniversidad Autonoma de Madrid dIRSIN, Madrid, España.

**RESUMEN / SUMMARY:** - PURPOSE OF REVIEW: The tumor necrosis factor-like weak inducer of apoptosis (TWEAK) cytokine has been linked to kidney injury by functional studies in experimental animals, and has biomarker potential in kidney disease. RECENT FINDINGS: TWEAK was known to promote tubular cell injury and kidney inflammation. Recent studies have expanded these observations, identifying additional targets of TWEAK relevant to kidney injury. Thus, TWEAK upregulates the chemokine and cholesterol scavenger receptor CXCL16 and downregulates the antiaging and antifibrotic molecule Klotho in tubular cells. Furthermore, fibrogenic TWEAK actions on renal fibroblasts were described. TWEAK or factor-inducible molecule 14 targeting decreased the kidney fibrosis resulting from immune and nonimmune kidney injury induced by transient tubular or glomerular insults or by persistent urinary tract obstruction. TWEAK might also contribute to the link between chronic kidney disease and kidney cancer, as suggested by its role in other genitourinary cancers. Progress has also been made in TWEAK targeting. A phase I clinical trial showed that TWEAK targeting is well tolerated in humans, and an ongoing trial is exploring efficacy in lupus nephritis. Nanomolecules and inhibitors of epidermal growth factor receptor pathway may also protect from the adverse effects of TWEAK in the kidney. SUMMARY: These findings suggest that TWEAK targeting has clinical potential in kidney injury of immune and nonimmune origin.

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**TÍTULO / TITLE:** - Parity and Kidney Cancer Risk: Evidence from Epidemiologic Studies.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov 12.

- Enlace al texto completo (gratis o de pago) [1158/1055-9965.EPI-13-](https://doi.org/10.1158/1055-9965.EPI-13-0759-T)

[0759-T](#)

**AUTORES / AUTHORS:** - Guan HB; Wu QJ; Gong TT

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Department of Obstetrics and Gynecology, Shengjing Hospital, China Medical University, Shenyang; Department of Epidemiology; and State Key Laboratory of Oncogene and Related Genes, Shanghai Cancer Institute, Renji Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, China.

**RESUMEN / SUMMARY:** - BACKGROUND: Observational studies have reported conflicting results between parity and kidney cancer risk. To our knowledge, a comprehensive and quantitative assessment of the association between parity and kidney cancer has not been reported. Thus, we conducted a systematic review and dose-response meta-analysis of published epidemiologic studies to summarize the evidence of this association. METHODS: Relevant published studies of parity and kidney cancer were identified using MEDLINE (PubMed) database through end of June 2013. Two authors independently assessed eligibility and extracted data. Six prospective and eight case-control studies reported relative risk (RR) estimates and

95% confidence intervals (CI) of kidney cancer associated with parity or parity number. Fixed- or random-effects models were used to estimate summary relative risk. RESULTS: The summary relative risk of kidney cancer for the parity versus nulliparous was 1.23 (95% CI, 1.10-1.36; Q = 12.41; P = 0.413; I<sup>2</sup> = 3.3%). In addition, significant association was also found for the highest versus lowest parity number, with summary RR = 1.36 (95% CI, 1.19-1.56; Q = 8.24; P = 0.766; I<sup>2</sup> = 0%). In the dose-response analysis, the summary per one live birth relative risk was 1.08 (95% CI: 1.05-1.10; Q = 9.34; P = 0.500; I<sup>2</sup> = 0%), also indicating the positive effect of parity on kidney cancer risk. No evidence of publication bias and significant heterogeneity between subgroups was detected by meta-regression analyses. CONCLUSIONS: In summary, findings from this meta-analysis suggest that ever parity and higher parity number is significantly associated with increased risk of kidney cancer. IMPACT: The present results suggest a positive association between parity and kidney cancer risk. Cancer Epidemiol Biomarkers Prev; 1-9. ©2013 AACR.

[328]

**TÍTULO / TITLE:** - Androgen receptor is negatively correlated with the methylation-mediated transcriptional repression of miR-375 in human prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2014 Jan;31(1):34-40. doi: 10.3892/or.2013.2810. Epub 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2810](#)

**AUTORES / AUTHORS:** - Chu M; Chang Y; Li P; Guo Y; Zhang K; Gao W

**INSTITUCIÓN / INSTITUTION:** - State Key Laboratory of Oncogenes and Related Genes, Stem Cell Research Center, Ren Ji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai 200127, P.R. China.

**RESUMEN / SUMMARY:** - Androgen receptor (AR) plays a critical role during the development and progression of prostate cancer in which microRNA miR-375 is overexpressed and correlated with tumor progression. Although DNA methylation is a key mechanism for the repression of gene expression, the relationship between AR and the expression or the hypermethylation of miR-375 is unknown. In this study, we found that AR-positive prostate cancer (PCa) cells showed high expression levels and hypomethylation of the miR-375. In contrast, AR-negative PCa cells displayed low levels and hypermethylation of the miR-375. Addition of 5-Aza-2'-deoxycytidine, a specific inhibitor of DNA methylation, into the culture medium reversed the low expression levels of miR-375 in the AR negative PCa cells. In addition, the total activity levels of DNA methyltransferases (DNMTs) were high in AR-negative PCa cells, in which hypermethylation of miR-375 promoter and low expression levels of miR-375 were observed. Taken together, these findings indicate that the negative correlation between AR and total DNMT activity is one of mechanisms to influence the methylation status of miR-375 promoter, which in turn regulates the expression of miR-375.

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**TÍTULO / TITLE:** - Does the width of the surgical margin of safety or premalignant dermatoses at the negative surgical margin affect outcome in surgically treated penile cancer?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Pathol. 2013 Oct 7. doi: 10.1136/jclinpath-2013-201911.

●● Enlace al texto completo (gratis o de pago) [1136/jclinpath-2013-201911](#)

**AUTORES / AUTHORS:** - Gunia S; Koch S; Jain A; May M

**INSTITUCIÓN / INSTITUTION:** - Institutes of Pathology at the Johanniter Hospital Stendal, Stendal, Germany.

**RESUMEN / SUMMARY:** - **AIMS:** To evaluate the prognostic impact of the width of negative surgical margins (NSM) and associated and preinvasive lesions at the NSM in patients with penile squamous cell cancer (PSC). **METHODS:** Enrolling 87 patients with NSM who underwent surgery for PSC, the archived margin slides and entirely wax-embedded surgical margins were retrieved from the pathology files. After step sections were cut, margins were stained with antibodies against CK5/6, p16, p53 and Ki-67 and subjected to in situ hybridisation for high-risk human papillomavirus (HPV). All NSM were histologically examined for squamous hyperplasia (SH), lichen sclerosis (LS) and subtypes of penile intraepithelial neoplasia (PeIN). Then, histological findings were correlated with cancer-specific mortality (CSM, median follow-up 34 months; IQR 6-70). **RESULTS:** All NSM were negative for high-risk HPV and exhibited SH (p16 and p53 negative, Ki-67 variably positive), LS (p16 negative, variable p53 and Ki-67 positivity) and differentiated PeIN (dPeIN; p16 negative, Ki-67 positive, variable p53 positivity) in 28 (32%), 30 (34%) and 22 (25%) cases, respectively, whereas PeIN subtypes other than dPeIN did not occur. Pathological tumour stage was the only independent predictive parameter with respect to CSM in the multivariable analysis (p=0.001). **CONCLUSIONS:** SH, LS and dPeIN are frequent histological findings at the NSM of surgically treated PSC. However, neither the width of the NSM nor dPeIN, LS or SH at the NSM influences prognostic outcome.

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**TÍTULO / TITLE:** - No improvement noted in overall or cause-specific survival for men presenting with metastatic prostate cancer over a 20-year period.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Nov 20. doi: 10.1002/cncr.28485.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28485](#)

**AUTORES / AUTHORS:** - Wu JN; Fish KM; Evans CP; Devere White RW; Dall'era MA  
**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of California at Davis, Davis Medical Center, Sacramento, California.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Prostate cancer mortality in the United States has declined by nearly 40% over the last 25 years. However, to the authors' knowledge, the contribution of prostate-specific antigen (PSA) screening for the early detection of prostate cancer remains unclear and controversial. In the current study, the authors attempted to determine whether improvements in survival over time among patients with metastatic prostate cancer have contributed to the decline in mortality. **METHODS:** Men aged  $\geq 45$  years who presented with de novo metastatic prostate cancer from 1988 to 2009 were identified within the California Cancer Registry. Overall survival and disease-specific survival were estimated using the Kaplan-Meier method.

A multivariate analysis with Cox proportional hazards modeling was performed to adjust for different distributions of variables between groups. RESULTS: A total of 19,336 men presented with de novo metastatic prostate cancer during the study period. On multivariate analysis, overall survival was found to be better for men diagnosed from 1988 through 1992 and 1993 through 1998 than for men diagnosed in the most recent era (hazards ratio, 0.78; 95% confidence interval, 0.72-0.85 [P < .001] and HR, 0.79; 95% confidence interval, 0.74-0.86 [P < .001]). There was no improvement in disease-specific survival observed when comparing the most contemporary men (those diagnosed between 2004 and 2009) with those diagnosed between 1988 and 1997. CONCLUSIONS: In this analysis of men presenting with de novo metastatic prostate cancer, no consistent improvement in overall or disease-specific survival could be demonstrated over time. These data suggest that improvements in survival for patients with advanced disease have not contributed substantially to the observed drop in prostate cancer mortality over the PSA era and that stage migration secondary to PSA screening plays a more prominent role. Cancer 2013. Esta es una cita bibliográfica que va por delante de la publicación en papel. La fecha indicada en la cita provista, NO corresponde con la fecha o la cita bibliográfica de la publicación en papel. La cita bibliográfica definitiva (con el volumen y su paginación) saldrá en 1 ó 2 meses a partir de la fecha de la emisión electrónica-online. \*\*\* This is a bibliographic record ahead of the paper publication. The given date in the bibliographic record does not correspond to the date or the bibliographic citation on the paper publication. The publisher will provide the final bibliographic citation (with the volume, and pagination) within 1 or 2 months from the date the record was published online. © 2013 American Cancer Society.

[331]

**TÍTULO / TITLE:** - Quality of life and toxicity from passively scattered and spot-scanning proton beam therapy for localized prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Oncol Biol Phys. 2013 Dec 1;87(5):946-53. doi: 10.1016/j.ijrobp.2013.08.032. Epub 2013 Oct 15.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.ijrobp.2013.08.032](#)

**AUTORES / AUTHORS:** - Pugh TJ; Munsell MF; Choi S; Nguyen QN; Mathai B; Zhu XR; Sahoo N; Gillin M; Johnson JL; Amos RA; Dong L; Mahmood U; Kuban DA; Frank SJ; Hoffman KE; McGuire SE; Lee AK

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, University of Texas MD Anderson Cancer Center, Houston, Texas.

**RESUMEN / SUMMARY:** - PURPOSE: To report quality of life (QOL)/toxicity in men treated with proton beam therapy for localized prostate cancer and to compare outcomes between passively scattered proton therapy (PSPT) and spot-scanning proton therapy (SSPT). METHODS AND MATERIALS: Men with localized prostate cancer enrolled on a prospective QOL protocol with a minimum of 2 years' follow-up were reviewed. Comparative groups were defined by technique (PSPT vs SSPT). Patients completed Expanded Prostate Cancer Index Composite questionnaires at baseline and every 3-6 months after proton beam therapy. Clinically meaningful differences in QOL were defined as  $\geq 0.5$  x baseline standard deviation. The cumulative incidence of modified Radiation Therapy Oncology Group grade  $\geq 2$

gastrointestinal (GI) or genitourinary (GU) toxicity and argon plasma coagulation were determined by the Kaplan-Meier method. RESULTS: A total of 226 men received PSPT, and 65 received SSPT. Both PSPT and SSPT resulted in statistically significant changes in sexual, urinary, and bowel Expanded Prostate Cancer Index Composite summary scores. Only bowel summary, function, and bother resulted in clinically meaningful decrements beyond treatment completion. The decrement in bowel QOL persisted through 24-month follow-up. Cumulative grade  $\geq 2$  GU and GI toxicity at 24 months were 13.4% and 9.6%, respectively. There was 1 grade 3 GI toxicity (PSPT group) and no other grade  $\geq 3$  GI or GU toxicity. Argon plasma coagulation application was infrequent (PSPT 4.4% vs SSPT 1.5%;  $P=.21$ ). No statistically significant differences were appreciated between PSPT and SSPT regarding toxicity or QOL. CONCLUSION: Both PSPT and SSPT confer low rates of grade  $\geq 2$  GI or GU toxicity, with preservation of meaningful sexual and urinary QOL at 24 months. A modest, yet clinically meaningful, decrement in bowel QOL was seen throughout follow-up. No toxicity or QOL differences between PSPT and SSPT were identified. Long-term comparative results in a larger patient cohort are warranted.

[332]

**TÍTULO / TITLE:** - Inhibition of PARP1 by small interfering RNA enhances docetaxel activity against human prostate cancer PC3 cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Biophys Res Commun. 2013 Nov 15. pii: S0006-291X(13)01909-8. doi: 10.1016/j.bbrc.2013.11.027.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbrc.2013.11.027](http://1016/j.bbrc.2013.11.027)

**AUTORES / AUTHORS:** - Wu W; Kong Z; Duan X; Zhu H; Li S; Zeng S; Liang Y; Iliakis G; Gui Z; Yang D

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Minimally Invasive Surgery Center, The First Affiliated Hospital of Guangzhou Medical University, Guangdong Key Laboratory of Urology, China. Electronic address: [wwgwml@163.com](mailto:wwgwml@163.com).

**RESUMEN / SUMMARY:** - Though poly(ADP-ribose) polymerase 1 (PARP1) inhibitors have benefits in combination with radiotherapy in prostate cancers, few is known about the exactly role and underlying mechanism of PARP1 in combination with chemotherapy agents. Here our data revealed that inhibition of PARP1 by small interfering RNA (siRNA) could enhance docetaxel's activity against PC3 cells, which is associated with an accelerate repression of EGF/Akt/FOXO1 signaling pathway. Our results provide a novel role of PARP1 in transcription regulation of EGFR/Akt/FOXO1 signaling pathway and indicate that PARP1 siRNA combined with docetaxel can be an innovative treatment strategy to potentially improve outcomes in CRPC patients.

[333]

**TÍTULO / TITLE:** - Interleukin-30 expression in prostate cancer and its draining lymph nodes correlates with advanced grade and stage.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-](http://1158/1078-0432.CCR-13-2240)

[2240](#)

**AUTORES / AUTHORS:** - Di Meo S; Airoidi I; Sorrentino C; Zorzoli A; Esposito S; Di Carlo E

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine and Science of Aging, G. d'Annunzio University.

**RESUMEN / SUMMARY:** - PURPOSE: The IL-27 cytokine subunit p28, also called IL-30, has been recognized as novel immunoregulatory mediator endowed with its own functions. These are currently the subject of discussion in immunology, but completely unexplored in cancer biology. We set out to investigate IL-30's role in prostate carcinogenesis and its effects on human (h) prostate cancer (PCa) cells. EXPERIMENTAL DESIGN: IL-30 expression, as visualized by immunohistochemistry and real-time RT-PCR on prostate and draining lymph nodes from 125 PCa patients, was correlated with clinico-pathological data. IL-30 regulation of hPCa cell viability and expression of selected gene clusters was tested by flow cytometry and PCR Array. RESULTS: IL-30, absent in normal prostatic epithelia, was expressed by cancerous epithelia with Gleason  $\geq 7$  of 21.3% of PCa stage I-III and 40.9% of PCa stage IV. IL-30 expression by Tumor Infiltrating Leukocytes (T-ILK) was higher in stage IV than in stage I-III PCa ( $P=0.0006$ ) or in control tissue ( $P=0.0011$ ). IL-30 expression in prostate draining Lymph Nodes (LN)-ILK was higher in stage IV than in stage I-III PCa ( $P=0.0031$ ) or in control nodes ( $P=0.0023$ ). The main IL-30 sources were identified as CD68+macrophages, CD33+/CD11b+myeloid cells and CD14+monocytes. In vitro, IL-30 stimulated proliferation of hPCa cells and also down-regulated CCL16/LEC, TNFSF14/LIGHT, Chemokine-like-factor/CKLF and particularly CKLF-like MARVEL transmembrane-domain-containing-3/CMTM3 and greatly up-regulated ChemR23/CMKLR. CONCLUSIONS: We provide the first evidence that IL-30 is implicated in PCa progression since I) its expression by PCa or T- and LN-ILK correlates with advanced disease grade and stage, and II) IL-30 exerts pro-tumor activity in hPCa cells.

[334]

**TÍTULO / TITLE:** - Long-term trends in incidence, survival and mortality of primary penile cancer in England.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Causes Control. 2013 Dec;24(12):2169-76. doi: 10.1007/s10552-013-0293-y. Epub 2013 Oct 8.

●● Enlace al texto completo (gratis o de pago) [1007/s10552-013-0293-y](#)

**AUTORES / AUTHORS:** - Arya M; Li R; Pegler K; Sangar V; Kelly JD; Minhas S; Muneer A; Coleman MP

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University College Hospital, London, UK, [manit\\_arya@hotmail.com](mailto:manit_arya@hotmail.com).

**RESUMEN / SUMMARY:** - PURPOSE: Few population-based studies exist of long-term trends in penile cancer. We report incidence and mortality trends in England over the 31 years 1979-2009 and survival trends over the 40 years 1971-2010. METHODS: We calculated annual incidence and mortality rates per 100,000 by age and calendar period. We estimated incidence and mortality rate ratios for cohorts born since 1890, and one- and five-year relative survival (%) by age and deprivation category. RESULTS: A total of 9,690 men were diagnosed with penile cancer during 1979-2009. Age-standardized incidence rates increased by 21 %, from 1.10 to 1.33 per 100,000.

Mortality rates fell by 20 % after 1994, from 0.39 to 0.31 per 100,000. Survival analyses included 11,478 men diagnosed during 1971-2010. Five-year relative survival increased from 61.4 to 70.2 %. Five-year survival for men diagnosed 2006-2010 was 77 % for men aged under 60 years and 53 % for men aged 80-99 years. The 8 % difference in five-year survival (66-74 %) between men in the most affluent and most deprived groups was not statistically significant. CONCLUSIONS: The 21 % increase in penile cancer incidence in England since the 1970s may be explained by changes in sexual practice, greater exposure to sexually transmitted oncogenic human papilloma viruses, and decreasing rates of childhood circumcision. Improvement in survival is likely due to advances in diagnostic, staging and surgical techniques. There is a need for public health education and potential preventative strategies to address the increasing incidence.

[335]

**TÍTULO / TITLE:** - Body mass and smoking are modifiable risk factors for recurrent bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Oct 10. doi: 10.1002/cncr.28394.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28394](#)

**AUTORES / AUTHORS:** - Wyszynski A; Tanyos SA; Rees JR; Marsit CJ; Kelsey KT; Schned AR; Pendleton EM; Celaya MO; Zens MS; Karagas MR; Andrew AS

**INSTITUCIÓN / INSTITUTION:** - Department of Community and Family Medicine, Section of Biostatistics and Epidemiology, Geisel School of Medicine at Dartmouth, Lebanon, New Hampshire; Program in Experimental and Molecular Medicine, Department of Pharmacology and Toxicology, Geisel School of Medicine at Dartmouth, Hanover, New Hampshire.

**RESUMEN / SUMMARY:** - BACKGROUND: In the Western world, bladder cancer is the fourth most common cancer in men and the eighth most common in women. Recurrences frequently occur, and continued surveillance is necessary to identify and treat recurrent tumors. Efforts to identify risk factors that are potentially modifiable to reduce the rate of recurrence are needed. METHODS: Cigarette smoking behavior and body mass index were investigated at diagnosis for associations with bladder cancer recurrence in a population-based study of 726 patients with bladder cancer in New Hampshire, United States. Patients diagnosed with non-muscle invasive urothelial cell carcinoma were followed to ascertain long-term prognosis. Analysis of time to recurrence was performed using multivariate Cox regression models. RESULTS: Smokers experienced shorter time to recurrence (continuing smoker hazard ratio [HR] = 1.51, 95% confidence interval [CI] = 1.08-2.13). Although being overweight (body mass index > 24.9 kg/m<sup>2</sup>) at diagnosis was not a strong independent factor (HR = 1.33, 95% CI = 0.94-1.89), among continuing smokers, being overweight more than doubled the risk of recurrence compared to smokers of normal weight (HR = 2.67, 95% CI = 1.14-6.28). CONCLUSIONS: These observational results suggest that adiposity is a risk factor for bladder cancer recurrence, particularly among tobacco users. Future intervention studies are warranted to evaluate whether both smoking cessation and weight reduction strategies reduce bladder tumor recurrences. Cancer 2013. © 2013 American Cancer Society.

[336]

**TÍTULO / TITLE:** - A novel resveratrol analogue, HS-1793, inhibits hypoxia-induced HIF-1alpha and VEGF expression, and migration in human prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2013 Dec;43(6):1915-24. doi: 10.3892/ijo.2013.2116. Epub 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2116](#)

**AUTORES / AUTHORS:** - Kim DH; Hossain MA; Kim MY; Kim JA; Yoon JH; Suh HS; Kim GY; Choi YH; Chung HY; Kim ND

**INSTITUCIÓN / INSTITUTION:** - Department of Pharmacy, Molecular Inflammation Research Center for Aging Intervention, Pusan National University, Busan 609-735, Republic of Korea.

**RESUMEN / SUMMARY:** - In many studies, resveratrol has been shown to have a chemopreventive effect in various types of cancer cells. However, the biological activity of resveratrol is limited by its photosensitivity and metabolic instability. This study investigated the effects of a novel analogue of resveratrol, HS-1793, on the expression of HIF-1alpha and vascular endothelial growth factor (VEGF) in PC-3 human prostate cancer cells. Hypoxic condition induced HIF-1alpha protein level in PC-3 cells in a time-dependent manner, and treatment with HS-1793 markedly decreased HIF-1alpha expression levels. HS-1793 also inhibited VEGF level. Mechanistically, HS-1793 inhibited HIF-1alpha and VEGF expression through multiple mechanisms. Firstly, HS-1793 inhibited phosphorylation of PI3K and Akt in PC-3 cells. Furthermore, HS-1793 substantially induced HIF-1alpha protein degradation through the proteasome pathway. Finally, HS-1793 inhibited hypoxia-induced PC-3 cell migration. These data suggest that HS-1793 may inhibit human prostate cancer progression and angiogenesis by inhibiting the expression of HIF-1alpha and VEGF. Moreover, HS-1793 showed more potent effects than resveratrol on the cytotoxic effects on PC-3 cells. Taken together, these results implied that HS-1793, a novel analogue of resveratrol, may be a new potent chemopreventive agent against human prostate cancer cells.

[337]

**TÍTULO / TITLE:** - Survival After Diagnosis of Localized T1a Kidney Cancer: Current Population-based Practice of Surgery and Nonsurgical Management.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 16. pii: S0090-4295(13)01260-0. doi: 10.1016/j.urology.2013.08.088.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.088](#)

**AUTORES / AUTHORS:** - Patel HD; Kates M; Pierorazio PM; Hyams ES; Gorin MA; Ball MW; Bhayani SB; Hui X; Thompson CB; Allaf ME

**INSTITUCIÓN / INSTITUTION:** - James Buchanan Brady Urological Institute, Johns Hopkins Medical Institutions, Baltimore, MD; Center for Surgical Trials and Outcomes Research, Department of Surgery, Johns Hopkins Medical Institutions, Baltimore, MD; Biostatistics Department, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. Electronic address: [hitenpatel@jhmi.edu](mailto:hitenpatel@jhmi.edu).

**RESUMEN / SUMMARY:** - OBJECTIVE: To compare overall and cancer-specific survival (CSS) of patients who undergo nonsurgical management (NSM), partial

nephrectomy (PN), and radical nephrectomy (RN). NSM is being increasingly used for older patients with early-stage kidney cancer and competing risks of death. However, survival is poorly characterized for this approach compared with surgery with PN or RN. METHODS: The Surveillance, Epidemiology and End Results-Medicare database from 1995 to 2007 was used to identify patients aged 65 years or older diagnosed with localized T1a kidney cancer treated with PN, RN, or NSM. We used Cox proportional hazards regression, Fine and Gray competing risks regression, and propensity score matching to adjust for patient and tumor characteristics. RESULTS: Of 7177 Medicare beneficiaries meeting the inclusion criteria, 754 (10.5%) underwent NSM, 1849 (25.8%) PN, and 4574 (63.7%) RN, with 436 (57.8%), 389 (21.0%), and 1598 (34.9%) patients dying from any cause, respectively, at a median follow-up of 56 months. Overall survival favored PN and RN compared with NSM (hazard ratio [95% CI]: 0.40 [0.34-0.46] and 0.50 [0.45-0.56], respectively) as did CSS (hazard ratio [95% CI]: 0.42 [0.27-0.64] and 0.62 [0.46-0.85], respectively). However, there was no difference in CSS between any 2 treatment groups for younger patients (<75 years), whereas there was an excess of kidney cancer deaths for NSM patients aged 75-79 years and an attenuated difference for patients aged 80 years or older. CONCLUSION: NSM was associated with an increased risk of kidney cancer death among Medicare beneficiaries aged 75-79 years. Evolving active surveillance protocols will need to develop robust selection criteria to maximize cancer survival for older patients with kidney cancer.

[338]

**TÍTULO / TITLE:** - The gastrin/cholecystokinin-B receptor on prostate cells - A novel target for bifunctional prostate cancer imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Pharm Sci. 2013 Nov 6;52C:69-76. doi: 10.1016/j.ejps.2013.10.013.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejps.2013.10.013](#)

**AUTORES / AUTHORS:** - Sturzu A; Klose U; Sheikh S; Echner H; Kalbacher H; Deeg M; Nagele T; Schwentner C; Ernemann U; Heckl S

**INSTITUCIÓN / INSTITUTION:** - Department of Neuroradiology, University of Tübingen, Germany; Peptide Synthesis Laboratory, Interfaculty Institute of Biochemistry, University of Tübingen, Germany. Electronic address: [alexsturzu@yahoo.de](mailto:alexsturzu@yahoo.de).

**RESUMEN / SUMMARY:** - The means of identifying prostate carcinoma and its metastases are limited. The contrast agents used in magnetic resonance imaging clinical diagnostics are not taken up into the tumor cells, but only accumulate in the interstitial space of the highly vasculated tumor. We examined the gastrin/cholecystokinin-B receptor as a possible target for prostate-specific detection using the C-terminal seven amino acid sequence of the gastrin peptide hormone. The correct sequence and a scrambled control sequence were coupled to the fluorescent dye rhodamine and the magnetic resonance imaging contrast agent gadolinium (Gd)-1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid (DOTA). Expression analysis of the gastrin receptor mRNA was performed by reverse transcriptase polymerase chain reaction on PC3 prostate carcinoma cells, U373 glioma, U2OS osteosarcoma and Colo205 colon carcinoma cells. After having confirmed elevated expression of gastrin receptor in PC3 cells and very low expression of the receptor in Colo205 cells,

these two cell lines were used to create tumor xenografts on nude mice for in vivo experiments. Confocal lasers scanning microscopy and magnetic resonance imaging showed a high specificity of the correct conjugate for the PC3 xenografts. Staining of the PC3 xenografts was much weaker with the scrambled conjugate while the Colo205 xenografts showed no marked staining with any of the conjugates. In vitro experiments comparing the correct and scrambled conjugates on PC3 cells by magnetic resonance relaxometry and fluorescence-activated cell sorting confirmed markedly higher specificity of the correct conjugate. The investigations show that the gastrin receptor is a promising tumor cell surface target for future prostate-cancer-specific imaging applications.

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[339]

**TÍTULO / TITLE:** - Malignancy-related mortality following kidney transplantation is common.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Kidney Int. 2013 Nov 20. doi: 10.1038/ki.2013.458.

●● [Enlace al texto completo \(gratis o de pago\) 1038/ki.2013.458](#)

**AUTORES / AUTHORS:** - Farrugia D; Mahboob S; Cheshire J; Begaj I; Khosla S; Ray D; Sharif A

**INSTITUCIÓN / INSTITUTION:** - Department of Nephrology and Transplantation, Renal Institute of Birmingham, Queen Elizabeth Hospital, Birmingham, UK.

**RESUMEN / SUMMARY:** - There is a paucity of studies describing malignancy-related mortality after kidney transplantation. To help quantify this, we extracted data for all kidney-alone transplant procedures performed in England between April 2001 and March 2012. Data linkage analysis was performed between Hospital Episode Statistics and the Office for National Statistics to identify all deaths occurring in this cohort. Among 19,103 kidney transplant procedures analyzed (median follow-up 4.4 years), 2085 deaths occurred, of which 376 (18.0%) were due to malignancy (crude mortality rate 361 malignancy-related deaths per 100,000 person-years). Common sites of malignancy-related death were lymphoma (18.4%), followed by lung (17.6%) and renal (9.8%), with 14.1% unspecified. The risk of malignancy-related death increased with age: under 50 (0.8%), 50-59 (2.5%), 60-69 (4.8%), 70-79 (6.5%) and over 80 years (9.1%). Age- and gender-stratified malignancy-related mortality risk difference was higher in the transplant compared with the general population. Cox proportional hazard models identified increased age, pretransplant history of malignancy and deceased-donor kidney transplantation to be independently associated with risk for post-transplant death from malignancy. Thus, malignancy as a cause of post-kidney transplantation death is common and requires heightened surveillance. Kidney International advance online publication, 20 November 2013; doi:10.1038/ki.2013.458.

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[340]

**TÍTULO / TITLE:** - Survival Outcomes after Radical and Partial Nephrectomy for Clinical T2 Renal Tumors Categorized by RENAL Nephrometry Score.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 26. doi: 10.1111/bju.12580.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12580](#)

**AUTORES / AUTHORS:** - Kopp RP; Mehrazin R; Palazzi KL; Liss MA; Jabaji R; Mirheydar HS; Lee HJ; Patel N; Elkhoury F; Patterson AL; Derweesh IH

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, UC San Diego Health System, La Jolla, California, USA.

**RESUMEN / SUMMARY:** - OBJECTIVE: We evaluated survival outcomes of PN and RN for clinical T2 renal masses (cT2RM) controlling for RENAL score. PATIENTS AND METHODS: Two-center study of 202 patients with cT2RM who underwent RN (122) or PN (80) between 7/2002-6/2012 (median follow-up 41.5 months). Kaplan-Meier analysis compared overall survival (OS), cancer specific survival (CSS) and progression free survival (PFS) among entire cohort and within categories of RENAL score  $\geq 10$  and  $< 10$ . Association between procedure and PFS and OS was analyzed using Cox-proportional Hazard. RESULTS: No significant differences between PN and RN existed in clinical T stage and RENAL nephrometry. For RN and PN, Five year-PFS was 69.8%/79.9% ( $p=0.115$ ), CSS 82.5%/86.7% ( $p=0.407$ ), and OS 80%/83.3% ( $p=0.291$ ). Cox regression demonstrated no association between RN vs. PN and PFS; RENAL  $\geq 10$  was associated with shorter PFS (HR 6.69,  $p=0.002$ ). Kaplan-Meier analysis for RN vs. PN had no difference in PFS for entire cohort or within RENAL  $\geq 10$  and  $< 10$ . PFS was superior for RENAL  $< 10$  vs.  $\geq 10$  ( $p < 0.001$ ) and for cT2a vs. cT2b tumors ( $p=0.012$ ). OS was no different between cT2a and cT2b tumors; RENAL  $\geq 10$  was more likely to die of disease ( $p < 0.001$ ) or any cause ( $p < 0.001$ ) vs. RENAL  $< 10$ . CONCLUSIONS: PN may be oncologically effective for cT2RM. RENAL  $\geq 10$  is negatively associated with OS among cT2RM compared to RENAL  $< 10$  and provides additional risk assessment beyond clinical T stage. Further follow-up and prospective randomized investigation is requisite to confirm efficacy of PN for cT2RM.

[341]

**TÍTULO / TITLE:** - Words of wisdom. Re: Role of immunohistochemistry in the evaluation of needle core biopsies in adult renal cortical tumors: an ex vivo study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov;64(5):859-60. doi: 10.1016/j.eururo.2013.08.043.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.08.043](http://1016/j.eururo.2013.08.043)

**AUTORES / AUTHORS:** - Linares Espinos E; Stephenson A

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Hospital Universitario Puerta de Hierro-Majadahonda, Madrid, España.

[342]

**TÍTULO / TITLE:** - Low rates of bone mineral density measurement in Medicare beneficiaries with prostate cancer initiating androgen deprivation therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Support Care Cancer. 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago) [1007/s00520-013-2008-z](http://1007/s00520-013-2008-z)

**AUTORES / AUTHORS:** - Suarez-Almazor ME; Peddi P; Luo R; Nguyen HT; Elting LS

**INSTITUCIÓN / INSTITUTION:** - Department of General Internal Medicine, Unit 1465, The University of Texas MD Anderson Cancer Center, 1515 Holcombe Blvd, Houston, TX, 77030, USA, [msalmazor@mdanderson.org](mailto:msalmazor@mdanderson.org).

**RESUMEN / SUMMARY:** - BACKGROUND: Men with prostate cancer who undergo androgen deprivation therapy (ADT) are at risk for bone loss and fractures. Our objective was to determine if Medicare beneficiaries with prostate cancer in the state of Texas underwent DXA scans when initiating ADT. METHODS: We identified men diagnosed with prostate cancer between 2005 and 2007 in the Texas Cancer Registry/Medicare linked database, and who received parenteral ADT or orchiectomy. We identified DXA claims within 1 year before or 6 months after starting ADT. We examined use of bone conservation agents in the subgroup of patients enrolled in Medicare Part D. Multivariate logistic regression models were used to examine determinants of DXA use. RESULTS: The analysis included 2,290 men (2,262 parenteral ADT, 28 orchiectomy); 197 (8.6 %) underwent DXA within 1 year before and 6 months after starting ADT. Men aged 75 years or older were more likely to undergo DXA than men aged 66-74 years (OR 1.5; 95 % CI 1.1-2.1). Those living in small urban areas were less likely to undergo DXA than those in big areas (OR 0.40; 95 % CI 0.19-0.82). Of the 1,060 men enrolled in Medicare part D, 59 (5.6 %) received bone conservation agents when starting ADT; 134 (12.6 %) either received bone conservation agents or underwent DXA. CONCLUSIONS: Fewer than one in ten Medicare beneficiaries with prostate cancer initiating ADT underwent a DXA exam. Variation in utilization was also related to residence area size. Further research is needed to identify whether the use of DXA in patients with prostate cancer receiving ADT will result in fracture prevention.

[343]

**TÍTULO / TITLE:** - Efficacy of imaging-guided percutaneous radiofrequency ablation for the treatment of biopsy-proven malignant cystic renal masses.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Nov;201(5):1029-35. doi: 10.2214/AJR.12.10210.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.12.10210](#)

**AUTORES / AUTHORS:** - Felker ER; Lee-Felker SA; Alpern L; Lu D; Raman SS

**INSTITUCIÓN / INSTITUTION:** - 1 All authors: Department of Radiological Sciences, David Geffen School of Medicine at UCLA, Ronald Reagan UCLA Medical Center, 757 Westwood Blvd, Ste 1638, Los Angeles, CA 90095.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this study was to determine the efficacy of imaging-guided percutaneous radiofrequency ablation (RFA) for the treatment of Bosniak category III and IV cystic renal lesions. MATERIALS AND METHODS. Our database was searched to assemble a cohort of biopsy-proven malignant Bosniak category III and IV cystic renal lesions that were treated with imaging-guided percutaneous RFA from 2004 to 2012. The clinical history, imaging features, procedural complications, pathologic results, imaging follow-up, and clinical outcomes of each case were reviewed. RESULTS. A total of 16 patients and 23 biopsy-proven malignant cystic renal lesions were included; two patients with von Hippel-Lindau syndrome had four and three treated lesions each, and a patient with multiple renal tumors had three treated lesions. The other 13 patients each had a single lesion. Clinical follow-up ranged from 2 to 110 months (average, 24 months). The primary treatment efficacy of RFA was 91% (21/23 lesions), and the secondary treatment efficacy was 96% (22/23 lesions). A minority of patients experienced partial

loss of renal function. There were no complications related to bleeding or tumor seeding. CONCLUSION. Imaging-guided percutaneous RFA is safe and effective for the treatment of Bosniak category III and IV cystic renal lesions.

[344]

**TÍTULO / TITLE:** - Pre-transplant risk stratification for early survival of renal allograft recipients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Clin Invest. 2013 Nov 13. doi: 10.1111/eci.12203.

●● [Enlace al texto completo \(gratis o de pago\) 1111/eci.12203](#)

**AUTORES / AUTHORS:** - Kikic Z; Herkner H; Sengolge G; Kozakowski N; Bartel G; Plischke M

**INSTITUCIÓN / INSTITUTION:** - Division of Nephrology and Dialysis, Department of Medicine III, Medical University of Vienna, Vienna, Austria.

**RESUMEN / SUMMARY:** - BACKGROUND: Baseline co-morbidities influence patient outcomes in renal transplantation. Identification of high risk recipients for patient death and early allograft loss might lead to superior stratification. MATERIAL AND METHODS: In this retrospective study risk stratification models were developed in a cohort of 392 kidney transplant recipients and validated in an independent cohort to predict short term (2 year) outcomes. RESULTS: Peripheral arterial disease [OR 7.7 (95% confidence interval (CI): 2.45-24.60); P<0.001], use of oral anticoagulation [OR 18.68 (95% CI: 3.77-92.46); P<0.0001], smoking [OR 5.15 (95% CI: 1.67-15.84); P=0.004], recipient age >60years [OR 7.28 (95% CI: 2.33-22.69; P=0.001)], serum-albumin <40g/l [OR 5.08 (95% CI: 1.82-14.19); P=0.002], serum-calcium >2.42 mmol/l [OR 6.47 (95% CI: 1.37-30.58); P=0.02] living donation [OR 2.95, (95% CI: 0.31-28.29); P=0.34] and previous hemodialysis [OR 3.33, (95% CI: 0.39- 28.11); P=0.27] were included in the model. The validated model discriminated between low (<3 points) and high risk recipients (>8.5 points) with mortality rates of 0% vs. 54%. The comparison of the model with the Charlson comorbidity index (CCI) yielded significantly better receiver operating characteristic (ROC) areas (Novel Score ROC: 0.87 vs. CCI: 0.72, P=0.0012). Early allograft loss was associated with pre-sensitization [OR 3.02 (95% CI: 1.29-7.09); P=0.011] and presence of hepatitis C antibodies [OR 2.42 (95% CI: 1.09-5.34); P=0.029]. A risk model (ROC: 0.62) for allograft loss could not be developed. CONCLUSION: Risk stratification based on the novel score might identify high risk recipients with disproportional risk of early patient death and lead to optimised strategies. This article is protected by copyright. All rights reserved.

[345]

**TÍTULO / TITLE:** - Procyanidin B2 3,3-di-O-gallate, a Biologically Active Constituent of Grape Seed Extract, Induces Apoptosis in Human Prostate Cancer Cells Via Targeting NF-kappaB, Stat3, and AP1 Transcription Factors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nutr Cancer. 2013 Nov 5.

●● [Enlace al texto completo \(gratis o de pago\) 1080/01635581.2013.783602](#)

**AUTORES / AUTHORS:** - Tyagi A; Raina K; Shrestha SP; Miller B; Thompson JA; Wempe MF; Agarwal R; Agarwal C

**INSTITUCIÓN / INSTITUTION:** - a Department of Pharmaceutical Sciences, Skaggs School of Pharmacy and Pharmaceutical Sciences , University of Colorado Anschutz Medical Campus , Aurora , Colorado , USA.

**RESUMEN / SUMMARY:** - Recently, we identified procyanidin B2 3,3'-di-O-gallate (B2G2) as most active constituent of grape seed extract (GSE) for efficacy against prostate cancer (PCa). Isolating large quantities of B2G2 from total GSE is labor intensive and expensive, thereby limiting both efficacy and mechanistic studies with this novel anticancer agent. Accordingly, here we synthesized gram-scale quantities of B2G2, compared it with B2G2 isolated from GSE for possible equivalent biological activity and conducted mechanistic studies. Both B2G2 preparations inhibited cell growth, decreased clonogenicity, and induced cell cycle arrest and apoptotic death, comparable to each other, in various human PCa cell lines. Mechanistic studies focusing on transcription factors involved in apoptotic and survival pathways revealed that B2G2 significantly inhibits NF-kappaB and activator protein1 (AP1) transcriptional activity and nuclear translocation of signal transducer and activator of transcription3 (Stat3) in PCa cell lines, irrespective of their functional androgen receptor status. B2G2 also decreased survivin expression which is regulated by NF-kappaB, AP1, and Stat3 and increased cleaved PARP level. In summary, we report B2G2 chemical synthesis at gram-quantity with equivalent biological efficacy against human PCa cell lines and same molecular targeting profiles at key transcription factors level. The synthetic B2G2 will stimulate more research on prostate and possibly other malignancies in preclinical models and clinical translation.

[346]

**TÍTULO / TITLE:** - A bufadienolide derived androgen receptor antagonist with inhibitory activities against prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Chem Biol Interact. 2013 Nov 5;207C:16-22. doi: 10.1016/j.cbi.2013.10.020.

●● Enlace al texto completo (gratis o de pago) [1016/j.cbi.2013.10.020](#)

**AUTORES / AUTHORS:** - Tian HY; Yuan XF; Jin L; Li J; Luo C; Ye WC; Jiang RW

**INSTITUCIÓN / INSTITUTION:** - Institute of Traditional Chinese Medicine and Natural Products, College of Pharmacy, Jinan University, Guangzhou 510632, PR China.

**RESUMEN / SUMMARY:** - Molecular docking studies have shown that Delta8,14-anhydrobufalin (1) exhibited more potent binding affinity on androgen receptor (AR) than Delta14,15-anhydrobufalin (2) and bufalin (3). To validate the docking results, compounds 1 and 2 were synthesized. The AR competitive binding assay indicated that the IC50 values of 1-3 were 1.9, >50 and >50µM (relative binding affinity), respectively, which confirmed that our theoretical binding mode was reliable and predictable. Furthermore, compound 1 was found to show more potent inhibitory activity against the androgen dependent LNCaP cancer cells than the androgen independent PC3 cancer cells, but exhibited less inhibition on the Na+/K+ ATPase as compared with the parent compound 3. To the best of our knowledge, compound 1 represented the first AR antagonist derived from bufadienolide discovered through a series of combined approaches of molecular docking and actual experimental validation.

[347]

**TÍTULO / TITLE:** - Metabolic Atrophy and 3T 1H - MR Spectroscopy Correlation After Radiation Therapy for Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 1. doi: 10.1111/bju.12553.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12553](#)

**AUTORES / AUTHORS:** - Panebianco V; Barchetti F; Musio D; Forte V; Pace A; De Felice F; Barchetti G; Tombolini V; Catalano C

**INSTITUCIÓN / INSTITUTION:** - Department of Radiological Sciences, Oncology and Pathology, "Sapienza, University of Rome", V.le Regina Elena, 324, 00161 Rome, Italy.

**RESUMEN / SUMMARY:** - OBJECTIVE: To correlate 3 T Magnetic Resonance Spectroscopic Imaging (MRSI) with prostate specific antigen (PSA) in patients with prostate cancer (PC) treated with external beam radiation therapy to assess potential advantages of MRSI. MATERIALS AND METHODS: 50 patients (age range 65-83 years) underwent PSA and MRSI surveillance before and 3,6,12,18 and 24 months after radiotherapy. RESULTS: Of the 50 patients examined, 13 patients completely responded to therapy showing metabolic atrophy (MA), defined as a choline-plus-creatine-to-citrate ratio (CC/C) < 0.2, at 3 months; in this group none had biochemical relapse (BR) (PSA nadir + 2 ng/mL) by the end of the follow-up. 35 patients out of 50 showed partial response to therapy (0.2 < CC/C < 0.8) at 3 and 6 months. 30 out of these 35 patients reached MA at 12 month, while 5 developed a recurrence (CC/C > 0.8). 3 of those with recurrence had a BR at 18 months and the other 2 at 24 months. 2 out of the 50 patients did not respond to the treatment showing persistent disease from the 3<sup>rd</sup> month (CC/C > 0.8); one patient showed BR at 6 and the other at 12 months. CONCLUSIONS: MRSI shows a greater potential than PSA in monitoring patients after radiotherapy, because it anticipates PSA nadir and especially BR.

[348]

**TÍTULO / TITLE:** - BiVap Saline Vaporization of the Prostate in Men With Benign Prostatic Hyperplasia: Our Clinical Experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 22. pii: S0090-4295(13)01321-6. doi: 10.1016/j.urology.2013.10.014.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.10.014](#)

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**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Izmir University School of Medicine, Izmir, Turkey. Electronic address: [drayhankarakose@gmail.com](mailto:drayhankarakose@gmail.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate the efficacy, safety, and postoperative outcomes of the recently developing endoscopic technique of BiVap saline vaporization of the prostate in patients with benign prostatic obstruction (BPO). METHODS: Ninety-six patients who underwent transurethral resection of the prostate with BiVap system for BPO and with available data during the 1-year postoperative follow-up period were included in the study. All patients were evaluated at the postoperative 1<sup>st</sup>, 3<sup>rd</sup>, 6<sup>th</sup>, and 12<sup>th</sup> month, and preoperative and postoperative values of International Prostate Symptom Score (IPSS), quality of life (QoL) score, total prostate-specific antigen, International Index of Erectile Function 15, postvoiding residual urinary

volume (PVR), maximum urinary flow rate (Qmax), and average urinary flow rate (Qave) were compared. Statistical analyses were performed with SPSS version 18. A P value <.05 was considered significant. RESULTS: Mean age of the patients was 65.6 +/- 7.5 years. Significant improvement was noted for IPSS, Qmax, Qave, PVR, and QoL score by the postoperative first month when compared with the preoperative values. Maximum improvement in the IPSS, Qmax, Qave, PVR, and QoL score was achieved at postoperative 6<sup>th</sup>, 3<sup>rd</sup>, 6<sup>th</sup>, 12<sup>th</sup>, and 3<sup>rd</sup> months, respectively. Although total International Index of Erectile Function and subgroup scores decreased at the postoperative first month, all improved to their preoperative levels by the postoperative third month. CONCLUSION: BiVap system is a safe, effective, and useful technique, which can be easily performed in patients with BPO.

[349]

**TÍTULO / TITLE:** - Telomere length as a risk factor for hereditary prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Nov 28. doi: 10.1002/pros.22755.

- [Enlace al texto completo \(gratis o de pago\) 1002/pros.22755](#)

**AUTORES / AUTHORS:** - Hurwitz LM; Heaphy CM; Joshu CE; Isaacs WB; Konishi Y; De Marzo AM; Isaacs SD; Wiley KE; Platz EA; Meeker AK

**INSTITUCIÓN / INSTITUTION:** - Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland.

**RESUMEN / SUMMARY:** - BACKGROUND: Telomeres are repetitive nucleotide sequences that stabilize the ends of chromosomes. Critically short telomeres are thought to contribute to cancer development by increasing chromosomal instability. We hypothesized that shorter leukocyte telomere length, a surrogate for inherited prostate cell telomere length, would be associated with increased risk of prostate cancer in hereditary prostate cancer (HPC) families. METHODS: One hundred twelve affected and 63 unaffected men from 28 families were drawn from the Johns Hopkins HPC family database. Relative mean telomere length was measured in isolated peripheral leukocyte DNA by quantitative PCR. Conditional logistic regression was used to estimate the association between quartile of age-adjusted telomere length and prostate cancer. RESULTS: Men in the shortest quartile of telomere length did not have increased odds of prostate cancer compared to men in the other three quartiles (OR = 0.84, 95% CI: 0.32-2.20, P = 0.73). However, when the analysis was restricted to affected men with blood drawn before or within a year of diagnosis (N = 39) and all unaffected men, shorter telomere length was moderately associated with increased odds of prostate cancer (OR = 3.55, 95% CI: 0.82-15.43, P = 0.09). CONCLUSIONS: Though we found no association overall, shorter leukocyte telomere length may be associated with increased odds of prostate cancer when measured in pre-diagnostic samples. Further prospective research is warranted exploring the utility of telomere length as a prostate cancer biomarker. Prostate © 2013 Wiley Periodicals, Inc.

[350]

**TÍTULO / TITLE:** - Brain metastasis from extramammary Paget's disease of the scrotum.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Neurosci. 2013 Aug 17. pii: S0967-5868(13)00442-6. doi: 10.1016/j.jocn.2013.05.027.

●● Enlace al texto completo (gratis o de pago) [1016/j.jocn.2013.05.027](http://1016/j.jocn.2013.05.027)

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**RESUMEN / SUMMARY:** - We present to our knowledge the first patient with histopathologically proven brain metastasis from extramammary Paget's disease (EMPD) and discuss the effect of brain radiation therapy for this condition. A 68-year-old man presented to our hospital with headache and gait disturbance. Brain MRI showed multiple enhancing mass lesions, and two large cystic lesions in the left cerebellum. The patient had been diagnosed with scrotal Paget's disease 3 months previously but no further management had been performed due to his refusal. The patient underwent stereotactic aspiration and biopsy of the two large cystic lesions. A histopathological examination revealed that the tumor was a metastatic adenocarcinoma. Immunohistochemical staining revealed that the tumor cells were strongly positive for cytokeratin 7 and moderately positive for carcinoembryonic antigen and gross cystic disease fluid protein 15. These findings were similar to those of his scrotal skin lesions and were consistent with metastatic EMPD. The patient underwent brain radiation therapy with a total radiation dose of 30Gy in 10 fractions. The patient improved neurologically so as to be self-ambulatory, and a mild improvement in the metastatic tumors was found on follow-up MRI. We had planned systemic chemotherapy, but the patient died of acute respiratory failure 2 months after radiation therapy.

[351]

**TÍTULO / TITLE:** - Alterations in chromatin accessibility and DNA methylation in clear cell renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Nov 4. doi: 10.1038/onc.2013.455.

●● Enlace al texto completo (gratis o de pago) [1038/onc.2013.455](http://1038/onc.2013.455)

**AUTORES / AUTHORS:** - Buck MJ; Raaijmakers LM; Ramakrishnan S; Wang D; Valiyaparambil S; Liu S; Nowak NJ; Pili R

**INSTITUCIÓN / INSTITUTION:** - 1] Department of Biochemistry, Center of Excellence in Bioinformatics and Life Sciences, State University of New York at Buffalo, Buffalo, NY, USA [2] Cancer Genetics, Roswell Park Cancer Institute, Buffalo, NY, USA.

**RESUMEN / SUMMARY:** - Recent studies have demonstrated that in clear cell renal cell carcinoma (ccRCC) several chromatin remodeling enzymes are genetically inactivated. Although, growing evidence in cancer models has demonstrated the importance of epigenetic changes, currently only changes in DNA methylation can be accurately determined from clinical samples. To address this limitation, we have applied formaldehyde-assisted isolation of regulatory elements (FAIREs) combined with next-generation sequencing (FAIRE-seq) to identify specific changes in chromatin

accessibility in clinical samples of ccRCC. We modified the FAIRE procedure to allow us to examine chromatin accessibility for small samples of solid tumors. Our FAIRE results were compared with DNA-methylation analysis and show how chromatin accessibility decreases at many sites where DNA-methylation remains unchanged. In addition, our FAIRE-seq analysis allowed us to identify regulatory elements associated with both normal and tumor tissue. We have identified decreases in chromatin accessibility at key ccRCC-linked genes, including PBRM1, SETD2 and MLL2. Overall, our results demonstrate the power of examining multiple aspects of the epigenome. Oncogene advance online publication, 4 November 2013; doi:10.1038/onc.2013.455.

[352]

**TÍTULO / TITLE:** - A reciprocal role of prostate cancer on stromal DNA damage.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Oct 21. doi: 10.1038/onc.2013.431.

●● Enlace al texto completo (gratis o de pago) [1038/onc.2013.431](#)

**AUTORES / AUTHORS:** - Banerjee J; Mishra R; Li X; Jackson RS 2<sup>nd</sup>; Sharma A; Bhowmick NA

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Vanderbilt University, Nashville, TN, USA.

**RESUMEN / SUMMARY:** - DNA damage found in prostate cancer-associated fibroblasts (CAF) promotes tumor progression. In the absence of somatic mutations in CAF, epigenetic changes dictate how stromal coevolution is mediated in tumors. Seventy percent of prostate cancer patients lose expression of transforming growth factor-beta type II receptor (TGFB2) in the stromal compartment (n=77, P-value=0.0001), similar to the rate of glutathione S-transferase P1 (GSTP1) silencing. Xenografting of human prostate cancer epithelia, LNCaP, resulted in the epigenetic Tgfbr2 silencing of host mouse prostatic fibroblasts. Stromal Tgfbr2 promoter hypermethylation, initiated by LNCaP cells, was found to be dependent on interleukin 6 expression, based on neutralizing antibody studies. We further found that pharmacologic and transgenic knockout of TGF-beta responsiveness in prostatic fibroblasts induced Gstp1 promoter methylation. It is known that TGF-beta promotes DNA stability, however, the mechanism is not well understood. Both prostatic human CAF and mouse transgenic knockout of Tgbr2 had elevated DNA methyltransferase I (DNMT1) activity and histone H3 lysine 9 trimethylation (H3K9me3) to suggest greater promoter methylation. Interestingly, the conditional knockout of Tgfbr2 in mouse prostatic fibroblasts, in modeling epigenetic silencing of Tgfbr2, had greater epigenetic gene silencing of multiple DNA damage repair and oxidative stress response genes, based on promoter methylation array analysis. Homologous gene silencing was validated by reverse transcriptase (RT)-PCR in mouse and human prostatic CAF. Not surprisingly, DNA damage repair gene silencing in the prostatic stromal cells corresponded with the presence of DNA damage. Restoring the expression of the epigenetically silenced genes in wild-type fibroblasts with radiation-induced DNA damage reduced tumor progression. Tumor progression was inhibited even when epigenetic silencing was reversed in the Tgfbr2-knockout prostatic fibroblasts. Taken together, fibroblastic epigenetic changes causative of DNA damage, initiated by association with cancer epithelia, is a dominant mediator of tumor progression over TGF-beta

responsiveness. Oncogene advance online publication, 21 October 2013;  
doi:10.1038/onc.2013.431.

[353]

**TÍTULO / TITLE:** - p62/SQSTM1 is required for cell survival of apoptosis-resistant bone metastatic prostate cancer cell lines.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Sep 30. doi: 10.1002/pros.22737.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pros.22737](#)

**AUTORES / AUTHORS:** - Chang MA; Morgado M; Warren CR; Hinton CV; Farach-Carson MC; Delk NA

**INSTITUCIÓN / INSTITUTION:** - Department of Biochemistry and Cell Biology, Rice University, BioScience Research Collaborative, Houston, Texas.

**RESUMEN / SUMMARY:** - BACKGROUND: Bone marrow stromal cell (BMSC) paracrine factor(s) can induce apoptosis in bone metastatic prostate cancer (PCa) cell lines. However, the PCa cells that escape BMSC-induced apoptosis can upregulate cytoprotective autophagy. METHODS: C4-2, C4-2B, MDA PCa 2a, MDA PCa 2b, VCaP, PC3, or DU145 PCa cell lines were grown in BMSC conditioned medium and analyzed for mRNA and/or protein accumulation of p62 (also known as sequestome-1/SQSTM1), Microtubule-associated protein 1 light chain 3B (LC3B), or lysosomal-associated membrane protein 1 (LAMP1) using quantitative polymerase chain reaction (QPCR), Western blot, or immunofluorescence. Small interfering RNA (siRNA) was used to determine if p62 is necessary PCa cell survival. RESULTS: BMSC paracrine signaling upregulated p62 mRNA and protein in a subset of the PCa cell lines. The PCa cell lines that were insensitive to BMSC-induced apoptosis and autophagy induction had elevated basal p62 mRNA and protein. In the BMSC-insensitive PCa cell lines, siRNA knockdown of p62 was cytotoxic and immunostaining showed perinuclear clustering of autolysosomes. However, in the BMSC-sensitive PCa cell lines, p62 siRNA knockdown was not appreciably cytotoxic and did not affect autolysosome subcellular localization. CONCLUSIONS: A pattern emerges wherein the BMSC-sensitive PCa cell lines are known to be osteoblastic and express the androgen receptor, while the BMSC-insensitive PCa cell lines are characteristically osteolytic and do not express the androgen receptor. Furthermore, BMSC-insensitive PCa may have evolved a dependency on p62 for cell survival that could be exploited to target and kill these apoptosis-resistant PCa cells in the bone. Prostate © 2013 Wiley Periodicals, Inc.

[354]

**TÍTULO / TITLE:** - Repression of cell proliferation and androgen receptor activity in prostate cancer cells by 2'-hydroxyflavanone.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4453-61.

**AUTORES / AUTHORS:** - Ofude M; Mizokami A; Kumaki M; Izumi K; Konaka H; Kadono Y; Kitagawa Y; Shin M; Zhang J; Keller ET; Namiki M

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**RESUMEN / SUMMARY:** - BACKGROUND: Prevention of the development of castration-resistant from hormone-naïve prostate cancer is an important issue in maintaining the quality of life of the patients. We explored the effect of 2'-hydroxyflavanone on proliferation and androgen responsiveness using prostate cancer cell lines. MATERIALS AND METHODS: To investigate the effect of 2'-hydroxyflavanone on proliferation, prostate cancer cells were treated with 2'-hydroxyflavanone. Androgen-responsiveness in LNCaP cells was confirmed by luciferase assay after transfection of luciferase reporter driven by prostate specific antigen promoter. To detect androgen receptor (AR) expression, reverse transcriptase polymerase chain reaction and western blot analysis were conducted. RESULTS: 2'-Hydroxyflavanone inhibited the proliferation of PC-3 and DU145 cells by induction of apoptosis. 2'-Hydroxyflavanone inhibited the proliferation of LNCaP cells stimulated by androgens and attenuated androgen-responsiveness through down-regulation of AR protein. CONCLUSION: 2'-Hydroxyflavanone not only inhibited proliferation of prostate cancer cells, but also repressed androgen-responsiveness, suggesting that it might be a useful agent in preventing recurrence of prostate cancer.

[355]

**TÍTULO / TITLE:** - MRI findings of radiation-induced changes in the urethra and periurethral tissues after treatment for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Radiol. 2013 Dec;82(12):e775-81. doi: 10.1016/j.ejrad.2013.09.011. Epub 2013 Sep 22.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejrad.2013.09.011](https://doi.org/10.1016/j.ejrad.2013.09.011)

**AUTORES / AUTHORS:** - Marigliano C; Donati OF; Vargas HA; Akin O; Goldman DA; Eastham JA; Zelefsky MJ; Hricak H

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Memorial Sloan-Kettering Cancer Center, New York, NY, United States; Department of Radiology, University "Sapienza", Rome, Italy.

**RESUMEN / SUMMARY:** - PURPOSE: To assess radiotherapy (RT)-induced changes in the urethra and periurethral tissues after treatment for prostate cancer (PCa). METHODS AND MATERIALS: This retrospective study included 108 men (median age, 64 years; range, 43-87 years) who received external-beam radiotherapy (EBRT) and/or brachytherapy for PCa and underwent endorectal-coil MRI of the prostate within 180 days before RT and a median of 20 months (range, 2-62 months) after RT. On all MRIs, two readers independently measured the urethral length (UL) and graded the margin definition (MD) of the urethral wall and the signal intensities (SIs) of the urethral wall and pelvic muscles on 4-point scales. RESULTS: The mean urethral length decreased significantly from pre- to post-RT MRI (from 15.2 to 12.6mm and from 14.4 to 12.9mm for readers 1 and 2, respectively; both p-values <0.0001). Brachytherapy resulted in greater urethral shortening than EBRT. After RT, SI in the urethral wall increased in 57% (62/108) and 35% (38/108) of patients (readers 1 and 2, respectively). The frequency and magnitude of SI increase in pelvic muscles depended on muscle location. In the obturator internus muscle, SI increased more often after

EBRT than after brachytherapy, while in the periurethral levator ani muscle SI increased more often after brachytherapy than after EBRT. CONCLUSION: After RT for PCa, MRI shows urethral shortening and increased SI of the urethral wall and pelvic muscles in substantial percentages of patients.

[356]

**TÍTULO / TITLE:** - Inhibition of nitric oxide is a good therapeutic target for bladder tumors that express iNOS.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nitric Oxide. 2013 Nov 6;36C:11-18. doi: 10.1016/j.niox.2013.10.010.

●● Enlace al texto completo (gratis o de pago) [1016/j.niox.2013.10.010](#)

**AUTORES / AUTHORS:** - Belgorosky D; Langle Y; Cormick BP; Colombo L; Sandes E; Eijan AM

**INSTITUCIÓN / INSTITUTION:** - Research Area from the Institute of Oncology Angel H. Roffo, University of Buenos Aires, Av. San Martín 5481, CP 1417 DTB Buenos Aires, Argentina.

**RESUMEN / SUMMARY:** - Bladder cancer is the second cause of death for urological tumors in man. When the tumor is nonmuscle invasive, transurethral resection is curative. On the other hand, radical cystectomy is the treatment chosen for patients with invasive tumors, but still under treatment, these patients have high risk of dying, by the development of metastatic disease within 5 years. It is therefore important to identify a new therapeutic target to avoid tumor recurrences and tumor progression. Nitric oxide (NO) is an important biological messenger known to influence several types of cancers. In bladder cancer, production of NO and expression and activity of inducible NO synthase was associated to recurrence and progression. The objective of this work was to analyze if inhibition of nitric oxide production could be considered a therapeutic target for bladder tumors expressing iNOS. Using a bladder cancer murine model with different invasiveness grade we have demonstrated that NO inhibition was able to inhibit growth of bladder tumors expressing iNOS. Furthermore, invasive properties of MB49-I orthotopic growth was inhibited using NO inhibitors. This paper also shows that levels of NO in urine can be correlated with tumor size. In conclusion, inhibition of NO could be considered as a therapeutic target that prevents tumor growth and progression. Also, urine NO levels may be useful for measuring tumor growth.

[357]

**TÍTULO / TITLE:** - The impact of technology diffusion on treatment for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med Care. 2013 Dec;51(12):1076-84. doi: 10.1097/MLR.000000000000019.

●● Enlace al texto completo (gratis o de pago)

[1097/MLR.000000000000019](#)

**AUTORES / AUTHORS:** - Schroeck FR; Kaufman SR; Jacobs BL; Zhang Y; Weizer AZ; Montgomery JS; Gilbert SM; Strobe SA; Hollenbeck BK

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Michigan, Ann Arbor, MI double dagger Departments of Urology and Epidemiology and Health Policy Research, University of Florida College of Medicine, Gainesville, FL section sign Division of Urologic Surgery, Washington University School of Medicine, St. Louis, MO.

**RESUMEN / SUMMARY:** - BACKGROUND: The use of local therapy for prostate cancer may increase because of the perceived advantages of new technologies such as intensity-modulated radiotherapy (IMRT) and robotic prostatectomy. OBJECTIVE: To examine the association of market-level technological capacity with receipt of local therapy. DESIGN: Retrospective cohort. SUBJECTS: Patients with localized prostate cancer who were diagnosed between 2003 and 2007 (n=59,043) from the Surveillance Epidemiology and End Results-Medicare database. MEASURES: We measured the capacity for delivering treatment with new technology as the number of providers offering robotic prostatectomy or IMRT per population in a market (hospital referral region). The association of this measure with receipt of prostatectomy, radiotherapy, or observation was examined with multinomial logistic regression. RESULTS: For each 1000 patients diagnosed with prostate cancer, 174 underwent prostatectomy, 490 radiotherapy, and 336 were observed. Markets with high robotic prostatectomy capacity had higher use of prostatectomy (146 vs. 118 per 1000 men, P=0.008) but a trend toward decreased use of radiotherapy (574 vs. 601 per 1000 men, P=0.068), resulting in a stable rate of local therapy. High versus low IMRT capacity did not significantly impact the use of prostatectomy (129 vs. 129 per 1000 men, P=0.947) and radiotherapy (594 vs. 585 per 1000 men, P=0.579). CONCLUSIONS: Although there was a small shift from radiotherapy to prostatectomy in markets with high robotic prostatectomy capacity, increased capacity for both robotic prostatectomy and IMRT did not change the overall rate of local therapy. Our findings temper concerns that the new technology spurs additional therapy of prostate cancer.

[358]

**TÍTULO / TITLE:** - Radium - 223 (Xofigo) for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med Lett Drugs Ther. 2013 Sep 30;55(1426):79-80.

[359]

**TÍTULO / TITLE:** - Conventional versus automated implantation of loose seeds in prostate brachytherapy: analysis of dosimetric and clinical results.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Oncol Biol Phys. 2013 Nov 15;87(4):651-8. doi: 10.1016/j.ijrobp.2013.08.010.

●● Enlace al texto completo (gratis o de pago) [1016/j.ijrobp.2013.08.010](http://1016/j.ijrobp.2013.08.010)

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**RESUMEN / SUMMARY:** - PURPOSE: To review the clinical outcome of I-125 permanent prostate brachytherapy (PPB) for low-risk and intermediate-risk prostate cancer and to compare 2 techniques of loose-seed implantation. METHODS AND

**MATERIALS:** 574 consecutive patients underwent I-125 PPB for low-risk and intermediate-risk prostate cancer between 2000 and 2008. Two successive techniques were used: conventional implantation from 2000 to 2004 and automated implantation (Nucletron, FIRST system) from 2004 to 2008. Dosimetric and biochemical recurrence-free (bNED) survival results were reported and compared for the 2 techniques. Univariate and multivariate analysis researched independent predictors for bNED survival. **RESULTS:** 419 (73%) and 155 (27%) patients with low-risk and intermediate-risk disease, respectively, were treated (median follow-up time, 69.3 months). The 60-month bNED survival rates were 95.2% and 85.7%, respectively, for patients with low-risk and intermediate-risk disease ( $P=.04$ ). In univariate analysis, patients treated with automated implantation had worse bNED survival rates than did those treated with conventional implantation ( $P<.0001$ ). By day 30, patients treated with automated implantation showed lower values of dose delivered to 90% of prostate volume (D90) and volume of prostate receiving 100% of prescribed dose (V100). In multivariate analysis, implantation technique, Gleason score, and V100 on day 30 were independent predictors of recurrence-free status. Grade 3 urethritis and urinary incontinence were observed in 2.6% and 1.6% of the cohort, respectively, with no significant differences between the 2 techniques. No grade 3 proctitis was observed. **CONCLUSION:** Satisfactory 60-month bNED survival rates (93.1%) and acceptable toxicity (grade 3 urethritis<3%) were achieved by loose-seed implantation. Automated implantation was associated with worse dosimetric and bNED survival outcomes.

[360]

**TÍTULO / TITLE:** - Live donor kidney transplantation in India: effects of donor and recipient age on graft survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ren Fail. 2013 Nov 4.

●● Enlace al texto completo (gratis o de pago) [3109/0886022X.2013.846795](#)

**AUTORES / AUTHORS:** - Pahwa M; Chawla A; Dar TI; Saifee Y; Pahwa AR; Tyagi V; Chadha S; Jauhari H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology and Renal Transplant, Sir Ganga Ram Hospital , Old Rajinder Nagar , New Delhi.

**RESUMEN / SUMMARY:** - Abstract Introduction: The increasing gap between demand and supply of human kidneys has resulted in the use of more expanded criteria donor organs are used. The influence of age on short- and long-term survival of renal allograft has not been well studied in Indian population. Materials and methods: Two hundred and seventy-eight patients were evaluated retrospectively who underwent kidney transplantation from Jan 2008 to June 2011. Patients were divided into 6 groups: group A (donor age 20-40 years, recipient age <50 years), group B (donor age 20-40 years, recipient age >50 years), group C (donor age 40-60 years, recipient age <50 years), group D (donor age 40-60 years, recipient age >50 years), group E (donor age >60 years, recipient age <50 years) and group F (donor age >60 years, recipient age >50 years). Uni-variate analysis was used to assess the effect of donor and recipient age as predictive factors for graft outcome, using the Kaplan-Meier method (log-rank) with  $p < 0.05$  considered significant. Results: Graft survival was found to be lowest in elderly recipients and in patients with donor age >60 years. Renal function was superior using younger donors both in short and long term. The incidence of acute

rejection was found to be lower in elderly donor group than in younger, although the difference was not statistically significant. Conclusion: Donor's higher age did not show significant impact on allograft survival although, kidney allografts demonstrated decreased short and long term renal function.

[361]

**TÍTULO / TITLE:** - Impact of Folate Intake on Prostate Cancer Recurrence Following Definitive Therapy: Data from CaPSURE.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 3. pii: S0022-5347(13)05564-X. doi: 10.1016/j.juro.2013.09.065.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.09.065](#)

**AUTORES / AUTHORS:** - Tomaszewski JJ; Richman EL; Sadetsky N; O'Keefe DS; Carroll PR; Davies BJ; Chan JM

**INSTITUCIÓN / INSTITUTION:** - Division of Urologic Oncology, Department of Surgical Oncology, Fox Chase Cancer Center, Philadelphia, Pennsylvania, USA. Electronic address: [tomaszewski.jeffrey@gmail.com](mailto:tomaszewski.jeffrey@gmail.com).

**RESUMEN / SUMMARY:** - PURPOSE: A randomized placebo-controlled clinical trial of folic acid supplementation for the chemoprevention of colorectal adenomas revealed an increased incidence of prostate cancer in the treatment group. Limited data exist on post-diagnostic folate/folic acid intake and risk of prostate cancer progression. We prospectively examined the association between post-diagnostic consumption of folate and the risk of prostate cancer recurrence following radical prostatectomy (RP), external beam radiation therapy (EBRT), and brachytherapy (BT). METHODS: This study was conducted among 1153 men treated with RP, EBRT, and BT with clinical stage T1-T2c prostate adenocarcinoma who participated in the Diet and Lifestyle sub-study of CaPSURE by completing a semi-quantitative food frequency questionnaire (FFQ) in 2004-2005. We utilized Cox proportional hazards regression to analyze the association between folate intake and prostate cancer progression. RESULTS: Overall, prostate cancer progression occurred in 101 (8.76%) men over a mean follow-up of 34 months. After multivariate adjustment, we observed no evidence of an association between intake of total folate, dietary folate, or dietary folate equivalents and prostate cancer recurrence. In a secondary analysis by treatment, patients in the lowest decile of dietary folate intake had a 2.6-fold increase in risk of recurrence (HR: 2.56; 95% CI: 1.23,5.29; p=0.01) following RP. In patients treated with EBRT and BT, we observed no evidence of an association between prostate cancer progression and increased intake of folate. CONCLUSIONS: Our results suggest that the consumption of folate-containing foods and multivitamins is not associated with prostate cancer progression following definitive treatment.

[362]

**TÍTULO / TITLE:** - Context-dependent role of ATG4B as target for autophagy inhibition in prostate cancer therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Biophys Res Commun. 2013 Nov 29;441(4):726-31. doi: 10.1016/j.bbrc.2013.10.117. Epub 2013 Oct 30.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbrc.2013.10.117](http://1016/j.bbrc.2013.10.117)

**AUTORES / AUTHORS:** - Tran E; Chow A; Goda T; Wong A; Blakely K; Rocha M; Taeb S; Hoang VC; Liu SK; Emmenegger U

**INSTITUCIÓN / INSTITUTION:** - Biological Sciences, Sunnybrook Research Institute, Canada.

**RESUMEN / SUMMARY:** - ATG4B belongs to the autophagin family of cysteine proteases required for autophagy, an emerging target of cancer therapy. Developing pharmacological ATG4B inhibitors is a very active area of research. However, detailed studies on the role of ATG4B during anticancer therapy are lacking. By analyzing PC-3 and C4-2 prostate cancer cells overexpressing dominant negative ATG4B(C74A) in vitro and in vivo, we show that the effects of ATG4B(C74A) are cell type, treatment, and context-dependent. ATG4B(C74A) expression can either amplify the effects of cytotoxic therapies or contribute to treatment resistance. Thus, the successful clinical application of ATG4B inhibitors will depend on finding predictive markers of response.

[363]

**TÍTULO / TITLE:** - Long-term Outcome in Pediatric Renal Tumor Survivors: Experience of a Single Center.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pediatr Hematol Oncol. 2013 Nov;35(8):610-3. doi: 10.1097/MPH.0b013e3182a06265.

●● Enlace al texto completo (gratis o de pago)

[1097/MPH.0b013e3182a06265](http://1097/MPH.0b013e3182a06265)

**AUTORES / AUTHORS:** - Sanpakit K; Triwatanawong J; Sumboonnanonda A

**INSTITUCIÓN / INSTITUTION:** - Department of Pediatrics, Faculty of Medicine Siriraj Hospital, Bangkok, Thailand.

**RESUMEN / SUMMARY:** - Medical records of 30 children with renal tumor diagnosed at Siriraj Hospital during 1996 to 2007 were reviewed. Mean age at diagnosis was 36 months; male to female ratio was 1.7:1. Clinical manifestations included abdominal mass (96.7%), hypertension (40.0%), abdominal pain (36.7%), hematuria (26.7%), postrenal obstruction (16.7%), and proteinuria (13.3%). Eight patients had Denys-Drash malformations, WAGR, Dandy-Walker malformation, or genitourinary anomalies. Twenty-seven patients (90%) had Wilms tumor. Sixteen patients were stage 3 or more at diagnosis. Rhabdoid tumor was found in 3 patients. All patients received chemotherapy, 13 patients also received radiation therapy. Acute complications included febrile neutropenia (44.4%), hypokalemia (37.0%), hyponatremia (29.6%), Fanconi syndrome (11.1%), urinary tract Infection (10.0%), and acute renal failure (7.4%). Mean follow-up time was 57.2 months. Ten patients died from progressive disease. Five-year patient survival was 69.7%. Two patients had chronic kidney disease. One of these had Denys-Drash malformations. Both patients received ifosfamide-carboplatin-etoposide protocol and abdominal radiation. Antihypertensive medications were needed in 9 patients for a mean duration of 164 days. None had persistent proteinuria or hematuria. No difference was found among mean estimated glomerular filtration rate at diagnosis, 1 year after treatment, and at last follow-up. Long-term follow-up, especially renal function, is recommended.

[364]

**TÍTULO / TITLE:** - Mechanism of androgen receptor corepression by CKbetaBP2/CRIF1, a multifunctional transcription factor coregulator expressed in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Endocrinol. 2014 Jan 25;382(1):302-13. doi: 10.1016/j.mce.2013.09.036. Epub 2013 Oct 5.

●● Enlace al texto completo (gratis o de pago) [1016/j.mce.2013.09.036](#)

**AUTORES / AUTHORS:** - Tan JA; Bai S; Grossman G; Titus MA; Harris Ford O; Pop EA; Smith GJ; Mohler JL; Wilson EM; French FS

**INSTITUCIÓN / INSTITUTION:** - Laboratories for Reproductive Biology, Department of Pediatrics, University of North Carolina, School of Medicine, Chapel Hill, NC, United States.

**RESUMEN / SUMMARY:** - The transcription factor coregulator Casein kinase IIbeta-binding protein 2 or CR6-interacting factor 1 (CKbetaBP2/CRIF1) binds the androgen receptor (AR) in prostate cancer cells and in response to dihydrotestosterone localizes with AR on the prostate-specific antigen gene enhancer, but does not bind DNA suggesting CKbetaBP2/CRIF1 localization in chromatin is determined by AR. In this study we show also that CKbetaBP2/CRIF1 inhibits wild-type AR and AR N-terminal transcriptional activity, binds to the AR C-terminal region, inhibits interaction of the AR N- and C-terminal domains (N/C interaction) and competes with p160 coactivator binding to the AR C-terminal domain, suggesting CKbetaBP2/CRIF1 interferes with AR activation functions 1 and 2. CKbetaBP2/CRIF1 is expressed mainly in stromal cells of benign prostatic hyperplasia and in stroma and epithelium of prostate cancer. CKbetaBP2/CRIF1 protein is increased in epithelium of androgen-dependent prostate cancer compared to benign prostatic hyperplasia and decreased slightly in castration recurrent epithelium compared to androgen-dependent prostate cancer. The multifunctional CKbetaBP2/CRIF1 is a STAT3 interacting protein and reported to be a coactivator of STAT3. CKbetaBP2/CRIF1 is expressed with STAT3 in prostate cancer where STAT3 may help to offset the AR repressor effect of CKbetaBP2/CRIF1 and allow AR regulation of prostate cancer growth.

[365]

**TÍTULO / TITLE:** - A High Frequency of Activating Extracellular Domain ERBB2 (HER2) mutation in Micropapillary Urothelial Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 5.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-1992](#)

**AUTORES / AUTHORS:** - Ross JS; Wang K; Gay L; Al-Rohil RN; Nazeer T; Sheehan CE; Jennings TA; Otto G; Donahue A; He J; Palmer GA; Ali S; Nahas M; Young G; Labrecque E; Frampton GM; Erlich R; Curran J; Brennan K; Downing SR; Yelensky R; Lipson D; Hawryluk M; Miller VA; Stephens PJ

**INSTITUCIÓN / INSTITUTION:** - Dept of Pathology, Albany Medical College.

**RESUMEN / SUMMARY:** - PURPOSE: Micropapillary urothelial carcinoma (MPUC) is a rare and aggressive form of bladder cancer. We conducted genomic analyses (NGS) of MPUC and non-micropapillary urothelial bladder carcinomas (non-MPUC) to

characterize the genomic landscape and identify targeted treatment options. EXPERIMENTAL DESIGN: DNA was extracted from 40 microns of FFPE sections from 15 MPUC and 64 non-MPUC tumors. Sequencing (NGS) was performed on hybridization-captured, adaptor ligation based libraries to high coverage for 3,230 exons of 182 cancer-related genes plus 37 introns from 14 genes frequently rearranged in cancer. The results were evaluated for all classes of genomic alteration (GA). RESULTS: Mutations in the extracellular domain of ERBB2 were identified in 6/15 (40%) of MPUC: S310F (4 cases), S310Y (1 case) and R157W (1 case). All 6 cases of MPUC with ERBB2 mutation were negative for ERBB2 amplification and Erbb2 overexpression. In contrast, 6/64 (9.4%) non-MPUC harbored an ERBB2 alteration, including base substitution (3 cases), amplification (2 cases) and gene fusion (1 case), which is higher than the 2/159 (1.3%) protein-changing ERBB2 mutations reported for urinary tract cancer in COSMIC. The enrichment of ERBB2 alterations in MPUC compared with non-MPUC is significant both between this series ( $p < 0.0084$ ) and for all types of urinary tract cancer in COSMIC ( $p < 0.001$ ). CONCLUSIONS: NGS of MPUC revealed a high incidence of mutation in the extracellular domain of ERBB2 a gene for which there are 5 approved targeted therapies. NGS can identify GA that inform treatment options for the majority of MPUC patients.

[366]

**TÍTULO / TITLE:** - Relationship between vegetable and carotene intake and risk of prostate cancer: the JACC study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Oct 29. doi: 10.1038/bjc.2013.685.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.685](#)

**AUTORES / AUTHORS:** - Umesawa M; Iso H; Mikami K; Kubo T; Suzuki K; Watanabe Y; Mori M; Miki T; Tamakoshi A

**INSTITUCIÓN / INSTITUTION:** - 1] Department of Public Health, Dokkyo Medical University School of Medicine, Mibu, Tochigi 321-0293, Japan [2] Department of Public Health Medicine, Faculty of Medicine, University of Tsukuba, Tsukuba 305-8577, Japan.

**RESUMEN / SUMMARY:** - Background: We examined the associations of intakes of vegetables and carotenoids with risk of prostate cancer in Japanese. Methods: A total of 15 471 Japanese men participating in the Japan Collaborative Cohort study completed a questionnaire including food intake. Of them, 143 incident prostate cancers were documented. We examined the associations stated above by using Cox proportional hazard model. Results: Vegetable intake was not associated with the risk of prostate cancer, but so was dietary alpha-carotene intake. The multivariable hazard ratio (95%CI) in the secondary highest and highest quintiles of alpha-carotene intake was 0.50 (0.26-0.98) ( $P=0.043$ ) and 0.46 (0.22-0.97) ( $P=0.041$ ) ( $P$  for trend=0.224), respectively. Beta-carotene intake was not associated with the risk of prostate cancer. Conclusion: Alpha-carotene intake was associated with lower risk of prostate cancer among Japanese. British Journal of Cancer Advance Online Publication, 29 October 2013 doi:10.1038/bjc.2013.685 [www.bjcancer.com](http://www.bjcancer.com).

[367]

**TÍTULO / TITLE:** - HOXB13 downregulates intracellular zinc and increases NF-kappaB signaling to promote prostate cancer metastasis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Oct 7. doi: 10.1038/onc.2013.404.

●● Enlace al texto completo (gratis o de pago) [1038/onc.2013.404](#)

**AUTORES / AUTHORS:** - Kim YR; Kim IJ; Kang TW; Choi C; Kim KK; Kim MS; Nam KI; Jung C

**INSTITUCIÓN / INSTITUTION:** - Department of Anatomy, Chonnam National University Medical School, Gwangju, Korea.

**RESUMEN / SUMMARY:** - Characteristically, prostate cancer (PCa) cells exhibit marked decrease in intracellular zinc; however, the mechanism responsible is not clearly understood. HOXB13 is involved in PCa progression and is overexpressed in castration-resistant PCa. DNA microarray analysis of LNCaP Pca cells showed that ZnT zinc output transporters were strikingly upregulated among androgen-independent HOXB13 target genes. Furthermore, exogenous HOXB13 caused intracellular zinc concentrations to fall in PCa cells, stimulated NF-kappaB-mediated signaling by reducing inhibitor of NF-kappaB alpha (IkappaBalpha) and enhanced the nuclear translocation of RelA/p65. Human prostate tumors also exhibited strong inverse correlation between the protein expressions of HOXB13 and IkappaBalpha. Consequently, HOXB13 stimulated PCa cell invasion, and this was inhibited by the suppression of ZnT4. In addition, studies in a PC3 orthotopic mouse model of PCa metastasis showed that HOXB13 is a strong metastatic stimulator. Taken together, these results show that HOXB13 promotes PCa invasion and metastasis by decreasing intracellular zinc levels, thus stimulating NF-kappaB signals, and suggest that HOXB13 acts as a modulator of intracellular zinc levels that promotes the malignant characteristics of PCa. Oncogene advance online publication, 7 October 2013; doi:10.1038/onc.2013.404.

[368]

**TÍTULO / TITLE:** - Nano-Encapsulation of Plitidepsin: In Vivo Pharmacokinetics, Biodistribution, and Efficacy in a Renal Xenograft Tumor Model.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pharm Res. 2013 Nov 28.

●● Enlace al texto completo (gratis o de pago) [1007/s11095-013-1220-3](#)

**AUTORES / AUTHORS:** - Oliveira H; Thevenot J; Garanger E; Ibarboure E; Calvo P; Aviles P; Guillen MJ; Lecommandoux S

**INSTITUCIÓN / INSTITUTION:** - Universite de Bordeaux/IPB, ENSCBP, 16 avenue Pey Berland, 33607, Pessac Cedex, France, [hugo.de-oliveira@inserm.fr](mailto:hugo.de-oliveira@inserm.fr).

**RESUMEN / SUMMARY:** - PURPOSE: Plitidepsin is an antineoplastic currently in clinical evaluation in a phase III trial in multiple myeloma (ADMYRE). Presently, the hydrophobic drug plitidepsin is formulated using Cremophor®, an adjuvant associated with unwanted hypersensitivity reactions. In search of alternatives, we developed and tested two nanoparticle-based formulations of plitidepsin, aiming to modify/improve drug biodistribution and efficacy. METHODS: Using nanoprecipitation, plitidepsin was loaded in polymer nanoparticles made of amphiphilic block copolymers (i.e. PEG-b-PBLG or PTMC-b-PGA). The pharmacokinetics, biodistribution and therapeutic efficacy

was assessed using a xenograft renal cancer mouse model (MRI-H-121 xenograft) upon administration of the different plitidepsin formulations at maximum tolerated multiple doses (0.20 and 0.25 mg/kg for Cremophor® and copolymer formulations, respectively). RESULTS: High plitidepsin loading efficiencies were obtained for both copolymer formulations. Considering pharmacokinetics, PEG-b-PBLG formulation showed lower plasma clearance, associated with higher AUC and Cmax than Cremophor® or PTMC-b-PGA formulations. Additionally, the PEG-b-PBLG formulation presented lower liver and kidney accumulation compared with the other two formulations, associated with an equivalent tumor distribution. Regarding the anticancer activity, all formulations elicited similar efficacy profiles, as compared to the Cremophor® formulation, successfully reducing tumor growth rate. CONCLUSIONS: Although the nanoparticle formulations present equivalent anticancer activity, compared to the Cremophor® formulation, they show improved biodistribution profiles, presenting novel tools for future plitidepsin-based therapies.

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[369]

**TÍTULO / TITLE:** - Potential implications on TCP for external beam prostate cancer treatment when considering the bystander effect in partial exposure scenarios.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Biol. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [3109/09553002.2014.868617](#)

**AUTORES / AUTHORS:** - Balderson MJ; Kirkby C

**RESUMEN / SUMMARY:** - Abstract Purpose: This work investigates the potential implications on tumour control probability (TCP) for external beam prostate cancer treatment when considering the bystander effect in partial exposure scenarios. Materials and methods: The biological response of a prostate cancer target volume under conditions where a sub-volume of the target volume was not directly irradiated was modelled in terms of surviving fraction (SF) and Poisson-based TCP. A direct comparison was made between the linear-quadratic (LQ) response model, and a response model that incorporates bystander effects as derived from published in vitro data (McMahon et al., 2013, McMahon et al., 2012). Scenarios of random and systematic misses were considered. Results: Our results suggest the potential for the bystander effect to deviate from LQ predictions when even very small (< 1 %) sub-volumes of the target volume were directly irradiated. Under conditions of random misses for each fraction, the bystander model predicts a 3 % and 1 % improvement in tumour control compared to that predicted by a LQ model when only 90 % and 95 % of the prostate cells randomly receive the intended dose. Under conditions of systematic miss, if even a small portion of the target volume is not directly exposed, the LQ model predicts a TCP approaching zero, whereas the bystander model suggests TCP will improve starting at exposed volumes of around 85%. Conclusions: The bystander model, when applied to clinically relevant scenarios, demonstrates the potential to deviate from the TCP predictions of the common local LQ model when sub-volumes of a target volume are randomly or systematically missed over a course of fractionated radiation therapy.

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[370]

**TÍTULO / TITLE:** - Percutaneous renal cryoablation: prospective experience treating 120 consecutive tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Dec;201(6):1353-61. doi: 10.2214/AJR.13.11084.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.13.11084](#)

**AUTORES / AUTHORS:** - Buy X; Lang H; Garnon J; Sauleau E; Roy C; Gangi A

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Interventional Radiology, University Hospital of Strasbourg, 1 Pl de l'Hopital, 67000 Strasbourg, France.

**RESUMEN / SUMMARY:** - **OBJECTIVE.** The purpose of this study was to evaluate the safety and efficacy of percutaneous renal cryoablation. **SUBJECTS AND METHODS.** A prospective nonrandomized evaluation of 120 renal tumors in 95 patients treated with percutaneous cryoablation because their condition did not allow surgery focused on tumor characteristics, complications, hospital course, treatment success based on MRI follow-up, and effect on renal function. **RESULTS.** The mean follow-up period was 28 months (range, 6-63 months). The mean tumor size was 26 mm (range, 10-68 mm), including 20 tumors larger than 40 mm. Ninety-one tumors were treated with CT and 29 with MRI guidance. Fifty-six tumors were anterior, and thermal protection of adjacent organs with carbodissection or hydrodissection was used in 55 cases. According to the Clavien-Dindo classification, five grade II complications and four grade III-V complications occurred. The technical success rate was 94%. Two tumors required a second session of cryoablation because of recurrence or residual tumor. Twelve months after treatment the overall survival was 96.7%, and the disease-free survival rate was 96.4%, including patients with recurrent genetic tumors. Renal function remained unchanged even in the subgroup of patients with a single kidney. **CONCLUSION.** Midterm follow-up shows that percutaneous renal cryoablation is an effective and safe alternative technique for patients whose condition does not allow surgery and that renal function is preserved. Cryoablation combined with percutaneous thermal protection techniques allows treatment of more complex tumors (large central tumors and tumors close to vulnerable structures). However, T1b and central tumors are associated with higher risk of incomplete treatment.

[371]

**TÍTULO / TITLE:** - Renal cell carcinoma: trying but failing to improve the only curative therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Immunother. 2013 Nov-Dec;36(9):459-61. doi: 10.1097/CJI.0000000000000002.

●● Enlace al texto completo (gratis o de pago) [1097/CJI.0000000000000002](#)

**AUTORES / AUTHORS:** - Acquavella N; Fojo T

**INSTITUCIÓN / INSTITUTION:** - Medical Oncology, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD.

[372]

**TÍTULO / TITLE:** - Incidence and long-term outcomes of squamous cell bladder cancer after deceased donor renal transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Transplant. 2013 Oct 11. doi: 10.1111/ctr.12245.

●● Enlace al texto completo (gratis o de pago) [1111/ctr.12245](#)

**AUTORES / AUTHORS:** - Davis NF; McLoughlin LC; Dowling C; Power R; Mohan P; Hickey D; Smyth G; Eng M; Little DM

**INSTITUCIÓN / INSTITUTION:** - Department of Urology and Transplant Surgery, Beaumont Hospital, Dublin, Ireland.

**RESUMEN / SUMMARY:** - OBJECTIVE: To review the incidence and long-term outcomes of squamous cell carcinoma (SCC) of the bladder in patients after kidney transplantation. METHODS: Between January 1976 and March 2013, five patients from one center (0.0013%) developed SCC of the bladder after undergoing a deceased donor kidney transplant. Their relevant risk factors included long-term self-intermittent catheterization/indwelling catheter (n = 2), smoking history (n = 2), and a prior history of cyclophosphamide treatment for vasculitis (n = 1). Primary outcome variables were overall patient survival and latency period between transplantation and SCC diagnosis. RESULTS: The duration of long-term follow-up was 94 +/- 89 (range: 4-239) months. The latency period between transplantation and bladder SCC was 87 +/- 87 (range: 2-228) months, and all five patients were immunosuppressed with tacrolimus, mycophenolate mofetil, and prednisone. Four patients had suspected metastases upon presentation, and one patient presented with organ-confined disease. This patient underwent a radical cystectomy and remains disease free eight months post-operatively. Despite radical treatment, the remaining four patients died from metastatic disease 7 +/- 4.4 (range: 2-11) months after their initial diagnosis. CONCLUSION: SCC of the bladder has a poor prognosis particularly in renal transplant patients. Early detection with flexible cystourethroscopy in patients with risk factors for SCC may improve long-term outcomes in this patient cohort.

[373]

**TÍTULO / TITLE:** - Differential BCCIP gene expression in primary human ovarian cancer, renal cell carcinoma and colorectal cancer tissues.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2013 Dec;43(6):1925-34. doi: 10.3892/ijo.2013.2124. Epub 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2124](#)

**AUTORES / AUTHORS:** - Liu X; Cao L; Ni J; Liu N; Zhao X; Wang Y; Zhu L; Wang L; Wang J; Yue Y; Cai Y; Jin J

**INSTITUCIÓN / INSTITUTION:** - Department of Gynecologic Oncology, The First Clinical Hospital of Jilin University, Changchun, Jilin 130021, P.R. China.

**RESUMEN / SUMMARY:** - Human BCCIP, a protein which interacts with BRCA2 and CDKN1A (Cip1, p21), has been implicated in many cellular processes including cell cycle regulation, DNA recombination and damage repair, telomere maintenance, embryonic development and genomic stability. BCCIP gene expression, which is an important BRCA2 cofactor in tumor suppression, has been identified in some primary cancers. Thus, we investigated the role of BCCIP expression in a large sample of clinically diagnosed primary ovarian cancer, renal cell carcinoma (RCC) and colorectal cancer (CRC) tissues. Using clinically diagnosed frozen primary cancer tissues, quantitative PCR (qPCR), western blot analysis (WB) and immunohistochemical

staining (IHC) approaches were used to detect and measure gene expression. Reduced BCCIP gene expression in ovarian cancer, RCC and CRC tissues occurred in 74, 89 and 75% of tissue samples, respectively. qPCR analysis of mRNA expression in 54 ovarian cancer, 50 RCC and 44 CRC samples revealed significant (>2-fold decreased) BCCIP downregulation in 56, 70 and 46% of tissue samples, respectively. Although BCCIP expression in three different tumor tissues decreased, the relationship between BCCIP expression and clinicopathological features of each cancer was distinct. Compared to normal tissues, BCCIP expression in ovarian cancers was significantly downregulated in serous, endometrioid and mucinous carcinomas. Downregulation of BCCIP expression was strongly associated with clear cell RCC (ccRCC) and Fuhrman tumor grading, but significant differences in BCCIP expression between CRC and matched normal tissues occurred only in male CRC tissues ( $p < 0.05$ ) and in tissue with a T4 tumor stage ( $p < 0.01$ ). Thus, BCCIP protein was chiefly reduced in ovarian cancer and RCC tissue samples ( $p < 0.05$ ). BCCIP gene expression was downregulated in human ovarian cancer, RCC and CRC tissues, suggesting a role for the gene in the pathogenesis of these cancers.

[374]

**TÍTULO / TITLE:** - The RTK/ERK pathway is associated with prostate cancer risk on the SNP level: A pooled analysis of 41 sets of data from case-control studies.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Gene. 2013 Oct 29. pii: S0378-1119(13)01451-0. doi: 10.1016/j.gene.2013.10.042.

●● Enlace al texto completo (gratis o de pago) [1016/j.gene.2013.10.042](#)

**AUTORES / AUTHORS:** - Chen Y; Li T; Yu X; Xu J; Li J; Luo D; Mo Z; Hu Y

**INSTITUCIÓN / INSTITUTION:** - Center for Genomic and Personalized Medicine, Guangxi Medical University, Nanning, Guangxi Zhuang Autonomous Region, China; Department of Urology and Nephrology, The First Affiliated Hospital of Guangxi Medical University, Nanning, China.

**RESUMEN / SUMMARY:** - Prostate cancer (PCa) is a malignant disease influencing numerous men worldwide every year. However, the exact pathogenesis and the genes, environment, and other factors involved have not been explained clearly. Some studies have proposed that cell signaling pathways might play a key role in the development and progression of PCa. According to our previous study, the RTK/ERK pathway containing nearly 40 genes was associated with PCa risk. On the basis of these genes, we conducted a meta-analysis with our own Chinese Consortium for Prostate Cancer Genetics (ChinaPCa) study and available studies in the databases to describe the association between the pathway and PCa on the SNP level. The results suggested that rs4764695/IGF1 (recessive model: pooled OR=0.92, 95%CI=0.852-0.994,  $P=0.034$ ;  $I^2=0\%$ ,  $P=0.042$ ; allele analysis: pooled OR=0.915, 95%CI=0.874-0.958,  $P=0$ ;  $I^2=0\%$ ,  $P=0.424$ ; codominant model: OR=0.835, 95%CI=0.762-0.916,  $P=0$ ;  $I^2=0\%$ ,  $P=0.684$ ) and rs1570360/VEGF (recessive model: OR=0.596, 95%CI=0.421-0.843,  $P=0.003$ ;  $I^2=23.9\%$ ,  $P=0.269$ ; codominant model: OR=0.576, 95%CI=0.404-0.820,  $P=0.002$ ;  $I^2=49.1\%$ ,  $P=0.140$ ) were significantly associated with PCa. In subgroup analysis, the relationship was also found in Caucasians for IGF1 (dominant model: OR=0.834, 95%CI=0.769-0.904,  $P=0$ ; allele analysis: OR=0.908, 95%CI=0.863-0.955,  $P=0$ ; AA vs CC: OR=0.829, 95%CI=0.750-0.916,  $P=0$ ; AC vs CC: OR=0.837,

95%CI=0.768-0.912, P=0). In addition, in Asians (allele analysis: OR=0.21, 95%CI=0.168-0.262, P=0) and Caucasians (recessive model: OR=0.453, 95%CI: 0.240-0.855, P=0.015; codominant model: OR=0.464, 95%CI=0.240-0.898, P=0.023) for VEGF, the association was significant. The results indicated that rs4764695/IGF1 and rs1570360/VEGF might play a key role in the development and progression of PCa. On the SNP level, we suggest that the study gives us a new view of gene-pathway analysis and targeted therapy for PCa.

[375]

**TÍTULO / TITLE:** - Cooperative behavior of the nuclear receptor superfamily and its deregulation in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Carcinogenesis. 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [1093/carcin/bgt334](#)

**AUTORES / AUTHORS:** - Long MD; Thorne JL; Russell J; Battaglia S; Singh PK; Sucheston-Campbell LE; Campbell MJ

**INSTITUCIÓN / INSTITUTION:** - Department of Pharmacology and Therapeutics, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263, USA.

**RESUMEN / SUMMARY:** - The current study aimed to assess the topology of the nuclear receptor (NR) superfamily in normal prostate epithelial cells and its distortion in prostate cancer. Both in vitro and in silico approaches were utilized to profile NRs expressed in non-malignant RWPE-1 cells, which were subsequently investigated by treating cells with 132 binary NR ligand combinations. Nine significant cooperative interactions emerged including both superadditive [22 $\alpha$ -hydroxycholesterol and eicosatetraenoic acid] and subadditive [1 $\alpha$ ,25(OH) $_2$ D $_3$  and chenodeoxycholic acid] cellular responses, which could be explained in part by cooperative control of cell-cycle progression and candidate gene expression. In addition, publicly available data were employed to assess NR expression in human prostate tissue. Common and significant loss of NR superfamily expression was established in publicly available data from prostate tumors, in part predicting parallel distortion of targeting microRNA. These findings suggest that the NR superfamily in the prostate cooperatively integrates signals from dietary, hormonal and metabolic cues, and is significantly distorted in prostate cancer.

[376]

**TÍTULO / TITLE:** - The HIF1A functional genetic polymorphism at locus +1772 associates with progression to metastatic prostate cancer and refractoriness to hormonal castration.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Sep 30. pii: S0959-8049(13)00825-3. doi: 10.1016/j.ejca.2013.09.001.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejca.2013.09.001](#)

**AUTORES / AUTHORS:** - Fraga A; Ribeiro R; Principe P; Lobato C; Pina F; Mauricio J; Monteiro C; Sousa H; Calais da Silva F; Lopes C; Medeiros R

**INSTITUCIÓN / INSTITUTION:** - Urology Department, Sto Antonio Hospital, Porto Hospital Centre, Porto, Portugal; ICBAS, Abel Salazar Biomedical Sciences Institute, University of Porto, Porto, Portugal. Electronic address: [avfraga@gmail.com](mailto:avfraga@gmail.com).

**RESUMEN / SUMMARY:** - The hypoxia inducible factor 1 alpha (HIF1a) is a key regulator of tumour cell response to hypoxia, orchestrating mechanisms known to be involved in cancer aggressiveness and metastatic behaviour. In this study we sought to evaluate the association of a functional genetic polymorphism in HIF1A with overall and metastatic prostate cancer (PCa) risk and with response to androgen deprivation therapy (ADT). The HIF1A +1772 C>T (rs11549465) polymorphism was genotyped, using DNA isolated from peripheral blood, in 1490 male subjects (754 with prostate cancer and 736 controls cancer-free) through Real-Time PCR. A nested group of cancer patients who were eligible for androgen deprivation therapy was followed up. Univariate and multivariate models were used to analyse the response to hormonal treatment and the risk for developing distant metastasis. Age-adjusted odds ratios were calculated to evaluate prostate cancer risk. Our results showed that patients under ADT carrying the HIF1A +1772 T-allele have increased risk for developing distant metastasis (OR, 2.0; 95%CI, 1.1-3.9) and an independent 6-fold increased risk for resistance to ADT after multivariate analysis (OR, 6.0; 95%CI, 2.2-16.8). This polymorphism was not associated with increased risk for being diagnosed with prostate cancer (OR, 0.9; 95%CI, 0.7-1.2). The HIF1A +1772 genetic polymorphism predicts a more aggressive prostate cancer behaviour, supporting the involvement of HIF1a in prostate cancer biological progression and ADT resistance. Molecular profiles using hypoxia markers may help predict clinically relevant prostate cancer and response to ADT.

[377]

**TÍTULO / TITLE:** - The epidermal growth factor receptor is frequently overexpressed in penile squamous cell carcinomas: a tissue microarray and digital image analysis study of 112 cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Dec;44(12):2690-5. doi: 10.1016/j.humpath.2013.07.012. Epub 2013 Sep 25.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.humpath.2013.07.012](#)

**AUTORES / AUTHORS:** - Chaux A; Munari E; Katz B; Sharma R; Lecksell K; Cubilla AL; Burnett AL; Netto GJ

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Johns Hopkins Medical Institutions, Baltimore, MD 31231, USA; Office of Scientific Research, Norte University, 1614 Asuncion, Paraguay. Electronic address: [alcideschaux@uninorte.edu.py](mailto:alcideschaux@uninorte.edu.py).

**RESUMEN / SUMMARY:** - Disseminated penile cancer is usually treated with chemotherapy. However, response rates are far from acceptable. Recently, anti-epidermal growth factor receptor (EGFR) monoclonal antibodies have shown to be clinically useful in penile carcinomas. Nevertheless, only a few cases of penile carcinomas have been evaluated for EGFR expression. In this study, we assessed the immunohistochemical expression of EGFR in 112 patients with penile squamous cell carcinoma. We built 4 tissue microarrays and evaluated EGFR expression using a monoclonal mouse anti-EGFR antibody. For digital image analysis, we used the open-source software ImageJ version 1.47 (NIH, Bethesda, MD) along with the

immunomembrane plug-in. Membranous EGFR expression was evaluated, taking into account staining completeness (0-10 points) and staining intensity (0-10 points) for a combined score (0-20 points). We classified the cases as follows: negative EGFR expression, 0 to 3 points; low EGFR expression, 4 to 8 points; and high EGFR expression, 9 to 20 points. The distribution of EGFR immunohistochemical expression was as follows: 13 cases (12%) were EGFR negative, 49 cases (44%) had low EGFR expression, and 50 cases (44%) had high EGFR expression. EGFR expression was not associated with histologic subtype ( $P = .47$ ), histologic grade ( $P = .77$ ), or human papillomavirus status ( $P = .14$ ). In conclusion, immunohistochemical EGFR expression appears to be a common feature of penile carcinomas, independently of histologic subtype, histologic grade, and human papillomavirus presence. Whether or not EGFR expression is associated with EGFR gene mutation or if it can be used to predict response to therapy in patients with disseminated penile cancer should be evaluated in future studies.

[378]

**TÍTULO / TITLE:** - Rottlerin induces autophagy and apoptosis in prostate cancer stem cells via PI3K/Akt/mTOR signaling pathway.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Lett. 2013 Oct 11. pii: S0304-3835(13)00714-3. doi: 10.1016/j.canlet.2013.10.003.

●● Enlace al texto completo (gratis o de pago) [1016/j.canlet.2013.10.003](#)

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**RESUMEN / SUMMARY:** - Autophagy plays an important role in cellular homeostasis through the disposal and recycling of cellular components. Cancer stem cells (CSCs) play major roles in cancer initiation, progression, and drug resistance. Rottlerin (Rott) is an active molecule isolated from *Mallotus philippinensis*, a medicinal plant used in Ayurvedic Medicine for anti-allergic and anti-helminthic treatments, demonstrates anticancer activities. However, the molecular mechanisms by which it induces autophagy in prostate CSCs have not been examined. The main objective of the paper was to examine the molecular mechanisms by which Rott induces autophagy in prostate CSCs. Autophagy was measured by the lipid modification of light chain-3 (LC3) and the formation of autophagosomes. Apoptosis was measured by flow cytometer analysis. The Western blot analysis was used to examine the effects of Rott on the expression of PI3K, phosphorylation of Akt, phosphorylation of mTOR, and phosphorylation of AMPK in pros CSCs. RNAi technology was used to inhibit the expression of Beclin-1 and ATG-7. Rott induced the lipid modification of light chain-3 (LC3) and the formation of autophagosomes after 24h of Rott treatment in prostate CSCs. Rott-treated prostate CSCs induced transition from LC3-I to LC3-II, a hall mark of autophagy. Rott also induced the expression of Atg5, Atg7, Atg12 and Beclin-1 proteins during autophagy. The knock-down of Atg7 and Beclin-1 blocked Rott-induced autophagy. Furthermore, Rott induced AMPK phosphorylation was blocked by 3-MA, Baf and CHX. In addition, inhibition of AMPK expression by shRNA blocked Rott induced autophagy. In conclusion, a better understanding of the biology of autophagy

and the pharmacology of autophagy modulators has the potential for facilitating the development of autophagy-based therapeutic interventions for prostate cancer.

[379]

**TÍTULO / TITLE:** - Pulmonary metastasis from urothelial carcinoma showing progressive multiple cystic lesions.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Respir Crit Care Med. 2013 Nov 15;188(10):1267-8. doi: 10.1164/rccm.201305-0887LE.

●● Enlace al texto completo (gratis o de pago) [1164/rccm.201305-0887LE](#)

**AUTORES / AUTHORS:** - Imokawa S; Uehara M; Uto T; Sagisaka S; Sato J; Yasuda K; Matsushita K; Oi S; Tanioka F; Suda T; Chida K

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[380]

**TÍTULO / TITLE:** - Estimation of rectal dose using daily megavoltage cone-beam computed tomography and deformable image registration.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Radiat Oncol Biol Phys. 2013 Nov 1;87(3):602-8. doi: 10.1016/j.ijrobp.2013.06.2054.

●● Enlace al texto completo (gratis o de pago) [1016/j.ijrobp.2013.06.2054](#)

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**RESUMEN / SUMMARY:** - PURPOSE: The actual dose delivered to critical organs will differ from the simulated dose because of interfractional organ motion and deformation. Here, we developed a method to estimate the rectal dose in prostate intensity modulated radiation therapy with consideration to interfractional organ motion using daily megavoltage cone-beam computed tomography (MVCBCT). METHODS AND MATERIALS: Under exemption status from our institutional review board, we retrospectively reviewed 231 series of MVCBCT of 8 patients with prostate cancer. On both planning CT (pCT) and MVCBCT images, the rectal contours were delineated and the CT value within the contours was replaced by the mean CT value within the pelvis, with the addition of 100 Hounsfield units. MVCBCT images were rigidly registered to pCT and then nonrigidly registered using B-Spline deformable image registration (DIR) with Velocity AI software. The concordance between the rectal contours on MVCBCT and pCT was evaluated using the Dice similarity coefficient (DSC). The dose distributions normalized for 1 fraction were also deformed and summed to estimate the actual total dose. RESULTS: The DSC of all treatment fractions of 8 patients was improved from 0.75±0.04 (mean ±SD) to 0.90 ±0.02 by DIR. Six patients showed a decrease of the generalized equivalent uniform dose (gEUD) from total dose compared with treatment plans. Although the rectal volume of each treatment fraction did not show any correlation with the change in gEUD ( $R^2=0.18\pm0.13$ ), the displacement of

the center of gravity of rectal contours in the anterior-posterior (AP) direction showed an intermediate relationship ( $R(2)=0.61\pm 0.16$ ). CONCLUSION: We developed a method for evaluation of rectal dose using DIR and MVCBCT images and showed the necessity of DIR for the evaluation of total dose. Displacement of the rectum in the AP direction showed a greater effect on the change in rectal dose compared with the rectal volume.

[381]

**TÍTULO / TITLE:** - Influence of Histologic Criteria and Confounding Factors in Staging Equivocal Cases for Microscopic Perivesical Tissue Invasion (pT3a): An Interobserver Study Among Genitourinary Pathologists.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Surg Pathol. 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago)

[1097/PAS.0000000000000096](#)

**AUTORES / AUTHORS:** - Ananthanarayanan V; Pan Y; Tretiakova M; Amin MB; Cheng L; Epstein JI; Grignon DJ; Hansel DE; Jimenez RE; McKenney JK; Montironi R; Oliva E; Osunkoya AO; Rao P; Reuter VE; Ro JY; Shen SS; Srigley JR; Tsuzuki T; Yao JL; Antic T; Haber M; Taxy JB; Paner GP

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**RESUMEN / SUMMARY:** - Current oncology guidelines and clinical trials consider giving adjuvant chemotherapy to bladder cancer patients with at least microscopic perivesical tissue invasion (MPVTI) ( $\geq pT3a$ ) on cystectomy. The boundary of muscularis propria (MP) and perivesical tissue is commonly ill defined, and hence, when the tumor involves the interface, interpretation of MPVTI is likely to be subjective. In this study, 20 sets of static images that included 1 nontumoral bladder wall for defining MP-perivesical tissue boundary and 19 bladder cancer cases equivocal for MPVTI with confounding factors were sent to 17 expert genitourinary pathologists for review. The

confounding factors were “histoanatomic,” as defined by the irregular MP-perivesical tissue boundary, and “tumor related,” such as fibrosis, dense inflammation, tumor cells at the edge of the outermost MP muscle bundle, and lymphovascular invasion. These equivocal cases were divided into 3 categories according to the following factors: (1) histoanatomic only (7/19), (2) histoanatomic+tumor related (7/19), and (3) tumor related only (5/19). Participating genitourinary pathologists used different criteria to assess MPVTI: (A) drawing a straight horizontal line using the outermost MP muscle bundle edge as the MP-perivesical tissue boundary reference (3/17); (B) drawing multiple straight lines interconnecting the outermost MP muscle bundle edges (9/17); (C) following the curves of every outermost MP muscle bundle edge (4/17). In category 1 cases, most pathologists who used the A criterion called for absence (6/7), whereas those who used the C criterion called for presence (5/7) of MPVTI, which resulted in disparity in 4/7 cases. There was no circumstance in which criteria A and C agreed on the presence or absence of MPVTI but was opposed by the B criterion in category 1 cases. Median pairwise agreement among all pathologists (regardless of criteria) for all cases (regardless of category) was only “fair” ( $\kappa=0.281$ ). However, when only the B criterion was assessed for category 1 cases, median agreement was “substantial” ( $\kappa=0.696$ ), and pairwise rater comparisons included 6/36 (17%) “near perfect,” 13/36 (36%) “substantial,” and 11/36 (31%) “moderate” agreements. When all cases with histoanatomic factors (categories 1 and 2) were combined, median pairwise agreements were: (A)  $\kappa=0.588$ , (B)  $\kappa=0.423$ , and (C)  $\kappa=0.512$ , and the B criterion rater comparisons included 0/36 (0%) “near perfect,” 6/36 (17%) “substantial,” and 16/36 (44%) “moderate” agreements, which showed the confounding effect of tumor-related factors. For category 3 cases, median pairwise agreement for all pathologists was “fair” ( $\kappa=0.286$ ), with consensus agreement in only 2/5 of these equivocal cases. Lymphovascular invasion only at the MP-perivesical tissue boundary was not staged as MPVTI by 87.5% of pathologists. In conclusion, this study showed that interpretation of equivocal cases for MPVTI can be made difficult by factors intrinsic to bladder histoanatomy, defined by an irregular MP-perivesical tissue boundary, and factors related to tumor spread. There are at least 3 different approaches to demarcating an irregular outer MP boundary, and agreement is improved on equivocal cases when a common histoanatomic criterion is used. However, inconsistent agreement of anatomic criteria may cause systematic discrepancy in assessing MPVTI. Tumor-related factors such as dense fibrosis or desmoplasia, obscuring inflammation, tumor cells at the edge of the outermost MP muscle bundle, and admixed lymphovascular invasion can also negatively influence the agreement on interpretation of MPVTI. This study highlights the need to adopt common criteria in defining the outer MP boundary. Future studies may identify the most clinically relevant histoanatomic criteria for MPVTI.

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[382]

**TÍTULO / TITLE:** - Sinodiellide A exerts thermosensitizing effects and induces apoptosis and G2/M cell cycle arrest in DU145 human prostate cancer cells via the Ras/Raf/MAPK and PI3K/Akt signaling pathways.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Mol Med. 2013 Nov 27. doi: 10.3892/ijmm.2013.1568.

●● [Enlace al texto completo \(gratis o de pago\) 3892/ijmm.2013.1568](#)

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**INSTITUCIÓN / INSTITUTION:** - Research and Development Department, The Wakasa Wan Energy Research Center, Tsuruga, Fukui 914-0192, Japan.

**RESUMEN / SUMMARY:** - Sinodielside A (SA) is a naturally occurring guaianolide, which is isolated from the root of *Sinodielsia yunnanensis*. This root, commonly found in Yunnan province, is used in traditional Chinese medicine as an antipyretic, analgesic and diaphoretic agent. A number of studies have reported that agents isolated from a species of Umbelliferae (Apiaceae) have antitumor activities. We previously reported, using combined treatments with this medicinal herb and hyperthermia at various temperatures, an enhanced cytotoxicity in the human prostate cancer androgenindependent cell lines, PC3 and DU145, and analyzed the related mechanisms. In the present study, we investigated the effects of treatment with SA prior to hyperthermia on the thermosensitivity of DU145 cells, and the mechanisms related to the induction of apoptosis and G2/M cell cycle arrest via the activation of extracellular-regulated kinase (ERK)1/2, c-Jun N-terminal kinase (JNK) mitogen-activated protein kinase (MAPK) signaling pathways, as well as the phosphoinositide 3-kinase (PI3K)/Akt signaling pathways. Cells were exposed to hyperthermia alone (40-44 C) or hyperthermia in combination with SA. Lethal damage to cells treated with mild hyperthermia (40 or 42 C) for up to 6 h was slight; however, hyperthermia in combination with SA synergistically enhanced thermosensitivity. Lethal damage to cells treated with acute hyperthermia (43 or 44 C) was more severe, but these effects were also enhanced and were more significant by the combined treatment with SA. The kinetics of apoptosis induction and cell cycle distribution were analyzed by flow cytometry. In addition, the levels of ERK1/2, JNK and Akt were determined by western blot analysis. The incidence of apoptotic cells after treatment with SA (20.0 microM) at 37 C for 4 h, hyperthermia (44 C) alone for 30 min, and the combination in sequence were examined. The sub-G1 division (%) in the diagram obtained by flow cytometry was applied to that assay. The percentage of apoptotic cells (10.53+/-5.02%) was higher at 48 h as compared to 0, 12 and 24 h after treatment. The distribution of DU145 cells in the G2/M cell cycle phase was markedly increased after 24 h of heating at 44 C and after the combined treatment with heating and SA. The phosphorylation of ERK1/2 was reduced following treatment with heating and SA, while the levels of phosphorylated JNK (p-JNK) were markedly increased immediately after heating at 44 C and when heating was combined with SA. By contrast, the levels of phosphorylated Akt (p-Akt) were immediately increased only after heating at 44 C. Thus, we concluded that SA exerts its thermosensitizing effects on DU145 cells by inhibiting the activation of the MAPK/ERK1/2 and PI3K/Akt signaling pathways.

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[383]

**TÍTULO / TITLE:** - Increasing discordant antioxidant protein levels and enzymatic activities contribute to increasing redox imbalance observed during human prostate cancer progression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Free Radic Biol Med. 2013 Nov 21. pii: S0891-5849(13)01495-0. doi: 10.1016/j.freeradbiomed.2013.11.006.

- Enlace al texto completo (gratis o de pago)

[1016/j.freeradbiomed.2013.11.006](http://1016/j.freeradbiomed.2013.11.006)

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**RESUMEN / SUMMARY:** - A metabolomics study demonstrated a decrease in glutathione and an increase in cysteine (Cys) levels in human prostate cancer (PCa) tissues as Gleason scores increased, indicating redox imbalance with PCa progression. These results were extended in the present study by analyzing redox state of the protein thioredoxin 1 (Trx1) and sulfinylation (SO<sub>3</sub>) of peroxiredoxins (Prxs) (PrxsSO<sub>3</sub>) in PCa tissues and cell lines. Lysates of paired human PCa tissues with varying degree of aggressiveness and adjacent benign (BN) tissues were used for analysis. Redox western blot analysis of Trx1 demonstrated low levels of reduced and high levels of oxidized Trx1 (functional and non-functional, respectively) in high grade PCa (Gleason scores 4+4 to 4+5) in comparison to intermediate grade PCa (Gleason scores 3+3 to 3+4) or BN tissues. PrxsSO<sub>3</sub> were increased in high grade PCa. Oxidized Trx1 and PrxsSO<sub>3</sub> are indicators of oxidative stress. To study whether redox imbalance may potentially affect enzyme activities of antioxidant proteins (AP), we determined levels of selected AP in PCa tissues by western blot analysis and found that mitochondrial manganese superoxide dismutase (MnSOD), Prx 3, and Trx1 were increased in high grade PCa tissues when compared with BN tissues. Enzyme activities of MnSOD in high grade PCa tissues were significantly increased but at a lower magnitude when compared with the levels of MnSOD protein (0.5 folds vs. 2 folds increase). Trx1 activity was not changed in high grade PCa tissues despite a large increase in Trx1 protein expression. Further studies demonstrated a significant increase in posttranslational modifications of tyrosine and lysine residues in MnSOD protein and oxidation of Cys at active site (Cys 32 and Cys 35) and regulatory site (Cys 62 and Cys 69) of Trx1 in high grade PCa compared to BN tissues. These discordant changes between protein levels and enzyme activities are consistent with protein inactivation by redox imbalance and/or posttranslational modifications. In contrast, the protein level and activity of extracellular superoxide dismutase (ECSOD) were significantly decreased in high grade PCa when compared with adjacent BN tissues. Results from cell lines mirror those from PCa tissues. Knowledge of redox state profiles in specific cancers may help to predict the behavior and response of each cancer to chemotherapeutic drugs and radiation.

[384]

**TÍTULO / TITLE:** - Androgens regulate prostate cancer cell growth via an AMPK-PGC-1α-mediated metabolic switch.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Nov 4. doi: 10.1038/onc.2013.463.

- Enlace al texto completo (gratis o de pago) [1038/onc.2013.463](http://1038/onc.2013.463)

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**RESUMEN / SUMMARY:** - Prostate cancer is the most commonly diagnosed malignancy among men in industrialized countries, accounting for the second leading cause of cancer-related deaths. Although we now know that the androgen receptor (AR) is important for progression to the deadly advanced stages of the disease, it is poorly understood what AR-regulated processes drive this pathology. Here we demonstrate that AR regulates prostate cancer cell growth via the metabolic sensor 5'-AMP-activated protein kinase (AMPK), a kinase that classically regulates cellular energy homeostasis. In patients, activation of AMPK correlated with prostate cancer progression. Using a combination of radiolabeled assays and emerging metabolomic approaches, we also show that prostate cancer cells respond to androgen treatment by increasing not only rates of glycolysis, as is commonly seen in many cancers, but also glucose and fatty acid oxidation. Importantly, this effect was dependent on androgen-mediated AMPK activity. Our results further indicate that the AMPK-mediated metabolic changes increased intracellular ATP levels and peroxisome proliferator-activated receptor gamma coactivator 1-alpha (PGC-1alpha)-mediated mitochondrial biogenesis, affording distinct growth advantages to the prostate cancer cells. Correspondingly, we used outlier analysis to determine that PGC-1alpha is overexpressed in a subpopulation of clinical cancer samples. This was in contrast to what was observed in immortalized benign human prostate cells and a testosterone-induced rat model of benign prostatic hyperplasia. Taken together, our findings converge to demonstrate that androgens can co-opt the AMPK-PGC-1alpha signaling cascade, a known homeostatic mechanism, to increase prostate cancer cell growth. The current study points to the potential utility of developing metabolic-targeted therapies directed toward the AMPK-PGC-1alpha signaling axis for the treatment of prostate cancer. Oncogene advance online publication, 4 November 2013; doi:10.1038/onc.2013.463.

[385]

**TÍTULO / TITLE:** - HRAS mutations in bladder cancer at an early age and the possible association with the Costello Syndrome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Hum Genet. 2013 Oct 30. doi: 10.1038/ejhg.2013.251.

●● Enlace al texto completo (gratis o de pago) [1038/ejhg.2013.251](#)

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**RESUMEN / SUMMARY:** - Bladder tumours of patients <20 years have a low incidence of genetic aberrations typically found in tumours in older patients. In this study, we investigated oncogene mutations in patients with bladder cancer (BC) <20 years and compared them to older age groups. Interestingly, we observed a relatively high number of HRAS mutations in tumour from young patients. These mutations were also highly uncommon in BCs of older patients, ie, p.(Gly12Ser) and p.(Gly12Ala). Germline mutations in the HRAS gene, especially p.(Gly12Ser/Ala), cause Costello Syndrome (CS), a severe congenital disorder. Indeed, one of the patients had been diagnosed with CS. We hypothesized that some of the other patients might be mosaic for the HRAS mutation and therefore could express some of the clinical features of CS, like tumour predisposition. Hence, we isolated DNA from microdissected stroma and

analysed it for HRAS mutations. In the CS patient and in patient X, the mutation was also highly expressed in normal stroma. We conclude that patient X is possibly mosaic for the HRAS mutation. These results suggest that mosaicism for oncogenic HRAS mutations may increase the risk for developing BC at a young age. European Journal of Human Genetics advance online publication, 30 October 2013; doi:10.1038/ejhg.2013.251.

[386]

**TÍTULO / TITLE:** - Trends in medical management of men with lower urinary tract symptoms suggestive of benign prostatic hyperplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Dec;82(6):1386-93. doi: 10.1016/j.urology.2013.07.062. Epub 2013 Oct 23.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urology.2013.07.062](#)

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**INSTITUCIÓN / INSTITUTION:** - Division of Health Services Research, Department of Urology, University of Michigan, Ann Arbor, MI.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To examine trends in medical management of men with benign prostatic hyperplasia/lower urinary tract symptoms (BPH/LUTS) in relation to sentinel events specific to particular medication regimens. **METHODS:** Using the National Ambulatory Medical Care Survey (1993-2010), we identified outpatient visits by men with BPH/LUTS. We ascertained prescriptions for medical therapy and distinguished between treatment with alpha-blocker monotherapy, 5alpha reductase inhibitor monotherapy, combination therapy, and anticholinergic therapy. We evaluated temporal trends in prescription patterns and assessed for changes after sentinel events related to each regimen (eg, Food and Drug Administration [FDA] approval for tamsulosin and alpha-blocker monotherapy). Finally, we used multivariable logistic regression to determine factors associated with each treatment strategy. **RESULTS:** From 1993 to 2010, there were over 101 million outpatient visits for men with a diagnosis of BPH/LUTS. Among these visits, the use of BPH medication increased from 14% of visits in 1993-1995 to over 40% of visits in 2008-2010 (P <.001). After tamsulosin was FDA approved, providers were twice as likely to prescribe ABs (odds ratio 2.35; 95% confidence interval 1.60-3.43). Providers were 5 times as likely to prescribe combination therapy after level 1 evidence supported its use (odds ratio 5.13; 95% confidence interval 3.35-7.86). **CONCLUSION:** Over the last 15 years, there has been a steady increase in the use of medications to manage men with BPH. Providers seem to have readily adopted novel medications and treatment regimens in response to FDA approval and supportive level 1 evidence.

[387]

**TÍTULO / TITLE:** - Characterization and sub-cellular localization of SS1R, SS2R, and SS5R in human late-stage prostate cancer cells: Effect of mono- and bi-specific somatostatin analogs on cell growth.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Endocrinol. 2013 Nov 5;382(2):860-870. doi: 10.1016/j.mce.2013.10.027.

- Enlace al texto completo (gratis o de pago) [1016/j.mce.2013.10.027](http://1016/j.mce.2013.10.027)

**AUTORES / AUTHORS:** - Ruscica M; Magni P; Steffani L; Gatto F; Albertelli M; Rametta R; Valenti L; Ameri P; Magnaghi V; Culler MD; Minuto F; Ferone D; Arvigo M

**INSTITUCIÓN / INSTITUTION:** - Department of Pharmacological and Biomolecular Sciences, Università degli Studi di Milano, Milan, Italy.

**RESUMEN / SUMMARY:** - Somatostatin (SST) and SST receptors (SS1R, SS2R, SS3R, SS4R and SS5R) appear to play a significant role in the progression of human prostate cancer (PCa), which is associated with heterogeneity of SSRs expression and specific cell localization as we already demonstrated in the LNCaP cell line, an in vitro model of human androgen-dependent PCa. In this study, PC-3 and DU-145 human castration-resistant PCa cells were found to express all SSRs, while LNCaP expressed all but SS4R. A 48-h treatment with BIM-23244 (SS2R/SS5R) or BIM-23926 (SS1R) SST analogs was more effective in inhibiting cell proliferation, compared to BIM-23120 (SS2R), BIM-23206 (SS5R) and BIM-23704 (SS1R/SS2R). BIM-23926 (SS1R) treatment increased the amount of p21 and decreased phosphorylated (p) ERK1/2. BIM-23244 (SS2R/SS5R) led to p21 increment only in PC-3 cells, and to pERK1/2 reduction in both cell lines. SS1R/SS2R and SS2R/SS5R receptor dimers were natively present on cell membrane and their amount was increased by BIM-23704 (SS1R/SS2R) or BIM-23244 (SS2R/SS5R) treatment, respectively. SS1R, SS2R and SS5R were differently distributed among nuclear, lysosomal and microsomal compartment, according to their different recycling dynamics. These results show that, in PC-3, DU-145 and LNCaP cells, activation of SS1R and SS2R/SS5R leads to relevant antiproliferative effects.

[388]

**TÍTULO / TITLE:** - An Investigation into the Anticancer Effects and Mechanism of Action of Hop beta-Acid Lupulone and Its Natural and Synthetic Derivatives in Prostate Cancer Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nutr Cancer. 2013 Oct;65(7):1086-92. doi: 10.1080/01635581.2013.850963. Epub 2013 Oct 29.

- Enlace al texto completo (gratis o de pago) [1080/01635581.2013.850963](http://1080/01635581.2013.850963)

**AUTORES / AUTHORS:** - Mouratidis PX; Colston KW; Tucknott ML; Tyrrell E; Pirianov G

**INSTITUCIÓN / INSTITUTION:** - a Division of Clinical Sciences, St. George's University of London, London, UK.

**RESUMEN / SUMMARY:** - Lupulone, a beta-acid derived from hop extracts has been shown to exhibit antibacterial and anticancer activity. In this study we investigated the anticancer potency of lupulone and its novel derivatives and their mechanism of action on prostate cancer cells. Cell viability was determined using the MTT assay, and the ELISA approach was used to investigate induction of apoptosis. Immunoblot analysis was carried out to determine activation and regulation of proteins associated with cell death. Screening of natural and new lupulone derivatives for their anticancer activity demonstrated that one (lupulone derivative 1h) displayed stronger anticancer activity than lupulone itself on PC3 and DU145 prostate cancer cells. We further found that lupulone derivatives induced caspase-dependent apoptosis that is associated with activation of caspases 8, 9, and 3. Furthermore, caspase 8 inhibitor Z-IETD-fmk

reduced cell death induced by lupulone derivatives, suggesting that apoptosis is mediated by caspase 8. Finally, we found that lupulone and its synthetic derivatives also increased formation of LC3II suggesting that autophagy is also implicated in prostate cancer cell death. The new lupulone derivatives induce caspase-dependent apoptosis and autophagy in prostate cancer cells and appear to be good candidates for further preclinical studies of prostate cancer treatment.

[389]

**TÍTULO / TITLE:** - Is GATA3 Expression Maintained in Regional Metastases?: A Study of Paired Primary and Metastatic Urothelial Carcinomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Surg Pathol. 2013 Dec;37(12):1876-81. doi: 10.1097/PAS.0b013e31829e2525.

●● Enlace al texto completo (gratis o de pago)

[1097/PAS.0b013e31829e2525](#)

**AUTORES / AUTHORS:** - Zhao L; Antic T; Witten D; Paner GP; Taxy JB; Husain A; Gwin K; Mirza MK; Lingen MW; Tretiakova MS

**INSTITUCIÓN / INSTITUTION:** - \*Department of Pathology, University of Chicago, Chicago, IL Departments of daggerBiostatistics double daggerPathology, University of Washington, Seattle, WA.

**RESUMEN / SUMMARY:** - GATA3 has been recognized as a promising marker for primary urothelial carcinoma (UC), consistently showing higher expression levels than urothelial markers thrombomodulin and uroplakin III. However, expression of GATA3 in comparison with UC-associated markers CK7 and p63 has not been systematically studied. Moreover, no studies have been conducted to establish GATA3 sensitivity in regional metastases. In this study, high-density tissue microarrays were constructed from 69 matched paired primary and metastatic bladder tumors including pure urothelial UCs with papillary (n=48) or flat phenotype (n=9), mixed tumors with micropapillary, glandular, small cell, squamous, giant cell, and plasmacytoid features (n=9), and 3 adenocarcinomas. GATA3 was expressed in 62/69 (90%) primary UC and 64/69 (93%) metastases, with significantly higher staining intensity in nodal metastases (P=0.03). In primary tumors, GATA3 was positive in 44/48 (92%) papillary UCs, 9/9 (100%) flat UCs, 8/9 (89%) mixed UCs, and 1/3 (33%) adenocarcinomas, whereas in metastases these numbers were 45/48 (94%), 9/9 (100%), 8/9 (89%), and 2/3 (67%), respectively. The majority of positive cases showed strong diffuse nuclear reactivity: 75% of primary UCs and 79% of metastases. GATA3 sensitivity in primary and metastatic UCs was comparable to that of CK7 and superior to that of p63 (P<0.05). GATA3 specificity was computed in comparison with its morphologic mimics expressing CK7 and p63, including 208 primary and 24 metastatic tumors from the lung, cervix, and head and neck regions. Strong GATA3 expression was present in 2/51 (4%) cervical carcinomas, whereas weak GATA3 expression was present in 7/51 (14%) cervical, 6/74 (8%) head and neck cancers, and 2/83 (3%) lung carcinomas. Remaining 191 primary and 24 metastatic tumors were GATA3 negative. Therefore, specificity of GATA3 calculated on the basis of morphologic and immunophenotypic UC mimics from lung, cervix, head and neck was 92%. Our findings demonstrate high sensitivity and specificity of the GATA3 diagnostic marker, with not only maintained but increased expression in regional metastases.

[390]

**TÍTULO / TITLE:** - Robotic Versus Open Simple Enucleation for the Treatment of T1a-T1b Renal Cell Carcinoma: A Single Center Matched-pair Comparison.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 22. pii: S0090-4295(13)01250-8. doi: 10.1016/j.urology.2013.08.080.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.080](#)

**AUTORES / AUTHORS:** - Serni S; Vittori G; Masieri L; Gacci M; Lapini A; Siena G; Vignolini G; Mari A; Carini M; Minervini A

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Careggi Hospital, University of Florence, Italy.

**RESUMEN / SUMMARY:** - OBJECTIVE: To compare surgical, pathological, short-term functional data, and complications of endoscopic robotic-assisted simple enucleation (ERASE) and open simple enucleation (OSE). METHODS: We undertook matched-pair analysis (age, tumor size, and preoperative aspects and dimensions used for an anatomical [PADUA] score) of 392 patients treated with simple enucleation (SE) for T1a-T1b renal tumors in our department, including 160 patients in the OSE group and 80 in the ERASE group. Perioperative outcomes were compared with univariate analysis. Variables associated with warm ischemia time (WIT) >25 minutes, complications, and postoperative acute kidney dysfunction (AKD) were assessed with multivariate analysis. RESULTS: The groups were comparable in body mass index (BMI), comorbidity, and preoperative renal function. In the ERASE vs the OSE group, no significant differences resulted regarding WIT (18.5 vs 16.4 minutes, P = .5), complications, transfusion rate, reoperation rate for Clavien grade  $\geq 3$  complications, and positive surgical margin rate (2.9% vs 2.1%, P = .63). In elective patients, no significant difference resulted in variation of estimated glomerular filtration rate from baseline (8.5 vs 13.9 mL/min, P = .17) and AKD. In the ERASE group, the clamping of renal pedicle was used with a lower frequency (P <.0001), with lower estimated blood loss (EBL), longer operative time, and a 1-day shorter hospitalization (P = .001). On the multivariate analysis, the surgical approach was not independently associated with WIT >25 minutes, postoperative complications, and AKD. CONCLUSION: The ERASE is a feasible technique with a positive surgical margin rate comparable to OSE; it showed WIT and complication rates similar to the open approach, along with the advantages of mini-invasivity.

[391]

**TÍTULO / TITLE:** - Optimizing prostate cancer screening; prospective randomized controlled study of the role of PSA and PCA3 testing in a sequential manner in an opportunistic screening program.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 26. pii: S0210-4806(13)00333-1. doi: 10.1016/j.acuro.2013.09.007.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.09.007](#)

**AUTORES / AUTHORS:** - Rubio-Briones J; Casanova J; Dumont R; Rubio L; Fernandez-Serra A; Casanova-Salas I; Dominguez-Escrig J; Ramirez-Backhaus M;

Collado A; Gomez-Ferrer A; Iborra I; Monros JL; Ricos JV; Solsona E; Salas D; Martinez F; Lopez-Guerrero JA

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**RESUMEN / SUMMARY:** - OBJECTIVES: To reduce unnecessary biopsies (Bx) in an opportunistic screening programme of prostate cancer MATERIAL AND METHODS: We perform a prospective evaluation of PCA3 as a second line biomarker in an opportunistic screening for prostate cancer (PCa). From September-2010 until September-2012, 2,366 men, aged 40-74 years and with >10 years life expectancy, were initially screened with PSA/digital rectal examination (DRE). Men with previous Bx or with recent urine infections were excluded. Men with abnormal DRE and/or PSA >3ng/ml were submitted for PCA3. All men with PCA3 ≥ 35 underwent an initial biopsy (IBx) -12cores-. Men with PCA3 < 35 were randomized 1:1 to either IBx or observation. Re-biopsy (16-18 cores) criteria were PSA increase >.5ng/ml at 4-6months or PSAv >.75ng/ml/year. RESULTS: With median follow-up (FU) of 10.1months, PCA3 was performed in 321/2366 men (13.57%), 289 at first visit and 32 during FU. All 110 PCA3+ men (34.3%) were biopsied and PCa was identified in 43 men in IBx (39.1%). In the randomized arm, 110 were observed and 101 underwent biopsy, finding 12 PCa (11.9%), showing a statistically significant reduction of PCa detection rate in this cohort (P<.001). Global PCa detection rates were 40.9% and 9.5% for the PCA3+ and PCA3- branches, respectively (P<.001). Area under the curve for PSA and PCA3 were .601 and .74, respectively. This is an ongoing prospective study limited by its short follow-up period and still limited enrolment. CONCLUSIONS: PCA3 as a second line biomarker within an opportunistic dual screening protocol, can potentially avoid 65.7% and 50.1% biopsies at first round and at median FU of 10.1months, respectively, just missing around 3.2% of high grade PCa.

[392]

**TÍTULO / TITLE:** - 'Race' and Prostate Cancer Mortality in Equal-access Healthcare Systems.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Med. 2013 Dec;126(12):1084-8. doi: 10.1016/j.amjmed.2013.08.012.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.amjmed.2013.08.012](#)

**AUTORES / AUTHORS:** - Graham-Steed T; Uchio E; Wells CK; Aslan M; Ko J; Concato J

**INSTITUCIÓN / INSTITUTION:** - Clinical Epidemiology Research Center, Medical Service, Department of Veterans Affairs Connecticut Healthcare System, West Haven Veterans Affairs Medical Center, West Haven, Conn; Department of Medicine, Yale University School of Medicine, New Haven, Conn.

**RESUMEN / SUMMARY:** - BACKGROUND: Reports suggest worse health-related outcomes among black (vs white) men diagnosed with prostate cancer, but appropriate cause-effect inferences are complicated by the relationship of race and other prognostic factors. METHODS: We searched the literature to find contemporary articles focusing on mortality among black and white men with prostate cancer in equal-access healthcare systems. We also directly assessed the association of race and prostate cancer mortality by conducting an observational cohort analysis of 1270

veterans diagnosed with prostate cancer and followed for 11 to 16 years at 9 medical centers within the Veterans Health Administration. RESULTS: Among 5 reports providing quantitative results for the association of race and mortality among men with prostate cancer in equal-access systems, outcomes were similar for black and white men. Race also was not a prognostic factor in the observational cohort analysis of US veterans, with an adjusted hazard ratio for black (vs white) men and prostate cancer mortality of 0.90 (95% confidence interval, 0.58-1.40; P = .65). CONCLUSIONS: Mortality among black and white patients with prostate cancer is similar in equal-access healthcare systems. Studies that find racial differences in mortality (including cause-specific mortality) among men with prostate cancer may not account fully for socioeconomic and clinical factors.

[393]

**TÍTULO / TITLE:** - HAI-2 suppresses the invasive growth and metastasis of prostate cancer through regulation of matriptase.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncogene. 2013 Oct 14. doi: 10.1038/onc.2013.412.

●● [Enlace al texto completo \(gratis o de pago\) 1038/onc.2013.412](#)

**AUTORES / AUTHORS:** - Tsai CH; Teng CH; Tu YT; Cheng TS; Wu SR; Ko CJ; Shyu HY; Lan SW; Huang HP; Tzeng SF; Johnson MD; Lin CY; Hsiao PW; Lee MS

**INSTITUCIÓN / INSTITUTION:** - Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan.

**RESUMEN / SUMMARY:** - Dysregulation of cell surface proteolysis has been strongly implicated in tumorigenicity and metastasis. In this study, we delineated the role of hepatocyte growth factor activator inhibitor-2 (HAI-2) in prostate cancer (PCa) cell migration, invasion, tumorigenicity and metastasis using a human PCa progression model (103E, N1, and N2 cells) and xenograft models. N1 and N2 cells were established through serial intraprostatic propagation of 103E human PCa cells and isolation of the metastatic cells from nearby lymph nodes. The invasion capability of these cells was revealed to gradually increase throughout the serial isolations (103E<N1<N2). In this series of cells, the expression of HAI-2 but not HAI-1 was significantly decreased throughout the progression and occurred in parallel with increased activation of matriptase. The expression level and activity of matriptase increased whereas the HAI-2 protein level decreased over the course of orthotopic tumor growth in mice, which was consistent with the immunohistochemical profiles of matriptase and HAI-2 in archival PCa specimens. Knockdown of matriptase reduced the PCa cell invasion induced by HAI-2 knockdown. HAI-2 overexpression or matriptase silencing in N2 cells downregulated matriptase activity and significantly decreased tumorigenicity and metastatic capability in orthotopically xenografted mice. These results suggest that during the progression of human PCa, matriptase activity is primarily controlled by HAI-2 expression. The imbalance between HAI-2 and matriptase expression led to matriptase activation, thereby increasing cell migration, invasion, tumorigenicity and metastasis. Oncogene advance online publication, 14 October 2013; doi:10.1038/onc.2013.412.

[394]

**TÍTULO / TITLE:** - Modulators of estrogen receptor inhibit proliferation and migration of prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pharmacol Res. 2013 Oct 31;79C:13-20. doi: 10.1016/j.phrs.2013.10.002.

●● Enlace al texto completo (gratis o de pago) [1016/j.phrs.2013.10.002](#)

**AUTORES / AUTHORS:** - Piccolella M; Crippa V; Messi E; Tetel MJ; Poletti A

**INSTITUCIÓN / INSTITUTION:** - Sezione di Biomedicina e Endocrinologia, Dipartimento di Scienze Farmacologiche e Biomolecolari (DiSFeB), Centro di Eccellenza sulle Malattie Neurodegenerative, Università degli Studi di Milano, Italy.

**RESUMEN / SUMMARY:** - In the initial stages, human prostate cancer (PC) is an androgen-sensitive disease, which can be pharmacologically controlled by androgen blockade. This therapy often induces selection of androgen-independent PC cells with increased invasiveness. We recently demonstrated, both in cells and mice, that a testosterone metabolite locally synthesized in prostate, the 5 $\alpha$ -androstane-3 $\beta$ , 17 $\beta$ -diol (3 $\beta$ -Adiol), inhibits PC cell proliferation, migration and invasion, acting as an anti-proliferative/anti-metastatic agent. 3 $\beta$ -Adiol is unable to bind androgen receptor (AR), but exerts its protection against PC by specifically interacting with estrogen receptor beta (ER $\beta$ ). Because of its potential retro-conversion to androgenic steroids, 3 $\beta$ -Adiol cannot be used "in vivo", thus, the aims of this study were to investigate the capability of four ligands of ER $\beta$  (raloxifen, tamoxifen, genistein and curcumin) to counteract PC progression by mimicking the 3 $\beta$ -Adiol activity. Our results demonstrated that raloxifen, tamoxifen, genistein and curcumin decreased DU145 and PC3 cell proliferation in a dose-dependent manner; in addition, all four compounds significantly decreased the detachment of cells seeded on laminin or fibronectin. Moreover, raloxifen, tamoxifen, genistein and curcumin-treated DU145 and PC3 cells showed a significant decrease in cell migration. Notably, all these effects were reversed by the anti-estrogen, ICI 182,780, suggesting that their actions are mediated by the estrogenic pathway, via the ER $\beta$ , the only isoform present in these PCs. In conclusion, these data demonstrate that by selectively activating the ER $\beta$ , raloxifen, tamoxifen, genistein and curcumin inhibit human PC cells proliferation and migration favoring cell adhesion. These synthetic and natural modulators of ER action may exert a potent protective activity against the progression of PC even in its androgen-independent status.

[395]

**TÍTULO / TITLE:** - Trends in stage-specific incidence rates for urothelial carcinoma of the bladder in the United States: 1988 to 2006.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Oct 10. doi: 10.1002/cncr.28397.

●● Enlace al texto completo (gratis o de pago) [1002/cncr.28397](#)

**AUTORES / AUTHORS:** - Nielsen ME; Smith AB; Meyer AM; Kuo TM; Tyree S; Kim WY; Milowsky MI; Pruthi RS; Millikan RC

**INSTITUCIÓN / INSTITUTION:** - Lineberger Comprehensive Cancer Center, University of North Carolina, Chapel Hill, North Carolina; Department of Urology, University of North Carolina School of Medicine, Chapel Hill, North Carolina; Department of Epidemiology,

University of North Carolina Gillings School of Global Public Health, Chapel Hill, North Carolina.

**RESUMEN / SUMMARY:** - BACKGROUND: Bladder cancer is notable for a striking heterogeneity of disease-specific risks. Among the approximately 75% of incident cases found to be superficial to the muscularis propria at the time of presentation (non-muscle-invasive bladder cancer), the risk of progression to the lethal phenotype of muscle-invasive disease is strongly associated with stage and grade of disease. Given the suggestion of an increasing percentage of low-risk cases in hospital-based registry data in recent years, the authors hypothesized that population-based data may reveal changes in the stage distribution of early-stage cases. METHODS: Surveillance, Epidemiology, and End Results (SEER) data were used to examine trends for the stage-specific incidence of bladder cancer between 1988 and 2006, adjusted for age, race, and sex, using Joinpoint and nonparametric tests. RESULTS: The adjusted incidence rate of papillary noninvasive (Ta) predominantly low grade (77%) disease was found to increase from 5.52 to 9.09 per 100,000 population ( $P < .0001$ ), with an average annual percentage change of +3.3. Over the same period, concomitant, albeit smaller, decreases were observed for flat in situ (Tis) and lamina propria-invasive (T1) disease (2.57 to 1.19 and 6.65 to 4.61 per 100,000 population [both  $P < .0001$ ]; average annual percent change of -5.0 and -1.6, respectively). The trend was most dramatic among patients in the oldest age strata, suggesting a previously unappreciated cohort phenomenon. CONCLUSIONS: The findings of the current study should motivate further epidemiological investigations of differential associations of genetic and environmental factors with different bladder cancer phenotypes as well as further scrutiny of clinical practice guideline recommendations for the growing subgroup of predominantly older patients with lower-risk disease. Cancer 2013. © 2013 American Cancer Society.

[396]

**TÍTULO / TITLE:** - Serial Prostate Biopsy and Risk of Lower Urinary Tract Symptoms: Results From a Large, Single-institution Active Surveillance Cohort.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 15. pii: S0090-4295(13)01285-5. doi: 10.1016/j.urology.2013.05.070.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.05.070](#)

**AUTORES / AUTHORS:** - Glass AS; Hilton JF; Cowan JE; Washington SL; Carroll PR

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**RESUMEN / SUMMARY:** - OBJECTIVE: To describe the effect of serial prostate biopsy on lower urinary tract symptoms (LUTS) in men who undergo active surveillance (AS) at a large academic institution. MATERIALS AND METHODS: This is a retrospective study of men enrolled in AS for  $\geq 6$  months who underwent  $\geq 1$  biopsy and completed  $\geq 1$  International Prostate Symptom Score (IPSS) questionnaire. In addition to total IPSS, we report the mean difference between the first and last questionnaires for patients who completed  $\geq 2$  questionnaires. Multivariate models, adjusting for disease features, age, race, prostate volume and baseline, or incident benign prostatic hypertrophy (BPH), were used to assess relationships between IPSS

and total biopsy exposure. RESULTS: Four hundred eighty-two men were eligible, and 291 completed  $\geq 2$  IPSS questionnaires. Overall, mean (standard deviation) age was 61.7 (7.8) years, and median prostate volume (interquartile range) was 42 (34-61) mL. At baseline, 11% provided history of BPH. Among men who completed multiple questionnaires, 25% experienced clinically significant worsening (IPSS increase  $\geq 4$  points). In regression model, total IPSS was not significantly associated with greater biopsy exposure ( $P = .25$ ). IPSS change from initial and the latest questionnaire was not significantly associated with initial or interval biopsy exposure in an adjusted longitudinal model ( $P = .64$  and  $.50$ , respectively), but a trend was observed with greater age decade (+4.07 points, 95% CI -0.30 to 8.4;  $P = .07$ ). CONCLUSION: Repeated prostate biopsy does not appear to independently pose additional risk of LUTS in an AS population. In unadjusted analyses, greater biopsy exposure is a surrogate for increasing follow-up time, age, and BPH risk, and thus, risk of LUTS onset and progression.

[397]

**TÍTULO / TITLE:** - Low production of reactive oxygen species and high DNA repair: mechanism of radioresistance of prostate cancer stem cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4469-74.

**AUTORES / AUTHORS:** - Kim YS; Kang MJ; Cho YM

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University of Ulsan College of Medicine, Asan Medical Center, 388-1 Pungnap-2dong, Songpa-gu, Seoul, 138-736, Republic of Korea. [yongcho@amc.seoul.kr](mailto:yongcho@amc.seoul.kr).

**RESUMEN / SUMMARY:** - BACKGROUND: Cancer stem cells (CSCs) are resistant to radiotherapy and are responsible for tumor recurrence of various malignant tumors, including prostate cancer. MATERIALS AND METHODS: In order to define the radioresistance mechanism of prostate CSCs, their proliferative activity, cell cycle distribution, expression of CD133 stem cell marker, reactive oxygen species (ROS) production, and DNA repair efficiency were examined using prostatospheres and adherent LNCaP cells as a model of prostate CSC and bulk model of differentiated cells, respectively. RESULTS: Compared to adherent cells, prostatospheres exhibited greater number of low-to-intermediate ROS-producing cells and CD133-positive cells. Prostatospheres showed higher expression of DNA repair proteins after ionizing radiation (IR). CONCLUSION: Low vulnerability to ROS-induced cellular damage and the efficient repair of IR-induced DNA injury may explain the radioresistance of prostate CSCs. Therefore, increasing ROS-induced cytotoxicity and inhibition of DNA repair in prostate CSCs may help achieve complete eradication of prostate CSCs by radiotherapy.

[398]

**TÍTULO / TITLE:** - Practical and Intuitive Surgical Approach Renal Ranking (SARR) to predict outcomes in the treatment of renal tumors: a novel score tool.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 19.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013-0148.ECB13](#)

**AUTORES / AUTHORS:** - Tannus M; Goldman SM; Andreoni C

**INSTITUCIÓN / INSTITUTION:** - Universidade Federal de Sao Paulo - UNIFESP, Urology, Dr. Diogo de Faria, 671, Vila Clementino, Sao Paulo, SP, Brazil, 04037000, +557188800925 ; [matheustannus@hotmail.com](mailto:matheustannus@hotmail.com).

**RESUMEN / SUMMARY:** - Background and Purpose: Surgery continues to be the main form of treatment for renal tumors. We create a more practical and intuitive score for renal tumor classification. Materials and Methods: 80 patients underwent surgery for renal tumors and were prospectively enrolled. The tumors were classified using the following variables: (1) tumor size, (2) endophytic or exophytic tumor, (3) longitudinal location of the tumor, (4) the extent of the impairment renal parenchyma, (5) relationship with the renal sinus, (6) anterior or posterior. Results: The mean operative time, tumor size and bleeding increased proportionally to the increased complexity of the tumor measured by scores ( $p < 0.0001$ ,  $p < 0.0001$  and  $p = 0.036$ , respectively). The mean total score was 8.7 points for patients undergoing partial nephrectomy (PN) and 14.4 points for those undergoing radical nephrectomy (RN) ( $p < 0.0001$ ). Larger tumors, completely endophytic, which exceeded the renal medulla and centrally located underwent radical nephrectomy (RN) more often (86.7% -  $p < 0.0001$ , 64% -  $p = 0.01$ , 77% -  $p < 0.0001$  and 78.9% -  $p < 0.0001$ , respectively). In univariate analysis, RN was associated with tumors larger than 7 cm ( $p = 0.001$ ), tumors that exceeded the renal medullary ( $< 0.001$ ), centrally located tumors (OR=150  $p < 0.001$ ) and tumors of high complexity ( $p < 0.001$ ). Analysis showed no association between complications and variables in the score. The findings were similar when the tumors were evaluated with the R.E.N.A.L. score system. Conclusion: SARR is a simple, practical and intuitive classification for renal tumors that can be used in the decision-making process and to predict outcomes in the surgical treatment of renal tumors.

[399]

**TÍTULO / TITLE:** - The reproducibility and predictive value on outcome of renal biopsies from expanded criteria donors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Kidney Int. 2013 Nov 27. doi: 10.1038/ki.2013.461.

●● [Enlace al texto completo \(gratis o de pago\) 1038/ki.2013.461](#)

**AUTORES / AUTHORS:** - Antonieta Azancot M; Moreso F; Salcedo M; Cantarell C; Perello M; Torres IB; Montero A; Trilla E; Sellares J; Morote J; Seron D

**INSTITUCIÓN / INSTITUTION:** - Department of Nephrology, Hospital Universitari Vall d'Hebron, Universitat Autònoma Barcelona, Barcelona, España.

**RESUMEN / SUMMARY:** - Reproducibility and predictive value on outcome are the main criteria to evaluate the utility of histological scores. Here we analyze the reproducibility of donor biopsy assessment by different on-call pathologists and the retrospective evaluation by a single renal pathologist blinded to clinical outcomes. We also evaluate the predictive value on graft outcome of both evaluations. A biopsy was performed in donors with any of the following: age  $\geq 55$  years, hypertension, diabetes, creatinine  $> 1.5$  mg/dl, or stroke. Glomerulosclerosis, interstitial fibrosis, tubular atrophy, intimal thickening, and arteriolar hyaline evaluated according to the Banff criteria were added to obtain a chronic score. Biopsies were classified as mild ( $\geq 3$ ), intermediate (4-5), or advanced (6-7) damage, and unacceptable ( $\geq 8$ ) for transplantation of 127 kidneys biopsied. Weighted kappa value between both readings was 0.41 (95% CI:

0.28-0.54). Evaluation of biopsies by the renal pathologist was significantly and independently associated with estimated 12-month glomerular filtration rate and a significant composite outcome variable, including death-censored graft survival and time to reach an estimated glomerular filtration rate <30 ml/min per 1.73 m<sup>2</sup>. Thus, there was no association between readings of on-call pathologists and outcome. The lack of association between histological scores obtained by the on-call pathologists and graft outcome suggests that a specific training on renal pathology is recommended to optimize the use of kidneys retrieved from expanded criteria donors. *Kidney International* advance online publication, 27 November 2013; doi:10.1038/ki.2013.461.

[400]

**TÍTULO / TITLE:** - Adrenomedullin blockade suppresses growth of human hormone-independent prostate tumor xenograft in mice.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Clin Cancer Res.* 2013 Nov 15;19(22):6138-50. doi: 10.1158/1078-0432.CCR-13-0691. Epub 2013 Oct 7.

●● [Enlace al texto completo \(gratis o de pago\) 1158/1078-0432.CCR-13-](#)

[0691](#)

**AUTORES / AUTHORS:** - Berenguer-Daize C; Boudouresque F; Bastide C; Tounsi A; Benyahia Z; Acunzo J; Dussault N; Delfino C; Baeza N; Daniel L; Cayol M; Rossi D; El Battari A; Bertin D; Mabrouk K; Martin PM; Ouafik L

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Aix-Marseille Université and Institut national de la santé et de la recherche médicale (INSERM), CRO2 UMR 911, 13005; AP-HM, CHU Nord, Service Urologie, 13015; Aix-Marseille Université, LCP UMR 6264, CROPS, 13397; and AP-HM, CHU Nord, Service de Transfert d'Oncologie Biologique, 13015, Marseille, France.

**RESUMEN / SUMMARY:** - **PURPOSE:** To study the role of the adrenomedullin system [adrenomedullin and its receptors (AMR), CLR, RAMP2, and RAMP3] in prostate cancer androgen-independent growth. **EXPERIMENTAL DESIGN:** Androgen-dependent and -independent prostate cancer models were used to investigate the role and mechanisms of adrenomedullin in prostate cancer hormone-independent growth and tumor-associated angiogenesis and lymphangiogenesis. **RESULTS:** Adrenomedullin and AMR were immunohistochemically localized in the carcinomatous epithelial compartment of prostate cancer specimens of high grade (Gleason score >7), suggesting a role of the adrenomedullin system in prostate cancer growth. We used the androgen-independent Du145 cells, for which we demonstrate that adrenomedullin stimulated cell proliferation in vitro through the cAMP/CRAF/MEK/ERK pathway. The proliferation of Du145 and PC3 cells is decreased by anti-adrenomedullin antibody (alphaAM), supporting the fact that adrenomedullin may function as a potent autocrine/paracrine growth factor for prostate cancer androgen-independent cells. In vivo, alphaAM therapy inhibits the growth of Du145 androgen-independent xenografts and interestingly of LNCaP androgen-dependent xenografts only in castrated animals, suggesting strongly that adrenomedullin might play an important role in tumor regrowth following androgen ablation. Histologic examination of alphaAM-treated tumors showed evidence of disruption of tumor vascularity, with depletion of vascular as well as lymphatic endothelial cells and pericytes, and increased lymphatic endothelial cell apoptosis. Importantly, alphaAM potentially blocks tumor-associated lymphangiogenesis,

but does not affect established vasculature and lymphatic vessels in normal adult mice. CONCLUSIONS: We conclude that expression of adrenomedullin upon androgen ablation in prostate cancer plays an important role in hormone-independent tumor growth and in neovascularization by supplying/amplifying signals essential for pathologic neoangiogenesis and lymphangiogenesis. Clin Cancer Res; 19(22); 6138-50. ©2013 AACR.

[401]

**TÍTULO / TITLE:** - Disodium pentaborate decahydrate (DPD) induced apoptosis by decreasing hTERT enzyme activity and disrupting F-actin organization of prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Oct 14.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1212-2](#)

**AUTORES / AUTHORS:** - Korkmaz M; Avci CB; Gunduz C; Aygunes D; Erbaykent-Tepedelen B

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Biology, Faculty of Medicine, Celal Bayar University, Manisa, 45030, Turkey, [mehmet.korkmaz@cbu.edu.tr](mailto:mehmet.korkmaz@cbu.edu.tr).

**RESUMEN / SUMMARY:** - Animal and cell culture studies have showed that boron and its derivatives may be promising anticancer agents in prostate cancer treatment. Thus, DU145 cells were treated with disodium pentaborate decahydrate (DPD) for 24, 48, and 72 h in order to investigate the inhibitor effect and mechanisms of DPD. Then, cell proliferation, telomerase enzyme activity, actin polymerization, and apoptosis were detected by WST-1 assay, qRT-PCR, immunofluorescence labeling, and flow cytometry, respectively. We found that DPD inhibited the growth of human prostate cancer cell line DU145 at the concentration of 3.5 mM for 24 h. Our results demonstrated that 7 mM of DPD treatment prevented the telomerase enzyme activity at the rate of 38 %. Furthermore, DPD has an apoptotic effect on DU145 cells which were examined by labeling DNA breaks. With 7 mM of DPD treatment, 8, 14, and 41 % of apoptotic cells were detected for 24, 48, and 72 h, respectively. Additionally, immunofluorescence labeling showed that the normal organization of actin filaments was disrupted in DPD-exposed cells, which is accompanied by the alteration of cell shape and by apoptosis in targeted cells. Taken together, the results indicate that DPD may exert its cytotoxicity at least partly by interfering with the dynamic properties of actin polymerization and decreasing the telomerase activity. Eventually, for the first time, the results of this study showed that DPD suppressed the activity of telomerase in DU145 cells, and therefore, we suggested that DPD could be an important agent for its therapeutic potential in the treatment of prostate cancer.

[402]

**TÍTULO / TITLE:** - Ultra-deep T-cell receptor sequencing reveals the complexity and intratumour heterogeneity of T-cell clones in renal cell carcinomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pathol. 2013 Oct 1. doi: 10.1002/path.4284.

●● Enlace al texto completo (gratis o de pago) [1002/path.4284](#)

**AUTORES / AUTHORS:** - Gerlinger M; Quezada SA; Peggs KS; Furness AJ; Fisher R; Marafioti T; Shende VH; McGranahan N; Rowan AJ; Hazell S; Hamm D; Robins HS; Pickering L; Gore M; Nicol DL; Larkin J; Swanton C

**INSTITUCIÓN / INSTITUTION:** - Cancer Research UK, London Research Institute, 44 Lincoln's Inn Fields, London, WC2A 3LY, UK; Barts Cancer Institute, Barts and The London School of Medicine and Dentistry, Charterhouse Square, London, EC1M 6BQ, UK.

**RESUMEN / SUMMARY:** - The recognition of cancer cells by T-cells can impact upon prognosis and be exploited for immunotherapeutic approaches. This recognition depends on the specific interaction between antigens displayed on the surface of cancer cells and the T-cell receptor (TCR), which is generated by somatic rearrangements of TCR alpha- and beta-chains (TCRb). Our aim was to assess whether ultra-deep sequencing of the rearranged TCRb in DNA extracted from unfractionated clear cell renal cell carcinoma (ccRCC) samples can provide insights into the clonality and heterogeneity of intratumoural T-cells in ccRCCs, a tumour type that can display extensive genetic intratumour heterogeneity (ITH). For this purpose, DNA was extracted from 2 to 4 tumour regions from each of 4 primary ccRCCs and was analysed by ultra-deep TCR-sequencing. In parallel, tumour infiltration by CD4, CD8 and Foxp3 regulatory T-cells was evaluated by immunohistochemistry and correlated with TCR-sequencing data. A polyclonal T-cell repertoire with 367 to 16,289 (median: 2,394) unique TCRb sequences was identified per tumour region. The frequencies of the 100 most abundant T-cell clones per tumour were poorly correlated between most regions (Pearson correlation coefficient: -0.281 to 0.465). 3%-93% of these T-cell clones were not detectable across all regions. Thus, the clonal composition of T-cells populations can be heterogeneous across different regions of the same ccRCC. T-cell ITH was higher in tumours pre-treated with an mTOR-inhibitor which could suggest that therapy can influence adaptive tumour immunity. These data show that ultra-deep TCR-sequencing technology can be applied directly to DNA extracted from unfractionated tumour samples, allowing novel insights into the clonality of T-cell populations in cancers. These were polyclonal and displayed ITH in ccRCC. TCRb sequencing may shed light on mechanisms of cancer immunity and the efficacy of immunotherapy approaches.

[403]

**TÍTULO / TITLE:** - Clinical Significance of Proliferative Inflammatory Atrophy in Prostate Biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 13. pii: S0210-4806(13)00179-4. doi: 10.1016/j.acuro.2013.04.008.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.04.008](#)

**AUTORES / AUTHORS:** - Celma A; Servian P; Planas J; Placer J; Quilez MT; Arbos MA; de Torres I; Morote J

**INSTITUCIÓN / INSTITUTION:** - Servicio de Urología, Hospital Vall d'Hebron, Barcelona, España; Instituto de Investigación, Hospital Vall d'Hebron, Barcelona, España.

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**RESUMEN / SUMMARY:** - INTRODUCTION: Proliferative inflammatory atrophy (PIA) is a frequently observed lesion in prostate biopsies and some authors have postulated its

involvement in prostate carcinogenesis. However, the mechanisms that would permit its neoplastic transformation and the clinical significance of its finding in a prostate biopsy is currently not well known. **OBJECTIVE:** To analyze the characteristics of the PIA lesion, its possible role in prostate carcinogenesis and its relation with the tumor aggressiveness. **MATERIAL AND METHOD:** A systematic review was made of the literature in PubMed with the terms <<proliferative inflammatory atrophy>> or <<PIA>> and <<prostate.>> The most important findings are summarized in accordance with the study objective. **RESULTS:** PIA seems to be involved in prostate carcinogenesis. This hypothesis is based on its frequent association to cancer lesions (CaP) and on some genetic alterations that are common to the high grade prostatic intraepithelial neoplasia (HGPIN) and to the CaP, fundamentally deficit in GSTP1 expression and overexpression of AGR2. Currently, there are no epidemiological studies that evaluate the incidence of PIA or its association with HGPIN and CaP. Only one study, carried out by our group, has determined the global incidence of PIA in 30% of the prostate biopsies, a lower association to CaP than the HGPIN lesion and an association between PIA and tumors of lower and insignificant grade. **CONCLUSIONS:** PIA shares genetic alterations with HGPIN and CaP. Currently, there is no epidemiologic evidence to consider that the PIA is associated to a greater incidence of CaP and the genetic and epidemiological data available suggest its association to not very aggressive tumors.

[404]

**TÍTULO / TITLE:** - MicroRNA-663 Induces Castration-Resistant Prostate Cancer Transformation and Predicts Clinical Recurrence.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cell Physiol. 2013 Nov 17. doi: 10.1002/jcp.24510.

●● [Enlace al texto completo \(gratis o de pago\) 1002/jcp.24510](#)

**AUTORES / AUTHORS:** - Jiao L; Deng Z; Xu C; Yu Y; Li Y; Yang C; Chen J; Liu Z; Huang G; Li LC; Sun Y

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Second Military Medical University, Changhai Hospital Shanghai, 200433, China.

**RESUMEN / SUMMARY:** - Castration-resistant prostate cancer (CRPC) and its treatment are challenging issues in prostate cancer management. Here, we report that miR-663 is upregulated in CRPC tissues. Overexpression of miR-663 in prostate LNCaP cells promotes cell proliferation and invasion, neuroendocrine differentiation, and reduction in dihydrotestosterone-induced upregulation of prostate-specific antigen expression. Furthermore, results of in situ hybridization show that miR-663 expression is correlated with Gleason score and TNM stage and is an independent prognostic predictor of clinical recurrence. Together, these findings suggest that miR-663 is a potential oncomiR for CRPC and may serve as a tumor biomarker for the early diagnosis of CRPC. J. Cell. Physiol. © 2013 Wiley Periodicals, Inc.

[405]

**TÍTULO / TITLE:** - Epigallocatechin-3-gallate prevents tumor cell implantation/growth in an experimental rat bladder tumor model.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2014 Jan;44(1):147-52. doi: 10.3892/ijo.2013.2174. Epub 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2174](http://dx.doi.org/10.3892/ijo.2013.2174)

**AUTORES / AUTHORS:** - Jankun J; Keck RW; Selman SH

**INSTITUCIÓN / INSTITUTION:** - Urology Research Center, Department of Urology, College of Medicine, University of Toledo, Toledo, OH 43614, USA.

**RESUMEN / SUMMARY:** - The aim of this study was to determine the efficacy of epigallocatechin-3-gallate (EGCG) (Polyphenon E®) in comparison with mitomycin C (MMC) to prevent tumor cell implantation/growth in an animal model of superficial bladder cancer and search for possible mechanism(s) of action. Female Fisher 344 rats were used to study the effects of EGCG and mitomycin C for the prevention of transitional cell tumor implantation (AY-27). Twenty rats served as a control, tumor implantation and saline wash only. Sixty rats were treated with EGCG (100, 200 and 400 microM) intravesically for 60 or 120 min after tumor implantation. Thirty other rats were divided equally and pretreated with 400 microM EGCG or saline for 120 min before tumor initiation. In a separate series of experiments, 30 rats were treated 2 weeks after tumor initiation with saline or EGCG (400 microM). In a different experiment 39 rats were treated with: saline (n=10) EGCG (n=9) 400 microM, MMC (n=10) 0.5 microM, MMC (n=10) 400 microM. Rats were sacrificed 3 weeks following treatment. Gross and histological analyses were performed on the bladders. EGCG and mitomycin C prevented intravesical tumor growth in a concentration- and time-dependent manner. EGCG pretreatment or treatment 2 weeks post tumor implantation did not have therapeutic effects. Molecular modeling suggests that EGCG inhibits urokinase and matrix metalloproteinase-9. EGCG prevents intravesical tumor implantation/growth with a slightly better efficacy than mitomycin C in this experimental model. The data suggest that EGCG lowers proteolytic activity and lowers probability of cancer cell implantation rather than direct cancer cell killing.

[406]

**TÍTULO / TITLE:** - Atlas of genitourinary oncological imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Nucl Med. 2013 Dec;54(12):2189. doi: 10.2967/jnumed.113.132290. Epub 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [2967/jnumed.113.132290](http://dx.doi.org/10.2967/jnumed.113.132290)

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[407]

**TÍTULO / TITLE:** - Treatment simulations with a statistical deformable motion model to evaluate margins for multiple targets in radiotherapy for high-risk prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Oct 31. pii: S0167-8140(13)00474-X. doi: 10.1016/j.radonc.2013.09.012.

●● Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.09.012](http://dx.doi.org/10.1016/j.radonc.2013.09.012)

**AUTORES / AUTHORS:** - Thornqvist S; Hysing LB; Zolnay AG; Sohn M; Hoogeman MS; Muren LP; Bentzen L; Heijmen BJ

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Physics, Aarhus University Hospital, Denmark; Department of Oncology, Aarhus University Hospital, Denmark. Electronic address: [sarathoe@rm.dk](mailto:sarathoe@rm.dk).

**RESUMEN / SUMMARY:** - BACKGROUND AND PURPOSE: Deformation and correlated target motion remain challenges for margin recipes in radiotherapy (RT). This study presents a statistical deformable motion model for multiple targets and applies it to margin evaluations for locally advanced prostate cancer i.e. RT of the prostate (CTV-p), seminal vesicles (CTV-sv) and pelvic lymph nodes (CTV-In). MATERIAL AND METHODS: The 19 patients included in this study, all had 7-10 repeat CT-scans available that were rigidly aligned with the planning CT-scan using intra-prostatic implanted markers, followed by deformable registrations. The displacement vectors from the deformable registrations were used to create patient-specific statistical motion models. The models were applied in treatment simulations to determine probabilities for adequate target coverage, e.g. by establishing distributions of the accumulated dose to 99% of the target volumes (D99) for various CTV-PTV expansions in the planning-CTs. RESULTS: The method allowed for estimation of the expected accumulated dose and its variance of different DVH parameters for each patient. Simulations of inter-fractional motion resulted in 7, 10, and 18 patients with an average D99 >95% of the prescribed dose for CTV-p expansions of 3mm, 4mm and 5mm, respectively. For CTV-sv and CTV-In, expansions of 3mm, 5mm and 7mm resulted in 1, 11 and 15 vs. 8, 18 and 18 patients respectively with an average D99 >95% of the prescription. CONCLUSIONS: Treatment simulations of target motion revealed large individual differences in accumulated dose mainly for CTV-sv, demanding the largest margins whereas those required for CTV-p and CTV-In were comparable.

[408]

**TÍTULO / TITLE:** - A Leydig cell tumor of the ovary resulting in extreme hyperandrogenism, erythrocytosis and recurrent pulmonary embolism.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Oct 23.

●● [Enlace al texto completo \(gratis o de pago\) 1210/jc.2013-3108](#)

**AUTORES / AUTHORS:** - Kozan P; Chalasani S; Handelsman DJ; Pike AH; Crawford BA

**INSTITUCIÓN / INSTITUTION:** - 1Departments of Endocrinology, Andrology, and.

**RESUMEN / SUMMARY:** - Context:Secondary erythrocytosis due to androgens is most commonly seen in the context of testosterone replacement therapy in men. Leydig cell ovarian tumors are a rare cause of virilization, erythrocytosis and thromboembolism.Patient Case:We describe a case of a 55 year old postmenopausal woman who presented with a 3 year history of frontal balding and virilization and a 5 year history of obstructive sleep apnea. She had not experienced significant alteration in libido nor mood. Menstruation had ceased at age 46. She had a history of recurrent pulmonary embolism and unexplained secondary erythrocytosis. Past hematological investigations had not revealed any evidence of malignancy, or thrombophilia, and the JAK2 mutation was negative. The serum erythropoietin was mildly elevated at 20.3

mIU/ml (NR 3.6-16.6 mIU/mL). The serum testosterone was initially reported (by immunoassays) as >1600 ng/dL (>55 nmol/L). Similarly, serum androstenedione (>1000 ng/dL, >35 nmol/L), estradiol (169 pg/mL, 621 pmol/L) and dehydroepiandrosterone sulfate (DHEAS, 348 mu g/dL, 9.4 mu mol/L) were all elevated for a postmenopausal woman. Repeat analysis of the serum testosterone, by mass spectrometry, showed an extremely elevated level of 4270 ng/dL (148 nmol/L). CT scan revealed a 5.0 cm right ovarian tumor. After surgical removal of an ovarian Leydig cell tumor, her virilization, erythrocytosis, and sleep apnea resolved. Conclusion: Hyperandrogenism in women should be considered as a rare but important cause of erythrocytosis, recurrent thrombo-embolism and sleep apnea. The diagnosis of hyperandrogenism requires a careful history and physical examination as, in postmenopausal women, menstrual disturbance does not occur and cosmetic measures may mask overt clinical features.

[409]

**TÍTULO / TITLE:** - Oncogenic Osteomalacia Caused by Renal Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Endocrinol Metab. 2013 Nov 11.

●● Enlace al texto completo (gratis o de pago) [1210/jc.2013-3335](#)

**AUTORES / AUTHORS:** - Xie Y; Li HZ

**INSTITUCIÓN / INSTITUTION:** - Departments of Urology, Peking Union Medical College Hospital, Peking Union Medical College and Chinese Academy of Medical Sciences, Beijing 100730, China.

**RESUMEN / SUMMARY:** - Abstract Not Available.

[410]

**TÍTULO / TITLE:** - Aberrant expression of the PRAC gene in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2013 Dec;43(6):1960-6. doi: 10.3892/ijo.2013.2117. Epub 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2117](#)

**AUTORES / AUTHORS:** - Lenka G; Weng WH; Chuang CK; Ng KF; Pang ST

**INSTITUCIÓN / INSTITUTION:** - Department of Chemical Engineering and Biotechnology, Institute of Biochemical and Biomedical Engineering, National Taipei University of Technology, Taipei, Taiwan, R.O.C.

**RESUMEN / SUMMARY:** - Identification of aberrant expression patterns of genes in prostate cancer (PCa) is a key step towards the development of effective therapies. Prostate-specific antigen (PSA) levels are commonly measured for the early detection of PCa, but which itself is still not an ideal biomarker. We analysed the expression patterns of prostate cancer susceptibility candidate (PRAC) in prostate cancer. The PRAC gene is known to be commonly expressed in prostate tissue, rectum and colon. To provide clear insights into the expression patterns of PRAC in PCa, we examined the gene expression by quantitative real-time PCR (qRT-PCR), western blot analysis and immunohistochemistry (IHC). The results showed that PRAC expression levels in androgen-insensitive cells (DU145 and PC3) are lower than those in androgen-sensitive cell lines (LNCaP, LNCaP-R and CW22R). However, treatment of the LNCaP cell line

with androgen and anti-androgen demonstrated that PRAC is expressed in an androgen-independent manner. Further, PRAC expression was restored upon treatment of DU145 and PC3 cells with the methyltransferase inhibitor, 5-aza-2'-deoxycytidine (5-aza-CdR), which indicates the effect of methylation in the control of PRAC expression. In addition, IHC analysis revealed a significantly decreased immunoreactivity of PRAC protein in PCa tissues compared to benign prostatic hyperplasia (BPH) ( $p < 0.0001$ ). Thus, our findings suggest that the pathogenesis of PCa may be due to the expression levels of PRAC protein, and this protein can serve as a potential biomarker for the management of PCa.

[411]

**TÍTULO / TITLE:** - HOXB13 is a sensitive and specific marker of prostate cells, useful in distinguishing between carcinomas of prostatic and urothelial origin.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Virchows Arch. 2013 Dec;463(6):803-9. doi: 10.1007/s00428-013-1495-0. Epub 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago) [1007/s00428-013-1495-0](#)

**AUTORES / AUTHORS:** - Varinot J; Cussenot O; Roupret M; Conort P; Bitker MO; Chartier-Kastler E; Cheng L; Comperat E

**INSTITUCIÓN / INSTITUTION:** - Laboratoire Oncotype Urologie-GRC UPMC-05, Hopital de la Pitie-Salpetriere, Paris, France, [justinevarinot@hotmail.com](mailto:justinevarinot@hotmail.com).

**RESUMEN / SUMMARY:** - The origin of a primary or metastatic carcinoma in the pelvic area is sometimes difficult to establish, in particular the distinction between those originating in the bladder and the prostate. A candidate marker is the HOXB13 gene, essential for prostate development. Some studies have shown expression of HOXB13 protein by immunohistochemistry in the nuclear compartment of benign prostate luminal epithelium and prostate carcinoma. Forty-two cases of biopsies and resection specimens of the prostate and urinary bladder, metastatic lymph nodes, and pelvic masses were retrieved from our databases. In all cases, doubt persisted regarding prostatic versus urothelial origin. All cases were stained for CK7, p63, p504s, PSA, CK20, and HOXB13. Chromogranin A, CD56, and synaptophysin were used when neuroendocrine differentiation was suspected. HOXB13 staining was negative or only weakly positive in all carcinomas of urothelial origin. Three of four carcinomas with neuroendocrine differentiation did not express HOXB13. The fourth carcinoma, in a patient with a history of prostate carcinoma, was positive. In two cases with a synchronous prostatic and urothelial carcinoma, HOXB13 was exclusively expressed in the prostatic carcinoma. Our results demonstrate that HOXB13 expression identifies prostatic origin of a carcinoma with good sensitivity (89 %) and very good specificity (100 %). HOXB13 is a specific and sensitive marker for prostate cells and a valuable diagnostic tool, especially when poorly differentiated or neuroendocrine tumors are encountered. These results justify testing of HOXB13 as a prostate-specific carcinoma marker in larger cohorts for a more thorough evaluation of its sensitivity and specificity.

[412]

**TÍTULO / TITLE:** - Plasma alkylresorcinol metabolites as biomarkers for whole-grain intake and their association with prostate cancer: a Swedish nested case-control study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1158/1055-9965.EPI-13-0878](#)

**AUTORES / AUTHORS:** - Drake I; Sonestedt E; Gullberg B; Bjartell A; Olsson H; Adlercreutz H; Tikkanen MJ; Wirfalt E; Wallstrom P

**INSTITUCIÓN / INSTITUTION:** - Department of Clinical Sciences in Malmö, Lund University.

**RESUMEN / SUMMARY:** - Background: Observational studies have mostly found no association between self-reported whole-grain (WG) intake and prostate cancer (PCa). Plasma alkylresorcinol metabolites have been suggested as biomarkers for WG intake in free-living populations. Methods: We investigated the major dietary and lifestyle determinants of plasma alkylresorcinol metabolites in a nested case-control study (1,016 cases and 1817 controls) in the Malmö Diet and Cancer Study. Multivariate adjusted odds ratios (OR) and 95% confidence intervals (95% CI) were estimated to assess the association between plasma alkylresorcinol metabolites and PCa using logistic regression. Results: WG intake, waist circumference, educational level and smoking status were the main determinants of alkylresorcinol metabolites. We observed significant correlations between alkylresorcinol metabolites and WG ( $r=0.31$ ) and fiber ( $r=0.27$ ) intake. Metabolite concentration was positively associated with PCa risk (P overall effect = 0.0004) but the association was not linear (P = 0.04). The lowest risk was seen among men with moderate plasma concentrations. The OR for high compared to moderate plasma alkylresorcinol metabolites was 1.41 (95% CI: 1.10-1.80) for PCa. Conclusions: Results suggest that plasma alkylresorcinol metabolites are mainly determined by WG intake in this nested-case control study of Swedish men. The increased risk of PCa seen among men with high plasma alkylresorcinol metabolites requires further study, but residual confounding, detection bias or competing risk of non-PCa related deaths are plausible explanations that could not be ruled out. Impact: We found no evidence of a protective effect of WG on incident PCa. Further validation of alkylresorcinol metabolites as a biomarker for WG intake is needed.

[413]

**TÍTULO / TITLE:** - Living kidney donor estimated glomerular filtration rate and recipient graft survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Oct 21.

●● Enlace al texto completo (gratis o de pago) [1093/ndt/gft239](#)

**AUTORES / AUTHORS:** - Young A; Kim SJ; Garg AX; Huang A; Knoll G; Prasad GV; Treleven D; Lok CE

**INSTITUCIÓN / INSTITUTION:** - Faculty of Medicine, University of Toronto, Ontario, Canada.

**RESUMEN / SUMMARY:** - BACKGROUND: Kidney transplants from living donors with an estimated glomerular filtration rate (eGFR) < 80 mL/min per 1.73 m<sup>2</sup> may be at risk for increased graft loss compared with a recipient who receives a kidney from a living donor with a higher eGFR. METHODS: This retrospective cohort study considered 2057 living kidney donors and their recipients from July 1993 to March 2010 at five centres in Ontario, Canada, and linked them to population-based, universal healthcare

databases. Recipients were divided into five groups based on their donor's baseline eGFR. The median (inter-quartile range) for the lowest eGFR group was 73 (68-77) mL/min per 1.73 m<sup>2</sup>. Subjects were followed for a median of 6 years (IQR: 3-10 years). RESULTS: There was no significant difference in the adjusted hazard ratio (HR) for graft loss when comparing recipients in each eGFR category to the referent group ( $\geq 110$  mL/min per 1.73 m<sup>2</sup>). The adjusted HRs (95% CI) from the lowest ( $< 80$  mL/min per 1.73 m<sup>2</sup>) to highest (100-109.9 mL/min per 1.73 m<sup>2</sup>) eGFR categories were 1.27 (0.84-1.92), 1.43 (0.96-2.14), 1.23 (0.86-1.77) and 1.23 (0.85-1.77), respectively. Similar results were observed when dichotomizing the baseline donor eGFR using a cut-point of 80 mL/min per 1.73 m<sup>2</sup>-adjusted HR 1.01 [95% confidence interval (95% CI) (0.76-1.44)]. CONCLUSIONS: Further research in this setting should clarify whether additional tests (i.e. measured GFR) should be performed in potential donors whose eGFR is considered borderline, whether eGFR values should be standardized to body surface area, and the outcomes for donors after nephrectomy.

[414]

**TÍTULO / TITLE:** - Early over-expression of GRP receptors in prostatic carcinogenesis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 22. doi: 10.1002/pros.22743.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pros.22743](#)

**AUTORES / AUTHORS:** - Korner M; Waser B; Rehmann R; Reubi JC

**INSTITUCIÓN / INSTITUTION:** - Division of Cell Biology and Experimental Cancer Research, Institute of Pathology of the University of Berne, Berne, Switzerland.

**RESUMEN / SUMMARY:** - BACKGROUND: The GRP receptor shows high over-expression in prostatic adenocarcinoma and high grade PIN, but low expression in normal prostate glands. This represents the molecular basis for GRP receptor imaging of prostate cancer with radioactive compounds. However, a focal, high density GRP receptor expression can be observed in hitherto uncharacterized prostate glands. METHODS: GRP receptors were quantitatively measured with in vitro receptor autoradiography using <sup>125</sup>I-Tyr4 -bombesin in samples from 115 prostates. On successive tissue sections, <sup>125</sup>I-Tyr4 -bombesin autoradiography was compared with H&E staining and MIB-1 and 34betaE12 immunohistochemistry. RESULTS: On one hand, it was confirmed that GRP receptors were expressed in adenocarcinoma and high grade PIN in high density and high incidence (77% and 73%, respectively), but in normal prostate glands in low density and low frequency (18%). On the other hand, a novel and intriguing observation was the existence of focal non-invasive prostate glands with high GRP receptor density, characterized by low grade nuclear atypia and increased proliferation, compatible with lower grade PIN. There was a significant GRP receptor density gradient ( $P \leq 0.005$ ), increasing from normal prostate glands (mean relative optical density, ROD, of <sup>125</sup>I-Tyr4 -bombesin binding: 0.17) over atypical glands without increased MIB-1 labeling (0.28) and atypical glands with increased MIB-1 expression (0.44) to high grade PIN and adenocarcinoma (0.64 and 0.58, respectively). CONCLUSIONS: GRP receptor over-expression may be a novel, specific marker of early prostatic neoplastic transformation, arising in low grade PIN, and progressively increasing during malignant progression. This should be considered when interpreting in vivo GRP receptor imaging in males. Prostate © 2013 Wiley Periodicals, Inc.

[415]

**TÍTULO / TITLE:** - Expression of the cancer-testis antigen BORIS correlates with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 4. doi: 10.1002/pros.22738.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22738](#)

**AUTORES / AUTHORS:** - Cheema Z; Hari-Gupta Y; Kita GX; Farrar D; Seddon I; Corr J; Klenova E

**INSTITUCIÓN / INSTITUTION:** - School of Biological Sciences, University of Essex, Colchester, UK; Department of Urology, Colchester Hospital University NHS Foundation Trust, Colchester, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: BORIS, a paralogue of the transcription factor CTCF, is a member of the cancer-testis antigen (CT) family. BORIS is normally present at high levels in the testis; however it is aberrantly expressed in various tumors and cancer cell lines. The main objectives of this study were to investigate BORIS expression together with sub-cellular localization in both prostate cell lines and tumor tissues, and assess correlations between BORIS and clinical/pathological characteristics. METHODS: We examined BORIS mRNA expression, protein levels and cellular localization in a panel of human prostate tissues, cancer and benign, together with a panel prostate cell lines. We also compared BORIS levels and localization with clinical/pathological characteristics in prostate tumors. RESULTS: BORIS was detected in all inspected prostate cancer cell lines and tumors, but was absent in benign prostatic hyperplasia. Increased levels of BORIS protein positively correlated with Gleason score, T-stage and androgen receptor (AR) protein levels in prostate tumors. The relationship between BORIS and AR was further highlighted in prostate cell lines by the ability of ectopically expressed BORIS to activate the endogenous AR mRNA and protein. BORIS localization in the nucleus plus cytoplasm was also associated with higher BORIS levels and Gleason score. CONCLUSIONS: Detection of BORIS in prostate tumors suggests potential applications of BORIS as a biomarker for prostate cancer diagnosis, as an immunotherapy target and, potentially, a prognostic marker of more aggressive prostate cancer. The ability of BORIS to activate the AR gene indicates BORIS involvement in the growth and development of prostate tumors. Prostate © 2013 Wiley Periodicals, Inc.

[416]

**TÍTULO / TITLE:** - The influence of baseline parameters on changes in International Prostate Symptom Score (IPSS) after combined therapy with dutasteride plus tamsulosin or either monotherapy in men with benign prostatic hyperplasia (BPH) and lower urinary tract symptoms (LUTS): 4-year results CombAT study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12500.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12500](#)

**AUTORES / AUTHORS:** - Roehrborn CG; Barkin J; Tubaro A; Emberton M; Wilson TH; Brotherton BJ; Castro R

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, UT Southwestern Medical Center, Dallas, Texas, USA.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To examine, using post-hoc analysis, the influence of baseline parameters on changes in international prostate symptom score (IPSS), maximum urinary flow rate (Qmax) and IPSS quality of life (QoL) in men with moderate-to-severe lower urinary tract symptoms (LUTS) due to benign prostatic hyperplasia (BPH) treated with either the alpha-blocker tamsulosin or the dual 5-alpha reductase inhibitor dutasteride alone or in combination as part of the 4-year Combination of Avodart and Tamsulosin (CombAT) study. **PATIENTS AND METHODS:** CombAT was a 4-year, multicentre, randomised, double-blind, parallel-group study in 4844 men  $\geq 50$  years of age with a BPH clinical diagnosis by medical history and physical examination, an IPSS  $\geq 12$  points, prostate volume (PV)  $\geq 30$  cc, total serum PSA  $\geq 1.5$  ng/ml, and Qmax  $> 5$  ml/s and  $\leq 15$  ml/s with a minimum voided volume  $\geq 125$  ml. Eligible subjects were randomised to receive oral daily tamsulosin, 0.4 mg; dutasteride, 0.5 mg; or a combination of both. Baseline parameter subgroups analysed were PV (30- $< 40$ ; 40- $< 60$ ; 60- $< 80$ ;  $\geq 80$  cc), PSA (1.5- $< 2.5$ ; 2.5- $< 4$ ;  $\geq 4$  ng/ml), age (median:  $< 66$ ,  $\geq 66$  years), IPSS (median:  $< 16$ ,  $\geq 16$ ; IPSS thresholds:  $< 20$ ,  $\geq 20$ ), IPSS QoL score (Q8) (median:  $< 4$ ,  $\geq 4$ ), Qmax (median:  $< 10.4$ ,  $\geq 10.4$  ml/s), BPH impact index (BII) (median:  $< 5$ ,  $\geq 5$ ) and BMI (median:  $< 26.8$ ,  $\geq 26.8$  kg/m<sup>2</sup>). Within each baseline parameter subgroup, changes in IPSS, Qmax and IPSS QoL Q8 from baseline were evaluated using a generalised linear model with effects for baseline IPSS, Qmax or IPSS QoL Q8 and treatment group at each post baseline assessment up to and including the month 48 visit using a last observation carried forward (LOCF) approach. The treatment comparisons of combination therapy vs. dutasteride and combination therapy vs. tamsulosin were performed from the general linear model with statistical significance defined as  $p \leq 0.01$ . **RESULTS:** Combination therapy resulted in a significantly greater improvement from baseline IPSS at 48 months vs. tamsulosin monotherapy across all baseline subgroups. The benefit of combination therapy over dutasteride was confined to groups with lower baseline PV ( $< 60$  cc) and PSA ( $< 4$  ng/ml). In groups with baseline PV  $\geq 60$  cc and PSA  $\geq 4$  ng/ml, dutasteride and combination therapy show similar improvements in symptoms. Combination therapy resulted in significantly improved Qmax compared with tamsulosin but not dutasteride monotherapy. Qmax improvement appeared to increase with PV and PSA in combination therapy subjects. The proportion of subjects with an IPSS QoL of  $\leq 2$  (at least mostly satisfied) at 48 months was significantly higher with combination therapy than with dutasteride for subgroups with PV 40-60 cc and PSA  $< 4$  ng/ml and compared with tamsulosin for all PSA subgroups and PV subgroups  $\geq 40$  cc. **CONCLUSION:** CombAT data support the use of long-term combination therapy with dutasteride and tamsulosin in men considered at risk for progression of BPH, as determined by high PV ( $\geq 30$  cc) and high PSA ( $\geq 1.5$  ng/ml). Combination therapy, dutasteride monotherapy and tamsulosin monotherapy all improved Qmax, but to different extents (combination therapy  $>$  dutasteride  $>>$  tamsulosin), suggesting that dutasteride contributes most to the Qmax benefit in combination therapy. Combination therapy provided consistent improvement over tamsulosin in LUTS across all analysed baseline parameters at 48 months. Compared with dutasteride, the superiority of combination therapy at 48 months was shown in men with PV  $< 60$  cc or PSA  $< 4$  ng/ml.

[417]

**TÍTULO / TITLE:** - Amylase alpha-1A (AMY1A): A Novel Immunohistochemical Marker to Differentiate Chromophobe Renal Cell Carcinoma From Benign Oncocytoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Surg Pathol. 2013 Dec;37(12):1824-30. doi: 10.1097/PAS.000000000000108.

- Enlace al texto completo (gratis o de pago)

[1097/PAS.000000000000108](#)

**AUTORES / AUTHORS:** - Jain S; Roy S; Amin M; Acquafondata M; Yin M; Laframboise W; Bastacky S; Pantanowitz L; Dhir R; Parwani A

**INSTITUCIÓN / INSTITUTION:** - \*Department of Pathology, University of Pittsburgh Medical Center, Pittsburgh, PA daggerDepartment of Pathology, East Carolina University, Greenville, NC.

**RESUMEN / SUMMARY:** - Chromophobe renal cell carcinoma (ChRCC) and oncocytoma present with a perplexing overlap of morphologic and immunohistochemical features. ChRCC have deletions in the 1p21.1 region including the amylase alpha-1A gene (AMY1A). No such deletions are found in oncocytoma. Instead, oncocytomas shared other deletions on chromosome 1: 1p31.3, 1q25.2, and 1q44. We performed AMY1A immunostaining on 75 oncocytomas (57 tissue microarray [TMA] cores, 18 whole slides) and 54 ChRCCs (20 TMA cores, 34 whole slides). Staining was assessed using the H-score method. The intensity was graded as follows: no staining=0, weak=1, moderate=2, and strong=3. The AMY1A immunostain preferentially stained the distal tubules and collecting ducts of normal kidney. All oncocytomas (100%) expressed AMY1A with an H-score that varied from 100 to 300 (mean 205). Mild to moderate heterogeneity in staining intensity was noted within a given oncocytoma. For oncocytomas, 87% (65/75) cases had H-scores of at least 120 with a mean score of 221. Notably, the 13% (10/75) of oncocytoma cases that had an H-score of 100 were derived from the TMA. A total of 87% (47/54) of the ChRCC cases were negative for the AMY1A immunostain. Of the ChRCC cases, 4% (2/54) showed very weak cytoplasmic staining (H-score of 70 each), which was less than the lowest H-score of oncocytoma cases. All 5 cases of ChRCC, which showed an H-score of 100 or more, were referred to as eosinophilic variants of ChRCC. Three of these 5 cases showed a very nondescript, diffuse staining of the cytoplasm. Two of these 5 cases showed an H-score of 130. We think that as the staining pattern of these 2 cases is similar to that of oncocytoma, they should be put in a category of renal oncocytic neoplasms favoring oncocytoma. This result shows that AMY1A staining could be very helpful in further classifying even a subset of the eosinophilic variants of ChRCC. The difference between ChRCC and oncocytoma was statistically significant (chi test,  $P < 0.0001$ ). All cases of clear cell RCC and papillary RCC were negative for AMY1A expression. Overall, sensitivity and specificity of AMY1A staining for oncocytoma was 100% (95% confidence interval, 0.95-1.00) and 96.75% (95% confidence interval, 0.93-0.99), respectively. Similarly, the sensitivity and specificity for distinguishing oncocytoma from ChRCC was 100% (95% confidence interval, 0.95-1.00) and 90.74% (95% confidence interval, 0.80-0.97), respectively. These data show that the novel marker AMY1A can be of great diagnostic utility when trying to differentiate ChRCC (classic and eosinophilic variant) and oncocytoma.

[418]

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**TÍTULO / TITLE:** - Comparing Radiation Exposure Between Ablative Therapies for Small Renal Masses.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 15.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0209](#)

**AUTORES / AUTHORS:** - Arnold DC 2nd; Schroeder G; Smith JC; Wahjudi IN; Heldt JP; Richards GD; Agarwal G; Brisbane WG; Farley DV; Baldwin DD

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Urology, Loma Linda University Medical Center, Loma Linda, California.

**RESUMEN / SUMMARY:** - Abstract Purpose: The purpose of this study was to evaluate the amount of radiation exposure patients with small renal masses undergoing percutaneous cyroablation (PCA) or percutaneous radiofrequency ablation (PRFA) received during treatment and follow up. Materials and Methods: A retrospective review was conducted on all patients with small renal masses <4 cm treated with PCA or PRFA over a 7-year period in a single academic center. Preoperative, operative, and post-operative variables were collected and compared. Radiation exposure received during treatment and 1 year of follow up were also determined for each modality. Statistical analysis was conducted using SPSS V.17 (SPSS, Chicago, IL). The groups were compared using the Mann-Whitney U and Pearson Chi-Square tests. Statistical significance was considered at  $p < 0.05$ . Results: There was no significant difference in pretreatment parameters or oncologic outcomes. The average PCA treatment radiation exposure was 39.7 mSv (15.5-133.4 mSv) compared with 22.2 mSv (8.1-67.7 mSv) for PRFA ( $p = 0.001$ ). During the initial year after treatment, the estimated mean treatment and follow-up radiation exposure for PCA was 134.5 mSv, compared with 117 mSv for RFA when routine computerized tomography imaging was employed. Conclusion: To our knowledge, this is the first published study that quantifies radiation exposure in PCA and PRFA treatment for small renal masses. These relatively high radiation exposures should be included in the informed consent for these procedures. In addition, caution should be employed when applying these technologies in young patients who are most susceptible to long-term radiation damage.

[419]

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**TÍTULO / TITLE:** - Association of E2F3 expression with clinicopathological features of Wilms' tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pediatr Surg. 2013 Nov;48(11):2187-93. doi: 10.1016/j.jpedsurg.2013.05.014.

●● Enlace al texto completo (gratis o de pago) [1016/j.jpedsurg.2013.05.014](#)

**AUTORES / AUTHORS:** - An Q; Wang Y; An R; Li Y; Yao T; Zhai B; Sun X

**INSTITUCIÓN / INSTITUTION:** - Department of Pediatric Surgery, The First Affiliated Hospital of Harbin Medical University, Harbin 150001, China.

**RESUMEN / SUMMARY:** - PURPOSE: The transcription factor E2F3 plays an important role in controlling cell cycle progression and proliferation, and is overexpressed in various human cancers. The present study was undertaken to examine the expression of E2F3 and investigate its relevance in clinical and pathological features of pediatric

Wilms' tumors. METHODS: Twenty-six Wilms' tumor samples collected at the First Affiliated Hospital of Harbin Medical University underwent immunohistochemical staining for E2F3 protein expression by measuring the percentage of E2F3-positive cells and integrated optical density (IOD), and quantitative real-time polymerase chain reaction (qRT-PCR) for E2F3 mRNA expression. RESULTS: The expression of E2F3 protein and mRNA was detectable in all the Wilms' tumor samples with big variations (The average percentage of positive cells was 30.2%±23.5%, range 0.3%-75.6%; average IOD was 6.61x10(4)±3.92x10(4), range 2.32x10(4)-13.84x10(4); average relative mRNA unit was 0.54±0.38, range 0.03-1.31), but not in fetal kidney tissues. Wilms' tumors with aggressive features, such as higher stage, unfavorable histology and higher risk level, expressed higher levels of E2F3 protein and mRNA. CONCLUSIONS: The preliminary data indicate that E2F3 is frequently expressed in pediatric Wilms' tumors examined in the present study. E2F3 expression may be associated with Wilms' tumors, particularly those that have more aggressive features. However, further studies are needed to validate these pilot observations and to clarify the functional and mechanistic significance of this association.

[420]

**TÍTULO / TITLE:** - Quantitative assessment of the influence of prostate stem cell antigen polymorphisms on gastric cancer risk.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Oct 22.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s13277-013-1287-9](#)

**AUTORES / AUTHORS:** - Gu X; Zhang W; Xu L; Cai D

**INSTITUCIÓN / INSTITUTION:** - Department of Traditional Chinese Medicine, Zhongshan Hospital, Fudan University, 180 Fenglin Road, Shanghai, 200032, People's Republic of China.

**RESUMEN / SUMMARY:** - Prostate stem cell antigen (PSCA) is a glycosylphosphatidylinositol-anchored 123-amino acid protein related to the cell proliferation inhibition and/or cell death induction activity which has attracted considerable attention as a candidate gene for gastric cancer (GC) since it was first identified through genome-wide association approach. Since then, the relationship between PSCA polymorphisms (rs2294008, rs2976392) and GC has been reported in various ethnic groups; however, these studies have yielded inconsistent results. To investigate this inconsistency, we performed a meta-analysis of 16 studies involving a total of 18,820 cases and 35,756 controls for the two widely studied polymorphisms of PSCA on genetic susceptibility for GC. Overall, the summary odds ratio for GC was 1.46 (95 % CI 1.30-1.69, P < 10<sup>-5</sup>) and 1.49 (95 % CI 1.22-1.82, P < 10<sup>-4</sup>) for PSCA rs2294008 and rs2976392 polymorphisms, respectively. Meanwhile, haplotype analyses of the two polymorphisms revealed a significant association between the combination of these alleles and GC risk. When stratifying for ethnicity, significantly increased risks were found for rs2294008 and rs2976392 polymorphism among East Asians in all genetic models, while no significant associations were observed for the rs2294008 polymorphism in Caucasians. In the stratified analyses according to histological type, and source of controls, evidence of gene-disease association was still obtained. In addition, our data indicate that rs2294008 of PSCA is involved in GC susceptibility and confer its effect primarily in noncardia tumors (OR = 1.30, 95 % CI

1.12-1.53,  $P < 10^{-4}$ ). Our findings demonstrated that rs2294008 and rs2976392 polymorphism of PSCA is a risk-conferring factor associated with increased GC susceptibility, especially in East Asians.

[421]

**TÍTULO / TITLE:** - Case 199: aggressive angiomyolipoma with renal vein thrombosis and pulmonary fat embolus.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiology. 2013 Nov;269(2):615-8. doi: 10.1148/radiol.13121187.

●● Enlace al texto completo (gratis o de pago) [1148/radiol.13121187](#)

**AUTORES / AUTHORS:** - Yarmish G; Dipocce J

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Staten Island University Hospital, 475 Seaview Ave, Staten Island, NY 10305.

[422]

**TÍTULO / TITLE:** - Expression of Aggrus/podoplanin in bladder cancer and its role in pulmonary metastasis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Nov 13. doi: 10.1002/ijc.28602.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28602](#)

**AUTORES / AUTHORS:** - Takagi S; Oh-Hara T; Sato S; Gong B; Takami M; Fujita N

**INSTITUCIÓN / INSTITUTION:** - Division of Experimental Chemotherapy, Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Tokyo, Japan.

**RESUMEN / SUMMARY:** - Platelet aggregation-inducing factor Aggrus, also known as podoplanin, is associated with tumor malignancy by promoting hematogenous metastasis. Aggrus overexpression has been reported in some tumor tissues including lung, esophagus, head and neck and brain. We here found the frequent upregulation of aggrus mRNA in urinary bladder cancers using cancer tissue panels from various organs. Immunohistochemical analysis confirmed Aggrus protein expression in urinary bladder cancers and suggested a positive correlation between Aggrus expression and metastatic tendency in bladder cancers. Endogenous expression of Aggrus protein on the cell surface was found in the mouse bladder cancer MBT-2 cell line and human bladder cancer SCaBER cell lines. Knockdown of Aggrus expression in MBT-2 cells decreased their ability to induce platelet aggregation and form pulmonary metastasis in syngeneic mouse models. Knockdown of Aggrus expression in the human bladder cancer SCaBER cells also attenuated their ability to induce platelet aggregation and form pulmonary metastasis in mice. Moreover, pulmonary metastasis of SCaBER cells was prevented by prior administration of our generated anti-Aggrus neutralizing monoclonal antibodies by attenuating their retention in lung. These results indicate that Aggrus plays an important role in bladder cancer metastasis. Thus, anti-Aggrus neutralizing antibodies would be useful for the prevention of hematogenous metastasis of Aggrus-positive bladder cancer.

[423]

**TÍTULO / TITLE:** - Longitudinal changes in body mass index following renal transplantation in UK children.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1093/ndt/gft395](#)

**AUTORES / AUTHORS:** - Plumb LA; Pitcher D; Tse Y; Shield JP; Inward C; Sinha MD  
**INSTITUCIÓN / INSTITUTION:** - Department of Paediatric Nephrology, Bristol Royal Hospital for Children, University Hospitals Bristol NHS Trust, Bristol BS2 8BJ, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: Childhood obesity is a significant health problem in the UK. To date, there is little known about the pattern of change in body mass index (BMI) following renal transplantation in UK paediatric patients. Our objectives in this study were to (i) describe trends in BMI seen in UK patients undergoing renal transplantation in the short and medium term and (ii) identify risk factors predisposing children to excessive weight gain following transplantation. METHODS: A retrospective case note review was performed across 12 of 13 paediatric nephrology centres in the UK, with BMI measurements recorded pre-transplantation and for 4 years thereafter. BMI% was used to assess changes in adiposity over time. International Obesity Taskforce definitions of overweight and obesity were used to identify the prevalence of excess weight pre- and post-renal transplantation. RESULTS: A total of 159 patients (113 boys) under the age of 18 with a functioning kidney transplant were included. Fifty-six patients (35.2%) were under the age of 5 at transplantation. Pre-transplantation, 31.4% of patients were classified as overweight or obese, which increased to 52.8% by the end of follow-up. The majority of patients experienced rapid increases in BMI% over the initial four months post-transplantation, which were sustained for the remainder of the follow-up period. The major risk factor for being overweight or obese at the end of follow-up was having excessive weight pre-transplantation. Four years following transplantation, the prevalence rate of overweight and obesity was much higher in our study cohort than the normal UK childhood population. CONCLUSIONS: The prevalence of patients classified as overweight or obese in the UK paediatric renal cohort is high pre-transplantation and rises subsequently. Those at risk can be identified by an unhealthy BMI pre-transplantation and will require timely intervention with close monitoring in the subsequent post-transplantation period.

[424]

**TÍTULO / TITLE:** - Antiproliferative, antiandrogenic and cytotoxic effects of novel caffeic acid derivatives in LNCaP human androgen-dependent prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Bioorg Med Chem. 2013 Nov 15;21(22):7182-93. doi: 10.1016/j.bmc.2013.08.057. Epub 2013 Sep 6.

●● Enlace al texto completo (gratis o de pago) [1016/j.bmc.2013.08.057](#)

**AUTORES / AUTHORS:** - Sanderson JT; Clabault H; Patton C; Lassalle-Claux G; Jean-Francois J; Pare AF; Hebert MJ; Surette ME; Touaibia M

**INSTITUCIÓN / INSTITUTION:** - INRS-Institut Armand-Frappier, 531, boulevard des Prairies, Laval, QC H7V 1B7, Canada. Electronic address: [thomas.sanderson@iaf.inrs.ca](mailto:thomas.sanderson@iaf.inrs.ca).

**RESUMEN / SUMMARY:** - Caffeic acid and its naturally occurring derivative caffeic acid phenethyl ester (CAPE) have antiproliferative and cytotoxic properties in a variety of cancer cell lines without displaying significant toxicity toward healthy cells, and are considered to be potential anticancer agents. However, little is known about their effects on prostate cancer cells. We synthesized and evaluated the effects of caffeic acid, CAPE (2) and 18 synthetic derivatives on cell viability and androgen-dependent cell proliferation, subcellular localisation and expression of androgen receptor (AR) and secretion of prostate-specific antigen (PSA) in LNCaP human hormone-dependent prostate cancer cells. Several synthetic derivatives of CAPE were strong, concentration-dependent cytotoxic agents in LNCaP cells with IC50 values in the 6.8-26.6  $\mu\text{M}$  range, potencies that were up to five-fold greater than that of CAPE (33.7 $\pm$ 4.0  $\mu\text{M}$ ). A number of caffeic acid derivatives were inhibitors of androgen-stimulated LNCaP cell proliferation with concomitant inhibition of DHT-stimulated PSA secretion. Compound 24 was the most cytotoxic and antiproliferative caffeic acid derivative (IC50 values of 6.8 $\pm$ 0.3 and 2.4 $\pm$ 0.8  $\mu\text{M}$ , respectively) inhibiting DHT-stimulated cell proliferation and PSA secretion statistically significantly at concentrations as low as 0.3  $\mu\text{M}$ . Exposure to DHT increased cytoplasmic and nuclear AR levels and co-treatment with increasing concentrations of compound 24 or CAPE (2), notably, further increased these levels. In conclusion, a number of synthetic derivatives of caffeic acid are potent inhibitors of androgen-dependent prostate cancer cell proliferation and viability, acting, at least in part, via an antiandrogenic mechanism that involves increased nuclear accumulation of (presumably inactive) AR.

[425]

**TÍTULO / TITLE:** - Withaferin A, a Steroidal Lactone from *Withania somnifera*, Induces Mitotic Catastrophe and Growth Arrest in Prostate Cancer Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Nat Prod. 2013 Oct 25;76(10):1909-15. doi: 10.1021/np400441f. Epub 2013 Sep 30.

●● Enlace al texto completo (gratis o de pago) [1021/np400441f](#)

**AUTORES / AUTHORS:** - Roy RV; Suman S; Das TP; Luevano JE; Damodaran C

**INSTITUCIÓN / INSTITUTION:** - Department of Biomedical Sciences, Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center, El Paso, Texas 79905, United States.

**RESUMEN / SUMMARY:** - Cell cycle deregulation is strongly associated with the pathogenesis of prostate cancer. Clinical trials of cell cycle regulators that target either the G0/G1 or G2/M phase to inhibit the growth of cancers including prostate cancer are increasing. The present study focused on the cell cycle regulatory potential of the withanolide withaferin A (1) on prostate cancer cells. Compound 1 induced G2/M arrest in both prostate cancer cell lines (PC-3 and DU-145) when treated for 48 h. The G2/M arrest was accompanied by upregulation of phosphorylated Wee-1, phosphorylated histone H3, p21, and Aurora B. On the other hand, downregulation of cyclins (A2, B1, and E2) and a reduction in phosphorylated Cdc2 (Tyr15) were observed in 1-treated prostate cancer cells. In addition, decreased levels of phosphorylated Chk1 (Ser345) and Chk2 (Thr68) were evident in prostate cancer cells on treatment with 1. These results suggest that activation of Cdc2 leads to arrest in the M phase, with abnormal duplication, and initiation of mitotic catastrophe that results in cell death. In conclusion,

these results show clearly the potential of 1 as a regulator of the G2/M phase of the cell cycle and as a therapeutic agent for prostate cancer.

[426]

**TÍTULO / TITLE:** - Mitochondrial Modulation of Apoptosis Induced by Low-dose Radiation in Mouse Testicular Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biomed Environ Sci. 2013 Oct;26(10):820-30. doi: 10.3967/bes2013.005.

●● Enlace al texto completo (gratis o de pago) [3967/bes2013.005](#)

**AUTORES / AUTHORS:** - Fang F; Gong PS; Zhao HG; Bi YJ; Zhao G; Gong SL; Wang ZC

**INSTITUCIÓN / INSTITUTION:** - Key Laboratory of Radiobiology, Ministry of Health, School of Public Health, Jilin University, Changchun 130021, Jilin, China.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To investigate whether apoptosis induced by low-dose radiation (LDR) is regulated by mitochondrial pathways in testicular cells. **METHODS:** Male mice were exposed to whole-body LDR, and changes in mitochondrial function and in expression of apoptotic factors were analyzed in the testicular cells as follows. Total nitric-oxide synthase (T-NOS) and Na<sup>+</sup>/K<sup>+</sup> ATPase activities were biochemically assayed. Reactive oxygen species (ROS) and mitochondrial membrane potential (Deltapsim) were determined by flow cytometry using fluorescent probes. Levels of mRNAs encoding cytochrome c (Cyt c) and apoptosis-inducing factor (AIF) were quantified by real-time reverse-transcription PCR (RT-PCR). Expression of Cyt c, AIF, caspase-9, and caspase-3 at the protein level was assessed by western blotting and immunohistochemistry. **RESULTS:** LDR induced an increase in T-NOS activity and ROS levels, and a decrease in Na<sup>+</sup>/K<sup>+</sup> ATPase activity and mitochondrial Deltapsim, in the testicular cells. The intensity of these effects increased with time after irradiation and with dose. The cells showed remarkable swelling and vacuolization of mitochondria, and displayed a time- and dose-dependent increase in the expression of Cyt c, AIF, procaspase-9, and procaspase-3. Activation of the two procaspases was confirmed by detection of the cleaved caspases. The changes in expression of the four apoptotic factors were mostly limited to spermatogonia and spermatocytes. **CONCLUSION:** LDR can induce testicular cell apoptosis through mitochondrial signaling pathways.

[427]

**TÍTULO / TITLE:** - Autotaxin-lysophosphatidic Acid signaling axis mediates tumorigenesis and development of acquired resistance to sunitinib in renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Dec 1;19(23):6461-72. doi: 10.1158/1078-0432.CCR-13-1284. Epub 2013 Oct 11.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-1284](#)

**AUTORES / AUTHORS:** - Su SC; Hu X; Kenney PA; Merrill MM; Babaian KN; Zhang XY; Maity T; Yang SF; Lin X; Wood CG

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Departments of Urology and Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, Texas; and Institute of Medicine, Chung Shan Medical University, Taichung, Taiwan.

**RESUMEN / SUMMARY:** - PURPOSE: Sunitinib is currently considered as the standard treatment for advanced renal cell carcinoma (RCC). We aimed to better understand the mechanisms of sunitinib action in kidney cancer treatment and in the development of acquired resistance. EXPERIMENTAL DESIGN: Gene expression profiles of RCC tumor endothelium in sunitinib-treated and -untreated patients were analyzed and verified by quantitative PCR and immunohistochemistry. The functional role of the target gene identified was investigated in RCC cell lines and primary cultures in vitro and in preclinical animal models in vivo. RESULTS: Altered expression of autotaxin, an extracellular lysophospholipase D, was detected in sunitinib-treated tumor vasculature of human RCC and in the tumor endothelial cells of RCC xenograft models when adapting to sunitinib. ATX and its catalytic product, lysophosphatidic acid (LPA), regulated the signaling pathways and cell motility of RCC in vitro. However, no marked in vitro effect of ATX-LPA signaling on endothelial cells was observed. Functional blockage of LPA receptor 1 (LPA1) using an LPA1 antagonist, Ki16425, or gene silencing of LPA1 in RCC cells attenuated LPA-mediated intracellular signaling and invasion responses in vitro. Ki16425 treatment also dampened RCC tumorigenesis in vivo. In addition, coadministration of Ki16425 with sunitinib prolonged the sensitivity of RCC to sunitinib in xenograft models, suggesting that ATX-LPA signaling in part mediates the acquired resistance against sunitinib in RCC. CONCLUSIONS: Our results reveal that endothelial ATX acts through LPA signaling to promote renal tumorigenesis and is functionally involved in the acquired resistance of RCC to sunitinib. Clin Cancer Res; 19(23); 6461-72. ©2013 AACR.

[428]

**TÍTULO / TITLE:** - Metastatic renal cell carcinoma: radiologic findings and assessment of response to targeted antiangiogenic therapy by using multidetector CT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiographics. 2013 Oct;33(6):1691-716. doi: 10.1148/rg.336125110.

●● Enlace al texto completo (gratis o de pago) [1148/rg.336125110](#)

**AUTORES / AUTHORS:** - Brufau BP; Cerqueda CS; Villalba LB; Izquierdo RS; Gonzalez BM; Molina CN

**INSTITUCIÓN / INSTITUTION:** - CDIC and ICMHO, Hospital Clinic de Barcelona, C/Villarroel n degrees 170, 08036 Barcelona, España.

**RESUMEN / SUMMARY:** - Recent advances in treatment of metastatic renal cell carcinoma (RCC), such as new molecular therapies that use novel antiangiogenic agents, have led to revision of the most frequently used guideline to evaluate tumor response to therapy: Response Evaluation Criteria in Solid Tumors (RECIST 1.1). Assessment of the response of metastatic RCC to therapy has traditionally been based on changes in target lesion size. However, the mechanism of action of newer antiangiogenic therapies is more cytostatic than cytotoxic, which leads to disease stabilization rather than to tumor regression. This change in tumor response makes RECIST 1.1--a system whose criteria are based exclusively on tumor size--inadequate

to discriminate patients with early tumor progression from those with more progression-free disease and prolonged survival. New criteria such as changes in attenuation, morphology, and structure, as seen at contrast-enhanced multidetector computed tomography (CT), are being incorporated into new classifications used to assess response of metastatic RCC to antiangiogenic therapies. The new classifications provide better assessments of tumor response to the new therapies, but they have some limitations. The authors provide a practical review of these systems—the Choi, modified Choi, and Morphology, Attenuation, Size, and Structure (MASS) criteria—by explaining their differences and limitations that may influence the feasibility and reproducibility of these classifications. The authors review the use of multidetector CT in the detection of metastatic RCC and the different appearances and locations of these lesions. They also provide an overview of the new antiangiogenic therapies and their mechanisms of action and a brief introduction to functional imaging techniques. Functional imaging techniques, especially dynamic contrast-enhanced CT, seem promising for assessing response of metastatic RCC to treatment. Nonetheless, further studies are needed before functional imaging can be used in routine clinical practice.

[429]

**TÍTULO / TITLE:** - Prostate cancer gene 3 and multiparametric magnetic resonance can reduce unnecessary biopsies: decision curve analysis to evaluate predictive models.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Dec;82(6):1355-62. doi: 10.1016/j.urology.2013.06.078. Epub 2013 Sep 29.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urology.2013.06.078](#)

**AUTORES / AUTHORS:** - Busetto GM; De Berardinis E; Sciarra A; Panebianco V; Giovannone R; Rosato S; D'Errigo P; Di Silverio F; Gentile V; Salciccia S

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Sapienza University of Rome, Rome, Italy.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To overcome the well-known prostate-specific antigen limits, several new biomarkers have been proposed. Since its introduction in clinical practice, the urinary prostate cancer gene 3 (PCA3) assay has shown promising results for prostate cancer (PC) detection. Furthermore, multiparametric magnetic resonance imaging (mMRI) has the ability to better describe several aspects of PC. **METHODS:** A prospective study of 171 patients with negative prostate biopsy findings and a persistent high prostate-specific antigen level was conducted to assess the role of mMRI and PCA3 in identifying PC. All patients underwent the PCA3 test and mMRI before a second transrectal ultrasound-guided prostate biopsy. The accuracy and reliability of PCA3 (3 different cutoff points) and mMRI were evaluated. Four multivariate logistic regression models were analyzed, in terms of discrimination and the cost benefit, to assess the clinical role of PCA3 and mMRI in predicting the biopsy outcome. A decision curve analysis was also plotted. **RESULTS:** Repeated transrectal ultrasound-guided biopsy identified 68 new cases (41.7%) of PC. The sensitivity and specificity of the PCA3 test and mMRI was 68% and 49% and 74% and 90%, respectively. Evaluating the regression models, the best discrimination (area under the curve 0.808) was obtained using the full model (base clinical model plus mMRI and PCA3). The decision curve analysis, to evaluate the cost/benefit ratio, showed good performance in predicting PC with the model that included mMRI and

PCA3. CONCLUSION: mMRI increased the accuracy and sensitivity of the PCA3 test, and the use of the full model significantly improved the cost/benefit ratio, avoiding unnecessary biopsies.

[430]

**TÍTULO / TITLE:** - NSC126188 induces apoptosis of prostate cancer PC-3 cells through inhibition of Akt membrane translocation, FoxO3a activation, and RhoB transcription.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Apoptosis. 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [1007/s10495-013-0905-8](#)

**AUTORES / AUTHORS:** - Won KJ; Kim BK; Han G; Lee K; Jung YJ; Kim HM; Song KB; Chung KS; Won M

**INSTITUCIÓN / INSTITUTION:** - Medical Genome Research Center, KRIBB, Taejeon, 305-806, Korea.

**RESUMEN / SUMMARY:** - We previously reported that NSC126188 caused apoptosis of cancer cells by inducing expression of RhoB. We here present that NSC126188 induces apoptosis of prostate cancer PC-3 cells by inhibiting Akt/FoxO3 signaling, which mediates RhoB upregulation. The apoptosis and Akt dephosphorylation caused by NSC126188 was not substantially relieved by overexpressing wild-type Akt but was relieved by overexpressing constitutively active Akt (CA-Akt) or myristoylated Akt (myr-Akt). Furthermore, overexpression of CA-Akt or myr-Akt downregulated RhoB expression, indicating that RhoB expression is regulated by Akt signaling. Interestingly, membrane translocation of GFP-Akt by insulin exposure was abolished in the cells pretreated with NSC126188 suggesting that NSC126188 directly interfered with translocation of Akt to the plasma membrane. In addition, NSC126188 activated FoxO3a by dephosphorylating S253 via Akt inhibition. Activated FoxO3a translocated to the nucleus and increased transcription of RhoB and other target genes. PC-3 cells transiently overexpressing FoxO3a exhibited increased RhoB expression and apoptosis in response to NSC126188. Conversely, FoxO3a knockdown reduced NSC126188-induced RhoB expression and cell death. These results suggest that RhoB may be a target gene of FoxO3a and is regulated by Akt signaling. Taken together, NSC126188 induces apoptosis of PC-3 cells by interfering with membrane recruitment of Akt, resulting in Akt dephosphorylation and FoxO3a activation, which leads to transcription of RhoB.

[431]

**TÍTULO / TITLE:** - Words of wisdom. Re: Active surveillance for prostate cancer compared with immediate treatment: an economic analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov;64(5):855. doi: 10.1016/j.eururo.2013.08.039.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.08.039](#)

**AUTORES / AUTHORS:** - Klaassen Z; Wyatt B; Moses KA; Terris MK

**INSTITUCIÓN / INSTITUTION:** - Section of Urology, Department of Surgery, Medical College of Georgia - Georgia Regents University, Augusta, GA, USA.

[432]

**TÍTULO / TITLE:** - Cost-Effectiveness of Everolimus for Second-Line Treatment of Metastatic Renal Cell Carcinoma in Serbia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Ther. 2013 Nov 13. pii: S0149-2918(13)01023-0. doi: 10.1016/j.clinthera.2013.10.004.

●● Enlace al texto completo (gratis o de pago) [1016/j.clinthera.2013.10.004](#)

**AUTORES / AUTHORS:** - Mihajlovic J; Pechlivanoglou P; Sabo A; Tomic Z; Postma MJ

**INSTITUCIÓN / INSTITUTION:** - Unit of PharmacoEpidemiology & PharmacoEconomics (PE2), Department of Pharmacy, University of Groningen, Groningen, The Netherlands. Electronic address: [j.mihajlovic@rug.nl](mailto:j.mihajlovic@rug.nl).

**RESUMEN / SUMMARY:** - BACKGROUND: New targeted therapeutics for metastatic renal cell carcinoma (mRCC) enable an increment in progression-free survival (PFS) ranging from 2 to 6 months. Compared with best supportive care, everolimus demonstrated an additional PFS of 3 months in patients with mRCC whose disease had progressed on sunitinib and/or sorafenib. The only targeted therapy for mRCC currently reimbursed in Serbia is sunitinib. OBJECTIVE: The aim of this study was to estimate the cost-effectiveness and the budget impact of the introduction of everolimus in Serbia in comparison to best supportive care, for mRCC patients refractory to sunitinib. METHODS: A Markov model was designed corresponding with Serbian treatment protocols. A health care payer perspective was taken, including direct costs only. Treated and untreated cohorts were followed up over 18 cycles, each cycle lasting 8 weeks, which covered the lifetime horizon of mRCC patients refractory to the first-line treatment. Annual discounted rates of 1.5% for effectiveness and 3% for costs were applied. Transitions between health states were modeled by time-dependent probabilities extracted from published Kaplan-Meier curves of PFS and overall survival (OS). Utility values were obtained from the appraisals of other mRCC treatments. One-way and probabilistic sensitivity analyses were done to test the robustness and uncertainty of the base-case estimate. Lastly, the potential impacts of everolimus on the overall health care expenditures on annual and 4-year bases were estimated in the budget-impact analysis. RESULTS: The incremental cost-effectiveness ratio for everolimus was estimated at euro86,978 per quality-adjusted life-year. Sensitivity analysis identified the hazard multiplier, a statistical approximator of OS gain, as the main driver of everolimus cost-effectiveness. Furthermore, probabilistic sensitivity analyses revealed a wide 95% CI around the base-case incremental cost-effectiveness ratio estimate (euro32,594-euro425,258 per quality-adjusted life-year). Finally, an average annual budgetary impact of everolimus in first 4 years after its potential reimbursement would be around euro270,000, contributing to <1% of the total budget in Serbian oncology. CONCLUSIONS: Everolimus as a second-line treatment of mRCC is not likely to be a cost-effective option under the present conditions in Serbia, with a relatively limited impact on its budget in oncology. A major constraint on the estimation of the cost-effectiveness of everolimus relates to the uncertainty around the everolimus effect on extending OS. However, prior to a final decision on the acceptance/rejection of everolimus, reassessment of the whole therapeutic group might be needed to construct an economically rational treatment strategy within the mRCC field.

[433]

**TÍTULO / TITLE:** - Elevated fatty acid synthase expression in prostate needle biopsy cores predicts upgraded Gleason score in radical prostatectomy specimens.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Sep 21. doi: 10.1002/pros.22732.

- Enlace al texto completo (gratis o de pago) [1002/pros.22732](#)

**AUTORES / AUTHORS:** - Hamada S; Horiguchi A; Kuroda K; Ito K; Asano T; Miyai K; Iwaya K

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, National Defense Medical College, Tokorozawa City, Saitama, Japan.

**RESUMEN / SUMMARY:** - BACKGROUND: We examined whether fatty acid synthase (FAS) expression in prostate biopsy cores had valuable information and could predict a Gleason score (GS) upgraded from biopsy to radical prostatectomy (RP) specimens. METHODS: Immunostaining with a FAS antibody was performed on paraffin-embedded prostate biopsy cores with GS 5-6 obtained from 80 patients who subsequently underwent RP. The correlations between FAS expression and clinicopathological parameters, upgrading group, and clinicopathological parameters including FAS expression were analyzed. Logistic regression analysis was performed to identify a significant set of independent predictors for upgrading GS. RESULTS: A total of 46 patients (57.5%) with biopsy GS 5-6 were upgraded to GS  $\geq 7$  at RP. FAS expression was significantly associated with clinical T stage ( $P = 0.0232$ ) and positive core rate ( $P = 0.0245$ ). Upgrading from biopsy GS 5-6 to GS  $\geq 7$  at RP was significantly associated with clinical T stage ( $P = 0.0337$ ), positive core rate ( $P = 0.0262$ ), and FAS expression ( $P < 0.0001$ ). FAS expression was a significant predictor for upgrading from biopsy GS 5-6 to GS  $\geq 7$  at RP in multivariate analysis ( $P < 0.0001$ ; odds ratio, 12.35). FAS scores showed the largest area under the receiver-operating characteristic curve (AUC) in preoperative parameters (AUC = 0.753). CONCLUSIONS: Increased FAS expression in prostate biopsy cores could be a novel parameter for upgrading from biopsy GS 5-6 to GS  $\geq 7$  at RP. If a biopsy GS is low, the treatment strategy for patients with high FAS expression in prostate biopsy cores should be carefully determined. Prostate 9999: XX-XX, 2013. © 2013 Wiley Periodicals, Inc.

[434]

**TÍTULO / TITLE:** - Non-coding RNAs in Prostate Cancer: the Long and the Short of it.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Oct 21.

- Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-](#)

[1989](#)

**AUTORES / AUTHORS:** - Bolton EM; Tuzova AV; Walsh AL; Lynch T; Perry AS

**INSTITUCIÓN / INSTITUTION:** - Clinical Medicine, Trinity College Dublin.

**RESUMEN / SUMMARY:** - As the leading culprit in cancer incidence for American men, prostate cancer continues to pose significant diagnostic, prognostic and therapeutic tribulations for clinicians. The vast spectrum of disease behavior warrants better molecular classification to facilitate the development of more robust biomarkers that can identify the more aggressive and clinically significant tumor subtypes that require treatment. The untranslated portion of the human transcriptome, namely non-coding

RNAs (ncRNAs), is emerging as a key player in cancer initiation and progression and boasts many attractive features for both biomarker and therapeutic research. Genetic linkage studies show that many ncRNAs are located in cancer-associated genomic regions that are frequently deleted or amplified in prostate cancer, whilst aberrant ncRNA expression patterns have well-established links with prostate tumor cell proliferation and survival. The dysregulation of pathways controlled by ncRNAs results in a cascade of multi-cellular events leading to carcinogenesis and tumor progression. The characterization of RNA species, their functions and their clinical applicability is a major area of biological and clinical importance. This review summarizes the growing body of evidence supporting a pivotal role for ncRNAs in the pathogenesis of prostate cancer. We highlight the most promising ncRNA biomarkers for detection and risk-stratification and present the state-of-play for RNA-based personalized medicine in treating the “untreatable” prostate tumors.

[435]

**TÍTULO / TITLE:** - Urinary metabolites of a polycyclic aromatic hydrocarbon and volatile organic compounds in relation to lung cancer development in lifelong never smokers in the Shanghai Cohort Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Carcinogenesis. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [1093/carcin/bgt352](#)

**AUTORES / AUTHORS:** - Yuan JM; Butler LM; Gao YT; Murphy SE; Carmella SG; Wang R; Nelson HH; Hecht SS

**INSTITUCIÓN / INSTITUTION:** - Cancer Control and Population Sciences, University of Pittsburgh Cancer Institute, Pittsburgh, PA 15232, USA.

**RESUMEN / SUMMARY:** - Exposures to polycyclic aromatic hydrocarbons (PAHs) from various environmental and occupational sources are considered a primary risk factor for lung cancer among lifelong never smokers, based largely on results from epidemiologic studies utilizing self-reported exposure information. Prospective, biomarker-based human studies on the role of PAH and other airborne carcinogens in the development of lung cancer among lifelong non-smokers have been lacking. We prospectively investigated levels of urinary metabolites of a PAH and volatile organic compounds in relation to lung cancer risk in a nested case-control study of 82 cases and 83 controls among lifelong never smokers of the Shanghai Cohort Study, a prospective cohort of 18 244 Chinese men aged 45-64 years at enrollment. We quantified three PAH metabolites: r-1,t-2,3,c-4-tetrahydroxy-1,2,3,4-tetrahydrophenanthrene (PheT), 3-hydroxyphenanthrene (3-OH-Phe) and total hydroxyphenanthrenes (total OH-Phe, the sum of 1-, 2-, 3- and 4-OH-Phe), as well as metabolites of the volatile organic compounds acrolein (3-hydroxypropyl mercapturic acid), benzene (S-phenyl mercapturic acid), crotonaldehyde (3-hydroxy-1-methylpropylmercapturic acid) and ethylene oxide (2-hydroxyethyl mercapturic acid). Urinary cotinine was also quantified to confirm non-smoking status. Compared with the lowest quartile, odds ratios (95% confidence intervals) for lung cancer risk for the highest quartile levels of PheT, 3-OH-Phe and total OH-Phe were 2.98 (1.13-7.87), 3.10 (1.12-7.75) and 2.59 (1.01-6.65) (all P trend < 0.05), respectively. None of the metabolites of the volatile organic compounds were associated with overall lung

cancer risk. This study demonstrates a potentially important role of exposure to PAH in the development of lung cancer among lifelong never smokers.

[436]

**TÍTULO / TITLE:** - A Prospective Pilot Study of 89Zr-J591/PSMA Positron Emission Tomography (PET) in Men with Localized Prostate Cancer Undergoing Radical Prostatectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 14. pii: S0022-5347(13)05648-6. doi: 10.1016/j.juro.2013.10.041.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.041](#)

**AUTORES / AUTHORS:** - Osborne JR; Green DA; Spratt DE; Lyashchenko S; Fareedy SB; Robinson BD; Beattie BJ; Jain M; Lewis JS; Christos P; Larson SM; Bander NH; Scherr DS

**INSTITUCIÓN / INSTITUTION:** - Molecular Imaging and Therapy Service, Department of Radiology, Memorial Sloan-Kettering Cancer Center, New York, NY.

**RESUMEN / SUMMARY:** - PURPOSE: The goal of this pilot study was to explore the feasibility of 89Zr-labeled J591 monoclonal antibody positron-emission tomography (PET) of localized prostate cancer (PCa). MATERIALS AND METHODS: Prior to scheduled radical prostatectomy, eleven patients were injected intravenously with 89Zr-J591 followed 6 days later by whole-body PET. Patients underwent surgery the day after imaging and the specimens were imaged by ex vivo micro-PET and custom 3 Tesla magnetic resonance scanner coil. PET imaging studies and histopathology were correlated. RESULTS: Median age was 61 years (range, 47-68 years), median PSA was 5.2 ng/mL (3.5-12.0 ng/mL), and median biopsy Gleason score of the 11 index lesions was 7 (range, 7-9). On histopathology, a total of 22 lesions were identified. Median lesion size was 5.5 mm (range, 2-21 mm) and median post-RP Gleason score was 7 (range, 6-9). On in vivo PET, 8 of 11 index lesions were identified (72.7%). Lesion identification improved with increasing lesion size for in vivo ( $p < 0.0001$ ) and ex vivo PET imaging ( $p < 0.0001$ ), and increasing Gleason score (ex vivo PET imaging,  $p = 0.01$ ; in vivo,  $p = 0.14$ ). SUV appeared to correlate with increased Gleason score but was not significant ( $p = 0.19$ ). CONCLUSIONS: This is the first report describing 89Zr-J591/PSMA PET imaging in localized PCa. In this setting, 89Zr-J591-PET binds to tumor foci in situ and identifies primarily Gleason  $\geq 7$  and larger sized tumors, likely corresponding to clinically significant disease warranting definitive therapy. Future work is planned in a larger clinical validation trial to better define the utility of 89Zr-J591-PET in localized PCa.

[437]

**TÍTULO / TITLE:** - Testicular-sparing surgery for bilateral or monorchide testicular tumors: a multicenter study of long term oncological and functional results.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 1. doi: 10.1111/bju.12549.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12549](#)

**AUTORES / AUTHORS:** - Ferretti L; Sargos P; Gross-Goupil M; Izard V; Wallerand H; Huyghe E; Rigot JM; Durand X; Benoit G; Ferriere JM; Droupy S

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University Hospital Pellegrin, Bordeaux, France; HIA Robert Picque, Departement of Surgery, Villenave d'Ornon.

**RESUMEN / SUMMARY:** - OBJECTIVE: To review long term oncological and functional outcomes of testicular-sparing surgery (TSS) in men presenting with bilateral or monorchide testicular tumor among five reference centers for testicular neoplasm and infertility. PATIENTS AND METHODS: We review 25 cases of bilateral synchrone and metachrone testicular tumors treated in five academic centers between 1984 and 2013. Clinical, biological, ultrasound, pathological tumor finding, overall survival (OS), local or metastatic recurrence, pre and post operative hormonal profile, paternity and the need for androgen substitution were assessed. RESULTS: Eleven patients with a bilateral synchrone tumor and fourteen with a testicular tumor on a solitary testicle underwent a tumorectomy. Mean age was 31.9 +/- 1.04 years old mean total testosterone level was 4.5 +/- 0.57 ng.ml and mean tumor size was 11.66 +/- 1.49 mm. Tumors were 11 seminoma, 9 non seminomatous or mixed germ cell tumors, 4 Leydig tumors, and one hamartoma. Frozen section examination was performed in 14 cases, and matched final pathological analysis in 11 cases. OS was 100% and 3 patients (12%) presented a local recurrence after a mean follow-up of 42.7 months. Radical orchiectomy was performed for 6 patients. No patient with a preserved testicle required androgen therapy; mean post-operative total testosterone level was 4.0 ng/ml. No patient could father a child after radiation therapy. CONCLUSIONS: Sparing surgery for bilateral testicular tumor is safe and effective in selected patients, and should be considered to avoid definitive androgen therapy. Adjuvant radiotherapy remains poorly described leading to adjuvant treatment heterogeneity.

[438]

**TÍTULO / TITLE:** - The analysis of serum response factor expression in bone and soft tissue prostate cancer metastases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Nov 19. doi: 10.1002/pros.22752.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pros.22752](#)

**AUTORES / AUTHORS:** - O'Hurley G; Prencipe M; Lundon D; O'Neill A; Boyce S; O'Grady A; Gallagher WM; Morrissey C; Kay EW; Watson RW

**INSTITUCIÓN / INSTITUTION:** - OncoMark Ltd, Nova UCD, University College Dublin, Belfield, Dublin 4, Ireland; Department of Pathology, RCSI Education and Research Centre, Beaumont Hospital, Dublin 9, Ireland.

**RESUMEN / SUMMARY:** - BACKGROUND: Castration-resistant prostate cancer (CRPC) represents a challenge to treat with no effective treatment options available. We recently identified serum response factor (SRF) as a key transcription factor in an in vitro model of castration resistance where we showed that SRF inhibition resulted in reduced cellular proliferation. We also demonstrated an association between SRF protein expression and CRPC in a cohort of castrate-resistant transurethral resections of the prostate (TURPS). The mechanisms regulating the growth of CRPC bone and visceral metastases have not been explored in depth due to the paucity of patient-related material available for analysis. In this study, we aim to evaluate SRF protein expression in prostate cancer (PCa) metastases, which has not previously been reported. METHODS AND RESULTS: We evaluated the nuclear tissue expression profile of SRF by immunohistochemistry in 151 metastatic sites from 42 patients who

died of advanced PCa. No relationship between SRF nuclear expression and the site of metastasis was observed ( $P = 0.824$ ). However, a negative association between SRF nuclear expression in bone metastases and survival from (a) diagnosis with PCa ( $P = 0.005$ ) and (b) diagnosis with CRPC ( $P = 0.029$ ) was seen. These results demonstrate that SRF nuclear expression in bone metastases is associated with survival, with patients with the shortest survival showing high SRF nuclear expression and patients with the longest survival having low SRF nuclear expression. CONCLUSION: Our study indicates that SRF is a key factor determining patients' survival in metastatic CRPC and therefore may represent a promising target for future therapies. Prostate (c) 2013 Wiley Periodicals, Inc.

[439]

**TÍTULO / TITLE:** - Exploring glyoxalase 1 expression in prostate cancer tissues: Targeting the enzyme by ethyl pyruvate defangs some malignancy-associated properties.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Sep 16. doi: 10.1002/pros.22728.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pros.22728](#)

**AUTORES / AUTHORS:** - Baunacke M; Horn LC; Trettner S; Engel KM; Hemdan NY; Wiechmann V; Stolzenburg JU; Bigl M; Birkenmeier G

**INSTITUCIÓN / INSTITUTION:** - Institute of Biochemistry, University of Leipzig, Leipzig, Germany.

**RESUMEN / SUMMARY:** - BACKGROUND: The glyoxalase (GLO)1 is part of a ubiquitous detoxification system in the glycolytic pathway of normal and tumor cells. It protects against cellular damage caused by cytotoxic metabolites. METHODS: Aiming at exploring the role of GLO1 in prostate cancer, we evaluated and targeted the expression of GLO1 in prostate cancer tissues and cell lines and analyzed its correlation with grading systems and tumor growth indices. RESULTS: Immunohistochemical studies on 37 prostate cancer specimens revealed a positive correlation between Helpap-grading and the cytoplasmic ( $P = 0.002$ )/nuclear ( $P = 0.006$ ) GLO1 level. A positive correlation between Ki-67 proliferation marker and the cytoplasmic GLO1 ( $P = 0.006$ ) was evident. Furthermore, the highest GLO1 level was detected in the androgen-sensitive LNCaP compared to the androgen-independent Du-145 and PC-3 prostate cell lines and the breast cancer cell MCF-7, both at protein and mRNA level. Treating cancer cells with ethyl pyruvate was found to defang some malignancy-associated properties of cancer cells including proliferation, invasion and anchorage-independent growth. In vitro results revealed that the potency of ethyl pyruvate is increased when cells are metabolically activated by growth stimulators, for example, by fetal calf serum, dihydrotestosterone, tumor growth factor-beta1 and leptin. CONCLUSIONS: The positive correlation of GLO1 expression level in prostate cancer tissues with the pathological grade and proliferation rate may assign GLO1 as a risk factor for prostate cancer development and progression. Furthermore, our data indicate that inhibitors of GLO1 might be useful to decelerate the cancer cell growth by a novel therapeutic approach that we may call "induced metabolic catastrophe." Prostate © 2013 Wiley Periodicals, Inc.

[440]

**TÍTULO / TITLE:** - Sodium meta-arsenite induces reactive oxygen species-dependent apoptosis, necrosis, and autophagy in both androgen-sensitive and androgen-insensitive prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Drugs. 2014 Jan;25(1):53-62. doi: 10.1097/CAD.000000000000013.

●● Enlace al texto completo (gratis o de pago)

[1097/CAD.000000000000013](#)

**AUTORES / AUTHORS:** - Kim Y; Jeong IG; You D; Song SH; Suh N; Jang SW; Kim S; Hwang JJ; Kim CS

**INSTITUCIÓN / INSTITUTION:** - aDepartment of Urology bInstitute for Innovative Cancer Research cDepartment of Medicine, Graduate School dDepartment of Medicine eAsan Institute for Life Sciences, Asan Medical Center, University of Ulsan College of Medicine, Seoul fPharmaceutical Division, Komipharm International Co. Ltd, Shiheung, Korea.

**RESUMEN / SUMMARY:** - Sodium meta-arsenite (NaAsO<sub>2</sub>), a novel compound synthesized by Komipharm International Co. Ltd, is an orally bioavailable, water-soluble trivalent arsenical that has shown potent cytotoxic activity in human solid cancer cells in vitro and in vivo, and is currently undergoing phase I/II clinical trials for the treatment of prostate cancer. In this study, mechanisms of cell death induced by sodium meta-arsenite were investigated. Sodium meta-arsenite reduced cell viability and increased the sub-G1 population in cell cycle analysis in both androgen-sensitive LNCaP and androgen-insensitive CWR22RV1 cells. The apoptosis induced by sodium meta-arsenite was associated with cleavage of caspases 3, 8, and 9, and poly (ADP-ribose) polymerase (PARP) and increased annexin V-positive cells, and was inhibited by the pan-caspase inhibitor Z-VAD-fmk. Sodium meta-arsenite also increased the level of the autophagy marker microtubule-associated protein 1 light chain 3 (LC3)-II and the number of autophagic vacuoles as shown by electron microscopy. Both the autophagy inhibitor 3-methyladenine and the necrosis inhibitor necrostatin-1 blocked cell death induced by sodium meta-arsenite. Moreover, sodium meta-arsenite led to the accumulation of intracellular reactive oxygen species (ROS) and N-acetyl-L-cysteine (NAC), a ROS scavenger, decreased sodium meta-arsenite-induced levels of cleaved PARP and LC3-II. Propidium iodide (PI) staining also showed that NAC restored membrane integrity, damaged by sodium meta-arsenite. Therefore, these results suggest that sodium meta-arsenite induces apoptotic, necrotic, and autophagic cell death through intracellular ROS accumulation in both androgen-sensitive and androgen-insensitive prostate cancer cells and may be used as a new anticancer drug for the treatment of prostate cancer.

[441]

**TÍTULO / TITLE:** - Prostate Cancer Tumour Features on Template Prostate-mapping Biopsies: Implications for Focal Therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 6. pii: S0302-2838(13)01039-7. doi: 10.1016/j.eururo.2013.09.045.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.045](#)

**AUTORES / AUTHORS:** - Singh PB; Anele C; Dalton E; Barbouti O; Stevens D; Gurung P; Arya M; Jameson C; Freeman A; Emberton M; Ahmed HU

**INSTITUCIÓN / INSTITUTION:** - Division of Surgery and Interventional Sciences, University College London, London, UK.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Focal therapy is being offered as a viable alternative for men with localised prostate cancer (PCa), but it is unclear which men may be suitable. **OBJECTIVE:** To determine the proportion of men with localised PCa who are potentially suitable for focal therapy. **DESIGN, SETTING, AND PARTICIPANTS:** Our institutional transperineal template prostate-mapping (TTPM) biopsy registry of 377 men from 2006 to 2010 identified 291 consecutive men with no prior treatment. **INTERVENTION:** TTPM biopsies using a 5-mm sampling frame. **OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS:** Suitability for focal therapy required the cancer to be (1) unifocal, (2) unilateral, (3) bilateral/bifocal with at least one neurovascular bundle avoided, or (4) bilateral/multifocal with one dominant index lesion and secondary lesions with Gleason  $\leq 3+3$  and cancer core involvement  $\leq 3$ mm. Binary logistic regression modelling was used to determine variables predictive for focal therapy suitability. **RESULTS AND LIMITATIONS:** The median age was 61 yr, and the median prostate-specific antigen was 6.8 ng/ml. The median total was 29 cores, with a median of 8 positive cores. Of 239 of 291 men with cancer, 29% (70 men), 60% (144 men), and 8% (20 men) had low-, intermediate-, and high-risk PCa, respectively. Ninety-two percent (220 men) were suitable for one form of focal therapy: hemiablation (22%, 53 men), unifocal ablation (31%, 73 men), bilateral/bifocal ablation (14%, 33 men), and index lesion ablation (26%, 61 men). Binary logistic regression modelling incorporating transrectal biopsy parameters showed no statistically significant predictive variable. When incorporating TTPM parameters, only T stage was a significant negative predictor for suitability ( $p=0.001$ ) (odds ratio: 0.001 [95% confidence interval, 0.000-0.048]). Limitations of the study include potential selection bias caused by tertiary referral practice and lack of long-term results on focal therapy efficacy. **CONCLUSIONS:** Focal therapy requires an accurate tool to localise individual cancer lesions. When such a test, TTPM biopsy, was applied to men with low- and intermediate-risk PCa, most of the men were suitable for a tissue preservation strategy.

[442]

**TÍTULO / TITLE:** - Id4 promotes senescence and sensitivity to doxorubicin-induced apoptosis in DU145 prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4271-8.

**AUTORES / AUTHORS:** - Carey JP; Knowell AE; Chinaranagari S; Chaudhary J

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**RESUMEN / SUMMARY:** - Inhibitor of differentiation proteins (Id1, 2, 3 and 4) are dominant negative regulators of basic helix loop helix transcription factors and play dominant roles in cancer cells, spanning several molecular pathways including senescence, invasion, metastasis, proliferation and apoptosis. In contrast to high Id1, Id2 and Id3 expression, the expression of Id4 is epigenetically silenced in prostate

cancer. In the present study we demonstrated a novel role of Id4, that of promotion of cellular senescence in prostate cancer cells. **MATERIALS AND METHODS:** Id4 was ectopically expressed in DU145 cells (DU145+Id4). The cells treated with Doxorubicin (0-500 nm) or vehicle control were analyzed for apoptosis, senescence (SA-beta Galactosidase), and expression of CDKN1A (p21), CDKN1B(p27), CDKN2A (p16), E2F1, vimentin and E-cadherin by immuno-histochemistry and/or Western blot. **RESULTS:** In the present study we demonstrated that Id4 promotes cellular senescence in prostate cancer cell line DU145. Ectopic overexpression of Id4 in androgen receptor-negative DU145 prostate cancer cells resulted in increased expression of p16, p21, p27, E-cadherin and vimentin but down-regulated E2F1 expression. Id4 also potentiated the effect of doxorubicin induced senescence and apoptosis. **CONCLUSION:** The absence of functional p16, pRB and p53 in DU145 suggests that Id4 could alter additional molecular pathways such as those involving E2F1 to promote senescence and increased sensitivity to doxorubicin-induced apoptosis. The results of the present study support the role of Id4 as a tumor suppressor in prostate cancer.

[443]

**TÍTULO / TITLE:** - Re: impact of smoking on oncologic outcomes of upper tract urothelial carcinoma after radical nephroureterectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2017-8. doi: 10.1016/j.juro.2013.08.044. Epub 2013 Aug 23.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.044](#)

**AUTORES / AUTHORS:** - Laguna MP

[444]

**TÍTULO / TITLE:** - Tumor necrosis factor receptor associated factor-4: an adapter protein overexpressed in metastatic prostate cancer is regulated by microRNA-29a.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2013 Dec;30(6):2963-8. doi: 10.3892/or.2013.2789. Epub 2013 Oct 8.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2789](#)

**AUTORES / AUTHORS:** - Ahmed F; Shiraishi T; Vessella RL; Kulkarni P

**INSTITUCIÓN / INSTITUTION:** - James Buchanan Brady Urological Institute, Department of Urology, The Johns Hopkins School of Medicine, Baltimore, MD 21287, USA.

**RESUMEN / SUMMARY:** - The tumor necrosis factor receptor (TNFR)-associated factor 4 (TRAF4) is a member of TRAF family proteins that act as major signal transducers of the TNF receptor and the interleukin-1 receptor/Toll-like receptor (IL-1R/TLR) superfamily. TRAF4 has been reported to be overexpressed in various human cancers. However, the exact mechanisms that regulate the expression of TRAF4 still remain elusive. The objective of the present study was to investigate the regulatory mechanism of TRAF4 expression in prostate cancer. We initially identified microRNA-29a (miR29a) as a possible candidate to bind TRAF4 3' untranslated region (3'UTR) by the algorithm, TargetScan. The expression of TRAF4 mRNA and protein was inversely associated with miR-29a expression in prostate cancer cell lines (LNCaP, DU145 and

PC3). TRAF4 expression was reduced by the introduction of mimic miR-29a in LNCaP cells. Luciferase activity from the construct harboring wild-type TRAF4 3'UTR was reduced by the mimic miR-29a and this reduction was diminished by introducing mutations at the predicted miR-29a binding site. On the other hand, TRAF4 was upregulated when transfected with the inhibitor of miR-29a in DU145 and PC3 cells. TRAF4 was significantly upregulated in patients with metastatic prostate cancer compared to those with localized prostate cancer. Furthermore, there was a significant inverse correlation between TRAF4 and miR-29a expression in tumor tissues from radical prostatectomy. Considered together, our results suggest that the tumor suppressor microRNA, miR-29a, is one of the regulators of TRAF4 expression in metastatic prostate cancer.

[445]

**TÍTULO / TITLE:** - D-glucuronyl C5-epimerase cell type specifically affects angiogenesis pathway in different prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Nov 22.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1423-6](#)

**AUTORES / AUTHORS:** - Rosenberg EE; Prudnikova TY; Zabarovsky ER; Kashuba VI; Grigorieva EV

**INSTITUCIÓN / INSTITUTION:** - Institute of Molecular Biology and Genetics, Zabolotnogo str 150, Kiev 03143, Ukraine.

**RESUMEN / SUMMARY:** - D-glucuronyl C5-epimerase (GLCE) is involved in breast and lung carcinogenesis as a potential tumor suppressor gene, acting through inhibition of tumor angiogenesis and invasion/metastasis pathways. However, in prostate tumors, increased GLCE expression is associated with advanced disease, suggesting versatile effects of GLCE in different cancers. To investigate further the potential cancer-promoting effect of GLCE in prostate cancer, GLCE was ectopically re-expressed in morphologically different LNCaP and PC3 prostate cancer cells. Transcriptional profiles of normal PNT2 prostate cells, LNCaP, PC3 and DU145 prostate cancer cells, and GLCE-expressing LNCaP and PC3 cells were determined. Comparative analysis revealed the genes whose expression was changed in prostate cancer cells compared with normal PNT2 cells, and those differently expressed between the cancer cell lines (ACTA2, IL6, SERPINE1, TAGLN, SEMA3A, and CDH2). GLCE re-expression influenced mainly angiogenesis-involved genes (ANGPT1, SERPINE1, IGF1, PDGFB, TNF, IL8, TEK, IFNA1, and IFNB1) but in a cell type-specific manner (from basic deregulation of angiogenesis in LNCaP cells to significant activation in PC3 cells). Invasion/metastasis pathway was also affected (MMP1, MMP2, MMP9, S100A4, ITGA1, ITGB3, ERBB2, and FAS). The obtained results suggest activation of angiogenesis as a main molecular mechanism of pro-oncogenic effect of GLCE in prostate cancer. GLCE up-regulation plus expression pattern of a panel of six genes, discriminating morphologically different prostate cancer cell sub-types, is suggested as a potential marker of aggressive prostate cancer.

[446]

**TÍTULO / TITLE:** - Exploring the potential of [11C]choline-PET/CT as a novel imaging biomarker for predicting early treatment response in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nucl Med Commun. 2014 Jan;35(1):20-9. doi: 10.1097/MNM.0000000000000014.

- Enlace al texto completo (gratis o de pago)

[1097/MNM.0000000000000014](#)

**AUTORES / AUTHORS:** - Challapalli A; Barwick T; Tomasi G; O' Doherty M; Contractor K; Stewart S; Al-Nahhas A; Behan K; Coombes C; Aboagye EO; Mangar S

**INSTITUCIÓN / INSTITUTION:** - Departments of aSurgery and Cancer bRadiology/Nuclear Medicine, Imperial College London and Imperial College Healthcare NHS Trust cThe PET Imaging Centre, St Thomas' Hospital, London, UK.

**RESUMEN / SUMMARY:** - OBJECTIVES: The aim of the study was to assess the effects of neoadjuvant androgen deprivation (NAD) and radical prostate radiotherapy with concurrent androgen deprivation (RT-CAD) on prostatic [C]choline kinetics and thus develop methodology for the use of [C]choline-PET/computed tomography (CT) as an early imaging biomarker. MATERIALS AND METHODS: Ten patients with histologically confirmed prostate cancer underwent three sequential dynamic [C]choline-PET/CT pelvic scans: at baseline, after NAD and 4 months after RT-CAD. [C]Choline uptake was quantified using the average and maximum standardized uptake values at 60 min (SUV60,ave and SUV60,max), the tumour-to-muscle ratios (TMR60,max) and net irreversible retention of [C]choline at steady state (Kimod-pat). RESULTS: The combination of NAD and RT-CAD significantly decreased tumour [C]choline uptake (SUV60,ave, SUV60,max, TMR60,max or Kimod-pat) and prostate-specific antigen (PSA) levels (analysis of variance,  $P < 0.001$  for all variables). Although the magnitude of reduction in the variables was larger after NAD, there was a smaller additional reduction after RT-CAD. A wide range of reduction in tumour SUV60,ave (38-83.7%) and SUV60,max (22.2-85.3%) was seen with combined NAD and RT-CAD despite patients universally achieving PSA suppression (narrow range of 93.5-99.7%). There was good association between baseline SUV60,max and initial PSA levels (Pearson's  $r = 0.7$ ,  $P = 0.04$ ). The reduction in tumour SUV60,ave after NAD was associated with PSA reduction ( $r = 0.7$ ,  $P = 0.04$ ). This association occurred despite the larger reduction in PSA (94%) compared with SUV60,ave (58%). CONCLUSION: This feasibility study shows that [C]choline-PET/CT detects metabolic changes within tumours following NAD and RT-CAD to the prostate. A differential reduction in [C]choline uptake despite a global reduction in PSA following NAD and RT-CAD could provide prognostic information and warrants further evaluation as an imaging biomarker in this setting.

[447]

**TÍTULO / TITLE:** - A Comparative Study of Radiolabeled Bombesin Analogs for the PET Imaging of Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Nucl Med. 2013 Dec;54(12):2132-8. doi: 10.2967/jnumed.113.121533. Epub 2013 Nov 6.

- Enlace al texto completo (gratis o de pago) [2967/jnumed.113.121533](#)

**AUTORES / AUTHORS:** - Liu Y; Hu X; Liu H; Bu L; Ma X; Cheng K; Li J; Tian M; Zhang H; Cheng Z

**INSTITUCIÓN / INSTITUTION:** - Department of Nuclear Medicine, Second Affiliated Hospital of Zhejiang University School of Medicine, Institute of Nuclear Medicine and Molecular Imaging of Zhejiang University, Center of Excellence in Medical Molecular Imaging of Zhejiang State, Hangzhou, China; and.

**RESUMEN / SUMMARY:** - Radiolabeled bombesin (BBN) analogs that bind to the gastrin-releasing peptide receptor (GRPR) represent a topic of active investigation for the development of molecular probes for PET or SPECT of prostate cancer (PCa). RM1 and AMBA have been identified as the 2 most promising BBN peptides for GRPR-targeted cancer imaging and therapy. In this study, to develop a clinically translatable BBN-based PET probe, we synthesized and evaluated (18)F-AIF- (aluminum-fluoride) and (64)Cu-radiolabeled RM1 and AMBA analogs for their potential application in PET imaging of PCa. **METHODS:** 1,4,7-triazacyclononane, 1-glutaric acid-4,7 acetic acid (NODAGA)-conjugated RM1 and AMBA were synthesized and tested for their GRPR-binding affinities. The NODAGA-RM1 and NODAGA-AMBA probes were further radiolabeled with (64)Cu or (18)F-AIF and then evaluated in a subcutaneous PCa xenograft model (PC3) by small-animal PET imaging and biodistribution studies. **RESULTS:** NODAGA-RM1 and NODAGA-AMBA can be successfully synthesized and radiolabeled with (64)Cu and (18)F-AIF. (64)Cu- and (18)F-AIF-labeled NODAGA-RM1 demonstrated excellent serum stability and tumor-imaging properties in the in vitro stability assays and in vivo imaging studies. (64)Cu-NODAGA-RM1 exhibited tumor uptake values of 3.3 +/- 0.38, 3.0 +/- 0.76, and 3.5 +/- 1.0 percentage injected dose per gram of tissue (%ID/g) at 0.5, 1.5, and 4 h after injection, respectively. (18)F-AIF-NODAGA-RM1 exhibited tumor uptake values of 4.6 +/- 1.5, 4.0 +/- 0.87, and 3.9 +/- 0.48 %ID/g at 0.5, 1, and 2 h, respectively. **CONCLUSION:** The high-stability, efficient tumor uptake and optimal pharmacokinetic properties highlight (18)F-AIF-NODAGA-RM1 as a probe with great potential and clinical application for the PET imaging of prostate cancer.

[448]

**TÍTULO / TITLE:** - Partnership status affects the association between gastrointestinal symptoms and quality of life after radiation therapy for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Oncol. 2013 Oct 14.

●● Enlace al texto completo (gratis o de pago) [3109/0284186X.2013.841988](#)

**AUTORES / AUTHORS:** - Alsadius D; Olsson C; Wilderang U; Steineck G

**INSTITUCIÓN / INSTITUTION:** - Division of Clinical Cancer Epidemiology, Department of Oncology, Institute of Clinical Sciences, the Sahlgrenska Academy at the University of Gothenburg, Sweden.

**RESUMEN / SUMMARY:** - Purpose. To study if partnership modifies the effect of gastrointestinal symptoms on quality of life after radiation therapy for prostate cancer. Material and methods. Using a study-specific questionnaire we conducted a cross-sectional follow-up of the occurrence gastrointestinal symptoms and quality of life after radiation therapy for prostate cancer. We obtained information from 874 prostate cancer survivors treated with radiation therapy at the Sahlgrenska University Hospital, Sweden between 1994 and 2006. In this paper we describe how partnership status

affects the association between gastrointestinal symptoms and quality of life. Results. We found that unpartnered men with gastrointestinal symptoms reported a lower quality of life than unpartnered men without such symptoms. Unpartnered men with symptoms had an excess risk of low quality of life compared with unpartnered men without symptoms for those experiencing altered composition of stools, prevalence ratio 3.8 (95% CI 1.1-13.1), leakage, 3.6 (1.3-10.1), sensory bowel symptoms, 4.5 (1.6-12.8), and for urgency, 4.2 (1.2-15.1). We also found that unpartnered men with symptoms had an excess risk of low quality of life compared with partnered men with symptoms for those experiencing altered composition of stools, prevalence ratio 2.9 (95% CI 1.4-5.8), leakage 2.8 (1.2-6.4), sensory bowel symptoms 3.4 (1.5-7.4), urgency 2.6 (1.2-5.8), and for any gastrointestinal symptom 2.5 (1.3-4.9). Conclusion. Unpartnered men may represent a group that is specifically vulnerable to the distressful effects of gastrointestinal symptoms after radiation therapy for prostate cancer.

[449]

**TÍTULO / TITLE:** - Digging Deep: High Output Heart Failure in Renal Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Med. 2013 Oct 8. pii: S0002-9343(13)00847-4. doi: 10.1016/j.amjmed.2013.09.023.

●● Enlace al texto completo (gratis o de pago) [1016/j.amjmed.2013.09.023](#)

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[450]

**TÍTULO / TITLE:** - Re: Urothelial Carcinoma with Prominent Squamous Differentiation in the Setting of Neurogenic Bladder: Role of Human Papillomavirus Infection.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2102-3. doi: 10.1016/j.juro.2013.08.068. Epub 2013 Aug 30.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.068](#)

**AUTORES / AUTHORS:** - Schaeffer EM

[451]

**TÍTULO / TITLE:** - Sedentarism and overweight as risk factors for the detection of prostate cancer and its aggressiveness.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 21. pii: S0210-4806(13)00327-6. doi: 10.1016/j.acuro.2013.09.001.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.09.001](#)

**AUTORES / AUTHORS:** - Morote J; Celma A; Planas J; Placer J; Konstantinidis C; Iztueta I; de Torres IM; Oliván M; Reventos J; Doll A

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**RESUMEN / SUMMARY:** - OBJECTIVE: To analyze the influence of sedentary (SE) and overweight (OW) in the risk of prostate cancer detection (CP) and aggressiveness. MATERIAL AND METHOD: We performed prostate biopsy (PB) to 2,408 consecutive male, 5ARIs untreated, because of elevated serum PSA above 4.0ng/mL (91%) or suspicious digital rectal examination (9%). In all ultrasound guided PB, 10 cores were obtained plus 2 to 8 additional, according to age and prostate volume. Physical activity was assessed using a survey (SE vs non-SE) and calculated body mass index (normal vs OW > 25kg/cm<sup>2</sup>). The tumor aggressiveness was evaluated according to the Gleason score (high grade <<HG>>: Gleason > 7) and D'Amico risk (high risk <<HR>>: T>3a or PSA>20 or Gleason score >7). RESULTS: We found a significant association between SE (52.5%) and OW (72.9%), P<.001. The overall PC detection rate was 35.2%. In men with SE it was 36.7% and non-SE 33.6%, P=.048. The overall rate of AG tumors was 28.3%, 29.2% in men with SE and 27.1 in non-SE, P=.261. The overall rate of AR tumors was 35%, 39.7% in men with SE and 29.4% non-SE, P<.001. CP was detected in 38.1% of men with normal BMI and 34.3% in men with OW, P=.065. HG tumor rates were 18.1% and 31.4% respectively, P<.001 and AR tumor rates were 22.6% and 39.2% respectively, P<.001. Binary logistic regression showed that SE was an independent predictor of CP, OR .791 (95% CI: .625-.989), P=.030. SE and OW were independent predictors of HG: OR .517 (95% CI: .356-.752), P=.001, and OR 1.635 (95% CI: 1.070-2.497), p=0.023. SE and OW were also independent predictors of HR: OR .519 (95% CI .349-.771), P=.001, and OR 1.998 (95% CI 1.281-3.115), P=.002. CONCLUSIONS: In men who met criteria for prostate biopsy an association between sedentary and overweight exist. A sedentary lifestyle is associated with increased risk of PC detection while sedentary and overweight were associated with more aggressive tumors.

[452]

**TÍTULO / TITLE:** - High expression of Cdc25B and low expression of 14-3-3sigma is associated with the development and poor prognosis in urothelial carcinoma of bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Nov 15.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s13277-013-1331-9](#)

**AUTORES / AUTHORS:** - Zhang Z; Zhang G; Kong C

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**RESUMEN / SUMMARY:** - Cdc25 dual-specificity phosphatases are essential regulators at critical stages of cell cycle. Cdc25B is overexpressed in several human tumor types. The activity of Cdc25B is regulated by 14-3-3 dimer. To investigate the roles of Cdc25B and 14-3-3sigma in bladder carcinoma, we examined expressions of Cdc25B and 14-3-3sigma proteins in bladder carcinoma and cell lines and analyzed their roles in the development and prognosis of urinary bladder carcinoma. Immunohistochemistry was used to detect the expressions of Cdc25B and 14-3-3sigma in 105 bladder carcinomas. Moreover, expressions of Cdc25B and 14-3-3sigma were analyzed by real-time PCR and Western blot in 40 bladder carcinomas and 20 normal epithelial tissues. Specific siRNA was used to knockdown the expression of Cdc25B or 14-3-3sigma. Wild-type plasmid was used to overexpress 14-3-3sigma. MTT assay and

Flow cytometry were used to examine proliferation and cell cycle of bladder cancer cells. There were higher Cdc25B expression and lower 14-3-3sigma expression in carcinomas than in the adjacent normal tissues ( $P < 0.05$ ), positive and negative correlations being noted with clinical stage and histopathologic grade. Cdc25B expression was positively correlated with recurrence and poor prognosis. Downregulation of Cdc25B resulted in slower growth, more G2/M cells and 14-3-3sigma increasing. However, upregulation and downregulation of 14-3-3sigma did not affect cell growth and Cdc25B expression. It showed that Cdc25B upregulation and 14-3-3sigma downregulation might promote development of bladder cancer and suggested a poor prognosis. Moreover, Cdc25B could play an important role on the bladder cancer cell proliferation and cell cycle progression and regulate expression of 14-3-3sigma.

[453]

**TÍTULO / TITLE:** - Can RENAL and PADUA nephrometry indices predict for complications of laparoscopic cryoablation for clinical stage T1 renal tumors?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 14.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013.0498](#)

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**RESUMEN / SUMMARY:** - Objective Assessment of anatomical complexity with the RENAL and PADUA nephrometry indices is used to predict complications related to surgical extirpation treatment for patients with clinical T1a/b renal mass (RM). This single centre study aims to investigate the value of these indices in order to predict complications in a cohort of patients treated with laparoscopic cryoablation (LCA) for cT1 RM. Materials and Methods Single institution data from consecutive LCA procedures were prospectively collected from December 2006 to April 2013. RM anatomical complexity was categorized according to RENAL and PADUA indices. Comorbidity was assessed by the Charlson-index. Intraoperative complications (IOC) were reviewed and categorized in: blood loss >100ml, conversion, tumor fracture, and incomplete ablation. Postoperative complications (POC) were graded using the modified Clavien-index. Univariate and multivariate logistic regression models addressed the risk for complications. Results 99 LCA procedures were included. The median RENAL-score was 7.0 (SD 1.7), and the median PADUA-score was 8.0 (SD 1.6). IOC occurred in 19 procedures (19%). The risk for IOC was significantly correlated ( $p < 0.05$ ) with tumor diameter (mm), surface, volume, the RENAL domains "R-size", "N-nearness to collecting system", "RENAL score", and the PADUA domain "diameter". In multivariate analysis with surgical complication as the independent variable, tumor diameter, surface and volume were a determining factor. A threshold was set for 35mm tumor diameter, it being predictive for an increased risk for IOC performing LCA. 23 POC which occurred in 20 patients. On univariate analysis, the RENAL domain "nearness to collecting system", and no PADUA domains, had a significant association with POC. Conclusion The RENAL score, and not the PADUA score, is associated with a higher risk for IOC. A non-categorized method of scoring

tumor diameter showed a more significant correlation with the risk for IOC than the categorized method of the nephrometry indices. As a result a threshold diameter of 35mm was established.

[454]

**TÍTULO / TITLE:** - Imaging of upper urinary tract cancer: using conventional MRI and diffusion-weighted MRI with different b values.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Radiol. 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [1177/0284185113506576](#)

**AUTORES / AUTHORS:** - Wu GY; Lu Q; Wu LM; Wenkong; Chen XX; Xu JR

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Renji Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, PR China.

**RESUMEN / SUMMARY:** - BACKGROUND: Diffusion-weighted magnetic resonance imaging (DW-MRI) has been considered to be useful in diagnosing upper urinary tract (UUT) disease; however, the value of DW-MRI with different b values has not been reported. PURPOSE: To evaluate the performance of using conventional MRI alone and in combination with DWI with different b values in diagnosing UUT cancer. MATERIAL AND METHODS: Seventy patients with suspected UUT cancer underwent conventional MRI (T1-weighted and T2-weighted) and DW-MRI (b = 500 and 1500 s/mm<sup>2</sup>) on a 3 T-MRI scanner. The ureteroscopic and histopathologic findings were compared with the imaging findings. The utility of detecting UUT cancer using conventional MRI (set A), combined DW-MRI (b = 500 s/mm<sup>2</sup>) and conventional MRI (set B), and combined DW-MRI (b = 1500 s/mm<sup>2</sup>) and conventional MRI (set C) were independently evaluated by two readers. RESULTS: A total of 32 patients had verified cancer; 23 patients had benign UUT diseases, and 15 had no abnormality. Sets B and C had significantly improved diagnostic accuracy for UUT cancer compared with set A; the specificity in diagnosing UUT cancer was significantly improved when using set C compared with sets A and B. In patients without UUT obstructions, improved sensitivity and accuracy in diagnosis was achieved when using sets B and C compared with set A. CONCLUSION: Using DW-MRI in combination with conventional MRI provides increased diagnostic accuracy and sensitivity in patients without UUT obstruction. The combination of conventional MRI and DW-MRI with a higher b value (1500 s/mm<sup>2</sup>) improved the specificity in diagnosing UUT cancer compared to conventional sequences and DW-MRI with a lower b value (500 s/mm<sup>2</sup>).

[455]

**TÍTULO / TITLE:** - External Validation of Preoperative and Postoperative Nomograms for Prediction of Cancer-Specific Survival, Overall Survival and Recurrence after Robot-assisted Radical Cystectomy for Urothelial Carcinoma of the Bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 4. doi: 10.1111/bju.12484.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12484](#)

**AUTORES / AUTHORS:** - Al-Daghmin A; English S; Kauffman EC; Din R; Khan A; Syed JR; Sztorc J; Mehedint D; Sharif M; Shi Y; Wilding G; Guru KA

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Roswell Park Cancer Institute, Buffalo, NY, USA.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To externally validate currently available bladder cancer nomograms for prediction of all-cause survival (ACS), cancer-specific survival (CSS), other-cause mortality (OCM) and progression-free survival (PFS). **SUBJECTS/METHODS:** Retrospective analysis of a prospectively maintained database of 282 patients who underwent robot-assisted radical cystectomy (RARC) at a single institution was performed. The Bladder Cancer Research Consortium (BCRC), International Bladder Cancer Nomogram Consortium (IBCNC) and Lughezzani Nomogram were used for external validation, and evaluation for accuracy at predicting oncologic outcomes. The 2 and 5 year oncological outcomes were compared, and nomogram performance was evaluated through measurement of the concordance (c-index) between nomogram-derived predicted oncologic outcomes and observed oncologic outcomes. **RESULTS:** Median patient age was 70 years (36-90). At a mean follow-up of 20 months, local or distant disease recurrence developed in 30% of patients. With an overall mortality rate of 33%, 17% died from bladder cancer. The actuarial 2 and 5-year PFS after RARC was 62% (95% CI 54%-68%) and 55% (95% CI 46%-63%), respectively., The actuarial 2 and 5-year ACS was 66% (95% CI 59%-72%) and 47% (95% CI 37%-55%), respectively, and the 2 and 5-year CSS was 81% (95% CI 74%-86%) and 67% (95% CI 57%-76%), respectively. The PFS c-index for IBCNC was 0.70 at 5 years, and for BCRC was 0.77 at both the 2-year and 5-year time points. Accuracy of ACS and CSS prediction was evaluated using the BCRC and Lughezzani nomograms. Using the BCRC nomogram, c-indices of for 2- and 5-year ACS were each 0.73 and c-indices for 2- and 5-year CSS were 0.70 each. The performance of Lughezzani nomogram for 5-year ACS, CSM and OCM were 0.73, 0.72 and 0.40, respectively. The BCRC nomogram prediction of advanced pathologic stage and lymph node metastasis was modest, with c-indices of 0.66 and 0.61, respectively. **CONCLUSION:** Bladder cancer nomograms available from the current open cystectomy literature adequately predict ACS, CSS and PFS following robotic cystectomy. However, prediction of advanced tumor stage and lymph node metastasis was modest and Lughezzani nomogram failed to predict OCM.

[456]

**TÍTULO / TITLE:** - Functional relevance of D,L-sulforaphane-mediated induction of vimentin and plasminogen activator inhibitor-1 in human prostate cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nutr. 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1007/s00394-013-0588-5](#)

**AUTORES / AUTHORS:** - Vyas AR; Singh SV

**INSTITUCIÓN / INSTITUTION:** - Department of Pharmacology and Chemical Biology, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA.

**RESUMEN / SUMMARY:** - **PURPOSE:** D,L-Sulforaphane (SFN) is a promising chemopreventive agent with in vivo efficacy against prostate cancer in experimental rodents. This study was undertaken to determine the role of vimentin and plasminogen activator inhibitor-1 (PAI-1) in anticancer effects of SFN. **METHODS:** Effect of SFN on levels of different proteins was determined by Western blotting or immunofluorescence microscopy. RNA interference of vimentin and PAI-1 was achieved by transient

transfection. Apoptosis was quantified by flow cytometry. Transwell chambers were used to determine cell migration. RESULTS: Exposure of PC-3 and DU145 human prostate cancer cells to SFN resulted in induction of vimentin protein, which was accompanied by down-regulation of E-cadherin protein expression. The SFN-mediated induction of vimentin was also observed in a normal human prostate epithelial cell line. RNA interference of vimentin did not have any appreciable effect on early or late apoptosis resulting from SFN exposure. On the other hand, SFN-mediated inhibition of PC-3 and DU145 cell migration was significantly augmented by knockdown of the vimentin protein. Knockdown of vimentin itself was inhibitory against cell migration. The SFN-treated cells also exhibited induction of PAI-1, which is an endogenous inhibitor of urokinase-type plasminogen activator system. Similar to vimentin, PAI-1 knockdown resulted in a modest augmentation of PC-3 cell migration inhibition by SFN. Tumors from SFN-treated transgenic adenocarcinoma of mouse prostate mice showed a 1.7-fold increase in vimentin protein level compared with control tumors. CONCLUSION: The present study indicates that vimentin and PAI-1 inductions confer modest protection against SFN-mediated inhibition of prostate cancer cell migration.

[457]

**TÍTULO / TITLE:** - Semaphorin 4F as a Critical Regulator of Neuroepithelial Interactions and a Biomarker of Aggressive Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 15;19(22):6101-11. doi: 10.1158/1078-0432.CCR-12-3669. Epub 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-12-](#)

[3669](#)

**AUTORES / AUTHORS:** - Ding Y; He D; Florentin D; Frolov A; Hilsenbeck S; Ittmann M; Kadmon D; Miles B; Rowley D; Ayala G

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: Department of Pathology and Laboratory Medicine, University of Texas Health Sciences Center Medical School; Departments of Pathology & Immunology and Molecular & Cell Biology, Dan L. Duncan Cancer Center, Scott Department of Urology, Baylor College of Medicine; Department of Urology, The Methodist Hospital, Houston, Texas; and Department of Internal Medicine, Detroit Medical Center, Sinai-Grace Hospital, Wayne State University, Detroit, Michigan.

**RESUMEN / SUMMARY:** - Background: Semaphorin 4F (S4F) has roles in embryologic axon guidance and is expressed in adults. S4F is involved in cancer-induced neurogenesis. Methods: Prostate cells were transfected with S4F retrovirus. Cells and controls were used for a bromodeoxyuridine (BrdUrd) incorporation assay (proliferation) and in vitro scratch and Matrigel Transwell chamber invasion assay (migration). Monoclonal antibodies were developed using baculovirus-expressed recombinant GST-S4F and used to immunostain tissue microarrays. Slides were imaged using deconvolution and analyzed using tissue segmentation. Data were correlated with clinicopathologic parameters, other biomarkers and survival analysis conducted. Heterogeneity of S4F expression was analyzed with unsupervised clustering algorithms. RESULTS: Proliferation rates measured by BrdUrd incorporation were higher in all S4F-transfected cells. S4F overexpression was associated with increased motility of the cancer cells. S4F expression was overexpressed in high-grade

prostatic intraepithelial neoplasia/prostate cancer than normal epithelium. S4F expression correlated with seminal vesicle invasion. Patients with high values of S4F in prostate cancer cytoplasm are at significantly higher risk of biochemical recurrence, by univariate and multivariate analyses. S4F cytoplasmic expression in prostate cancer cells also correlates with nerve density in prostate cancer and perineural invasion diameter. Correlations were identified with NF-kappaB and inversely with apoptosis in perineural invasion. CONCLUSION: These data show that S4F is significantly involved in human prostate cancer progression. S4F is a key regulator of the interactions between nerves in the tumor microenvironment and cancer cells. Because of the importance of cancer nerve interaction in the biology of cancer and its clinical implication, S4F can be considered a major therapeutic target. Clin Cancer Res; 19(22); 6101-11. ©2013 AACR.

[458]

**TÍTULO / TITLE:** - Cabozantinib and prostate cancer: inhibiting seed and disrupting soil?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 27.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-2636](#)

**AUTORES / AUTHORS:** - Lee RJ; Smith MR

**INSTITUCIÓN / INSTITUTION:** - Massachusetts General Hospital Cancer Center, Harvard Medical School.

**RESUMEN / SUMMARY:** - Treatment with cabozantinib, an inhibitor of MET and VEGFR2 signaling, has demonstrated clinical benefit in early trials in men with metastatic prostate cancer. Preclinical evidence suggests that cabozantinib can kill cancer cell seeds while disrupting angiogenesis and stromal cells in the metastatic soil.

[459]

**TÍTULO / TITLE:** - The PDGFRbeta-AKT Pathway Contributes To CDDP-Acquired Resistance In Testicular Germ Cell Tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Cancer Res. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [1158/1078-0432.CCR-13-1131](#)

**AUTORES / AUTHORS:** - Juliachs M; Munoz C; Moutinho C; Vidal A; Condom E; Esteller M; Graupera M; Casanovas O; Germa JR; Villanueva A; Vinals F

**INSTITUCIÓN / INSTITUTION:** - Translational Research Laboratory, Catalan Institute of Oncology.

**RESUMEN / SUMMARY:** - PURPOSE: We examined whether PI3K-AKT or ERK signaling pathways could play a role in the development of cisplatin (CDDP) resistance in testicular germ cell tumor cells. EXPERIMENTAL DESIGN: We compared AKT and ERK activation levels in CDDP-sensitive testicular tumor cells and in their corresponding CDDP-resistant derived cells. We also analyzed these pathways in orthotopic testicular tumors and human patient samples. RESULTS: Our results indicated that there was overactivation of AKT in CDDP-resistant cells compared with

sensitive cells, but no effect on activated ERK levels. We observed an increase in mRNA and protein levels for PDGF receptor beta and PDGF-B ligand levels. These were responsible for AKT overactivation in CDDP-resistant cells. When PDGFRbeta levels were decreased by shRNA treatment or its activation was blocked by pazopanib, CDDP-resistant cells behaved like sensitive cells. Moreover, CDDP-resistant cells were more sensitive to incubation with PDGFRbeta inhibitors such as pazopanib or sunitinib than sensitive cells, a finding consistent with these cells being dependent on this signaling pathway. We also found overexpression of PDGFRbeta and pAKT in CDDP-resistant choriocarcinoma orthotopic tumor versus their CDDP-sensitive counterparts. Finally, we found high PDGFRbeta levels in human testicular tumors, and overexpression in CDDP-resistant testicular choriocarcinomas compared with the CDDP-sensitive and non-treated tumors. CONCLUSION: The PDGFRbeta-AKT pathway plays a critical role in the development of CDDP resistance in testicular tumoral cells.

[460]

**TÍTULO / TITLE:** - High-intensity focused ultrasound treatment of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Acoust Soc Am. 2013 Nov;134(5):4089. doi: 10.1121/1.4830936.

●● Enlace al texto completo (gratis o de pago) [1121/1.4830936](#)

**AUTORES / AUTHORS:** - Sanghvi NT

**INSTITUCIÓN / INSTITUTION:** - R & D, SonaCare Medical, 4000 Pendleton Way, Indianapolis, IN [46226narensanghvi@sonacaremedical.com](mailto:46226narensanghvi@sonacaremedical.com).

**RESUMEN / SUMMARY:** - In the last decade, over 40,000 prostate cancer patients have been treated by HIFU systems in over 30 countries. These treatments have been conducted using two ultrasound image guided hifu devices-Ablatherm (EDAP, Lyon, France) and Sonablate® 500 (Focus Surgery, Inc., Indianapolis, IN). In addition, there is a shift in the management of prostate cancer from whole gland radical prostatectomy and radiation to focal treatment of prostate cancer. The focal treatment is guided by meticulous pretreatment imaging with multi-parametric MRI to accurately localize the index lesion. The MRI images are used to render 3D deformable model of the prostate gland and provide fusion of US and MRI to guide HIFU treatment resulting in reduced complications of rectal fistula, erectile dysfunction, and urinary incontinence. The results of the clinical studies indicate that patients with recurrent cancer post radiation can benefit from HIFU treatment. Both these devices are marketed in many countries and recently have submitted PMA applications to the FDA to receive clearance to market in the United States. Long term clinical results and status of HIFU devices will be presented.

[461]

**TÍTULO / TITLE:** - Suppression of ERbeta signaling via ERbeta knockout or antagonist protects against bladder cancer development.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Carcinogenesis. 2013 Nov 30.

●● Enlace al texto completo (gratis o de pago) [1093/carcin/bgt348](#)

**AUTORES / AUTHORS:** - Hsu I; Chuang KL; Slavin S; Da J; Lim WX; Pang ST; O'Brien JH; Yeh S

**INSTITUCIÓN / INSTITUTION:** - Department of Urology and.

**RESUMEN / SUMMARY:** - Epidemiological studies showed that women have a lower bladder cancer (BCa) incidence, yet higher muscle-invasive rates than men, suggesting that estrogen and the estrogen receptors, estrogen receptor alpha (ERalpha) and estrogen receptor beta (ERbeta), may play critical roles in BCa progression. Using in vitro cell lines and an in vivo carcinogen N-butyl-N-(4-hydroxybutyl) nitrosamine (BBN)-induced mouse BCa model, we found that ERbeta plays a positive role in promoting BCa progression. Knockdown of ERbeta with ERbeta-shRNA in ERbeta-positive human BCa J82, 647v and T24 cell lines led to suppressed cell growth and invasion. Mice lacking ERbeta have less cancer incidence with reduced expression of the proliferation marker Ki67 in BBN-induced BCa. Consistently, our results show that non-malignant urothelial cells with ERbeta knockdown are more resistant to carcinogen-induced malignant transformation. Mechanism dissection found that targeting ERbeta suppressed the expression of minichromosome maintenance complex component 5 (MCM5), a DNA replication licensing factor that is involved in tumor cell growth. Restoring MCM5 expression can partially reverse ERbeta knockdown-mediated growth reduction. Supportively, treating cells with the ERbeta-specific antagonist, 4-[2-Phenyl-5,7-bis(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-3-yl]phenol (PHTPP), reduced BCa cell growth and invasion, as well as MCM5 expression. Furthermore, we provide the first evidence that BCa burden and mortality can be controlled by PHTPP treatment in the carcinogen-induced BCa model. Together, these results demonstrate that ERbeta could play positive roles in promoting BCa progression via MCM5 regulation. Targeting ERbeta through ERbeta-shRNA, PHTPP or via downstream targets, such as MCM5, could serve as potential therapeutic approaches to battle BCa.

[462]

**TÍTULO / TITLE:** - Results of a prospective study comparing the clinical efficacy of cryoablation of renal cell cancer followed by immediate partial nephrectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Surg Oncol. 2013 Oct 6. pii: S0748-7983(13)00843-3. doi: 10.1016/j.ejso.2013.09.025.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejso.2013.09.025](#)

**AUTORES / AUTHORS:** - Khoder WY; Siegert S; Stief CG; Becker AJ; Waidelich R

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University Hospital of Munich, Ludwig-Maximilians-University, Munich, Germany. Electronic address: [wael.khoder@med.uni-muenchen.de](mailto:wael.khoder@med.uni-muenchen.de).

**RESUMEN / SUMMARY:** - PURPOSE: Evaluation if cryoablation of small renal tumours (RT) would facilitate the technique of laparoscopic partial nephrectomy (LPN) in a prospective study. PATIENTS AND METHODS: In a prospective non-randomised study between April 2007 and October 2009, 16 patients with a mean age of 68 years (48-80 years) and a peripherally located RT were candidates for nephron-sparing surgery (5 open partial nephrectomy (OPN), 11 LPN). Cryoablation of RT was followed in the same session by open (K-OPN) and laparoscopic (K-LPN) partial nephrectomy. Perioperative and follow-up parameters were estimated. A matched-pair cohort of 41

patients (20 OPN, 21 LPN) who underwent standard operations due to the same indication has been selected for retrospective comparison (controls). RESULTS: Mean age for K-OPN was 74 years (69-83) with mean blood loss 140 ml (50-200); for K-LPN: 66.6 years (48-80) with 100 ml (50-700). All procedures were completed successfully without conversions (K-LPN), transfusions or intra-operative complications. Compared to OPN/LPN, K-OPN and K-LPN were associated with a longer operative time ( $P < 0.05$ ) and a comparable postoperative hospital stay. There were no early postoperative complications. Cryoablation has not affected the histopathological evaluation of tumours or resection margins. Histopathology showed cytologic changes suggesting fresh coagulative necrosis, glomerular vascular congestion and interstitial haemorrhages following cryotherapy. One patient (K-LPN) developed a pararenal abscess necessitating puncture after 7 weeks. The follow-up (9-42 months) was uneventful. CONCLUSIONS: The current study shows that K-LPN is feasible without increasing procedure morbidity or compromising surgical and oncological outcomes. It adds no advantage to tumour excision. Pathological findings document early cryoablation effects but viable tissue.

[463]

**TÍTULO / TITLE:** - Direct Determination of Urinary Creatinine by Reactive-Thermal Desorption-Extractive Electrospray-Ion Mobility-Tandem Mass Spectrometry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anal Chem. 2013 Nov 27.

•• Enlace al texto completo (gratis o de pago) [1021/ac403133t](https://doi.org/10.1021/ac403133t)

**AUTORES / AUTHORS:** - Devenport NA; Blenkhorn DJ; Weston DJ; Reynolds JC; Creaser CS

**RESUMEN / SUMMARY:** - A direct, ambient ionization method has been developed for the determination of creatinine in urine that combines derivatization and thermal desorption with extractive electrospray ionization and ion mobility-mass spectrometry. The volatility of creatinine was enhanced by a rapid on-probe aqueous acylation reaction, using a custom-made thermal desorption probe, allowing thermal desorption and ionization of the monoacylated derivative. The monoacyl creatinine  $[M+H]^+$  ion ( $m/z$  156) was subjected to mass-to-charge and ion mobility section, before collision induced dissociation to remove the acyl group, generating the protonated creatinine  $[M+H]^+$  product ion at  $m/z$  114. Stable isotope dilution using creatinine D3 as internal standard was used for quantitative measurements. The direct on-probe derivatization allows high sample throughput with a typical cycle time of 1 minute per sample. The method shows good linearity ( $R^2 = 0.986$ ) and repeatability (%RSD 8-10%) in the range 0.25-2.0 mg/mL. The creatinine concentration in diluted urine samples from a healthy individual were determined to contain a mean concentration of 1.44 mg/mL of creatinine with a precision (%RSD) of 9.9%. The reactive ambient ionization approach demonstrated here has potential for the determination of involatile analytes in urine and other biofluids.

[464]

**TÍTULO / TITLE:** - Cancer testis antigen expression in testicular germ cell tumorigenesis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mod Pathol. 2013 Nov 15. doi: 10.1038/modpathol.2013.183.

●● Enlace al texto completo (gratis o de pago) [1038/modpathol.2013.183](#)

**AUTORES / AUTHORS:** - Bode PK; Thielken A; Brandt S; Barghorn A; Lohe B; Knuth A; Moch H

**INSTITUCIÓN / INSTITUTION:** - Institute of Surgical Pathology, University Hospital Zurich, Zurich, Switzerland.

**RESUMEN / SUMMARY:** - Cancer testis antigens are encoded by germ line-associated genes that are present in normal germ cells of testis and ovary but not in differentiated tissues. Their expression in various human cancer types has been interpreted as 're-expression' or as intratumoral progenitor cell signature. Cancer testis antigen expression patterns have not yet been studied in germ cell tumorigenesis with specific emphasis on intratubular germ cell neoplasia unclassified as a precursor lesion for testicular germ cell tumors. Immunohistochemistry was used to study MAGEA3, MAGEA4, MAGEC1, GAGE1 and CTAG1B expression in 325 primary testicular germ cell tumors, including 94 mixed germ cell tumors. Seminomatous and non-seminomatous components were separately arranged and evaluated on tissue microarrays. Spermatogonia in the normal testis were positive, whereas intratubular germ cell neoplasia unclassified was negative for all five CT antigens. Cancer testis antigen expression was only found in 3% (CTAG1B), 10% (GAGE1, MAGEA4), 33% (MAGEA3) and 40% (MAGEC1) of classic seminoma but not in non-seminomatous testicular germ cell tumors. In contrast, all spermatocytic seminomas were positive for cancer testis antigens. These data are consistent with a different cell origin in spermatocytic seminoma compared with classic seminoma and support a progression model with loss of cancer testis antigens in early tumorigenesis of testicular germ cell tumors and later re-expression in a subset of seminomas. Modern Pathology advance online publication, 15 November 2013; doi:10.1038/modpathol.2013.183.

[465]

**TÍTULO / TITLE:** - Diffusion-Weighted Imaging of Prostate Cancer on 3T MR: Relationship between Apparent Diffusion Coefficient Values and Ki-67 Expression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acad Radiol. 2013 Dec;20(12):1535-41. doi: 10.1016/j.acra.2013.09.007.

●● Enlace al texto completo (gratis o de pago) [1016/j.acra.2013.09.007](#)

**AUTORES / AUTHORS:** - Zhang J; Jing H; Han X; Huang Z; Cao Z; Liu Q

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Shandong Provincial Hospital, Shandong University, No. 324, Jingwu Weiqi Road, Jinan, P. R. China 250021.

**RESUMEN / SUMMARY:** - RATIONALE AND OBJECTIVES: To investigate the relationship between apparent diffusion coefficient (ADC) values and the Ki-67 staining index (Ki-67 SI), a tumor proliferation marker, in prostate cancer (PCa). MATERIALS AND METHODS: Forty-three patients with PCa and thirty-six patients with benign prostatic hyperplasia (BPH) underwent diffusion-weighted (DW) imaging on 3T magnetic resonance (MR) with pelvic phased-array coil. The ADC values of PCa were calculated from two DW images ( $b = 0, 800 \text{ s/mm}^2$ ). Immunohistochemical staining for Ki-67 was used to determine the Ki-67 SI of PCa and BPH. The Pearson correlation

test was used to examine the relationship between ADC values and the Ki-67 SI. The ADC values of PCa with different level of Ki-67 SI were compared using an independent-sample t-test. RESULTS: The mean (+/-standard deviation [SD]) Ki-67 SI of PCa (7.23 +/- 5.29%) was higher than that of BPH (2.11 +/- 1.90%) (P < .001). The mean (+/-SD) ADC value (10(-3) mm(2)/s) of PCa (0.850 +/- 0.155) was lower than that of BPH (1.173 +/- 0.245) (P < .001). The ADC values of PCa were negatively correlated with the Ki-67 SI (r = -0.459, P = .002). The mean ADC values of PCa with Ki-67 >3.5% and <=3.5% were (0.803 +/- 0.094) and (0.936 +/- 0.208), respectively. The former was significantly lower than the latter (P = .031). The ADC values of PCa with Ki-67 >7.1% and <=7.1% were (0.779 +/- 0.081) and (0.906 +/- 0.178), respectively. The difference was significant (P = .004). CONCLUSION: The ADC values of PCa could reflect the tumor proliferative activity and the differentiated degree of PCa.

[466]

**TÍTULO / TITLE:** - Pulmonary embolization as the primary clinical manifestation of giant renal angiomyolipoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Thorac Surg. 2013 Oct;96(4):1484. doi: 10.1016/j.athoracsur.2013.01.060.

●● Enlace al texto completo (gratis o de pago)

[1016/j.athoracsur.2013.01.060](#)

**AUTORES / AUTHORS:** - Yu L; Gu T; Xiu Z

**INSTITUCIÓN / INSTITUTION:** - Department of Cardiac Surgery, The First Affiliated Hospital of China Medical University, Shenyang, P. R. China.

[467]

**TÍTULO / TITLE:** - Hedgehog signaling is active in human prostate cancer stroma and regulates proliferation and differentiation of adjacent epithelium.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Dec;73(16):1810-23. doi: 10.1002/pros.22720. Epub 2013 Sep 16.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22720](#)

**AUTORES / AUTHORS:** - Wilkinson SE; Furic L; Buchanan G; Larsson O; Pedersen J; Frydenberg M; Risbridger GP; Taylor RA

**INSTITUCIÓN / INSTITUTION:** - Prostate Cancer Research Group, Department of Anatomy and Developmental Biology, Monash University, Clayton, Victoria, Australia; Department of Physiology, Monash University, Clayton, Victoria, Australia.

**RESUMEN / SUMMARY:** - BACKGROUND: Contribution of stromal Hedgehog (Hh) signaling is evident in the prostate gland in mice, but needs translation to human tissues if Hh therapeutics are to be used effectively. Our goal was to determine if primary human prostate fibroblasts contain cilia, and respond to prostate Hh signaling. METHODS: Primary human prostate cancer-associated (CAFs), and adjacent non-malignant (NPFs) fibroblasts isolated from human tissue specimens were analyzed using immunofluorescence, real-time PCR, and available array data. Cell culture and tissue recombination were used to determine responsiveness of human fibroblasts to

Hh pathway manipulation and the paracrine effects of stromal Hh signaling, respectively. RESULTS: Prostatic fibroblasts were capable of forming primary cilia, with the capacity for active Hh signaling as seen by Smo co-localization to the tip of the primary cilium. Expression of genes known to represent a signature of active Hh signaling in the prostate (especially Fgf5 and Igfbp6) were increased in CAFs compared to NPFs. The level of canonical Hh genes and prostate Hh signature genes were rarely synchronous; with lower doses of Purmorphamine/BMS-833923 regulating canonical transcription factors, and higher doses effecting prostate Hh signature genes. Grafts consisting of NPFs with constitutively active Hh signaling induced increased proliferation and dedifferentiation of adjacent non-malignant BPH-1 epithelial cells. CONCLUSIONS: These data show that human prostatic fibroblasts have the capacity for Hh signaling and manipulation. Increased expression of a signature of prostatic Hh genes in the prostate tumor microenvironment suggests a role in the epithelial transformations driving prostate cancer (PCa). Prostate 73:1810-1823, 2013. © 2013 Wiley Periodicals, Inc.

[468]

**TÍTULO / TITLE:** - Treatment of bacillus Calmette-Guerin refractory non-muscle invasive bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Esp Urol. 2013 Nov;66(9):833-840.

**AUTORES / AUTHORS:** - Turker P; Turkeri L

**INSTITUCIÓN / INSTITUTION:** - Urology Department.Namik Kemal University Faculty of Medicine.Turkey.

**RESUMEN / SUMMARY:** - Treatment options for patients with non-muscle invasive bladder cancer (NMIBC) refractory to intravesical bacillus Calmette-Guerin (BCG) therapy is reviewed in this article based on the recent published literature. Although intravesical BCG is the best bladder sparing treatment option for NMIBC to prevent recurrence and progression, about 1/3 of cases are refractory to this treatment. At this point radical cystectomy is the standard treatment of choice. If this option is not feasible, intravesical chemotherapy with docetaxel or gemcitabine, the combination of BCG and interferon (INF)-a or device-assisted intravesical strategies, such as mitomycin-EMDA or chemohyperthermia are some of the candidates for further treatment.

[469]

**TÍTULO / TITLE:** - Combination of quercetin and hyperoside has anticancer effects on renal cancer cells through inhibition of oncogenic microRNA-27a.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2014 Jan;31(1):117-24. doi: 10.3892/or.2013.2811. Epub 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2811](#)

**AUTORES / AUTHORS:** - Li W; Liu M; Xu YF; Feng Y; Che JP; Wang GC; Zheng JH

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Shanghai Tenth People's Hospital, Tongji University, Shanghai 200072, P.R. China.

**RESUMEN / SUMMARY:** - Quercetin and hyperoside (QH) in combination (1:1 ratio) have previously been shown to inhibit the growth of human leukemia cells. Here, we investigated the anticancer activity of the same mixture in 786-O renal cancer cells. QH decreased the generation of reactive oxygen species (ROS) by up to 2.25fold and increased the antioxidant capacity by up to 3-fold in 786-O cells (3.8-60 µg/ml), whereas IC50 values for viability were 18.2, 18.7 and 11.8 µg/ml, respectively. QH also induced caspase-3 cleavage (2-fold) and increased PARP cleavage. Specificity protein (Sp) transcription factors are overexpressed in cancer cells and regulate genes required for cell proliferation, survival and angiogenesis. QH treatment decreased the expression of Sp1, Sp3 and Sp4 mRNA and this was accompanied by decreased protein expression. Moreover, expression of the Sp-dependent anti-apoptotic survival gene survivin was also significantly reduced, both at the mRNA and protein levels. QH decreased microRNA27a (miR27a) and induced the zinc finger protein ZBTB10, an Sp-repressor, suggesting that interactions between QH and the miR27aZBTB10 axis play a role in Sp downregulation. This was confirmed by transfection of cells with a specific mimic for miR27a, which partially reversed the effects of QH. These findings are consistent with previous studies on botanical anticancer agents in colon cancer cells.

[470]

**TÍTULO / TITLE:** - Alternative Therapeutic Approach to Renal Cell Carcinoma: Induction of Apoptosis with Combination of Vitamin K3 and D-fraction.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 7.

●● [Enlace al texto completo \(gratis o de pago\) 1089/END-2013-](#)

[0207.ECB.R1](#)

**AUTORES / AUTHORS:** - Degen M; Alexander B; Choudhury M; Eshghi M; Konno S

**INSTITUCIÓN / INSTITUTION:** - New York Medical College, Urology, Tarrytown, New York, United States ; [michael.degen@me.com](mailto:michael.degen@me.com).

**RESUMEN / SUMMARY:** - Abstract Purpose: Due to a dismal prognosis for advanced renal cell carcinoma (RCC), an alternative therapeutic approach, using vitamin K3 (VK3) and D-fraction (DF) was investigated. VK3 is a synthetic VK derivative and DF is a bioactive mushroom extract, and they have been shown to have antitumor activity. We examined if the combination of VK3 and DF would exhibit the improved anticancer effect on RCC in vitro. Materials and Methods: Human RCC, ACHN cell line, were treated with varying concentrations of VK3, DF, or a combination of the two. Cell viability was assessed at 72 hours by MTT assay. To explore the possible anticancer mechanism, studies on cell cycle, chromatin modifications, and apoptosis were conducted. Results: VK3 alone led to a ~20% reduction in cell viability at 4 µM, while DF alone induced a 20-45% viability reduction at ≥500 µg/mL. However, combination of VK3 (4 µM) and DF (300 µg/mL) led to a drastic >90% viability reduction. Cell cycle analysis indicated that VK3/DF treatment induced a G1 cell cycle arrest, accompanied by the up-regulation of p21WAF1 and p27Kip1. Histone deacetylase (HDAC) was also significantly (.60%) inactivated, indicating chromatin modifications. In addition, Western blot analysis revealed that the up-regulation of Bax and activation of poly-(ADP-ribose)-polymerase (PARP) were seen in VK3/DF-treated cells, indicating induction of apoptosis. Conclusions: The combination of VK3 and DF can lead to a profound reduction in ACHN cell viability, through a p21WAF1-mediated

G1 cell cycle arrest, and ultimately induces apoptosis. Therefore, the combination of VK3/DF may have clinical implications as an alternative, improved therapeutic modality for advanced RCC.

[471]

**TÍTULO / TITLE:** - Words of wisdom. Re: African American men with very low-risk prostate cancer exhibit adverse oncologic outcomes after radical prostatectomy: should active surveillance still be an option for them?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov;64(5):858-9. doi: 10.1016/j.eururo.2013.08.042.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.08.042](#)

**AUTORES / AUTHORS:** - Hollenbeck BK

**INSTITUCIÓN / INSTITUTION:** - Dow Division of Health Services Research, University of Michigan, Ann Arbor, MI, USA. Electronic address: [bhollen@umich.edu](mailto:bhollen@umich.edu).

[472]

**TÍTULO / TITLE:** - Positive surgical margins: rate, contributing factors and impact on further treatment: findings from the Prostate Cancer Registry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12509.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12509](#)

**AUTORES / AUTHORS:** - Evans SM; Millar JL; Frydenberg M; Murphy DG; Davis ID; Spelman T; Bolton DM; Giles GG; Dean J; Costello AJ; Frauman AG; Kearns PA; Day L; Daniels C; McNeil JJ

**INSTITUCIÓN / INSTITUTION:** - Department of Epidemiology and Preventive Medicine, Monash University, 3<sup>rd</sup> Floor, Burnet Building Alfred Hospital, Melbourne, VIC, 3004.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** To describe characteristics of patients with and without positive surgical margins (PSM) and describe the impact of PSM on secondary cancer treatment after radical prostatectomy (RP) with short-term follow-up. **PATIENTS AND METHODS:** We analysed data from 2385 consecutive patients who were notified to the Prostate Cancer Registry by 37 Victorian hospitals between August 2008 and February 2012 and were treated by RP. Independent and multivariate models were constructed to predict the likelihood of PSM. Independent and multivariate predictors of secondary treatment following prostatectomy in the initial 12 months post diagnosis were also assessed. **RESULTS:** Surgical margin status was collected for 2219/2385 (93%) cases. In total 592/2175 (27.2%) radical prostatectomies resulted in PSM; 102/534 (19.1%) cases in the low risk group, 317/1,218 (26.0%) cases in the intermediate risk group, 153/387 (39.5%) in the high risk group, and 9/11 (81.8%) in the very high risk disease group. PSM were significantly more likely for men having surgery in a hospital where less than ten RPs occur each year (Incidence rate ratio [IRR] 1.44 confidence interval [CI] 1.07-1.93) and in the intermediate-, high-, or very-high-risk group, than those for those in the low risk group (Incidence rate ratio (IRR) 1.34 [CI] 1.09-1.65, p= 0.007], 1.96 [CI: 1.57-2.45, p<0.001] 3.81 [CI: 2.60-5.60, p<0.001] and 2.50 [CI: 1.23-5.11, p=0.012] respectively). Patients with PSM were significantly less likely to have been treated at a private hospital than a public hospital (IRR=0.76, CI:

0.63-0.93,  $p=0.006$ ) or to have had robot-assisted surgery performed (IRR=0.69, CI: 0.55-0.87,  $p=0.002$ ) than an open approach. Of the 2182 cases who underwent surgery in the initial 12 months post diagnosis, 1987 (91.1%) received no subsequent treatment, 123 (5.6%) received radiotherapy, 47 (2.1%) received androgen deprivation therapy (ADT) and 23 (1.1%) received a combination of radiotherapy and ADT. Two cases (0.1%) received chemotherapy combined with another treatment. At a multivariate level, predictors of additional treatment following surgery in the initial 12 months included having a PSM compared with clear margins (Odds ratio (OR)=5.61 CI: 3.82-8.22  $p<0.001$ ); pT3 compared with pT2 disease (OR 4.72, CI: 2.69-8.23,  $p<0.001$ ); and having high or very-high risk disease compared with low risk disease (OR 4.36, CI: 2.24-8.50,  $p<0.001$  and 4.50, CI: 1.34-15.17,  $p=0.015$  respectively). Patient age, hospital location and hospital type were not associated with secondary treatment. Patients undergoing robotic-assisted surgery were significantly less likely to receive additional treatment compared with those receiving surgery using the open approach (OR 0.59, CI: 0.39-0.88,  $p=0.010$ ). CONCLUSIONS: These data indicate an important association between hospital status and PSMs, with radical prostatectomy cases treated in private hospitals less likely than those in public hospitals to have PSM. Cases treated in lower volume hospitals were more likely to have PSM and less likely to receive additional treatment following surgery in the initial 12 months. Robot-assisted prostatectomy is associated with fewer positive surgical margins compared with the open approach in this non-randomised observational study. Surgical margin status and pathological T3 disease are both important and independent predictor of secondary cancer treatment for patients undergoing radical prostatectomy. A robot-assisted radical prostatectomy approach appears to decrease the risk of men having subsequent treatment, when compared with the open approach.

[473]

**TÍTULO / TITLE:** - Lantabetulic Acid Derivatives Induce G1 Arrest and Apoptosis in Human Prostate Cancer Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Pharm (Weinheim). 2013 Nov 18. doi: 10.1002/ardp.201300224.

●● Enlace al texto completo (gratis o de pago) [1002/ardp.201300224](#)

**AUTORES / AUTHORS:** - Lin KW; Lin ZY; Huang AM; Weng JR; Yen MH; Yang SC; Lin CN

**INSTITUCIÓN / INSTITUTION:** - Faculty of Fragrance and Cosmetics, College of Pharmacy, Kaohsiung Medical University, Kaohsiung, Taiwan.

**RESUMEN / SUMMARY:** - Ten new lantabetulic acid (1) derivatives 2-11 were synthesized and their cytotoxicities against human prostate cancer cells were evaluated. PC3 cells treated with 10  $\mu\text{M}$  8 exhibited the most potent G1 phase arrest. In addition, 10  $\mu\text{M}$  8 markedly decreased the levels of cyclin E and cdk2 and caused an increase in the p21 and p27 levels, while 20  $\mu\text{M}$  8 mainly led to cell death through the apoptotic pathway, which correlated with an increase in reactive oxygen species levels, decreased expression levels of Bcl-2 and caspase-8, the induction of mitochondrial changes, and decreased levels of cytochrome c in mitochondria. The dual action of 8 could provide a new approach for the development of chemotherapeutic drugs.

[474]

**TÍTULO / TITLE:** - A Hierarchical Frailty Model for Familial Testicular Germ-Cell Tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Epidemiol. 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1093/aje/kwt267](#)

**AUTORES / AUTHORS:** - Valberg M; Grotmol T; Tretli S; Veierod MB; Moger TA; Aalen OO

**RESUMEN / SUMMARY:** - Using a 2-level hierarchical frailty model, we analyzed population-wide data on testicular germ-cell tumor (TGCT) status in 1,135,320 two-generational Norwegian families to examine the risk of TGCT in family members of patients. Follow-up extended from 1954 (cases) or 1960 (unaffected persons) to 2008. The first-level frailty variable was compound Poisson-distributed. The underlying Poisson parameter was randomized to model the frailty variation between families and was decomposed additively to characterize the correlation structure within a family. The frailty relative risk (FRR) for a son, given a diseased father, was 4.03 (95% confidence interval (CI): 3.12, 5.19), with a borderline significantly higher FRR for nonseminoma than for seminoma ( $P = 0.06$ ). Given 1 affected brother, the lifetime FRR was 5.88 (95% CI: 4.70, 7.36), with no difference between subtypes. Given 2 affected brothers, the FRR was 21.71 (95% CI: 8.93, 52.76). These estimates decreased with the number of additional healthy brothers. The estimated FRRs support previous findings. However, the present hierarchical frailty approach allows for a very precise definition of familial risk. These FRRs, estimated according to numbers of affected/nonaffected family members, provide new insight into familial TGCT. Furthermore, new light is shed on the different familial risks of seminoma and nonseminoma.

[475]

**TÍTULO / TITLE:** - Minor H antigen matches and mismatches are equally distributed among recipients with or without complications after HLA identical sibling renal transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tissue Antigens. 2013 Nov;82(5):312-6. doi: 10.1111/tan.12209. Epub 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1111/tan.12209](#)

**AUTORES / AUTHORS:** - Dierselhuis MP; Spierings E; Drabbels J; Hendriks M; Alaez C; Alberu J; Alvarez MB; Burlingham W; Campos E; Christiaans M; Claas F; Fasano ME; Gerbase-Delima M; Gervais T; Gorodezky C; Larriba J; Lardy NM; Latinne D; Morales-Buenrostro LE; Moreno MJ; Oguz F; Opelz G; Sergeant R; Tambutti M; Teper S; Tilanus M; Turkmen A; Warrens AN; Weimar W; Goulmy E

**INSTITUCIÓN / INSTITUTION:** - Department of Immunohematology and Blood Transfusion, Leiden University Medical Center, Leiden, The Netherlands.

**RESUMEN / SUMMARY:** - Studies of the effect of minor H antigen mismatching on the outcome of renal transplantation are scarce and concern mainly single center studies. The International Histocompatibility and Immunogenetics Workshops (IHIW) provide a

collaborative platform to execute crucial large studies. In collaboration with 16 laboratories of the IHIW, the role of 15 autosomal, 10 Y-chromosome encoded minor H antigens and 3 CD31 polymorphisms, was investigated in relation to the incidence of renal graft rejection and graft loss in 444 human leukocyte antigens (HLA)-identical sibling renal transplantations. Recipient and donor DNA samples were genotyped for the minor H antigens HA-1, HA-2, HA-3, HA-8, HB-1, ACC-1, ACC-2, SP110, PANE1, UGT2B17, C19Orf48, LB-ECGF-1, CTSH, LRH-1, LB-ADIR and HY. The correlation between minor H antigen mismatch and the primary outcome graft rejection or graft loss was statistically analyzed. The incidence of rejection was very low and no correlation was observed between one or more minor H antigen mismatch(es) and a rejection episode (n = 36), of which only eight resulted in graft loss. In summary, in our study cohort of 444 renal transplants, mismatching for neither autosomal nor HY minor H antigens correlate with rejection episodes or with graft loss.

[476]

**TÍTULO / TITLE:** - Re: Long Non-Coding RNA H19 Increases Bladder Cancer Metastasis by Associating with EZH2 and Inhibiting E-Cadherin Expression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2306. doi: 10.1016/j.juro.2013.08.057. Epub 2013 Aug 30.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.057](#)

**AUTORES / AUTHORS:** - Atala A

[477]

**TÍTULO / TITLE:** - Does graft mass impact on pediatric kidney transplant outcomes?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pediatr Nephrol. 2013 Oct 12.

●● Enlace al texto completo (gratis o de pago) [1007/s00467-013-2637-y](#)

**AUTORES / AUTHORS:** - Feltran LD; Koch Nogueira PC; Ajzen SA; Verrastro CG; Pacheco-Silva A

**INSTITUCIÓN / INSTITUTION:** - Nephrology Department, Escola Paulista de Medicina, Universidade Federal de Sao Paulo (UNIFESP), Sao Paulo, Brazil.

**RESUMEN / SUMMARY:** - BACKGROUND: The aim of this study is to assess the evolution of renal size and function in pediatric transplant patients according to the graft mass/recipient size ratio. METHODS: Fifty pediatric renal transplant recipients were followed over 2 years. Grafts were weighed, and three different graft mass/m<sup>2</sup> ratios were determined: (1) low graft mass (58 g/m<sup>2</sup>, range 31-57 g/m<sup>2</sup>), (2) median (142 g/m<sup>2</sup>, range 59-141 g/m<sup>2</sup>) and high (267 g/m<sup>2</sup>, range 143-353 g/m<sup>2</sup>). Patients underwent repeated ultrasound Doppler scans and repeated measurements of estimated glomerular filtration rate (eGFR; 1 week and 1, 6, 12 and 24 months), urinary retinol-binding protein (RBP) and proteinuria (1 week and 6, 12 and 24 months). RESULTS: The volume of renal tissue increased by 12 +/- 5.6 cm<sup>3</sup> at 24 months (p = 0.035) in the low graft mass and decreased by -14 +/- 7 cm<sup>3</sup> (p = 0.046) in the high graft mass. The eGFR increased when either low (30 +/- 5 ml/min/1.73 m<sup>2</sup>, p < 0.001) or median (19 +/- 4 ml/min/1.73 m<sup>2</sup>, p < 0.001) graft mass was transplanted but remained stable when high graft mass was transplanted. The resistive index (RI)

presented a significant decrease throughout early follow-up in the transplants involving low and median graft mass, whereas a slight rise was observed in those involving high graft mass. A significant difference was apparent 6 months post-transplant. Transplants of low and median graft mass were associated with an initial higher urinary RBP. No significant differences in proteinuria were detected. CONCLUSIONS: Small kidneys undergo increases in volume and function without escalation of either proteinuria or urinary RBP, characterizing an adequate adaptation to the recipient. Children receiving larger kidneys present a reduction in volume, stable GFR and higher RI at 6 months.

[478]

**TÍTULO / TITLE:** - Microarray Diagnosis of Antibody-Mediated Rejection in Kidney Transplant Biopsies: An International Prospective Study (INTERCOM).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Transplant. 2013 Nov;13(11):2865-74. doi: 10.1111/ajt.12465. Epub 2013 Oct 3.

●● [Enlace al texto completo \(gratis o de pago\) 1111/ajt.12465](#)

**AUTORES / AUTHORS:** - Halloran PF; Pereira AB; Chang J; Matas A; Picton M; De Freitas D; Bromberg J; Seron D; Sellares J; Einecke G; Reeve J

**INSTITUCIÓN / INSTITUTION:** - Alberta Transplant Applied Genomics Center, University of Alberta, Edmonton, AB, Canada; Department of Medicine, Division of Nephrology and Transplant Immunology, University of Alberta, Edmonton, AB, Canada.

**RESUMEN / SUMMARY:** - In a reference set of 403 kidney transplant biopsies, we recently developed a microarray-based test that diagnoses antibody-mediated rejection (ABMR) by assigning an ABMR score. To validate the ABMR score and assess its potential impact on practice, we performed the present prospective INTERCOM study (clinicaltrials.gov NCT01299168) in 300 new biopsies (264 patients) from six centers: Baltimore, Barcelona, Edmonton, Hannover, Manchester and Minneapolis. We assigned ABMR scores using the classifier created in the reference set and compared it to conventional assessment as documented in the pathology reports. INTERCOM documented uncertainty in conventional assessment: In 41% of biopsies where ABMR features were noted, the recorded diagnoses did not mention ABMR. The ABMR score correlated with ABMR histologic lesions and donor-specific antibodies, but not with T cell-mediated rejection lesions. The agreement between ABMR scores and conventional assessment was identical to that in the reference set (accuracy 85%). The ABMR score was more strongly associated with failure than conventional assessment, and when the ABMR score and conventional assessment disagreed, only the ABMR score was associated with early progression to failure. INTERCOM confirms the need to reduce uncertainty in the diagnosis of ABMR, and demonstrates the potential of the ABMR score to impact practice.

[479]

**TÍTULO / TITLE:** - Utility of a Triple Antibody Cocktail Intraurothelial Neoplasm-3 (IUN-3-CK20/CD44s/p53) and alpha-Methylacyl-CoA Racemase (AMACR) in the Distinction of Urothelial Carcinoma In Situ (CIS) and Reactive Urothelial Atypia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Surg Pathol. 2013 Dec;37(12):1815-23. doi: 10.1097/PAS.000000000000114.

●● Enlace al texto completo (gratis o de pago)

[1097/PAS.000000000000114](https://doi.org/10.1097/PAS.000000000000114)

**AUTORES / AUTHORS:** - Aron M; Luthringer DJ; McKenney JK; Hansel DE; Westfall DE; Parakh R; Mohanty SK; Balzer B; Amin MB

**INSTITUCIÓN / INSTITUTION:** - \*Cedars-Sinai Medical Center, Los Angeles, CA  
Cleveland Clinic, Cleveland, OH.

**RESUMEN / SUMMARY:** - Urothelial carcinoma in situ (CIS) is a prognostically and therapeutically significant lesion with considerable morphologic overlap with reactive conditions especially in the setting of prior therapy. Various markers including CK20, CD44s, and p53 have been used as an adjunct in making this distinction; however, the utility of these markers in the posttreatment scenario is not fully established. alpha-Methylacyl-CoA racemase (AMACR) is a tumor-associated marker that is expressed in a subset of high-grade urothelial carcinomas but has not been studied in CIS. This study was undertaken to evaluate the immunoreactivity of CK20, CD44s, and p53 as a triple antibody cocktail intraurothelial neoplasm-3 (IUN-3) in distinguishing CIS from its mimics and to compare its utility with AMACR in the diagnosis of CIS. A total of 135 specimens (7 benign ureters and 128 bladder biopsies-28 reactive, 33 posttherapy reactive, 43 CIS, 24 CIS posttherapy) were included in this study. Immunostaining for p53 (brown, nuclear), CD44s (brown, membranous), and CK20 (red, cytoplasmic and membranous) was performed as a cocktail, and the staining pattern was further classified as: malignant (full-thickness CK20 and/or full-thickness p53 with CD44s negativity), reactive/benign (CK20 limited to the umbrella cell layer, p53 negative, and CD44s positivity ranging from basal to full thickness), and indeterminate (CK20 and p53 positive but not full thickness and/or CD44s positive). AMACR staining was performed in 50 cases. Cytoplasmic staining for AMACR was graded as negative (absent to weak focal staining [ $<5\%$  cells]) and positive ( $\geq 5\%$ ). The "IUN-3 malignant" pattern was observed in 84% of cases of CIS without a history of prior therapy and in 71% of the cases of CIS with a history of prior therapy. Cases with posttherapy reactive atypia showed an "IUN-3 reactive" pattern in 84% cases and "IUN-3 indeterminate" pattern in 16% of the cases; the IUN-3 malignant pattern was not identified in any of the cases. Benign and reactive urothelium (with and without a history of therapy) showed an IUN-3 reactive pattern and negative AMACR staining in all the cases (100%). AMACR positivity was observed in 78% of nontreated CIS cases and 50% of CIS posttherapy cases. In these cases, the IUN-3 cocktail showed an IUN-3 malignant pattern in 83% of untreated CIS cases and 88% of CIS posttherapy cases. AMACR positivity is a potentially useful marker of CIS. However, the IUN-3 malignant pattern is a more reliable indicator of CIS compared with AMACR, especially in the posttreatment setting. The simultaneous evaluation of all 3 markers (p53, CD44s, and CK20) in a single slide in the form of a cocktail is advantageous, especially in small biopsy specimens.

[480]

**TÍTULO / TITLE:** - Differences in prostate cancer grade, stage, and location in radical prostatectomy specimens from United States and Japan.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Nov 20. doi: 10.1002/pros.22754.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22754](https://doi.org/10.1002/pros.22754)

**AUTORES / AUTHORS:** - Takahashi H; Epstein JI; Wakui S; Yamamoto T; Furusato B; Zhang M

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, The Jikei University School of Medicine, Tokyo, Japan.

**RESUMEN / SUMMARY:** - BACKGROUND: To compared prostate cancer at radical prostatectomy between men in the United States (US) and Japan in the modern era. METHODS: Three hundred seventy consecutive totally embedded RP cases (159 US; 211 Japan) from 2010 to 2012 were reviewed. RESULTS: US men were significantly younger (mean age 58.8 years) than Japanese men (mean age 64.6 years;  $P < 0.00001$ ). Japanese patients presented with higher PSA levels (mean = 10.9 ng/ml) compared to US patients (mean = 5.8 ng/ml,  $P < 0.00001$ ) and higher clinical stage ( $P = 0.003$ ). Japanese tumors were: higher grade; larger; more advanced stage; with increased lymphovascular invasion; and more commonly TZ in location ( $P < 0.00001$ ). In multivariate analysis, independent predictors of high tumor volume were PSA level, clinical stage, TZ location, Gleason grade, and country of origin (Japan). Independent predictors of TZ location were clinical stage, tumor volume, and country of origin (Japan). CONCLUSION: A major factor for larger, higher grade and stage tumors in Japanese patients is the lower prevalence of screening for prostate cancer in Japan. Another contributing factor may be their TZ location, where they are not palpable until advanced and where they are difficult to sample on needle biopsy possibly leading to a delay in diagnosis. The finding of a difference in zonal location of prostate cancer between US and Japanese cases is novel and may reflect differences in biology rather than different health care practice between the groups. If this data is confirmed, consideration should be given to TZ sampling as part of routine needle biopsies in Japanese men. Prostate © 2013 Wiley Periodicals, Inc.

[481]

**TÍTULO / TITLE:** - When to worry about incidental renal and adrenal masses.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Fam Pract. 2013 Sep;62(9):476-83.

**AUTORES / AUTHORS:** - Higgins JC; Arnold MJ

**INSTITUCIÓN / INSTITUTION:** - Family Medicine Department, Naval Hospital, Jacksonville, FL, USA. Email: [James.Higgins@med.navy.mil](mailto:James.Higgins@med.navy.mil).

**RESUMEN / SUMMARY:** - Greater use of imaging has led to a corresponding rise in the detection of renal and adrenal incidentalomas and left many primary care physicians unsure of what to do about the masses they've found.

[482]

**TÍTULO / TITLE:** - Body mass index and body fat distribution as renal risk factors: a focus on the role of renal haemodynamics.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Nov;28 Suppl 4:iv42-iv49. doi: 10.1093/ndt/gft331.

●● Enlace al texto completo (gratis o de pago) [1093/ndt/gft331](https://doi.org/10.1093/ndt/gft331)

**AUTORES / AUTHORS:** - Kwakernaak AJ; Toering TJ; Navis G

**INSTITUCIÓN / INSTITUTION:** - Division of Nephrology, Department of Medicine, University of Groningen, University Medical Center Groningen, Groningen, The Netherlands.

**RESUMEN / SUMMARY:** - Weight excess and/or central body fat distribution are associated with increased long-term renal risk, not only in subjects with renal disease or renal transplant recipients, but also in the general population. As the prevalence of weight excess is rising worldwide, this may become a main renal risk factor on a population basis, even more so because the risk extends to the overweight range. Understanding the mechanisms of this detrimental effect of weight excess on the kidneys is needed in order to design preventive treatment strategies. The increased risk associated with weight excess is partly attributed to associated comorbid conditions, such as hypertension, dyslipidaemia, insulin resistance and diabetes; however, current evidence supports a direct pathogenetic role for renal haemodynamics as well. Weight excess is associated with an altered renal haemodynamic profile, i.e. an increased glomerular filtration rate relative to effective renal plasma flow, resulting in an increased filtration fraction (FF). This renal haemodynamic profile is considered to reflect glomerular hyperfiltration and glomerular hypertension, resulting from a dysbalance between afferent and efferent arterial vasomotor balance. This unfavorable renal haemodynamic profile was found to be associated with renal outcome in experimental models and in human renal transplant recipients, and is associated with a blunted sodium excretion, and reversible by weight loss, renin-angiotensin-aldosterone system blockade or by dietary sodium restriction. More recent evidence showed that a central body fat distribution is also associated with an increased FF, even independent of overall weight excess. In this review, we provide an overview on current literature on the impact of weight excess and central body fat distribution on the renal haemodynamic profile in humans, and its possible role in progressive renal damage.

[483]

**TÍTULO / TITLE:** - A nomogram including baseline prognostic factors to estimate the activity of second-line therapy for advanced urothelial carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 13. doi: 10.1111/bju.12564.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12564](#)

**AUTORES / AUTHORS:** - Pond GR; Agarwal N; Bellmunt J; Choueiri TK; Qu AQ; Fougeray R; Vaughn D; James ND; Salhi Y; Albers P; Niegisch G; Galsky MD; Wong YN; Ko YJ; Stadler WM; O'Donnell PH; Sridhar SS; Vogelzang NJ; Necchi A; di Lorenzo G; Sternberg CN; Mehta AN; Sonpavde G

**INSTITUCIÓN / INSTITUTION:** - McMaster University, Ontario, Canada.

**RESUMEN / SUMMARY:** - OBJECTIVE: To study the impact of prognostic factors (liver metastasis [LM], anemia [Hb<10 g/dl], ECOG-performance status [PS]  $\geq 1$ , time from prior chemotherapy [TFPC]) on the activity of second-line therapy for advanced urothelial carcinoma (UC). PATIENTS AND METHODS: Twelve phase II trials evaluating second-line chemotherapy and/or biologics (n=748) in patients with progressive disease were pooled. Progression-free survival (PFS) was defined as tumor progression or death from any cause. PFS at 6 months (PFS6) was defined from

the date of registration and calculated using the Kaplan-Meier method. Response rate (RR) was defined using RECIST 1.0. A nomogram predicting PFS6 was constructed using the RMS package in R ([www.r-project.org](http://www.r-project.org)). RESULTS: Data regarding progression, Hb, LM, PS and TFPC were available from 570 patients in 9 phase II trials. The overall median PFS was 2.7 months (mo), PFS6 was 22.2% (95% CI: 18.8-25.9) and RR was 17.5% (95% CI: 14.5%-20.9%). For every unit increase in risk group, the hazard of progression in 6 mo increased by 41% and the odds of response decreased by 48%. A nomogram was constructed to predict PFS6 on an individual patient level. The model was internally validated and displayed acceptable calibration performance. CONCLUSIONS: PFS6 and RR vary as a function of baseline prognostic factors in patients receiving second-line therapy for advanced UC. A nomogram incorporating prognostic factors facilitates the evaluation of outcomes across phase II trials enrolling heterogeneous populations and helps select suitable agents for phase III testing.

[484]

**TÍTULO / TITLE:** - Organ-sparing surgery is the treatment of choice in benign testicular tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1174-4](http://1007/s00345-013-1174-4)

**AUTORES / AUTHORS:** - Leonhartsberger N; Pichler R; Stoehr B; Horninger W; Steiner H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Medical University Innsbruck, Anichstrasse 35, 6020, Innsbruck, Austria, [Nicolai.Leonhartsberger@i-med.ac.at](mailto:Nicolai.Leonhartsberger@i-med.ac.at).

**RESUMEN / SUMMARY:** - PURPOSE: Ablation of the testis has been the reference standard for malignant and benign testicular tumors in the past. Nowadays, an organ-sparing surgery (OSS) can be attempted in special cases. Removal of a testis for a benign lesion should be avoided. In this retrospective survey, we analyze the results and long-term follow-up of OSS in benign testicular tumors. METHODS: Charts of all patients that underwent OSS because of a benign testicular tumor between 1999 and 2011 at our department were searched and the data from patients were collected. Before surgery, all patients underwent ultrasound (US) and complete staging. Surgery was performed under US or palpation guidance. Frozen-section examination of the tumor and tumor bed biopsies was obtained. All patients underwent postoperative follow-up. We retrospectively reviewed surgical technique, histology, epidemiology, and outcome in all patients. RESULTS: In the study period, 40 benign testicular tumors were surgically removed in 37 consecutive patients. Definitive histology did not report of any malignant histopathologic features in all patients. All patients are free of disease after a mean follow-up of 63 months (range 10-120). During this period, two patients developed a second leydig cell tumor (LCT) on the contralateral side; another patient had a second LCT within the same testicle, but on the opposite pole. All patients underwent a subsequent organ-sparing tumor resection. CONCLUSIONS: An overtreatment for benign testicular tumors should be avoided. Our initial results indicate that OSS in benign tumors is a safe, feasible treatment for patients.

[485]

**TÍTULO / TITLE:** - Investigation of poorer bladder cancer survival in women than men in NSW Australia: A data linkage study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12496.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12496](#)

**AUTORES / AUTHORS:** - Tracey E; Watt H; Currow D; Young J; Armstrong B

**INSTITUCIÓN / INSTITUTION:** - The University of Sydney, New South Wales (NSW) Sydney, NSW.

**RESUMEN / SUMMARY:** - OBJECTIVE: To investigate the associations of a range of personal and clinical variables with bladder cancer survival in men and women in NSW to see if we could explain why bladder cancer survival is consistently poorer in women than in men. PATIENTS AND METHODS: All 6,880 cases of bladder cancers diagnosed in NSW between 2000 and 2008 were linked to hospital separation data and to deaths. Separate Cox proportional hazards regression models of hazard of bladder cancer death were constructed in those who did or did not undergo cystectomy. RESULTS: Sixteen per cent of bladder cancer patients underwent cystectomy (16 per cent of men and 15 per cent of women). Women who underwent cystectomy were 26 per cent more likely to die than men (Hazard Ratio (HR) 1.26 95% confidence interval, CI 1.00-1.59) after adjustment for age, stage, time from diagnosis to cystectomy, distance from treatment facility and country of birth. None of these covariates had a material effect on the difference in hazard between women and men. However, when stratified by a history of cystitis, the adjusted hazard was 55 per cent higher in women (HR 1.55, 95%CI 1.15-2.10) than men with a history of cystitis while, in the absence of this history, there was no difference in the hazard between men and women (HR 0.99, 95%CI 0.57-1.70). This apparent modification of the effect of sex on bladder cancer outcome was not seen in patients treated only by resection: the adjusted HRs in women relative to men were 1.10 (95% CI 0.92-1.31) in those with a history of cystitis and 1.21 (95% CI 0.98-1.50) in those without. History of haematuria did not modify appreciably the association of sex with bladder cancer outcome. CONCLUSIONS: Women's poorer survival from bladder cancer than men's remains unexplained. The possibility, however, that some factor associated with a history of cystitis may contribute to or explain the poorer outcome in women merits further investigation.

[486]

**TÍTULO / TITLE:** - AG11, a novel dichloroflavanone derivative with anti-mitotic activity towards human bladder cancer cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4445-52.

**AUTORES / AUTHORS:** - Juhem A; Boumendjel A; Touquet B; Guillot A; Popov A; Ronot X; Martel-Frchet V

**INSTITUCIÓN / INSTITUTION:** - AGing Imaging Modeling, CNRS FRE 3405, Université Joseph Fourier, EPHE, Faculte de Medecine, BP 170 La Tronche, 38042 Grenoble Cedex, France. [Veronique.Frchet@agim.eu](mailto:Veronique.Frchet@agim.eu).

**RESUMEN / SUMMARY:** - BACKGROUND: New chemotherapy drugs should be investigated to improve survival of patients with advanced bladder cancer. Here, we report the synthesis and evaluation of AG11, a new flavanone derivative obtained

through cyclization of its chalcone precursor CB11. MATERIALS AND METHODS: The effect of AG11 on cell viability was evaluated by 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide assay and apoptotic cell death was analyzed by flow cytometry. Finally, the effect of AG11 on tubulin polymerization in vitro and microtubule distribution across the cells was investigated. RESULTS: AG11 was found to have an IC50 (half-maximal inhibitory concentration) of 4.6  $\mu$ M and its inhibitory effect on RT4 cells proliferation is associated with a cell-cycle arrest in G2+M phases followed by apoptosis after a 48 h treatment. AG11 prevented polymerization of purified tubulin in a concentration-dependent manner in vitro and disrupted mitotic spindle formation in cells. CONCLUSION: AG11 appears to be an attractive scaffold for further development of a structurally simpler new anti-microtubule agents.

[487]

**TÍTULO / TITLE:** - Refinement of the prediction of N-acetyltransferase 2 (NAT2) phenotypes with respect to enzyme activity and urinary bladder cancer risk.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Toxicol. 2013 Dec;87(12):2129-39. doi: 10.1007/s00204-013-1157-7. Epub 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [1007/s00204-013-1157-7](#)

**AUTORES / AUTHORS:** - Selinski S; Blaszkewicz M; Ickstadt K; Hengstler JG; Golka K

**INSTITUCIÓN / INSTITUTION:** - Leibniz Research Centre for Working Environment and Human Factors (IfADo), Ardeystrasse 67, 44139, Dortmund, Germany, [selinski@ifado.de](mailto:selinski@ifado.de).

**RESUMEN / SUMMARY:** - Polymorphisms of N-acetyltransferase 2 (NAT2) are well known to modify urinary bladder cancer risk as well as efficacy and toxicity of pharmaceuticals via reduction in the enzyme's acetylation capacity. Nevertheless, the discussion about optimal NAT2 phenotype prediction, particularly differentiation between different degrees of slow acetylation, is still controversial. Therefore, we investigated the impact of single nucleotide polymorphisms and their haplotypes on slow acetylation in vivo and on bladder cancer risk. For this purpose, we used a study cohort of 1,712 bladder cancer cases and 2,020 controls genotyped for NAT2 by RFLP-PCR and for the tagSNP rs1495741 by TaqMan® assay. A subgroup of 344 individuals was phenotyped by the caffeine test in vivo. We identified an 'ultra-slow' acetylator phenotype based on combined \*6A/\*6A, \*6A/\*7B and \*7B/\*7B genotypes containing the homozygous minor alleles of C282T (rs1041983, \*6A, \*7B) and G590A (rs1799930, \*6A). 'Ultra-slow' acetylators have significantly about 32 and 46 % lower activities of caffeine metabolism compared with other slow acetylators and with the \*5B/\*5B genotypes, respectively ( $P < 0.01$ , both). The 'ultra-slow' genotype showed an association with bladder cancer risk in the univariate analysis (OR = 1.31,  $P = 0.012$ ) and a trend adjusted for age, gender and smoking habits (OR = 1.22,  $P = 0.082$ ). In contrast, slow acetylators in general were not associated with bladder cancer risk, neither in the univariate (OR = 1.02,  $P = 0.78$ ) nor in the adjusted (OR = 0.98,  $P = 0.77$ ) analysis. In conclusion, this study suggests that NAT2 phenotype prediction should be refined by consideration of an 'ultra-slow' acetylation genotype.

[488]

**TÍTULO / TITLE:** - Pro-survival and pro-growth effects of stress-induced nitric oxide in a prostate cancer photodynamic therapy model.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Lett. 2013 Sep 27. pii: S0304-3835(13)00694-0. doi: 10.1016/j.canlet.2013.09.025.

●● Enlace al texto completo (gratis o de pago) [1016/j.canlet.2013.09.025](#)

**AUTORES / AUTHORS:** - Bhowmick R; Girotti AW

**INSTITUCIÓN / INSTITUTION:** - Department of Biochemistry, Medical College of Wisconsin, Milwaukee, WI, USA. Electronic address: [rbhowmic@gmail.com](mailto:rbhowmic@gmail.com).

**RESUMEN / SUMMARY:** - We discovered recently that human breast cancer cells subjected to photodynamic therapy (PDT)-like oxidative stress localized in mitochondria rapidly upregulated nitric oxide synthase-2 (NOS2) and nitric oxide (NO), which increased resistance to apoptotic photokilling. In this study, we asked whether human prostate cancer PC-3 cells would exploit NOS2/NO similarly and, if so, how proliferation of surviving cells might be affected. Irradiation of photosensitized PC-3 cells resulted in a rapid (<1h), robust (approximately 12-fold), and prolonged (approximately 20h) post-irradiation upregulation of NOS2. Caspase-3/7 activation and apoptosis were stimulated by NOS2 inhibitors and a NO scavenger, implying that induced NO was acting cytoprotectively. Cyclic GMP involvement was ruled out, whereas suppression of pro-apoptotic JNK and p38 MAPK activation was clearly implicated. Cells surviving photostress grew back approximately 2-times faster than controls. NOS2 inhibition prevented this and the large increase in cell cycle S-phase occupancy observed after irradiation. Thus, photostress upregulation of NOS/NO elicited both a pro-survival and pro-growth response, both of which could compromise clinical PDT efficacy unless suppressed, e.g. by pharmacological intervention with a NOS2 inhibitor.

[489]

**TÍTULO / TITLE:** - Targeted therapy in metastatic renal carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Lett. 2013 Nov 13. pii: S0304-3835(13)00707-6. doi: 10.1016/j.canlet.2013.09.038.

●● Enlace al texto completo (gratis o de pago) [1016/j.canlet.2013.09.038](#)

**AUTORES / AUTHORS:** - Mattei J; da Silva RD; Seht D; Molina WR; Kim FJ

**INSTITUCIÓN / INSTITUTION:** - Chief of Urology, Denver Health Medical Center, 777 Bannock Street, Denver, CO 80204, United States.

**RESUMEN / SUMMARY:** - BACKGROUND: Advanced renal cell carcinoma is one of the most treatment-resistant malignancies to conventional cytotoxic chemotherapy. The development of new targeted therapy was result of understanding biological pathways underlying renal cell carcinoma. Our objective is to provide an overview of current therapies in metastatic renal cell carcinoma. METHODS: MEDLINE/PUBMED was queried in December 2012 to identify abstracts, original and review articles. The research was conducted using the following words: "metastatic renal cell carcinoma" and "target therapy". Phase II and Phase III clinical trials were included followed FDA approval. Total of 40 studies were eligible for review. CONCLUSION: The result of this review shows benefit of these target drugs in tumor burden, increase progression-free

and overall survival and improvement the quality of life compared with previous toxic immunotherapy, although complete response remains rare.

[490]

**TÍTULO / TITLE:** - Population-Based Assessment of the Number of Lymph Nodes Removed in the Treatment of Penile Squamous Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1159/000354401](#)

**AUTORES / AUTHORS:** - Zhu Y; Gu CY; Ye DW

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Fudan University Shanghai Cancer Center, Shanghai, PR China.

**RESUMEN / SUMMARY:** - Purpose: To evaluate the number of lymph nodes (LNs) removed, as a performance measure of lymph node dissection (LND), in a population-based database. Materials and Methods: Data from the Surveillance, Epidemiology, and End Results database (1988-2009) were used to identify 393 patients who underwent regional LND for penile cancer. The study cohort was divided into two groups: limited LND (<8 LNs removed) and extensive LND (>=8 LNs removed). Logistic regression analyses were performed to assess factors associated with extensive LND. Log-rank tests were used to evaluate the associations between LN evaluation and survival outcomes. Results: The median number of removed LNs was 15, and 28% of patients underwent limited LND. The prevalence of extensive LND decreased gradually with increasing age: from 81% in men younger than 50 years to 65% in men aged 70 years or older. In multivariate analysis, only age retained an independent association with extensive LND (odds ratio = 0.98, p = 0.01). Log-rank test showed better cause-specific survival in patients receiving extensive LND (p = 0.006). The difference in survival was statistically significant in the subgroup of node-positive penile cancer patients (p = 0.01). Conclusions: An inadequate number of LN retrieval was observed in a considerable proportion of penile cancer patients, especially in the elderly population. © 2013 S. Karger AG, Basel.

[491]

**TÍTULO / TITLE:** - Discontinuous Foci of Cancer in a Single Core of Prostatic Biopsy: When it Occurs and Performance of Quantification Methods in a Private-practice Setting.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Surg Pathol. 2013 Dec;37(12):1831-6. doi: 10.1097/PAS.0000000000000112.

●● Enlace al texto completo (gratis o de pago)

[1097/PAS.0000000000000112](#)

**AUTORES / AUTHORS:** - Schultz L; Maluf CE; da Silva RC; Falashi Rde H; da Costa MV; Schultz MI

**INSTITUCIÓN / INSTITUTION:** - \*Instituto de Anatomia Patologica, Piracicaba daggerHospital dos Fonecedores de Cana de Piracicaba, Piracicaba, Brazil.

**RESUMEN / SUMMARY:** - In addition to clinical data, prostatic biopsy (Bx) reports orient urologists in outlining the patient's treatment options. Discontinuous involvement of a

core by multiple foci of cancer is not infrequent; however, there is currently no consensus as to which method of quantification should be the standard. We applied 2 distinct approaches to quantify the length of cancer foci in the Bx and compared the results to prostatectomy (RP) parameters. All patients with matched Bx and RP treated by the same medical team between 2006 and 2010 were consecutively included in the study. Tumor extent in the Bx was estimated by multiple approaches, and the length was measured in millimeters. The subset of cases with discontinuous foci of cancer in a single core was initially reported by adding each foci and ignoring the benign intervening prostatic tissue, which was designated as additive quantification (AQ). Upon slide review, these foci were reassessed as a single focus and measured by linear quantification (LQ). RPs were partially embedded according to the International Society of Urological Pathology recommendations, and the percentage of tumor was evaluated with graphic precision. Mean percentage of the tumor in RP (%RP) and in the Bx were arbitrarily classified as limited (<6%) and nonlimited (>=6%). Bx parameters were then correlated with %RP and margin status. All methods of quantification of the tumor in the Bx obtained excellent correlation with %RP. LQ and AQ diverged in 14/38 patients, with a mean total length of cancer of 5.8 mm more than the length obtained by LQ in the same population, accurately upgrading 6/14 cases to nonlimited. This subset (LQ>AQ) was more often seen in Bx with significantly more positive cores (P=0.003) of predominantly Gleason score 7 and associated with positive surgical margins in RP (P=0.034) independent of %RP (21% vs. 19% in the margin-negative cases). However, in the subset of Bx in which the tumor infiltration was continuous (AQ=AL) positive margins were indeed associated with tumor extent (31% vs. 6% in margin-negative cases). Discontinuous foci of cancer in a single core were most often seen in Bx sampling nonlimited disease, and this event was associated with positive surgical margins. LQ of cancer improved the performance of the Bx in predicting RP tumor extent relative to the traditional millimetric sum. Our findings support the idea that discontinuous foci may represent undersampling of a larger irregular nodule; however, this study is based on routine reports and does not directly access tumor biology.

[492]

**TÍTULO / TITLE:** - Chemopreventive effect of quercetin, a natural dietary flavonoid on prostate cancer in in vivo model.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nutr. 2013 Sep 3. pii: S0261-5614(13)00235-5. doi: 10.1016/j.clnu.2013.08.011.

●● Enlace al texto completo (gratis o de pago) [1016/j.clnu.2013.08.011](#)

**AUTORES / AUTHORS:** - Sharmila G; Bhat FA; Arunkumar R; Elumalai P; Raja Singh P; Senthilkumar K; Arunakaran J

**INSTITUCIÓN / INSTITUTION:** - Department of Endocrinology, Dr. ALM Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai 600113, India.

**RESUMEN / SUMMARY:** - BACKGROUND & AIM: Prostate cancer is one of the frequently diagnosed cancers in men. Increased Growth factor IGF-1/IGF-1R axis activation mediated by both PI3K/Akt or RAF/MEK/ERK system and AR expression remains important in the development and progression of prostate cancer. Targeting

such system by dietary agents quercetin in vivo model could aid its application in both treatment as well as prevention of prostate cancer. METHODS: In our study the rats were divided into four groups; Group I: control (propylene glycol-vehicle), Group II: cancer-induced (MNU and Testosterone treated) rats, Group III: cancer-induced + Quercetin (200 mg/kg body wt/orally) and Group IV: Quercetin (200 mg/kg body wt) thrice a week. After the treatment period rats were sacrificed and the ventral and dorsolateral prostate lobes were dissected. RESULTS: Antioxidant enzymes and apoptotic proteins were significantly decreased in cancer-induced animal and upon quercetin supplement its level was increased. The IGFIR, AKT, AR, cell proliferative and anti-apoptotic proteins were increased in cancer-induced group whereas supplement of quercetin decreased its expression. CONCLUSIONS: Quercetin down regulates the cell survival, proliferative and anti-apoptotic proteins thereby prevents prostate cancer, by acting as a chemopreventive agent in preclinical model.

[493]

**TÍTULO / TITLE:** - Volumetric-modulated arc therapy for a pelvic lymph node metastasis from prostate cancer: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumori. 2013 May-Jun;99(3):120e-3e. doi: 10.1700/1334.14819.

●● Enlace al texto completo (gratis o de pago) [1700/1334.14819](#)

**AUTORES / AUTHORS:** - von Eyben FE; Kangasmaki A; Kiljunen T; Joensuu T

**RESUMEN / SUMMARY:** - A 50-year-old patient had an early biochemical recurrence after radical prostatectomy and androgen deprivation therapy and castration. An anti-1-amino-3-[18F] fluorocyclobutane-1-carboxylic acid positron emission tomography/computed tomography scan showed a single pelvic lymph node metastasis. The patient was given volume-modulated arc therapy with a cumulative dose of 50 Gy for the volume with pelvic lymph nodes and 78 Gy to the boost volume for the lymph node metastasis. He experienced only a transitory mild toxicity from the rectum and the urinary bladder and had a partial remission for 16 months.

[494]

**TÍTULO / TITLE:** - Evaluation of the ESUR PI-RADS scoring system for multiparametric MRI of the prostate with targeted MR/TRUS fusion-guided biopsy at 3.0 Tesla.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Radiol. 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [1007/s00330-013-3017-5](#)

**AUTORES / AUTHORS:** - Roethke MC; Kuru TH; Schultze S; Tichy D; Kopp-Schneider A; Fenchel M; Schlemmer HP; Hadaschik BA

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology (E010), German Cancer Research Center (DKFZ), Im Neuenheimer Feld 280, D-69120, Heidelberg, Germany, [m.roethke@dkfz.de](mailto:m.roethke@dkfz.de).

**RESUMEN / SUMMARY:** - OBJECTIVES: To evaluate the Prostate Imaging Reporting and Data System (PI-RADS) proposed by the European Society of Urogenital Radiology (ESUR) for detection of prostate cancer (PCa) by multiparametric magnetic resonance imaging (mpMRI) in a consecutive cohort of patients with magnetic

resonance/transrectal ultrasound (MR/TRUS) fusion-guided biopsy. METHODS: Suspicious lesions on mpMRI at 3.0 T were scored according to the PI-RADS system before MR/TRUS fusion-guided biopsy and correlated to histopathology results. Statistical correlation was obtained by a Mann-Whitney U test. Receiver operating characteristics (ROC) and optimal thresholds were calculated. RESULTS: In 64 patients, 128/445 positive biopsy cores were obtained out of 95 suspicious regions of interest (ROIs). PCa was present in 27/64 (42 %) of the patients. ROC results for the aggregated PI-RADS scores exhibited higher areas under the curve compared to those of the Likert score. Sensitivity/specificity for the following thresholds were calculated: 73 %/92 % and 85 %/67 % for PI-RADS scores of 9 and 10, respectively; 85 %/56 % and 60 %/97 % for Likert scores of 3 and 4, respectively. CONCLUSIONS: The standardised ESUR PI-RADS system is beneficial to indicate the likelihood of PCa of suspicious lesions on mpMRI. It is also valuable to identify locations to be targeted with biopsy. The aggregated PI-RADS score achieved better results compared to the single five-point Likert score. KEY POINTS: \* The ESUR PI-RADS scoring system was evaluated using multiparametric 3.0-T MRI. \* To investigate suspicious findings, transperineal MR/TRUS fusion-guided biopsy was used. \* PI-RADS can guide biopsy locations and improve detection of clinically significant cancer. \* Biopsy procedures can be optimised, reducing unnecessary negative biopsies for patients. \* The PI-RADS scoring system may contribute to more effective prostate MRI.

[495]

**TÍTULO / TITLE:** - Utility of quantitative MRI metrics for assessment of stage and grade of urothelial carcinoma of the bladder: preliminary results.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Dec;201(6):1254-9. doi: 10.2214/AJR.12.10348.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.12.10348](#)

**AUTORES / AUTHORS:** - Rosenkrantz AB; Haghghi M; Horn J; Naik M; Hardie AD; Somberg MB; Melamed J; Xiao GQ; Huang WC; Taouli B

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology, NYU School of Medicine, NYU Langone Medical Center, 560 First Ave, TCH-HW202, New York, NY 10016.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this study was to assess associations between quantitative MRI metrics and pathologic indicators of aggressiveness of urothelial carcinoma of the bladder. MATERIALS AND METHODS. In this retrospective biinstitutional study, 37 patients (28 men and nine women; mean age, 73 +/- 12 years) who underwent pelvic MRI including diffusion-weighted imaging (b values 0, 400, and 800 s/mm<sup>2</sup>) and T2-weighted imaging before transurethral resection or cystectomy for urothelial carcinoma of the bladder were identified. Tumor diameter (measured on T2-weighted imaging), normalized T2 signal intensity (to muscle; hereafter labeled normalized T2) and apparent diffusion coefficient (ADC) were measured for all tumors. Mann-Whitney test and receiver operating characteristic analyses were used to identify associations between these metrics and histopathologic tumor stage and grade. RESULTS. Thirty-seven tumors were assessed (mean size, 35 +/- 23 mm; range 8-88 mm). At histopathologic analysis, 16 of 37 (43%) tumors were stage T2 or greater and 21 of 37 (57%) were stage T1 or lower, whereas 34 of 37 (92%) were high grade and three of 37 (8%) were low grade. High-stage (>= T2)

tumors showed greater tumor diameter, lower normalized T2, and lower ADC ( $p = 0.005-0.032$ ) than low-stage ( $\leq T1$ ) tumors. Tumor diameter and ADC were significant independent predictors of stage ( $p \leq 0.043$ ), with their combination giving an area-under-the-curve (AUC) of 0.804. High-grade tumors showed significantly lower ADC ( $p = 0.023$ ) but no significant difference in tumor diameter or normalized T2 ( $p = 0.201-0.559$ ). AUC for differentiating low- and high-grade tumors was higher for ADC (0.902) than for tumor diameter (0.603) or normalized T2 (0.725). CONCLUSION. A combination of size and quantitative MRI metrics can potentially be used as markers of stage and grade of bladder cancer.

[496]

**TÍTULO / TITLE:** - Kaposi sarcoma in the early post-transplant period in a kidney transplant recipient.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nefrologia. 2013 Nov 13;33(6):861-862. doi: 10.3265/Nefrologia.pre2013.Jul.12178.

●● Enlace al texto completo (gratis o de pago)

[3265/Nefrologia.pre2013.Jul.12178](#)

**AUTORES / AUTHORS:** - Ercan Z; Demir ME; Merhametsiz O; Yayar O; Ulas T; Ayli MD

[497]

**TÍTULO / TITLE:** - Laparoscopic radiofrequency ablation of small renal tumors: Long-term oncologic outcomes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0542](#)

**AUTORES / AUTHORS:** - Ramirez D; Ma YB; Bedir S; Antonelli JA; Cadeddu JA; Gahan JC

**INSTITUCIÓN / INSTITUTION:** - UT Southwestern, Urology, Dallas, Texas, United States ; [Daniel.Ramirez@phhs.org](mailto:Daniel.Ramirez@phhs.org).

**RESUMEN / SUMMARY:** - Introduction: Unlike percutaneous radiofrequency ablation (RFA) of small renal tumors, there is limited data assessing the long-term efficacy of laparoscopic RFA. Though the ablation cannot be visualized as reliably as with cryoablation, laparoscopic RFA allows for improved mobilization and placement of probes under direct vision. We reviewed our experience with laparoscopic RFA to assess long-term oncologic outcomes. Methods: We performed a retrospective study of all patients who had undergone laparoscopic RFA for pT1a renal tumors from April 2000 to April 2010. Demographic, clinical and radiologic data were assessed to determine indications and evidence for recurrence of disease. Radiologic recurrence was defined as any new enhancement ( $> 10$  Hounsfield units) after absence of enhancement on initial negative 6-week computed tomography. Results: Data was available for 79 patients who had 111 small renal masses treated over the 10 year period. The median tumor diameter was 2.2 cm and intraoperative biopsy identified renal cell carcinoma in 77%. The median follow-up was 59 months with an estimated 5-year recurrence-free survival of 93.3%. The overall rate of complications was 8.8% with

a 3.8% rate of major complications. Conclusions: Long-term experience with laparoscopic RFA demonstrates that it is a safe and effective option for the treatment of small renal tumors. Five year oncologic outcomes appear to be comparable to extirpation.

[498]

**TÍTULO / TITLE:** - A genome-wide association study of prostate cancer in West African men.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Genet. 2013 Nov 2.

●● Enlace al texto completo (gratis o de pago) [1007/s00439-013-1387-z](#)

**AUTORES / AUTHORS:** - Cook MB; Wang Z; Yeboah ED; Tettey Y; Biritwum RB; Adjei AA; Tay E; Truelove A; Niwa S; Chung CC; Chokkalingam AP; Chu LW; Yeager M; Hutchinson A; Yu K; Rand KA; Haiman CA; Hoover RN; Hsing AW; Chanock SJ

**INSTITUCIÓN / INSTITUTION:** - Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH, DHHS, 9609 Medical Center Drive, Rm 7-E106, MSC 9774, Bethesda, MD, 20892-9774, USA, [cookmich@mail.nih.gov](mailto:cookmich@mail.nih.gov).

**RESUMEN / SUMMARY:** - Age-adjusted mortality rates for prostate cancer are higher for African-American men compared with those of European ancestry. Recent data suggest that West African men also have elevated risk for prostate cancer relative to European men. Genetic susceptibility to prostate cancer could account for part of this difference. We conducted a genome-wide association study (GWAS) of prostate cancer in West African men in the Ghana Prostate Study. Association testing was performed using multivariable logistic regression adjusted for age and genetic ancestry for 474 prostate cancer cases and 458 population-based controls on the Illumina HumanOmni-5 Quad BeadChip. The most promising association was at 10p14 within an intron of a long non-coding RNA (lncRNA RP11-543F8.2) 360 kb centromeric of GATA3 ( $p = 1.29E-7$ ). In sub-analyses, SNPs at 5q31.3 were associated with high Gleason score ( $\geq 7$ ) cancers, the strongest of which was a missense SNP in PCDHA1 (rs34575154,  $p = 3.66E-8$ ), and SNPs at Xq28 (rs985081,  $p = 8.66E-9$ ) and 6q21 (rs2185710,  $p = 5.95E-8$ ) were associated with low Gleason score ( $< 7$ ) cancers. We sought to validate our findings in silico in the African Ancestry Prostate Cancer GWAS Consortium, but only one SNP, at 10p14, replicated at  $p < 0.05$ . Of the 90 prostate cancer loci reported from studies of men of European, Asian or African-American ancestry, we were able to test 81 in the Ghana Prostate Study, and 10 of these replicated at  $p < 0.05$ . Further genetic studies of prostate cancer in West African men are needed to confirm our promising susceptibility loci.

[499]

**TÍTULO / TITLE:** - Immunohistochemical Expression of the Mammalian Target of Rapamycin Pathway in Penile Squamous Cell Carcinomas: A Tissue Microarray Study of 112 Cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histopathology. 2013 Nov 27. doi: 10.1111/his.12338.

●● Enlace al texto completo (gratis o de pago) [1111/his.12338](#)

**AUTORES / AUTHORS:** - Chaux A; Munari E; Cubilla AL; Hicks J; Lecksell K; Burnett AL; Netto GJ

**INSTITUCIÓN / INSTITUTION:** - Departments of Pathology, Johns Hopkins Medical Institutions, Baltimore, MD; Office of Scientific Research, Norte University, Asuncion, Paraguay.

**RESUMEN / SUMMARY:** - AIM: The aim of this study is to evaluate the immunohistochemical expression of mTOR pathway-related biomarkers in penile carcinomas, and to assess the association with histologic type, histologic grade, and human papillomavirus (HPV) infection. METHODS AND RESULTS: We built 4 tissue microarrays from 112 invasive penile squamous cell carcinomas and we evaluated the immunohistochemical expression of PTEN, phos-AKT, phos-mTOR, and phos-S6. We found decreased or loss of PTEN expression in 87% of cases. Warty and/or basaloid carcinomas had a higher proportion of PTEN loss ( $P=0.02$ ) while keratinizing tumours showed higher levels of phos-S6 ( $P=0.009$ ); phos-AKT and phos-mTOR levels were not significantly different between warty/basaloid and keratinizing carcinomas ( $P=0.75$  and  $P=0.77$ , respectively). PTEN was not associated with histologic grade ( $P=0.18$ ). Expression levels of phos-S6 were significantly higher in low-grade tumours ( $P=0.001$ ) while expression levels of phos-AKT and phos-mTOR were slightly higher in high-grade tumours ( $P=0.01$  and  $P=0.35$ , respectively). We did not find any association between HPV infection and mTOR markers ( $P \geq 0.2$  in all cases). CONCLUSIONS: Our results provide evidence of dysregulation of the mTOR pathway in penile carcinomas independent of HPV infection. Future clinical studies should further evaluate the prognostic and predictive usefulness of these markers in patients with penile cancer. This article is protected by copyright. All rights reserved.

[500]

**TÍTULO / TITLE:** - Contemporary issues in radiotherapy for clinically localized prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematol Oncol Clin North Am. 2013 Dec;27(6):1137-62. doi: 10.1016/j.hoc.2013.08.006. Epub 2013 Sep 21.

●● Enlace al texto completo (gratis o de pago) [1016/j.hoc.2013.08.006](#)

**AUTORES / AUTHORS:** - Khor R; Williams S

**INSTITUCIÓN / INSTITUTION:** - Division of Radiation Oncology and Cancer Imaging, Peter MacCallum Cancer Centre, Locked Bag 1, A'Beckett Street, Victoria 8006, Australia. Electronic address: [richard.khor@petermac.org](mailto:richard.khor@petermac.org).

**RESUMEN / SUMMARY:** - Radiotherapy is a valid curative alternative to surgery for prostate cancer. However, patient selection is critical to ensure patients obtain benefits from therapy delivered with curative intent. Dose-escalated radiation has been shown to improve patient outcomes, facilitated by development of robust image guidance and better target delineation imaging technologies. These concepts have also rekindled interest in hypofractionated radiotherapy in the forms of stereotactic body radiotherapy and brachytherapy. Postprostatectomy radiotherapy also improves long-term biochemical outcome in men at high risk of local recurrence.

[501]

**TÍTULO / TITLE:** - Epigenetic inactivation of ITIH5 promotes bladder cancer progression and predicts early relapse of pT1 high grade urothelial tumours.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Carcinogenesis. 2013 Nov 21.

●● Enlace al texto completo (gratis o de pago) [1093/carcin/bgt375](#)

**AUTORES / AUTHORS:** - Rose M; Gaisa NT; Antony P; Fiedler D; Heidenreich A; Otto W; Denzinger S; Bertz S; Hartmann A; Karl A; Knuchel R; Dahl E

**INSTITUCIÓN / INSTITUTION:** - Molecular Oncology Group, Institute of Pathology, Medical Faculty of the RWTH Aachen University, Aachen, Germany.

**RESUMEN / SUMMARY:** - ITIH5 has been associated with tumour suppression in various cancers. However, its putative role in bladder cancer is completely unknown. Therefore, we initiated a study analysing ITIH5 expression as well as its prognostic and functional impact on human urothelial cancers (UC). Expression analysis showed a clear downregulation of ITIH5 mRNA in 61% (n=45) of UC, especially in muscle-invasive tumours (p<0.001). ITIH5 loss in UC was further evident on protein level (65.5%, n=55) as detected by immunohistochemistry. DNA methylation analysis demonstrated tumour-specific ITIH5 promoter methylation in 50% of papillary non-invasive pTa (n=30) and 68% of invasive (n=28) UC. Aberrant ITIH5 promoter methylation in bladder tumours was tightly linked (p<0.001) with loss of ITIH5 mRNA expression, which was furthermore functionally confirmed by demethylation analysis in cell lines. Pyrosequencing analysis revealed that ITIH5 promoter hypermethylation was closely associated with progressive bladder cancers. Subsequently, a large cohort (n=120) of clinically challenging pT1 high grade UC was analysed for ITIH5 expression. Of clinical significance, we found an association between loss of ITIH5 expression and unfavourable prognosis of UC patients without distant metastasis at first diagnosis (recurrence-free survival; hazard ratio: 4.35, p=0.048). Functionally, ITIH5 re-expression in human RT112 bladder cancer cells led to both suppression of cell migration and inhibition of colony spreading. Hence, we provide evidence that downregulation of ITIH5 by aberrant DNA hypermethylation may provoke invasive phenotypes in human bladder cancer. Moreover, ITIH5 protein might become a prognostic biomarker for relapse risk stratification in high grade UC patients.

[502]

**TÍTULO / TITLE:** - Two sequential diagnoses of atypical foci suspicious for carcinoma on prostate biopsy: a follow-up study of 179 cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct;82(4):861-4. doi: 10.1016/j.urology.2013.05.057.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.05.057](#)

**AUTORES / AUTHORS:** - Zhang M; Amberson JB; Epstein JI

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Johns Hopkins Hospital, Baltimore, MD.

**RESUMEN / SUMMARY:** - OBJECTIVE: To follow-up the outcomes with patients who have had 2 consecutive “atypical foci suspicious for carcinoma (ATYP)” diagnoses from prostate biopsies. MATERIALS AND METHODS: A total of 516 men who had prostate core biopsy specimens with 2 sequential diagnoses of ATYP from 2003 to 2012 from 1 institution were studied. RESULTS: Of the 516 men, 179 underwent additional repeat

biopsy (34.8%) after 2 ATYP diagnoses. No difference was found between the patients with and without a repeat biopsy after 2 ATYPs in terms of patient age, serum prostate-specific antigen levels, and digital rectal examination and transrectal ultrasound findings. On repeat biopsy after 2 ATYP findings, 95 of the 179 men (53.1%) had benign prostatic tissue or high-grade prostatic intraepithelial neoplasia, 65 (36.3%) had cancer, and 19 (10.6%) had a third finding of ATYP. The Gleason score in the cancer group was 3+3=6 (50 patients, 77%), 3+4=7 (12 patients, 18.5%), 4+3=7 (1 patient, 1.5%), and 4+4=8 (2 patients, 3%). No difference was seen between those without (benign, high-grade prostatic intraepithelial neoplasia, or ATYP) and with cancer in terms of patient age, serum prostate-specific antigen level, digital rectal examination and transrectal ultrasound findings, and interval between the 2 ATYP biopsies and the interval between the first ATYP and last biopsy. CONCLUSION: The results of our study have shown that 36.3% men will be diagnosed with cancer on biopsy after 2 ATYP diagnoses, with 23% having a Gleason score of  $\geq 7$ . Because no clinical features were predictive of which patients would have cancer on the follow-up biopsy, close follow-up and repeat biopsy are warranted.

[503]

**TÍTULO / TITLE:** - CD151 is associated with prostate cancer cell invasion and lymphangiogenesis in vivo.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2014 Jan;31(1):241-7. doi: 10.3892/or.2013.2823. Epub 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2823](#)

**AUTORES / AUTHORS:** - Detchokul S; Newell B; Williams ED; Frauman AG

**INSTITUCIÓN / INSTITUTION:** - Clinical Pharmacology and Therapeutics Unit, Department of Medicine (Austin Health/Northern Health), The University of Melbourne, Heidelberg, VIC, Australia.

**RESUMEN / SUMMARY:** - CD151, a member of the tetraspanin family, is associated with regulation of migration of normal and tumour cells via cell surface microdomain formation. CD151 was found in our laboratory to have a prognostic value in prostate cancer and is a promoter of prostate cancer migration and invasion. These roles involve association with integrins on both cell-cell and cell-stroma levels. Furthermore, CD151 plays a role in endothelial cell motility. CD151 expression was examined in three commonly used prostate cancer cell lines. We investigated CD151 expression, angiogenesis (microvessel density; MVD) and lymphangiogenesis (lymphatic vessel density; LVD) in an orthotopic xenograft model of prostate cancer in matched tumours from primary and secondary sites. CD151 was found to be heterogeneously expressed across different prostate cancer cell lines and the levels of CD151 expression were significantly higher in the highly tumorigenic, androgen-insensitive cells PC-3 and DU-145 compared to the androgen-sensitive cell line LNCaP ( $P < 0.05$ ). The majority of in vivo xenografts developed pelvic lymph node metastases. Importantly, primary tumours that developed metastasis had significantly higher CD151 expression and MVD compared to those which did not develop metastasis ( $P < 0.05$ ). We identified, for the first time, that CD151 expression is associated with LVD in prostate cancer. These findings underscore the potential role of CD151 and angiogenesis in the metastatic potential of prostate cancer. CD151 has a prognostic value in this mouse model of

prostate cancer and may play a role in lymphangiogenesis. CD151 is likely an important regulator of cancer cell communication with the surrounding microenvironment.

[504]

**TÍTULO / TITLE:** - Messenger RNA vaccine based on recombinant MS2 virus-like particles against prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Sep 17. doi: 10.1002/ijc.28482.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28482](#)

**AUTORES / AUTHORS:** - Li J; Sun Y; Jia T; Zhang R; Zhang K; Wang L

**INSTITUCIÓN / INSTITUTION:** - National Center for Clinical Laboratory, Beijing Hospital of the Ministry of Health, Beijing, 100730, People's Republic of China.

**RESUMEN / SUMMARY:** - Prostate cancer (PCa) is the most diagnosed cancer in the western male population with high mortality. Recently, alternative approaches based on immunotherapy including mRNA vaccines for PCa have shown therapeutic promise. However, for mRNA vaccine, several disadvantages such as the instability of mRNA, the high cost of gold particles, the limited production scale for mRNA-transfected dendritic cells in vitro, limit their development. Herein, recombinant bacteriophage MS2 virus-like particles (VLPs), which based on the interaction of a 19-nucleotide RNA aptamer and the coat protein of bacteriophage MS2, successfully addressed these questions, in which target mRNA was packaged by MS2 capsid. MS2 VLP-based mRNA vaccines were easily prepared by recombinant protein technology, nontoxic and RNase-resistant. We show the packaged mRNA was translated into protein as early as 12 hr after phagocytosed by macrophages. Moreover, MS2 VLP-based mRNA vaccines induced strong humoral and cellular immune responses, especially antigen-specific cytotoxic T-lymphocyte (CTL) and balanced Th1/Th2 responses without upregulation of CD4+ regulatory T cells, and protected C57BL/6 mice against PCa completely. As a therapeutic vaccine, MS2 VLP-based mRNA vaccines delayed tumor growth. Our results provide proof of concept on the efficacy and safety of MS2 VLP-based mRNA vaccine, which provides a new delivery approach for mRNA vaccine and implies important clinical value for the prevention and therapy of PCa.

[505]

**TÍTULO / TITLE:** - Mature Testicular Teratoma in Children: Multifaceted Tumors on Ultrasound.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Sep 28. pii: S0090-4295(13)01019-4. doi: 10.1016/j.urology.2013.07.046.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.07.046](#)

**AUTORES / AUTHORS:** - Epifanio M; Baldissera M; Esteban FG; Baldisserotto M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Pontificia Universidade Catolica do Rio Grande do Sul, School of Medicine, Hospital Sao Lucas, Porto Alegre, Brazil.

**RESUMEN / SUMMARY:** - OBJECTIVE: To describe the different ultrasound (US) findings of mature testicular hamartomas in children. MATERIALS AND METHODS: This is a retrospective study from January 2000 to July 2012 that reviewed the clinical,

laboratory, and US findings of 7 children with a pathologic diagnosis of mature teratoma of the testis. All patients in the study received surgery (tumorectomy or orchiectomy), and the material was examined by the institution's Pathology Department. RESULTS: The US findings were varied and distinct. As to the lesions' consistency, they were cystic (n: 1), multicystic (n: 2), solid-cystic (n: 1), solid containing larger or smaller calcifications (n: 2), and focal calcification (n: 1). With regard to total circulation, all the solid lesions had few vessels in the interior of the lesions. CONCLUSION: Testicular teratoma has a very variable US appearance and can simulate that of other lesions. It can be single, multiseptated, small, or large. It can contain diffuse or localized calcifications. The testicle can have an increased or a normal volume.

[506]

**TÍTULO / TITLE:** - Direct detection of unamplified hepatoma upregulated protein RNA in urine using gold nanoparticles for bladder cancer diagnosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Biochem. 2013 Oct 29. pii: S0009-9120(13)00496-7. doi: 10.1016/j.clinbiochem.2013.10.022.

●● Enlace al texto completo (gratis o de pago)

[1016/j.clinbiochem.2013.10.022](#)

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**INSTITUCIÓN / INSTITUTION:** - Oncology Diagnostic Unit, Medical Biochemistry and Molecular Biology Department, Faculty of Medicine, Ain Shams University, Abbassia, Cairo 11381, Egypt.

**RESUMEN / SUMMARY:** - OBJECTIVE: To develop a gold nanoparticle (AuNP) assay for direct detection of unamplified HURP RNA in urine. DESIGN AND METHODS: HURP RNA was extracted from urine samples (50 bladder carcinoma patients, 25 benign bladder lesions, and 25 controls) and further purified using magnetic nanoparticles (MNPs), functionalized with HURP RNA-specific oligonucleotides, and then detected by RT-PCR or gold nanoparticles. RESULTS: The developed HURP RNA AuNP assay has a sensitivity and a specificity of 88.5% and 94%, respectively, and a detection limit of 2.4nmol/L. The concordance between the HURP AuNP assay with RT-PCR after RNA purification using functionalized MNPs was 97%.

CONCLUSIONS: The developed colorimetric HURP RNA AuNP assay is sensitive, simple, and can aid noninvasive diagnosis of bladder cancer.

[507]

**TÍTULO / TITLE:** - Cryoablation for locally advanced clinical stage T3 prostate cancer: a report from the Cryo-On-Line Database (COLD) Registry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Sep 25. doi: 10.1111/bju.12476.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12476](#)

**AUTORES / AUTHORS:** - Ward JF; Diblasio CJ; Williams C; Given R; Jones JS

**INSTITUCIÓN / INSTITUTION:** - Urology, The University of Texas MD Anderson Cancer Center, Houston, Texas.

**RESUMEN / SUMMARY:** - OBJECTIVE: To assess the oncologic and functional outcomes of primary prostate cryoablation for men with clinical stage T3 prostate cancer. INTRODUCTION: Radical prostatectomy or external beam radiotherapy are the standard treatments for locally advanced clinical stage T3 (cT3) prostate cancer, but some patients opt for nonextirpative prostate cryoablation instead. PATIENTS AND METHODS: The Cryo-On-Line Database (COLD) Registry was queried to identify patients with cT3 prostate cancer treated with whole-gland cryoablation (n = 366). We assessed biochemical disease-free survival (bDFS) using the Phoenix definition and determined reported rates of urinary incontinence and retention, sexual activity, and rectourethral fistulization following treatment. Patients were subsequently assessed according to whether they were administered neoadjuvant androgen deprivation therapy or not. (ADT; n = 115, 31.4%). RESULTS: For the entire cohort, the 36- and 60-month bDFS rates were 65.3% and 51.9%, respectively. Patients who received neoadjuvant ADT had nonsignificantly higher 36- and 60-month bDFS rates (68.0% and 55.4%, respectively) than patients who did not receive neoadjuvant ADT (55.3% and 36.9%, respectively). The reported posttreatment urinary incontinence rate was 2.6%; urinary retention rate, 6.0%; sexual activity rate, 30.4%; and rectourethral fistulization rate, 1.1%. CONCLUSIONS: Cryoablation for patients with cT3 prostate cancer leads to less favorable bDFS than is reported in the literature following surgery or radiotherapy for the same group of men. Observed, posttreatment rectourethral fistulization rates for patients with cT3 disease are higher than in those with organ-confined prostate cancer treated with cryoablation; however, urinary dysfunction and sexual activity rates are similar for men with cT3 to those reported from this same registry in men with cT2 disease. The addition of neoadjuvant ADT (though not studied prospectively here) should be strongly considered if a patient with cT3 prostate cancer is to be treated with cryoablation.

[508]

**TÍTULO / TITLE:** - Neoadjuvant Chemotherapy for Bladder Cancer Does Not Increase Risk of Perioperative Morbidity.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 26. doi: 10.1111/bju.12585.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12585](#)

**AUTORES / AUTHORS:** - Johnson DC; Nielsen ME; Matthews J; Woods ME; Wallen EM; Pruthi RS; Milowsky MI; Smith AB

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

**RESUMEN / SUMMARY:** - To determine whether neoadjuvant chemotherapy (NAC) is a predictor of post-operative complications, length of stay, or operative time after radical cystectomy (RC) for bladder cancer. PATIENTS AND METHODS: A retrospective review of the American College of Surgeons National Surgical Quality Improvement Program (NSQIP) database was performed to identify patients receiving NAC prior to RC from 2005-2011. Bivariable and multivariable analyses were performed to determine whether NAC was associated with 30-day peri-operative outcomes such as complications, length of stay, and operative time. RESULTS: Of the 878 patients who underwent RC for bladder cancer in our study, 78 (8.9%) received NAC. Excluding those patients who were ineligible for NAC due to renal insufficiency, 78/642 (12.1%)

received NAC. 457 of the 878 patients (52.1%) undergoing RC had at least 1 complication within 30 days, including 43 of 78 patients (55.1%) who received NAC and 414 of 800 patients (51.8%) who did not ( $p = 0.58$ ). On multivariable logistic regression, NAC was not a predictor of complications ( $p=0.87$ ), reoperation ( $p=0.16$ ), wound infection ( $p=0.32$ ), or wound dehiscence ( $p=0.32$ ). Using multiple linear regression, NAC was not a predictor of increased operative time ( $p=0.24$ ), and patients undergoing NAC had decreased hospital length of stay ( $p=0.02$ ). **CONCLUSIONS:** Our study is the first large multi-institutional analysis specifically comparing complications after RC with and without NAC. Using a nationally validated, prospectively maintained database specifically designed to measure perioperative outcomes, we found no increase in perioperative complications or surgical morbidity with NAC. In light of these findings and the well-established overall survival benefit over surgery alone, efforts are needed to improve the uptake of NAC.

[509]

**TÍTULO / TITLE:** - MicroRNA profile: a promising ancillary tool for accurate renal cell tumour diagnosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 12;109(10):2646-53. doi: 10.1038/bjc.2013.552. Epub 2013 Oct 15.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.552](#)

**AUTORES / AUTHORS:** - Silva-Santos RM; Costa-Pinheiro P; Luis A; Antunes L; Lobo F; Oliveira J; Henrique R; Jeronimo C

**INSTITUCIÓN / INSTITUTION:** - 1] Cancer Epigenetics Group, Research Center of the Portuguese Oncology Institute, Rua Doutor Antonio Bernardino Almeida, 4200-072 Porto, Portugal [2] Department of Genetics, Portuguese Oncology Institute, Porto, Portugal.

**RESUMEN / SUMMARY:** - Background: Renal cell tumours (RCTs) are clinically, morphologically and genetically heterogeneous. Accurate identification of renal cell carcinomas (RCCs) and its discrimination from normal tissue and benign tumours is mandatory. We, thus, aimed to define a panel of microRNAs that might aid in the diagnostic workup of RCTs. Methods: Fresh-frozen tissues from 120 RCTs (clear-cell RCC, papillary RCC, chromophobe RCC (chRCC) and oncocytomas: 30 cases each), 10 normal renal tissues and 60 cases of ex-vivo fine-needle aspiration biopsies from RCTs (15 of each subtype validation set) were collected. Expression levels of miR-21, miR-141, miR-155, miR-183 and miR-200b were assessed by quantitative reverse transcription-PCR. Receiver operator characteristic curves were constructed and the areas under the curve were calculated to assess diagnostic performance. Disease-specific survival curves and a Cox regression model comprising all significant variables were computed. Results: Renal cell tumours displayed significantly lower expression levels of miR-21, miR-141 and miR-200b compared with that of normal tissues, and expression levels of all miRs differed significantly between malignant and benign RCTs. Expression analysis of miR-141 or miR-200b accurately distinguished RCTs from normal renal tissues, oncocytoma from RCC and chRCC from oncocytoma. The diagnostic performance was confirmed in the validation set. Interestingly, miR-21, miR-141 and miR-155 expression levels showed prognostic significance in a univariate analysis. Conclusion: The miR-141 or miR-200b panel accurately distinguishes RCC

from normal kidney and oncocytoma in tissue samples, discriminating from normal kidney and oncocytoma, whereas miR-21, miR-141 and miR-155 convey prognostic information. This approach is feasible in fine-needle aspiration biopsies and might provide an ancillary tool for routine diagnosis.

[510]

**TÍTULO / TITLE:** - Cumulative probability of prostate cancer detection in biopsy according to free/total PSA ratio in men with total PSA levels of 2.1-10.0 ng/ml at population screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cancer Res Clin Oncol. 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1007/s00432-013-1543-9](#)

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**RESUMEN / SUMMARY:** - PURPOSE: The aim of this study was to investigate the cumulative probability of prostate cancer detection according to free/total prostate-specific antigen (PSA) ratio in men with PSA levels of 2.1-10.0 ng/ml and also likelihood of detecting clinically insignificant prostate cancer in population-based screening. METHODS: A total of 1,277 men aged between 55 and 69 years with total PSA (tPSA) levels of 2.1-10.0 ng/ml screened in population screening in Kanazawa city and underwent systematic transrectal ultrasonography-guided prostate biopsy between 2000 and 2011 were enrolled. The cumulative probability of prostate cancer detection in biopsy according to age, serum tPSA, and free-to-total PSA (f/t PSA) ratio was investigated. The clinicopathological features of screening-detected prostate cancer were also investigated. RESULTS: Of the 1,277 subjects in the study population, 320 (25.0 %) were diagnosed with prostate cancer during the observation period. The probabilities of prostate cancer detection at 3 years were 64.5, 41.2, 28.5, and 14.3 % for the men with f/t PSA ratio  $\leq 0.08$ , 0.09-0.13, 0.14-0.22, and  $\geq 0.23$ , respectively; the differences in probabilities of prostate cancer detection among men with different f/t PSA ratios were statistically significant. Among 320 patients, 84 (26.3 %) had favorable clinicopathological features that made them suitable for active surveillance. The f/t PSA ratio in unfavorable cancer patients was significantly lower than that in favorable cancer patients. CONCLUSION: The present study demonstrated that the f/t PSA ratio was a strong predictor of future cancer detection and unfavorable cancerous features in prostate biopsy in men with total PSA levels of 2.1-10.0 ng/ml at population screening.

[511]

**TÍTULO / TITLE:** - Nephrogenic adenoma of the urinary tract: clinical, histological, and immunohistochemical characteristics.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Virchows Arch. 2013 Dec;463(6):819-25. doi: 10.1007/s00428-013-1497-y. Epub 2013 Oct 19.

●● Enlace al texto completo (gratis o de pago) [1007/s00428-013-1497-y](#)

**AUTORES / AUTHORS:** - Lopez JI; Schiavo-Lena M; Corominas-Cishek A; Yague A; Bauleth K; Guarch R; Hes O; Tardanico R

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**RESUMEN / SUMMARY:** - Nephrogenic adenoma is a benign condition of the urinary tract resulting from the displacement and seeding of renal tubular cells from the renal pelvis to the urethra. A retrospective series of 134 cases collected from four hospitals in three different countries was analyzed in this study. Recorded clinical data included age and sex, topography, urological antecedents, coexistent lesions, and follow-up. Cytonuclear and architectural features were reviewed, and PAX-8, p63, PSMA, S100A1, CEA, EMA, CD117, cannabinoid receptor CB1, AMACR, E-cadherin, and CD10 antibodies were included in an immunohistochemical panel. Males predominated (105 M/29 F) with an average age of 66 years (range, 14-96). Urothelial carcinoma was the most frequent clinical antecedent (43.2 %) and also the most common coexisting lesion (14 %). Tubular architecture was the most frequent pattern detected (40 %) although most cases showed a mixed pattern (45.5 %). Deep infiltrative growth into the muscularis propria occurred in two cases. EMA and PAX-8 were expressed in 100 % of nephrogenic adenomas, while E-cadherin reactivity was observed in 66.6 % of cases, cannabinoid receptor CB1 in 25 %, CD10 in 13.6 %, CD117 in 4.1 %, and AMACR in 2.7 %. For the rest of the antigens, no reactivity was found. The average time lapse between the pathological antecedent and the discovery of a nephrogenic adenoma was 32 months. We conclude that nephrogenic adenoma displays a broad spectrum of histological features that may mimic malignancy. In our experience, CB1 immunostaining adds a further argument in favor of a renal origin of this lesion. The combination of PAX-8+, p63-, and EMA + distinguishes nephrogenic adenoma from urothelial and prostate carcinoma, its most frequent malignant look-alikes.

[512]

**TÍTULO / TITLE:** - Outcome of metastasectomy for urothelial carcinoma: A multi-institutional retrospective study in Japan.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 7. pii: S0022-5347(13)05898-9. doi: 10.1016/j.juro.2013.11.004.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.11.004](http://1016/j.juro.2013.11.004)

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**RESUMEN / SUMMARY:** - PURPOSE: To determine prognostic factors associated with prolonged survival after metastasectomy for urothelial carcinoma (UC). MATERIALS AND METHODS: Forty-two patients who underwent resection of metastases of UC with curative intent at 4 different Japanese university hospitals were included. Most of the patients (41/42) underwent systemic chemotherapy before and/or after metastasectomy. Overall survival was analyzed using the Kaplan-Meier method, and the relationship between the clinical characteristics and survival was analyzed using the log-rank test. RESULTS: Details of metastasectomy were as follows: lymph node

dissection (n=20), pulmonary resection (n=12), pelvic exenteration (n=3), resection of local recurrence (n=2), resection of subcutaneous metastasis (n=2), liver resection (n=1), and others (n=2). The median overall survival time was 29 months (interquartile range [IQR]: 19-80 months) from the initiation of treatment for metastases and 26 months (IQR: 11-90) from metastasectomy. The overall 5-year survival rate from metastasectomy was 31%. On univariate analysis, patients undergoing metastasectomy for solitary lung or solitary lymph node metastasis showed a significantly longer survival than the others undergoing metastasectomy (median survival time: 81 months in patients with solitary lung or solitary lymph node metastasis vs. 19 months in the others, log-rank test  $p = 0.0296$ ). CONCLUSIONS: Long-term cancer control could be achieved in a subgroup of patients undergoing metastasectomy, especially in those with solitary lung or solitary lymph node metastasis.

[513]

**TÍTULO / TITLE:** - Immunohistochemical profile of the penile urethra and differential expression of GATA3 in urothelial versus squamous cell carcinomas of the penile urethra.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Dec;44(12):2760-7. doi: 10.1016/j.humpath.2013.07.023. Epub 2013 Oct 14.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.07.023](#)

**AUTORES / AUTHORS:** - Chaux A; Han JS; Lee S; Gonzalez-Roibon N; Sharma R; Burnett AL; Cubilla AL; Netto GJ

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**RESUMEN / SUMMARY:** - The penile urethra has a distinctive morphology not yet fully characterized by immunohistochemistry. In addition, both urothelial and squamous cell carcinomas have been reported in the penile urethra, and the distinction between these 2 tumors might be difficult. The purposes of this study are to assess the histology and immunohistochemical profile (CK20, CK7, p63, and GATA3) of the penile urethra and to assess the usefulness of Trans-acting T-cell-specific transcription factor (GATA3) and human papillomavirus detection in distinguishing urothelial versus squamous cell carcinomas. Normal penile urethra was evaluated in 11 total penectomies. The penile urethra was lined by 2 cell layers: a superficial single layer of CK7+, CK20-, and p63-columnar cells and a deep stratified layer of CK7-, CK20-, and p63+ cubical cells. Both layers were GATA3+, supporting urothelial differentiation. In addition, 2 tissue microarrays and 6 surgical specimens of primary tumors of the penile urethra (3 urothelial and 3 squamous cell carcinomas) were evaluated for GATA3 expression. In the tissue microarrays, 22 of 25 upper tract urothelial carcinomas and 0 of 38 penile squamous cell carcinomas were GATA3+. In the surgical specimens, GATA3 was positive in all urothelial carcinomas and negative in all squamous cell carcinomas. Human papillomavirus was detected in 2 of 3 squamous cell carcinomas and in 0 of 3 of the urothelial carcinomas. In conclusion, the penile urethra is covered by epithelial cells that are unique in morphology and immunohistochemical profile. In addition, our study suggests that GATA3 and human papillomavirus detection are useful markers for

distinguishing urothelial carcinomas from squamous cell carcinomas of the penile urethra.

[514]

**TÍTULO / TITLE:** - High prevalence of oncogenic MYD88 and CD79B mutations in primary testicular diffuse large B-cell lymphoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Leukemia. 2013 Nov 20. doi: 10.1038/leu.2013.348.

●● Enlace al texto completo (gratis o de pago) [1038/leu.2013.348](#)

**AUTORES / AUTHORS:** - Kraan W; van Keimpema M; Horlings HM; Schilder-Tol EJ; Oud ME; Noorduyt AL; Kluijn PM; Kersten MJ; Spaargaren M; Pals ST

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology.

[515]

**TÍTULO / TITLE:** - A genome-wide association study of renal cell carcinoma among African Americans.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1158/1055-9965.EPI-13-0818](#)

**AUTORES / AUTHORS:** - Purdue MP; Ye Y; Wang Z; Colt JS; Schwartz KL; Davis FG; Rothman N; Chow WH; Wu X; Chanock SJ

**INSTITUCIÓN / INSTITUTION:** - Division of Cancer Epidemiology and Genetics, National Cancer Institute.

**RESUMEN / SUMMARY:** - Genome-wide association studies (GWAS) of renal cell carcinoma (RCC) in populations of European ancestry have identified four susceptibility loci. No GWAS has been conducted among African Americans (AAs), who experience a higher incidence of RCC. We conducted a GWAS in which we analyzed 1,136,723 common single-nucleotide polymorphisms (SNPs) among 255 cases and 375 controls of African ancestry, and further investigated 16 SNPs in a replication set (140 cases, 543 controls). The 12p11.23 variant rs10771279, located 77kb from the European-ancestry RCC marker rs718314, was associated with RCC risk in the GWAS ( $P=1.2 \times 10^{-7}$ ) but did not replicate ( $P=0.99$ ). Consistent with European-ancestry findings, the A allele of rs7105934 on 11q13.3 was associated with decreased risk [odds ratio (OR)=0.76, 95% confidence interval (CI)=0.64-0.91;  $P=0.0022$ ]. The frequency of this allele was higher than that observed in the European-ancestry GWAS (0.56 and 0.07 respectively among controls). The rs7105934 association was stronger for clear cell RCC (ccRCC: OR=0.56;  $P=7.4 \times 10^{-7}$ ) and absent for cases of other or unknown histology (OR=1.02;  $P=0.86$ ). Analyses of rs7105934 by subtype among European-ancestry participants from these studies yielded similar findings (ORs 0.69 and 0.92 respectively). This study provides, to our knowledge, the first evidence that rs7105934 is an RCC susceptibility locus among AAs. Our finding that the association with this SNP may be specific to ccRCC is novel and requires additional investigation. Additional investigation of rs10771279 and other suggestive GWAS findings is also needed.

[516]

**TÍTULO / TITLE:** - Loss of PTEN Is Associated with Aggressive Behavior in ERG-Positive Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Epidemiol Biomarkers Prev. 2013 Nov 27.

●● [Enlace al texto completo \(gratis o de pago\) 1158/1055-9965.EPI-13-](#)

[0333-T](#)

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**RESUMEN / SUMMARY:** - **BACKGROUND:** The associations of ERG overexpression with clinical behavior and molecular pathways of prostate cancer are incompletely known. We assessed the association of ERG expression with AR, PTEN, SPINK1, Ki-67, and EZH2 expression levels, deletion, and mutations of chromosomal region 3p14 and TP53, and clinicopathologic variables. **METHODS:** The material consisted of 326 prostatectomies, 166 needle biopsies from men treated primarily with endocrine therapy, 177 transurethral resections of castration-resistant prostate cancers (CRPC), and 114 CRPC metastases obtained from 32 men. Immunohistochemistry, FISH, and sequencing was used for the measurements. **RESULTS:** ERG expression was found in about 45% of all patient cohorts. In a multivariate analysis, ERG expression showed independent value of favorable prognosis ( $P = 0.019$ ). ERG positivity was significantly associated with loss of PTEN expression in prostatectomy ( $P = 0.0348$ ), and locally recurrent CRPCs ( $P = 0.0042$ ). Loss of PTEN expression was associated ( $P = 0.0085$ ) with shorter progression-free survival in ERG-positive, but not in negative cases. When metastases in each subject were compared, consistent ERG, PTEN, and AR expression as well as TP53 mutations were found in a majority of subjects. **CONCLUSIONS:** A similar frequency of ERG positivity from early to late stage of the disease suggests lack of selection of ERG expression during disease progression. The prognostic significance of PTEN loss solely in ERG-positive cases indicates interaction of these pathways. The finding of consistent genetic alterations in different metastases suggests that the major genetic alterations take place in the primary tumor. **IMPACT:** Interaction of PTEN and ERG pathways warrants further studies. Cancer Epidemiol Biomarkers Prev; 22(12); 1-12. ©2013 AACR.

[517]

**TÍTULO / TITLE:** - A retrospective analysis of two different sequences of therapy lines for advanced kidney cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):4999-5004.

**AUTORES / AUTHORS:** - Paglino C; Procopio G; Sabbatini R; Bellmunt J; Schmidinger M; Bearz A; Bamias A; Melichar B; Imarisio I; Tinelli C; Porta C

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**RESUMEN / SUMMARY:** - Background/Aim: the ideal sequence of targeted agents for advanced kidney cancer is still unknown. In the present study we assessed the clinical benefit of two different sequential approaches, namely sorafenib, an inhibitor of mammalian target of rapamycin (mTORi) and sunitinib, or sunitinib (an mTORi) and sorafenib. **PATIENTS AND METHODS:** we retrospectively reviewed the outcome of 40 advanced kidney cancer patients treated with one of the two above sequences. **RESULTS:** a total of 26 patients were treated with the sequence sorafenib-mTORi-sunitinib and 14 with the sequence sunitinib-mTORi-sorafenib. The actuarial overall median progression-free survival (PFS) in the sorafenib-mTORi-sunitinib group and in the sunitinib-mTORi-sorafenib group were 21.9 and 22.8 months, respectively (log-rank test:  $p=0.928$ ). In the sorafenib-mTORi-sunitinib group, patients in first-, second- and third-line therapy experienced PFS of 11.7, 5.1 and 9.1 months, respectively, while in the sunitinib-mTORi-sorafenib group PFS was 14.4, 4.3, and 3.9 months, respectively. **CONCLUSION:** Our results suggest there is no significant difference between the two sequence modalities.

[518]

**TÍTULO / TITLE:** - Therapeutic Value of Quinazoline-based Compounds in Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):4695-700.

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**RESUMEN / SUMMARY:** - Certain alpha1-adrenoreceptor antagonists induce significant apoptosis and impair tumor vascularity without affecting cellular proliferation, effects specific to the quinazoline structure. These anticancer effects have been attributed to both induction of classical apoptosis and reversal of anoikis resistance via disruption of integrin-mediated cell survival pathways. Recent drug optimization efforts have generated several novel compounds with quinazoline-derived chemical structure that exert potent anti-tumor activity via anoikis. Results from pre-clinical and clinical studies implicate a potential value of quinazoline-based analogues in prostate cancer prevention and therapy. A retrospective study of a large patient cohort at our center, revealed that treatment with alpha1-adrenoreceptor antagonists significantly reduced the risk of developing prostate cancer, indicating a potential chemopreventative mechanism for these FDA-approved agents. In the present review we discuss the current understanding of the signaling mechanisms reversing anoikis resistance by the quinazoline-based compounds in prostate tumors, towards enabling identification of novel therapeutic targets for the treatment of metastatic castration-resistant prostate cancer (CRPC).

[519]

**TÍTULO / TITLE:** - Laparoscopic Partial Nephrectomy for Hilar Tumors: Oncologic and Renal Functional Outcomes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct 10. pii: S0090-4295(13)01151-5. doi: 10.1016/j.urology.2013.08.059.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.059](#)

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**RESUMEN / SUMMARY:** - OBJECTIVE: To present our experience with laparoscopic partial nephrectomy (LPN) for hilar tumors and evaluate intermediate oncologic and renal functional outcomes. MATERIALS AND METHODS: A retrospective review of LPN cases performed in 488 patients was performed. Hilar lesions were defined as renal cortical tumors in direct physical contact with the renal artery, vein, or both, as identified on preoperative imaging and confirmed intraoperatively. The clinicopathologic parameters, perioperative course, complications, and oncologic and 6-month renal functional outcomes were analyzed. RESULTS: A total of 488 patients underwent LPN, of which 43 were hilar. The mean tumor size for hilar and nonhilar tumors was 3.6 cm and 3.1 cm, respectively. The mean operative time was shorter for hilar as compared with nonhilar tumors (129.1 minutes vs 141.8 minutes). Mean estimated blood loss was greater in LPN for hilar tumors (311.65 mL vs 298.4 mL). There were no statistically significant differences noted in any of the perioperative parameters investigated despite a higher nephrometry complexity score in the hilar group. Change in estimated glomerular filtration rate at 6 months showed a decrease of 10.9 mL/min and 8.8 mL/min for hilar and nonhilar tumors, respectively (P = NS). There was 1 recurrence detected in the hilar group, with a median follow-up of 41.6 months. CONCLUSION: In the hands of an experienced laparoscopist, LPN can safely be performed for hilar tumors, with preservation of perioperative outcomes and durable renal functional and oncologic outcomes.

[520]

**TÍTULO / TITLE:** - The expression of C-FABP and PPARgamma and their prognostic significance in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2014 Jan;44(1):265-75. doi: 10.3892/ijo.2013.2166. Epub 2013 Nov 5.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2166](#)

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**INSTITUCIÓN / INSTITUTION:** - Molecular Pathology Laboratory, Department of Molecular and Clinical Cancer Medicine, Liverpool University, Liverpool, L69 3GA, UK.

**RESUMEN / SUMMARY:** - The purpose of this study was to test the hypothesis that cooperative interaction between cutaneous fatty acid-binding protein (C-FABP) and peroxisome proliferator-activated receptors (PPAR) promotes the malignant progression of human prostate cancer. The expression of C-FABP, PPARbeta/delta

and PPARgamma was measured by western blot analysis in prostate cell lines and by immunohistochemical staining in tissue sections of benign prostatic hyperplasia (BPH) and prostatic carcinomas. The correlation between the expression of PPARs and C-FABP was assessed. The significance of increased expression of these proteins was analysed with respect to prognosis and compared with those of alternative biomarkers. The expression levels of C-FABP and PPARgamma in prostate cancer cell lines and the cytoplasm and nuclei of carcinoma tissues were significantly (Student's t-test,  $p < 0.05$ ) higher compared to those in benign cell lines and BPH tissues. The raised expression level of C-FABP and PPARgamma was significantly correlated with the increased combined Gleason scores (GS) of the carcinomas. Enhanced expression of cytoplasmic C-FABP significantly correlated with increased nuclear PPARgamma (Student's t-test,  $p < 0.005$ ). While expression of PPARbeta/delta in carcinomas did not correlate with patient outcome, the increased levels of both C-FABP and PPARgamma were associated with shorter patient survival. Multivariate analysis indicated that C-FABP was independently associated with patient survival, whereas PPARgamma was confounded by C-FABP in predicting patient survival. Thus, the increased C-FABP may interact with PPARgamma in a coordinated mechanism to facilitate malignant progression in prostatic cancer. Both C-FABP and PPARgamma are suitable as prognostic factors to predict the clinical outcome of prostatic cancer patients.

[521]

**TÍTULO / TITLE:** - The role of interpersonal relationships in men's attendance in primary care: qualitative findings in a cohort of men with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Support Care Cancer. 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [1007/s00520-013-1989-y](#)

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**INSTITUCIÓN / INSTITUTION:** - Cancer Care Research Centre, University of Stirling, Stirling, FK9 4LA, UK, [elizabeth.forbat@stir.ac.uk](mailto:elizabeth.forbat@stir.ac.uk).

**RESUMEN / SUMMARY:** - OBJECTIVES: Men's response to ill health is framed as a "battleground" for the enactment of masculinities. With an increase in diagnoses of men's cancers, there is a need to better understand the features which influence timely access to diagnostic services. This study explored the ways in which men account for the timing of their diagnosis of prostate cancer. METHODS: Thirty semi-structured interviews were conducted with men and, where possible, their partner. Data were analyzed with reference to framework analysis. RESULTS: Relationships, including spousal, familial, and friendships, appear pivotal in informing men's help-seeking behaviors. Friends and partners were often critical in facilitating access to primary care. Following their own diagnosis, this virtuous cycle of encouragement led many men to encourage others to seek medical attention for prostate tests. CONCLUSIONS: Interpersonal relationships are a missing dimension in models of delay. We need to know more about how to use relationships, in addition to traditional routes, to harness health promotion messages. Interpersonal relationship, including partners and social networks, may be powerful conduits and may prove effective mechanisms to identify and access men most at risk of prostate cancer.

[522]

**TÍTULO / TITLE:** - The worcestershire prostate cancer survivorship programme.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Gen Pract. 2013 Nov;63(616):574-5. doi: 10.3399/bjgp13X674378.

●● Enlace al texto completo (gratis o de pago) [3399/bjgp13X674378](#)

**AUTORES / AUTHORS:** - Goonewardene SS; Symons M; Sullivan A; Thrush S; Makar AA; Young A

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[523]

**TÍTULO / TITLE:** - Cross-resistance between taxanes and new hormonal agents abiraterone and enzalutamide may affect drug sequence choices in metastatic castration-resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Dec;49(18):3821-30. doi: 10.1016/j.ejca.2013.09.026. Epub 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejca.2013.09.026](#)

**AUTORES / AUTHORS:** - van Soest RJ; van Royen ME; de Morree ES; Moll JM; Teubel W; Wiemer EA; Mathijssen RH; de Wit R; van Weerden WM

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**RESUMEN / SUMMARY:** - INTRODUCTION: Treatment options for patients with metastatic castration-resistant prostate cancer (mCRPC) have expanded in recent years with the introduction of cabazitaxel, abiraterone and enzalutamide. With new systemic therapies available, the optimal treatment sequence of these drugs in mCRPC becomes increasingly important. As shown recently, patients who had previously been treated with abiraterone showed impaired responses to docetaxel, suggesting clinical cross-resistance [1]. In the present study, we aimed to identify cross-resistance between taxanes (docetaxel and cabazitaxel) and the new hormonal agents abiraterone and enzalutamide. As a potential mechanism for cross-resistance, we investigated the effects on androgen receptor (AR) nuclear translocation of these compounds. METHODS: To identify cross-resistance, we determined the effects of docetaxel, cabazitaxel, abiraterone and enzalutamide on cell viability in prostate cancer cell lines with acquired resistance to abiraterone and enzalutamide. Time-lapse confocal microscopy was used to study the dynamics of AR nuclear translocation. RESULTS: We observed impaired efficacy of docetaxel, cabazitaxel and enzalutamide in the abiraterone-resistant cell line, compared to the non-resistant cell line, providing evidence for in vitro cross-resistance. Impaired efficacy of docetaxel, cabazitaxel and abiraterone was observed in the enzalutamide-resistant cell line. Furthermore, docetaxel and cabazitaxel inhibited AR nuclear translocation, which was also observed for abiraterone and enzalutamide. CONCLUSIONS: In conclusion we found substantial preclinical evidence for cross-resistance between the taxanes docetaxel and cabazitaxel, and AR targeting agents abiraterone and enzalutamide. Since these

compounds all interfere with AR-signalling, this strongly suggests a common mechanism of action, and thus a potential mechanism for cross-resistance in mCRPC.

[524]

**TÍTULO / TITLE:** - Renal Infarction Secondary to Invasive Aspergillosis in a 5-Year-Old Girl With Acute Lymphoblastic Leukemia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pediatr Hematol Oncol. 2013 Oct 16.

●● Enlace al texto completo (gratis o de pago)

[1097/MPH.0000000000000010](#)

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**RESUMEN / SUMMARY:** - Aspergillus species have angioinvasive properties and can involve extrapulmonary organs by hematogenous spread from the lungs. However, renal involvement by Aspergillus is uncommon and is usually associated with the formation of abscesses. We report an unusual case of invasive renal aspergillosis presenting with extensive renal infarction in a 5-year-old girl with acute lymphoblastic leukemia. This case emphasizes the fact that renal aspergillosis initially presents with only renal infarction, and metastatic-embolism by invasive aspergillosis should be considered in differential diagnosis for any focal lesion of kidney in a patient with leukemia.

[525]

**TÍTULO / TITLE:** - Cabozantinib: a novel agent with a dual mechanism of action for castration-resistant prostate carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Chemother Pharmacol. 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [1007/s00280-013-2343-2](#)

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**RESUMEN / SUMMARY:** - The landscape of castration-resistant prostate carcinoma has changed completely in the last few years, with the approval of four new agents with proven benefit in overall survival. Abiraterone, cabazitaxel, enzalutamide and radium-223 dichloride have been added to the armamentarium of available agents for the treatment of these patients. We still lack information about which agent works best in an individual patient and how to optimally use them in a sequential strategy. Cabozantinib, a targeted agent against MET and vascular endothelial growth factor receptor-2, has shown promising results and could become the first targeted therapy to be approved for castration-resistant prostate carcinoma. This paper reviews the clinical development of cabozantinib in prostate cancer and future research possibilities for this drug.

[526]

**TÍTULO / TITLE:** - Eicosanoid post-mortem induction in kidney tissue is prevented by microwave irradiation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostaglandins Leukot Essent Fatty Acids. 2013 Oct;89(5):313-8. doi: 10.1016/j.plefa.2013.09.005. Epub 2013 Sep 16.

●● Enlace al texto completo (gratis o de pago) [1016/j.plefa.2013.09.005](#)

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**RESUMEN / SUMMARY:** - Previously, we, and others, have demonstrated a rapid and significant post-mortem increase in brain prostanoid (PG) levels analyzed without microwave fixation, and this is not the result of PG trapping or destruction in microwave-irradiated brain tissue. In the present study, we demonstrate a dramatic increase in kidney eicosanoid levels when analyzed without microwave fixation which was mainly accounted for by the 142-, 81-, and 62-fold increase in medullary 6-ketoPGF1alpha, PGE2, and PGF2alpha, levels, respectively, while PGD2 and TXB2 levels were increased ~7-fold. Whole kidney and cortex PG were also significantly increased in non-microwaved tissue, but at lesser extent. Arachidonic acid and the lipoxygenase products hydroxyeicosatetraenoic acids (HETE) were also induced in whole kidney, cortex, and medulla 1.5- to 5.5-fold depending upon tissue and metabolite. Cyclooxygenase inhibition with indomethacin decreased PG mass in non-microwaved tissue to basal levels, however HETE and arachidonic acid were not decreased. These data demonstrate the critical importance of kidney tissue fixation to limiting artifacts during kidney eicosanoid analysis.

[527]

**TÍTULO / TITLE:** - Screening for Prostate Cancer in New York's Skid Row: History and Implications.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Public Health. 2013 Oct 17.

●● Enlace al texto completo (gratis o de pago) [2105/AJPH.2013.301446](#)

**AUTORES / AUTHORS:** - Aronowitz R

**INSTITUCIÓN / INSTITUTION:** - Robert Aronowitz is with the Departments of the History and Sociology of Science and Family Medicine and Community Practice, University of Pennsylvania, Philadelphia.

**RESUMEN / SUMMARY:** - The Bowery series, open perineal biopsies performed on more than 1200 alcoholic men recruited from homeless shelters in New York City's Bowery section, began in 1951 and persisted for more than a decade. If frozen sections revealed prostate cancer, men typically underwent radical perineal prostatectomy, orchiectomy, and diethylstilbestrol treatment. This poorly informed, vulnerable population was subjected to health risks that investigators knew others would not accept. Although the knowledge produced had little impact on practice, the Bowery practices foreshadowed and have troubling continuities with later developments. Currently, more than a million American men each year undergo prostatic biopsies. But the efficacy of prostate-specific antigen screening and the

treatment that typically follows has never been established. The Bowery series and subsequent developments are part of one continuous story of how medical and lay people came to believe in the efficacy of population screening followed by aggressive treatment without solid supporting scientific evidence. (Am J Public Health. Published online ahead of print October 17, 2013:e1-e8. doi:10.2105/AJPH.2013.301446).

[528]

**TÍTULO / TITLE:** - Role of natural and adaptive immunity in renal cell carcinoma response to VEGFR-TKIs and mTOR inhibitor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Oct 2. doi: 10.1002/ijc.28503.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28503](#)

**AUTORES / AUTHORS:** - Santoni M; Berardi R; Amantini C; Burattini L; Santini D; Santoni G; Cascinu S

**INSTITUCIÓN / INSTITUTION:** - Medical Oncology AOU Ospedali Riuniti, Polytechnic University of the Marche Region, Ancona, Italy.

**RESUMEN / SUMMARY:** - Angiogenesis and immunosuppression work hand-in-hand in the renal cell carcinoma (RCC) microenvironment. Tumor growth is associated with impaired antitumor immune response in RCC, which involves T cells, natural killer cells, dendritic cells (DCs) and macrophages. Vascular endothelial growth factor receptor (VEGFR), such as sorafenib, sunitinib, pazopanib and axitinib, and mammalian target of rapamycin (mTOR) inhibitors, such as temsirolimus and everolimus, do exert both antiangiogenic and immunomodulatory functions. Indeed, these agents affect neutrophil migration, as well as T lymphocyte-DC cross-talk, DC maturation and immune cell metabolism and reactivity. In this review, we overview the essential role of innate and adaptive immune response in RCC proliferation, invasion and metastasis and the relationship between tumor-associated immune cells and the response to targeted agents approved for the treatment of metastatic RCC.

[529]

**TÍTULO / TITLE:** - PI3K/AKT pathway activation in bladder carcinogenesis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Cancer. 2013 Oct 7. doi: 10.1002/ijc.28518.

●● Enlace al texto completo (gratis o de pago) [1002/ijc.28518](#)

**AUTORES / AUTHORS:** - Calderaro J; Rebouissou S; de Koning L; Masmoudi A; Herault A; Dubois T; Maille P; Soyeux P; Sibony M; de la Taille A; Vordos D; Lebreton T; Radvanyi F; Allory Y

**INSTITUCIÓN / INSTITUTION:** - APHP, Groupe Hospitalier Henri Mondor, Departement de Pathologie, 51 avenue du Mal-de-Lattre-de-Tassigny, 94010, Creteil, France; INSERM, U955, Institut Mondor de Recherche Biomedicale, 94010, Creteil, France; Universite Paris-Est Creteil, 94010, Creteil, France.

**RESUMEN / SUMMARY:** - The PI3K/AKT pathway is considered to play a major role in bladder carcinogenesis, but its relationships with other molecular alterations observed in bladder cancer remain unknown. We investigated PI3K/AKT pathway activation in a series of human bladder urothelial carcinomas (UC) according to PTEN expression, PTEN deletions and FGFR3, PIK3CA, KRAS, HRAS, NRAS and TP53 gene mutations.

The series included 6 normal bladder urothelial samples and 129 UC (Ta n = 25, T1 n = 34, T2-T3-T4 n = 70). Expression of phospho-AKT (pAKT), phospho-S6-Ribosomal Protein (pS6) (one downstream effector of PI3K/AKT pathway) and PTEN was evaluated by reverse phase protein Array. Expression of miR-21, miR-19a and miR-222, known to regulate PTEN expression, was also evaluated. pAKT expression levels were higher in tumors than in normal urothelium ( $p < 0.01$ ), regardless of stage and showed a weak and positive correlation with pS6 (Spearman coefficient  $RS = 0.26$ ;  $p = 0.002$ ). No association was observed between pAKT or pS6 expression and the gene mutations studied. PTEN expression was decreased in PTEN-deleted tumors, and in T1 ( $p = 0.0089$ ) and T2-T3-T4 ( $p < 0.001$ ) tumors compared to Ta tumors; it was also negatively correlated with miR-19a ( $RS = -0.50$ ;  $p = 0.0088$ ) and miR-222 ( $RS = -0.48$ ;  $p = 0.0132$ ), but not miR-21 ( $RS = -0.27$ ;  $p = 0.18$ ) expression. pAKT and PTEN expressions were not negatively correlated, and, on the opposite, a positive and moderate correlation was observed in Ta ( $RS = 0.54$ ;  $p = 0.0056$ ) and T1 ( $RS = 0.56$ ;  $p = 0.0006$ ) tumors. Our study suggests that PI3K/AKT pathway activation occurs in the entire spectrum of bladder UC regardless of stage or known most frequent molecular alterations, and independently of low PTEN expression.

[530]

**TÍTULO / TITLE:** - Regional Variation in Quality of Prostate Cancer Care.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 18. pii: S0022-5347(13)05683-8. doi: 10.1016/j.juro.2013.10.066.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.066](http://1016/j.juro.2013.10.066)

**AUTORES / AUTHORS:** - Schroeck FR; Kaufman SR; Jacobs BL; Skolarus TA; Hollingsworth JM; Shahinian VB; Hollenbeck BK

**INSTITUCIÓN / INSTITUTION:** - Division of Health Services Research(a), Department of Urology, University of Michigan, 1500 E Medical Center Drive, Ann Arbor, MI, 48109; Division of Urologic Oncology(b), Department of Urology, University of Michigan, 1500 E Medical Center Drive, Ann Arbor, MI, 48109.

**RESUMEN / SUMMARY:** - **PURPOSE:** Despite the endorsement of several quality measures for prostate cancer by the National Quality Forum and the Physician Consortium for Performance Improvement, how consistently physicians adhere to these measures has not been examined. We evaluated regional variation in adherence to these quality measures in order to identify targets for future quality improvement. **MATERIALS AND METHODS:** For this retrospective cohort study, we used Surveillance, Epidemiology, and End Results (SEER) -Medicare data for 2001-2007 to identify 53,614 patients with newly diagnosed prostate cancer. Patients were assigned to 661 regions (Hospital Service Areas [HSAs]). Hierarchical generalized linear models were used to examine reliability adjusted regional adherence to the endorsed quality measures. **RESULTS:** Adherence at the patient level was highly variable, ranging from 33% for treatment by a high-volume provider to 76% for receipt of adjuvant androgen deprivation therapy while undergoing radiotherapy for high-risk cancer. Additionally, there was considerable regional variation in adherence to several measures, including pretreatment counseling by both a urologist and radiation oncologist (range 9% to 89%,  $p < 0.001$ ), avoiding overuse of bone scans in low-risk cancer (range 16% to 96%,  $p < 0.001$ ), treatment by a high-volume provider (range 1% to 90%,  $p < 0.001$ ), and

follow-up with radiation oncologists (range 14% to 86%,  $p < 0.001$ ). CONCLUSIONS: We found low adherence rates for most established prostate cancer quality of care measures. Within most measures, regional variation in adherence was pronounced. Measures with low adherence and a large amount of regional variation may be important low-hanging targets for quality improvement.

[531]

**TÍTULO / TITLE:** - Somatic copy number alterations by whole exome sequencing implicates YWHAZ and PTK2 in castration-resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Pathol. 2013 Sep 23. doi: 10.1002/path.4274.

●● [Enlace al texto completo \(gratis o de pago\) 1002/path.4274](#)

**AUTORES / AUTHORS:** - Menon R; Deng M; Ruenauer K; Queisser A; Offermann A; Boehm D; Vogel W; Scheble V; Fend F; Kristiansen G; Wernert N; Oberbeckmann N; Biskup S; Rubin MA; Shaikhibrahim Z; Perner S

**INSTITUCIÓN / INSTITUTION:** - Department of Prostate Cancer Research, University Hospital of Bonn, Bonn, Germany; Institute of Pathology, University Hospital of Bonn, Bonn, Germany.

**RESUMEN / SUMMARY:** - Castration-resistant prostate cancer (CRPC) is the most aggressive form of prostate cancer (PCa) and remains a significant therapeutic challenge. The key to the development of novel therapeutic targets for CRPC is to decipher the molecular alterations underlying this lethal disease. The aim of our study was to identify therapeutic targets for CRPC by assessing somatic copy number alterations (SCNA) by whole exome sequencing on five CRPC/normal paired formalin fixed paraffin embedded (FFPE) samples using the SOLiD4 next generation sequencing (NGS) platform. Data were validated using fluorescence in-situ hybridization (FISH) on a PCa progression cohort. PTK2 and YWHAZ amplification, mRNA and protein expression were determined in selected PCa cell lines. Effects of PTK2 inhibition using TAE226 inhibitor and YWHAZ knockdown on cell proliferation and migration were tested in PC3 cells in vitro. In a larger validation cohort, the amplification frequency of YWHAZ was 3% in localized PCa and 48% in CRPC, whereas PTK2 was amplified in 1% of localized PCa and 35% in CRPC. YWHAZ knockdown and PTK2 inhibition significantly affected cell proliferation and migration in the PC3 cells. Our findings suggest that inhibition of YWHAZ and PTK2 could delay the progression of the disease in CRPC patients harboring amplification of the latter genes. Furthermore, our validated whole exome sequencing data shows that FFPE tissue could be a promising alternative for SCNA screening using next generation sequencing technologies.

[532]

**TÍTULO / TITLE:** - Role of focal salvage ablative therapy in localised radiorecurrent prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 13.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1100-9](#)

**AUTORES / AUTHORS:** - Kanthabalan A; Arya M; Punwani S; Freeman A; Haroon A; Bomanji J; Emberton M; Ahmed HU

**INSTITUCIÓN / INSTITUTION:** - Division of Surgery and Interventional Science, UCL, London, UK, [ana-k@doctors.org.uk](mailto:ana-k@doctors.org.uk).

**RESUMEN / SUMMARY:** - Up to one-third of men can fail radical external beam radiotherapy for primary prostate cancer. Most of these men have expectant management with delayed hormones. However, around half of these men have localised recurrence. Challenges remain in identifying such men accurately, in order to enable them to undergo local salvage therapy which is potentially curative. Currently, this includes radical prostatectomy, brachytherapy and ablative whole-gland therapies, such as cryotherapy and high intensity focused ultrasound, all of which can carry significant morbidity. New approaches may involve targeting the area of recurrence alone-focal salvage therapy-in order to reduce tissue damage and thus reduce morbidity. This requires accurate localisation of intraprostatic recurrent disease and precision targeted ablation.

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[533]

**TÍTULO / TITLE:** - Induction Chemotherapy Followed by Surgery in Node Positive Bladder Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 15. pii: S0090-4295(13)01254-5. doi: 10.1016/j.urology.2013.08.082.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.082](http://1016/j.urology.2013.08.082)

**AUTORES / AUTHORS:** - Meijer RP; Mertens LS; van Rhijn BW; Bex A; van der Poel HG; Meinhardt W; Kerst JM; Bergman AM; Fiiole-Bruining A; van Werkhoven E; Horenblas S

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The Netherlands Cancer Institute, Amsterdam, The Netherlands; Department of Urology, University Medical Center Utrecht, The Netherlands. Electronic address: [rpmeijer111@yahoo.com](mailto:rpmeijer111@yahoo.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate the outcome and prognostic factors of patients with node positive bladder cancer (NPBC), who were eligible for surgery and treated with induction chemotherapy. METHODS: All consecutive patients with NPBC, who were treated with at least 2 cycles of induction chemotherapy and initially scheduled for surgery, between 1990 and 2012, were identified from an institutional bladder cancer database. Induction chemotherapy consisted of MVAC (methotrexate, vinblastine, doxorubicin, and cisplatin) or gemcitabine with cisplatin (Gem/Cis) or carboplatin (Gem/Carbo). RESULTS: One hundred forty-nine patients with NPBC (mean age, 60 years; range, 31-79) were treated with induction chemotherapy. Median cancer-specific survival (CSS) was 20 months and 5-year CSS 29.2%. In case of complete pathologic response to induction chemotherapy (N = 40; 26.8%), median CSS was 127 months and 5-year CSS 63.5% (P <.0001). Clinical and pathologic responses to chemotherapy were predictive parameters with respect to CSS and recurrence-free survival. Combined local and nodal responses resulted in a significantly better outcome, compared with isolated nodal or local response (P <.0001). CONCLUSION: Prognosis for NPBC remains poor despite the use of induction chemotherapy. Nevertheless, in the present series, 1 of 4 patients showed complete pathologic response to induction chemotherapy with subsequently a

significant CSS benefit (median CSS 127 months and 5-year CSS 63.5%). Clinical and pathologic responses to chemotherapy are predictive parameters for outcome.

[534]

**TÍTULO / TITLE:** - Case-control study on perfluorinated alkyl acids (PFAAs) and the risk of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Environ Int. 2013 Nov 15;63C:35-39. doi: 10.1016/j.envint.2013.10.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.envint.2013.10.005](http://1016/j.envint.2013.10.005)

**AUTORES / AUTHORS:** - Hardell E; Karrman A; van Bavel B; Bao J; Carlberg M; Hardell L

**INSTITUCIÓN / INSTITUTION:** - MTM Research Centre, School of Science and Technology, Orebro University, SE-70182 Orebro, Sweden. Electronic address: [elin.hardell@karolinska.se](mailto:elin.hardell@karolinska.se).

**RESUMEN / SUMMARY:** - Perfluorinated alkyl acids (PFAAs) are emerging environmental contaminants. Possible health effects for humans include increased risk for cancer but the knowledge is limited. In this study serum concentrations of certain perfluorinated sulfonates (PFHxS and PFOS) and carboxylates (PFOA, PFNA, PFDA, PFUnDA) were analyzed among 201 cases with prostate cancer and 186 population based control subjects. All blood samples were collected during 2007-2011 and no case had been treated with radio- or chemotherapy before enrolment in the study. The blood concentrations did not differ statistically significant between cases and controls except for PFDA with higher concentration among the cases ( $p=0.03$ ). Analyses based on Gleason score and prostate specific antigen (PSA) level did not change the results. Heredity was a risk factor for prostate cancer yielding odds ratio (OR)=1.8, 95% confidence interval (CI)=1.01-3.1. The analyzed PFAAs yielded statistically significant higher ORs in cases with a first degree relative reporting prostate cancer, e.g., PFOA gave OR=2.6, 95% CI=1.2-6.0 and PFOS gave OR=2.7, 95% CI=1.04-6.8. The results showed a higher risk for prostate cancer in cases with heredity as a risk factor. In further studies interaction between gene and environment should be considered.

[535]

**TÍTULO / TITLE:** - Down-regulation of RE-1 silencing transcription factor (REST) in advanced prostate cancer by hypoxia-induced miR-106b~25.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Exp Cell Res. 2013 Oct 14. pii: S0014-4827(13)00403-5. doi: 10.1016/j.yexcr.2013.09.020.

●● Enlace al texto completo (gratis o de pago) [1016/j.yexcr.2013.09.020](http://1016/j.yexcr.2013.09.020)

**AUTORES / AUTHORS:** - Liang H; Studach L; Hullinger RL; Xie J; Andrisani OM

**INSTITUCIÓN / INSTITUTION:** - Department of Basic Medical Sciences and Purdue University Center for Cancer Research, Purdue University, West Lafayette, IN 47907, USA. Electronic address: [coco.liang@roche.com](mailto:coco.liang@roche.com).

**RESUMEN / SUMMARY:** - Clinically aggressive prostate cancer (PCa) is linked to androgen resistance, metastasis, and expression of neuroendocrine markers. To understand mechanism(s) of neuroendocrine differentiation (NED) of PCa epithelia,

we compared neuronal differentiation occurring during embryogenesis, in primary cultures of neural crest (NC) cells, and NED in PCa cell lines (LNCaP and PC3). We demonstrate, hypoxia promotes neuronal and neuroendocrine differentiation of NC cells and PCa cells, respectively, by inducing the miR-106b~25 cluster. In turn, miR-106b~25 comprised of miR-106b, miR-93 and miR-25, down-regulates the transcriptional repressor REST, which represses neuron-specific protein-coding and miRNA genes. In prostate tumors of high Gleason score ( $\geq 8$ ), an inverse trend was observed between REST and miR-106b~25 induction. Employing miRNA PCR arrays, we identified miRNAs up-regulated by hypoxia in LNCaP cells and REST-knockdown in NC cells. Significantly, a subset of miRNAs (miR-9, miR-25, miR-30d and miR302b) is up-regulated in high Gleason score ( $\geq 8$ ) PCa, suggesting a mechanism by which NED contributes to PCa malignancy. We propose that loss of REST and induction of this set of microRNAs can serve as potential novel clinical markers of advanced PCa.

[536]

**TÍTULO / TITLE:** - Prostate volumes derived from MRI and volume-adjusted serum prostate-specific antigen: correlation with Gleason score of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Nov;201(5):1041-8. doi: 10.2214/AJR.13.10591.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.13.10591](#)

**AUTORES / AUTHORS:** - Karademir I; Shen D; Peng Y; Liao S; Jiang Y; Yousuf A; Karczmar G; Sammet S; Wang S; Medved M; Antic T; Eggner S; Oto A

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology, University of Chicago, 5841 S Maryland Ave, MC 2026, Chicago, IL 60637.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this article is to study relationships between MRI-based prostate volume and volume-adjusted serum prostate-specific antigen (PSA) concentration estimates and prostate cancer Gleason score. MATERIALS AND METHODS. The study included 61 patients with prostate cancer (average age, 63.3 years; range 52-75 years) who underwent MRI before prostatectomy. A semiautomated and MRI-based technique was used to estimate total and central gland prostate volumes, central gland volume fraction (central gland volume divided by total prostate volume), PSA density (PSAD; PSA divided by total prostate volume), and PSAD for the central gland (PSA divided by central gland volume). These MRI-based volume and volume-adjusted PSA estimates were compared with prostatectomy specimen weight and Gleason score by using Pearson® or Spearman (rho) correlation coefficients. RESULTS. The estimated total prostate volume showed a high correlation with reference standard volume ( $r = 0.94$ ). Of the 61 patients, eight (13.1%) had a Gleason score of 6, 40 (65.6%) had a Gleason score of 7, seven (11.5%) had a Gleason score of 8, and six (9.8%) had a Gleason score of 9 for prostate cancer. The Gleason score was significantly correlated with central gland volume fraction ( $\rho = -0.42$ ;  $p = 0.0007$ ), PSAD ( $\rho = 0.46$ ;  $p = 0.0002$ ), and PSAD for the central gland ( $\rho = 0.55$ ;  $p = 0.00001$ ). CONCLUSION. Central gland volume fraction, PSAD, and PSAD for the central gland estimated from MRI examinations show a modest but significant correlation with Gleason score and have the potential to contribute to personalized risk assessment for significant prostate cancer.

[537]

**TÍTULO / TITLE:** - MicroRNAs with Prognostic Potential for Metastasis in Clear Cell Renal Cell Carcinoma: A Comparison of Primary Tumors and Distant Metastases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg Oncol. 2013 Nov 18.

●● Enlace al texto completo (gratis o de pago) [1245/s10434-013-3361-3](#)

**AUTORES / AUTHORS:** - Heinzelmann J; Unrein A; Wickmann U; Baumgart S; Stapf M; Szendroi A; Grimm MO; Gajda MR; Wunderlich H; Junker K

**INSTITUCIÓN / INSTITUTION:** - Clinic of Urology and Pediatric Urology, Saarland University Medical Center, Homburg/Saar, Germany, [joana.heinzelmann@uks.eu](mailto:joana.heinzelmann@uks.eu).

**RESUMEN / SUMMARY:** - BACKGROUND: MicroRNAs (miRNAs) are regulators of gene expression in tumor development and progression. However, their influence on metastasis of clear cell renal cell carcinoma (ccRCC) is less understood. To determine the role of miRNAs in metastatic progression, miRNA expression in primary ccRCC was compared to distant metastases. METHODS: Total RNA of 53 primary ccRCCs, 35 distant metastases from lung, bone, brain, and abdomen, as well as 17 normal kidney tissues was isolated from fresh frozen tissue and formalin-fixed paraffin-embedded (FFPE) samples. The miRNA microarrays were performed based on fresh frozen tissue. Results were validated by quantitative reverse transcription-polymerase chain reaction (qRT-PCR) on fresh frozen tissue and FFPE samples. Real-time cell analyses and transwell invasion assays were carried out after transient transfection of microRNA-30c (miR-30c) in cell line 786-O. RESULTS: There were 14 miRNAs differently expressed in metastatic primary ccRCC and distant metastases compared to non-metastatic primary tumors. A strong correlation of miRNAs to progression-free- and cancer-specific 5-year-survival was determined. Specific miRNAs were differently expressed in distant metastases compared to primary ccRCC. A miRNA signature distinguished lung metastases from other metastatic sites. Overexpression of miR-30c increased adherence and decreased migration and invasion in the ccRCC cell line. CONCLUSIONS: MiRNAs are deregulated in metastatic primary ccRCC and could be promising prognostic markers for an early prediction of metastasis. Alterations in miRNA expression characterize distant metastases of different metastatic sites. Furthermore, our study suggests a functional role of miR-30c in metastasis. The miRNAs could be a helpful tool for individual follow-up prediction and personalized therapy selection.

[538]

**TÍTULO / TITLE:** - Mucinous Neoplasm Arising in a Urachal Cyst: A First in the Pediatric Population.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 12. pii: S0090-4295(13)01273-9. doi: 10.1016/j.urology.2013.09.034.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.09.034](#)

**AUTORES / AUTHORS:** - Gupta S; Bhaijee F; Harmon EP

**INSTITUCIÓN / INSTITUTION:** - Division of Pediatric Urology, Department of Surgery, University of Mississippi, Jackson, MS.

**RESUMEN / SUMMARY:** - Urachal anomalies are relatively uncommon and result because of incomplete obliteration of the urachus prenatally. In children, urachal cysts and sinuses constitute the common presentations, and these can sometimes become secondarily infected. Malignant involvement of the urachus in the pediatric population is rare, and primary urachal adenocarcinoma is reported exclusively in adults. Herein, we present the case of an adolescent girl with a low-grade mucinous neoplasm arising in a urachal cyst and discuss its significance.

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[539]

**TÍTULO / TITLE:** - Low-grade prostate cancers may not become aggressive with time.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer. 2013 Dec 1;119(23):4057. doi: 10.1002/cncr.28474.

●● [Enlace al texto completo \(gratis o de pago\) 1002/cncr.28474](#)

**AUTORES / AUTHORS:** - Printz C

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[540]

**TÍTULO / TITLE:** - Biomarkers of chemotherapy-induced testicular damage.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Fertil Steril. 2013 Nov;100(5):1192-202. doi: 10.1016/j.fertnstert.2013.09.017.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.fertnstert.2013.09.017](#)

**AUTORES / AUTHORS:** - Dere E; Anderson LM; Hwang K; Boekelheide K

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Rhode Island Hospital, Providence, Rhode Island; Department of Pathology and Laboratory Medicine, Brown University, Providence, Rhode Island.

**RESUMEN / SUMMARY:** - Increasing numbers of men are having or wanting children after chemotherapy treatment. This can be attributed to improvements in cancer therapies that increase survival. However, a side effect of most chemotherapy drugs is disruption of spermatogenesis and a drastic reduction in sperm count and quality. Although many men eventually recover reproductive function, as indicated by normal semen analyses, there is no clinical test that can assess sperm quality at a high level of sensitivity. Sperm fluorescent in situ hybridization (i.e., FISH) and several different tests for deoxyribonucleic acid (DNA) fragmentation have been used infrequently in clinical assessment. Animal models of chemotherapy-induced testicular damage are currently being used to identify potential molecular biomarkers that may be translatable to humans-these include sperm messenger RNAs, microRNAs, histone modifications, and DNA methylation patterns. Changes in these molecular measurements are quantitative and sensitive, potentially making them important clinical biomarkers of testicular function after chemotherapy treatment.

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[541]

**TÍTULO / TITLE:** - Utility of MRI features in differentiation of central renal cell carcinoma and renal pelvic urothelial carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Dec;201(6):1260-7. doi: 10.2214/AJR.13.10673.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.13.10673](https://doi.org/10.2214/AJR.13.10673)

**AUTORES / AUTHORS:** - Wehrli NE; Kim MJ; Matza BW; Melamed J; Taneja SS; Rosenkrantz AB

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology, NYU Langone Medical Center, 660 First Ave, New York, NY 10016.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this article is to evaluate the utility of various morphologic and quantitative MRI features in differentiating central renal cell carcinoma (RCC) from renal pelvic urothelial carcinoma. MATERIALS AND METHODS. Sixty patients (39 men and 21 women; mean [± SD] age, 65 ± 14 years; 48 with central RCC and 12 with renal pelvic urothelial carcinoma) who underwent MRI, including diffusion-weighted imaging (b values, 0, 400, and 800 s/mm<sup>2</sup>) and dynamic contrast-enhanced imaging, before histopathologic confirmation were included. Tumor T2 signal intensity and apparent diffusion coefficients (ADCs) were measured and normalized to muscle and CSF (hereafter referred to as normalized T2 signal and normalized ADC, respectively) and then were compared using receiver operating characteristic analysis. Also, two blinded radiologists independently assessed all tumors for various qualitative features, which were compared with the Fisher exact test and unpaired Student t test. RESULTS. Urothelial carcinoma exhibited significantly lower normalized ADC than did RCC (p = 0.008), but no significant difference was seen in ADC or normalized T2 signal intensity (p = 0.247-0.773). Normalized ADC had the highest area under the curve (0.757); normalized ADC below an optimal threshold of 0.451 was associated with sensitivity of 83% and specificity of 71% for diagnosing urothelial carcinoma. Features that were significantly more prevalent in urothelial carcinoma included global impression of urothelial carcinoma, location centered within the collecting system, collecting system defect, extension to the ureteropelvic junction, preserved renal shape, absence of cystic or necrotic areas, absence of hemorrhage, homogeneous enhancement, and hypovascularity (all p < 0.033). Increased T1 signal intensity suggestive of hemorrhage was significantly more prevalent in RCC (p = 0.02). Interreader agreement for the subjective features ranged from 61.7% to 98.3%. CONCLUSION. In addition to various qualitative MRI parameters, normalized ADC has utility in differentiating central RCC from renal pelvic urothelial carcinoma. Such differentiation may assist decisions regarding possible biopsy and treatment planning.

[542]

**TÍTULO / TITLE:** - Wilms' tumor gene 1 enhances nutlin-3-induced apoptosis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2014 Jan;31(1):131-6. doi: 10.3892/or.2013.2832. Epub 2013 Nov 1.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2832](https://doi.org/10.3892/or.2013.2832)

**AUTORES / AUTHORS:** - Lee SY; Choe YJ; Park JY; Lee SS; Kim YH; Shin SJ; Chung YJ; Kim HS

**INSTITUCIÓN / INSTITUTION:** - Department of Biochemistry, College of Medicine, The Catholic University of Korea, Seoul 137-701, Republic of Korea.

**RESUMEN / SUMMARY:** - Nutlin-3, a human double minute 2 (HDM2) antagonist, induces cell cycle arrest or apoptosis by upregulating p53 in cancer cells. WT1, the product of Wilms' tumor gene 1, has been shown to interact with p53, but the effect of WT1 on nutlin-3-induced apoptosis has yet to be examined. To address this issue, we analyzed the inhibitory effect of nutlin-3 on cell growth as a function of Wt1 expression status using a Wt1-inducible U2OS cell line. In the absence of Wt1 expression, nutlin-3 induced cell cycle arrest with marginal cytotoxicity. Furthermore, upon Wt1 expression, nutlin-3 exerted a marked degree of cell death, as evidenced by the accumulation of hypo-diploid cells and LDH release. During cell death induction, cytochrome c was released into the cytosol, and caspase-9 and -3 were activated, suggesting that an intrinsic apoptotic pathway may be involved in this cell death. Consistent with this, z-VAD-Fmk, a pan-caspase inhibitor and the overexpression of BCL-XL attenuated the cell death. Nutlin-3 caused an increase in the mRNA levels of both BCL-XL and BAK, as well as their corresponding protein levels in mitochondria. In the presence of Wt1, nutlin-3-induced BCL-XL expression was attenuated while the expression of nutlin-3-induced BAK was potentiated. Collectively, these results suggest that WT1 potentiates nutlin-3-induced apoptosis by downregulating the expression of BCL-XL while upregulating that of BAK, which leads to the activation of an intrinsic apoptotic pathway.

[543]

**TÍTULO / TITLE:** - Evidence of surfactant protein A and D expression decrement and their localizations in human prostate adenocarcinomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ren Fail. 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [3109/0886022X.2013.846831](#)

**AUTORES / AUTHORS:** - Kankavi O; Baykara M; Eren Karanis MI; Bassorgun CI; Ergin H; Ciftcioglu MA

**INSTITUCIÓN / INSTITUTION:** - Department of Biochemistry, Faculty of Veterinary Medicine, The University of Mehmet Akif Ersoy , Burdur , Turkey .

**RESUMEN / SUMMARY:** - Abstract Aim: Surfactant proteins (SP-A and SP-D) were originally described in the lung; however, they are also present in the prostate. Purpose of this study, therefore, was to determine how surfactant proteins are altered in prostate adenocarcinomas (PCa) and find out any connection exists between their expressions and their staining patterns, prostate-specific antigen (PSA) values, Gleason score, age, tumor volume and tumor, node, metastases (TNM) clinical stage. Methods: Thirty-five tissue samples were obtained during radical prostatectomy. All specimens were classified to three groups based on the Gleason score <7, 7 and Gleason score >7. Surfactant proteins' expressions were tested by immunohistochemical and Western blotting methods. Results: Immunoreactivity was detected in the cytoplasm from both basal cells and secretory epithelial cells in malignant and non-malignant areas. About 80% of the malignant basal cells were characterized as either weak or strong while non-malignant epithelial cells demonstrated strong immunoreactivity for SP-A. Also malignant (81.8%) and non-malignant cells (90.6%) were characterized as either weak or strong for SP-D. Decrement of SP-A and SP-D immunostaining tended to associate with an increasing Gleason score ( $p > 0.05$ ,  $p < 0.05$ ), tumor volume ( $p < 0.05$ ,  $p > 0.05$ ) and age ( $p >$

0.05,  $p > 0.05$ ). There was a strong positive correlation between Gleason score and tumor volume ( $p < 0.01$ ). Also, either none or weak SP-A and SP-D immunoreactivity was observed specimens with Gleason score 7 or higher. SP-A and SP-D reacted with 34 kDa (SP-A) and 43 kDa (SP-D) immunoreactive single bands were decreased in tumor tissues. Conclusions: The development of prostate cancer may be related to decreased level of surfactant protein A and D.

[544]

**TÍTULO / TITLE:** - Biobanking of derivatives from radical retropubic and robot-assisted laparoscopic prostatectomy tissues as part of the prostate cancer biorepository network.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Sep 21. doi: 10.1002/pros.22730.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pros.22730](#)

**AUTORES / AUTHORS:** - Darshan M; Zheng Q; Fedor HL; Wyhs N; Yegnasubramanian S; Lee P; Melamed J; Netto GJ; Trock BJ; De Marzo AM; Sfanos KS

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Johns Hopkins University School of Medicine, Baltimore, Maryland.

**RESUMEN / SUMMARY:** - BACKGROUND: The goal of the Prostate Cancer Biorepository Network (PCBN) is to develop a biorepository with high-quality, well-annotated specimens obtained in a systematic, reproducible fashion using optimized and standardized protocols, and an infrastructure to facilitate the growth of the resource and its wide usage by the prostate cancer research community. An emerging area of concern in the field of prostate cancer biobanking is an apparent shift in the proportion of surgical procedures performed for prostate cancer treatment from radical retropubic prostatectomy (RRP) to robot-assisted laparoscopic prostatectomy (RALP). Our study aimed to determine the potential impact of the RALP procedure on the detection of known prostate cancer biomarkers, and the subsequent suitability of RALP-derived specimens for prostate cancer biomarker studies. METHODS: DNA and RNA were extracted from RRP and RALP specimens. Quality assessment was conducted using spectrophotometric analysis and RNA was analyzed for RNA integrity number (RIN) and by real-time reverse-transcription PCR (qRT-PCR) for racemase, hepsin, ERG, TMPRSS2-ERG gene fusions, and the microRNAs miR-26a, miR-26b, miR-141, and miR-221. RESULTS: We demonstrate that extraction of derivatives from frozen tissues from RRP and RALP specimens yields samples of equally high quality as assessed by spectrophotometric and RIN analysis. Likewise, expression levels of genes analyzed by qRT-PCR did not differ between RRP and RALP-derived tissues. CONCLUSIONS: Our studies indicate that samples obtained from RALP specimens may be suitable for prostate cancer biomarker studies-an important finding given the current shift in surgical procedures for prostate cancer treatment. Prostate 9999: XX-XX, 2013. © 2013 Wiley Periodicals, Inc.

[545]

**TÍTULO / TITLE:** - The Prognostic Importance of Metastatic Site in Men with Metastatic Castration-resistant Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2014 Jan;65(1):3-6. doi: 10.1016/j.eururo.2013.09.024. Epub 2013 Oct 5.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.024](https://doi.org/10.1016/j.eururo.2013.09.024)

**AUTORES / AUTHORS:** - Pond GR; Sonpavde G; de Wit R; Eisenberger MA; Tannock IF; Armstrong AJ

**INSTITUCIÓN / INSTITUTION:** - Department of Oncology, McMaster University and Escarpment Cancer Research Institute, Hamilton, Ontario, Canada.

**RESUMEN / SUMMARY:** - The presence of visceral metastases is adversely prognostic in men with metastatic castration-resistant prostate cancer (mCRPC), but the prognostic impact of the site of visceral metastasis is unclear. Men with mCRPC in the TAX 327 phase 3 trial receiving docetaxel or mitoxantrone every 3 wk or weekly docetaxel, each with prednisone, were analyzed retrospectively to study the impact of the site of visceral metastasis on overall survival (OS). Patients were assessed for OS by site of metastases: liver with or without other sites, lung with or without bone or lymph nodes, bone plus lymph nodes, bone only, and lymph nodes only. Cox proportional hazards regression, adjusted for treatment and stratification factors, was performed. Men with liver metastases with or without other metastases had shorter median OS (10.0 mo; 95% confidence interval [CI], 5.4-11.5) than men with lung metastases with or without bone or nodal metastases (median OS: 14.4 mo; 95% CI, 11.5-22.4). Men with lymph node-only disease had the best median OS (26.7 mo; 95% CI, 22.3-34.2), followed by men with bone-only metastases (median OS: 19.0 mo; 95% CI, 18.2-20.7) and bone-plus-node disease (median OS: 15.7 mo; 95% CI, 14.4-17.2). Thus, pattern of spread including site of visceral metastasis confers a differential prognostic impact. These data require validation and may inform trial design and therapy.

[546]

**TÍTULO / TITLE:** - The Kallikrein Panel for prostate cancer screening: Its economic impact.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 26. doi: 10.1002/pros.22746.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22746](https://doi.org/10.1002/pros.22746)

**AUTORES / AUTHORS:** - Voigt JD; Zappala SM; Vaughan ED; Wein AJ

**INSTITUCIÓN / INSTITUTION:** - Medical Device Consultants of Ridgewood, LLC, Ridgewood, New Jersey.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Current diagnostic testing for prostate cancer results in numerous unnecessary biopsy procedures and creates a substantial financial burden. A statistical prediction model for prostate cancer has been developed, based on four Kallikrein markers in blood. This systematic review and meta-analysis examines the aggregated results from published studies of the Kallikrein Panel. **METHODS:** Literature searches to identify relevant studies were conducted. A meta-analysis of the results was performed using inverse variance, mean difference with corresponding 95% confidence intervals (CI). The results of the meta-analysis were used to assess the Kallikrein Panel's effect on healthcare costs. **RESULTS:** The Kallikrein Panel has been evaluated in more than 8,500 patients (2,780 with prostate cancer and 598 with high grade prostate cancer). Meta-analysis demonstrates a statistically significant improvement of 8-10% in predictive accuracy. In addition, 48% to

56% of current prostate biopsies could be avoided. Use of the Kallikrein Panel could result in annual US savings approaching \$1 billion. CONCLUSIONS: The Kallikrein Panel has the potential to improve patient outcomes and reduce costs. The panel provides significantly improved specificity. Because the Kallikrein Panel has been studied in a range of clinical settings, it is a test that could be readily and widely used in practice. Prostate © 2013 Wiley Periodicals, Inc.

[547]

**TÍTULO / TITLE:** - 5alpha-reductase type 3 enzyme in benign and malignant prostate.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 22. doi: 10.1002/pros.22745.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22745](#)

**AUTORES / AUTHORS:** - Titus MA; Li Y; Kozyreva OG; Maher V; Godoy A; Smith GJ; Mohler JL

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Roswell Park Cancer Institute, Buffalo, New York.

**RESUMEN / SUMMARY:** - BACKGROUND: Currently available 5alpha-reductase inhibitors are not completely effective for treatment of benign prostate enlargement, prevention of prostate cancer (CaP), or treatment of advanced castration-recurrent (CR) CaP. We tested the hypothesis that a novel 5alpha-reductase, 5alpha-reductase-3, contributes to residual androgen metabolism, especially in CR-CaP. METHODS: A new protein with potential 5alpha-reducing activity was expressed in CHO-K1 cells and TOP10 E. coli for characterization. Protein lysates and total mRNA were isolated from preclinical and clinical tissues. Androgen metabolism was assessed using androgen precursors and thin layer chromatography or liquid chromatography tandem mass spectrometry. RESULTS: The relative mRNA expression for the three 5alpha-reductase enzymes in clinical samples of CR-CaP was 5alpha-reductase-3 >> 5alpha-reductase-1 > 5alpha-reductase-2. Recombinant 5alpha-reductase-3 protein incubations converted testosterone, 4-androstene-3,17-dione (androstenedione) and 4-pregnene-3,20-dione (progesterone) to dihydrotestosterone, 5alpha-androstan-3,17-dione, and 5alpha-pregnan-3,20-dione, respectively. 5alpha-Reduced androgen metabolites were measurable in lysates from androgen-stimulated (AS) CWR22 and CR-CWR22 tumors and clinical specimens of AS-CaP and CR-CaP pre-incubated with dutasteride (a bi-specific inhibitor of 5alpha-reductase-1 and 2). CONCLUSION: Human prostate tissues contain a third 5alpha-reductase that was inhibited poorly by dutasteride at high androgen substrate concentration in vitro, and it may promote DHT formation in vivo, through alternative androgen metabolism pathways when testosterone levels are low. Prostate © 2013 Wiley Periodicals, Inc.

[548]

**TÍTULO / TITLE:** - Proteomic signatures of angiogenesis in androgen-independent prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Oct 26. doi: 10.1002/pros.22747.

●● Enlace al texto completo (gratis o de pago) [1002/pros.22747](#)

**AUTORES / AUTHORS:** - Karagiannis GS; Saraon P; Jarvi KA; Diamandis EP

**INSTITUCIÓN / INSTITUTION:** - Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, Ontario, Canada; Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, Toronto, Ontario, Canada.

**RESUMEN / SUMMARY:** - **INTRODUCTION:** The observation that angiogenesis, the process of new blood vessel formation, in healthy prostate and early prostate cancer is androgen-dependent gave rise to significant questions on how hypervascularization and increased angiogenesis is also achieved at the molecular level in advanced androgen-independent prostate cancer. The exact paracrine molecular network that is hardwired into the proteome of the endothelial and cancer subpopulations participating in this process remains partially understood. **METHODS:** Here, we interrogated the signaling pathways and the molecular functional signatures across the proteome of endothelial cells after interacting with various secretomes produced by androgen-dependent and -independent prostate cancer cells. **RESULTS:** We found the significant overexpression ( $P < 0.05$ ) of prominent markers of angiogenesis, such as vonWillebrand factor (vWF) (approximately 2.5-fold) and CD31 (approximately 2-fold) in HUVECs stimulated with conditioned media from the androgen-independent prostate cancer cell line PC3. By mining the proteome of PC3 conditioned media, we discovered a signature of chemokine CXC motif ligands (i.e., CXCL3, CXCL5, CXCL6 and CXCL8) that could potentially coordinate increased angiogenesis in androgen-independent prostate cancer and verified their increased expression ( $P < 0.05$ ) in both in vitro and xenograft models of androgen-independence. **DISCUSSION:** Our findings form the basis for understanding the regulation of crucial metastatic phenomena during the transition of androgen-dependent prostate cancer into the highly aggressive, androgen-independent state and provide further insight on potential therapeutic targets of cancer-related angiogenesis. Prostate © 2013 Wiley Periodicals, Inc.

[549]

**TÍTULO / TITLE:** - Evaluation of ERG responsive proteome in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate. 2013 Sep 21. doi: 10.1002/pros.22731.

●● Enlace al texto completo (gratuito o de pago) [1002/pros.22731](#)

**AUTORES / AUTHORS:** - Tan SH; Furusato B; Fang X; He F; Mohamed AA; Griner NB; Sood K; Saxena S; Katta S; Young D; Chen Y; Sreenath T; Petrovics G; Dobi A; McLeod DG; Sesterhenn IA; Saxena S; Srivastava S

**INSTITUCIÓN / INSTITUTION:** - Center for Prostate Disease Research, Department of Surgery, Uniformed Services University of the Health Sciences, Rockville, Maryland.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Gene fusion between TMPRSS2 promoter and the ERG proto-oncogene is a major genomic alteration found in over half of prostate cancers (CaP), which leads to aberrant androgen dependent ERG expression. Despite extensive analysis for the biological functions of ERG in CaP, there is no systematic evaluation of the ERG responsive proteome (ERP). ERP has the potential to define new biomarkers and therapeutic targets for prostate tumors stratified by ERG expression. **METHODS:** Global proteome analysis was performed by using ERG (+) and ERG (-) CaP cells isolated by ERG immunohistochemistry defined laser capture microdissection and by using TMPRSS2-ERG positive VCaP cells treated with ERG and control siRNA. **RESULTS:** We identified 1,196 and 2,190 unique proteins stratified by ERG status from prostate tumors and VCaP cells, respectively. Comparative

analysis of these two proteomes identified 330 concordantly regulated proteins characterizing enrichment of pathways modulating cytoskeletal and actin reorganization, cell migration, protein biosynthesis, and proteasome and ER-associated protein degradation. ERPs unique for ERG (+) tumors reveal enrichment for cell growth and survival pathways while proteasome and redox function pathways were enriched in ERPs unique for ERG (-) tumors. Meta-analysis of ERPs against CaP gene expression data revealed that Myosin VI and Monoamine oxidase A were positively and negatively correlated to ERG expression, respectively. CONCLUSIONS: This study delineates the global proteome for prostate tumors stratified by ERG expression status. The ERP data confirm the functions of ERG in inhibiting cell differentiation and activating cell growth, and identify potentially novel biomarkers and therapeutic targets. Prostate 9999: XX-XX, 2013. © 2013 Wiley Periodicals, Inc.

[550]

**TÍTULO / TITLE:** - Staging, surveillance, and evaluation of response to therapy in renal cell carcinoma: role of MDCT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Abdom Imaging. 2013 Sep 28.

- Enlace al texto completo (gratis o de pago) [1007/s00261-013-0037-1](#)

**AUTORES / AUTHORS:** - Ganeshan D; Morani A; Ladha H; Bathala T; Kang H; Gupta S; Lalwani N; Kundra V

**INSTITUCIÓN / INSTITUTION:** - Division of Diagnostic Imaging, Body Imaging Section, Unit 1473, The University of Texas MD Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX, 77030-4009, USA, [drdakshin@yahoo.co.in](mailto:drdakshin@yahoo.co.in).

**RESUMEN / SUMMARY:** - Renal cell carcinoma is the most common malignant renal tumor in the adults. Significant advances have been made in the management of localized and advanced renal cell carcinoma. Surgery is the standard of care and accurate pre-operative staging based on imaging is critical in guiding appropriate patient management. Besides staging, imaging plays a key role in the post-operative surveillance and evaluation of response to systemic therapies. Both CT and MR are useful in the staging and follow up of renal cell carcinoma, but CT is more commonly used due to its lower costs and wider availability. In this article, we discuss and illustrate the role of multi-detector CT in pre-operative staging, post-operative surveillance, and evaluation of response to systemic therapy in renal cell carcinoma.

[551]

**TÍTULO / TITLE:** - Cross-device automated prostate cancer localization with multiparametric MRI.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - IEEE Trans Image Process. 2013 Dec;22(12):5385-94.

**AUTORES / AUTHORS:** - Artan Y; Oto A; Yetik IS

**RESUMEN / SUMMARY:** - Prostate cancer localization using supervised classification techniques has aroused considerable interest in medical imaging community in recent years. However, it is crucial to have an accurate training data set for supervised classification techniques. Since different devices with, e.g., different protocols and/or field strengths cause different intensity profiles, each device/protocol must have an

accompanying training data set, which is very costly to obtain. It is highly desirable to adapt the existing classifier(s) trained for one device/protocol to help classify data coming from another device/protocol. In this paper, we propose a novel method that has the ability to design classifiers obtained from one imaging protocol and/or MRI device to be used on a data set from another protocol and/or imaging device. As an example problem, we consider prostate cancer localization with multiparametric MRI. We show that simple normalization techniques such as z-score are not sufficient for cross-device automated cancer localization. On the other hand, the method we have originally developed based on relative intensity allows us to successfully use a classifier obtained from one device to be applied on a test patient imaged with another device. Proposed method also allows us to employ T2-weighted MR images directly instead of an additional step to normalize T2-weighted images usually performed in an ad hoc manner when T2 maps are not available. To demonstrate the effectiveness of the proposed method, we use a multiparametric MRI data set acquired from 18 biopsy-confirmed cancer patients with two separate scanners: 1) 1.5-T (Excite HD) GE and 2) 1.5-T (Achieva) Philips Healthcare scanners. A comprehensive visual, quantitative, and statistical analysis of the results show that methods we have developed allow us to: 1) perform cross-device automated classification and 2) use T2-weighted images without an ad hoc subject-specific normalization.

[552]

**TÍTULO / TITLE:** - Cross-Device Automated Prostate Cancer Localization With Multiparametric MRI.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - IEEE Trans Image Process. 2013 Oct 17.

- Enlace al texto completo (gratis o de pago) [1109/TIP.2013.2285626](#)

**AUTORES / AUTHORS:** - Artan Y; Yetik I; Oto A

**RESUMEN / SUMMARY:** - Prostate cancer localization using supervised classification techniques has aroused considerable interest in medical imaging community in recent years. However, it is crucial to have an accurate training dataset for supervised classification techniques. Since different devices with e.g. different protocols and/or field strengths cause different intensity profiles, each device/protocol must have an accompanying training dataset which is very costly to obtain. It is highly desirable to adapt the existing classifier(s) trained for one device/protocol to help classify data coming from another device/protocol. In this paper, we propose a novel method that has the ability to design classifiers obtained from one imaging protocol and/or MRI device to be used on a dataset from another protocol and/or imaging device. As an example problem we consider prostate cancer localization with multiparametric MRI. We show that simple normalization techniques such as z-score are not sufficient for cross-device automated cancer localization. On the other hand, the method we have originally developed based on relative intensity allows us to successfully use a classifier obtained from one device to be applied on a test patient imaged with another device. Proposed method also allows us to employ T2-weighted MR images directly instead of an additional step to normalize T2-weighted images usually performed in an ad hoc manner when T2 maps are not available. To demonstrate the effectiveness of the proposed method, we use a multiparametric MRI dataset acquired from 18 biopsyconfirmed cancer patients with two separate scanners : (i) 1.5- T (Excite HD) GE

and (ii) 1.5-T (Achieva) Philips Healthcare scanners. A comprehensive visual, quantitative, and statistical analysis of the results show that methods we have developed allow us to, (i) perform cross-device automated classification, (ii) use T2-weighted images without an ad hoc subject-specific normalization.

[553]

**TÍTULO / TITLE:** - The impact of time-zero biopsy on early graft outcomes after living donor kidney transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplant Proc. 2013 Oct;45(8):2937-40. doi: 10.1016/j.transproceed.2013.08.081.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1016/j.transproceed.2013.08.081](#)

**AUTORES / AUTHORS:** - Lee AL; Kim YS; Lim BJ; Jeong HJ; Joo DJ; Kim MS; Huh KH

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Yonsei University College of Medicine, Seoul, Korea; The Research Institute for Transplantation, Yonsei University College of Medicine, Seoul, Korea.

**RESUMEN / SUMMARY:** - BACKGROUND: In contrast with deceased donor transplantation, the clinical significance of pathologic findings in time-zero biopsies after living donor kidney transplantation are rarely reported, due to the expectation that histologic findings and renal function are normal. The aim of this study was to identify subclinical pathologic findings in living donors and examine the effect on early graft renal function. METHODS: Between December 2006 and July 2011, 146 living-donor kidney transplant recipients were enrolled in this study. We retrospectively analyzed donor and recipient-related clinical parameters, and post-transplant 6 months and 1 year estimated glomerular filtration rate (eGFR) as early graft renal function. Time-zero biopsies were evaluated using the 2007 Banff criteria. RESULTS: Most abnormal histologic findings were of mild degree as determined by Banff scores. Global glomerulosclerosis (GS, 35.6%), tubular atrophy (CT, 36.3%), interstitial fibrosis (CI, 20.5%), vascular fibrous intimal thickening (CV, 4.1%), arteriolar hyaline thickening (AH, 14.4%), interstitial inflammation (I, 3.4%) were pathologic findings in time-zero biopsies. The univariate analysis revealed that donor age and gender were significantly associated with eGFR at post-transplant 6 months and at 1 year ( $P < .05$ ). Furthermore, GS and CT were significantly associated with early graft renal function ( $P < .05$ ). However, multivariate linear regression analysis showed only donor age was significantly associated with early graft renal function ( $P = .001$ ). CONCLUSION: A mild degree of subclinical, pathologic findings on time-zero biopsy did not affect early graft renal function in living-donor kidney transplantation.

[554]

**TÍTULO / TITLE:** - Urinary tuberculosis is associated with the development of urothelial carcinoma but not renal cell carcinoma: a nationwide cohort study in Taiwan.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 26;109(11):2933-40. doi: 10.1038/bjc.2013.538. Epub 2013 Oct 15.

●● [Enlace al texto completo \(gratis o de pago\)](#) [1038/bjc.2013.538](#)

**AUTORES / AUTHORS:** - Lien YC; Wang JY; Lee MC; Shu CC; Chen HY; Hsieh CH; Lee CH; Lee LN; Chao KM

**INSTITUCIÓN / INSTITUTION:** - Department of Internal Medicine, Taipei Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Taipei Branch, No. 289, Jianguo Road, Xindian District, New Taipei City 23142, Taiwan.

**RESUMEN / SUMMARY:** - Background:Obstructive uropathy and chronic urinary tract infection increase the risk of urinary tract cancer. Urinary tuberculosis (UTB) can cause chronic urinary tract inflammation, lead to obstructive uropathy, and potentially contribute to the development of urinary tract cancer. However, the association between UTB and urinary tract cancer has not been studied.Methods:This study enrolled 135 142 tuberculosis (TB) cases (male, 69%) from a nationwide health insurance research database in Taiwan and investigated the risk factors for urinary tract cancer, with emphasis on a history of UTB. The incidence of urinary tract cancer in the general population without TB was also calculated for comparison.Results:The TB patients had a mean age of 57.5+/-19.5 years. Of the 1287 UTB and 133 855 non-UTB patients, 15 (1.2%) and 396 (0.3%) developed urothelial carcinoma, respectively (P<0.001); and 2 (0.2%) and 96 (0.1%) developed renal cell carcinoma, respectively (P=0.240). Cox regression analysis revealed that age, male sex, end-stage renal disease, obstructive uropathy, arsenic intoxication, organ transplantation, and UTB (hazard ratio: 3.38 (2.01-5.69)) were independent risk factors for urothelial carcinoma. The hazard ratio of UTB was higher among female patients (5.26 (2.12-13.06)) than that among male patients (2.96 (1.57-5.60)).Conclusion:Urinary tuberculosis had a strong association with urothelial carcinoma, but not with renal cell carcinoma. In TB endemic areas, the urinary tract of TB patients should be scrutinised. It is also imperative that these patients be followed-up carefully in the post-treatment period, and urinalysis, ultrasonography or endoscopy should be an integral part of the follow-up.

[555]

**TÍTULO / TITLE:** - SDS SAMPLES PRE-TREATMENT IMPROVES DIRECT IDENTIFICATION OF URINARY TRACT PATHOGENS WITH MALDI-TOF MASS SPECTROMETRY.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Microbiol. 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [1128/JCM.01881-13](#)

**AUTORES / AUTHORS:** - Sanchez-Juanes F; Ruiz MS; Obregon FM; Gonzalez MC; Egido SH; de Frutos Serna M; Gonzalez-Buitrago JM; Munoz-Bellido JL

**INSTITUCIÓN / INSTITUTION:** - Unidad de Investigacion. Complejo Asistencial Universitario de Salamanca. España.

**RESUMEN / SUMMARY:** - We pretreated with SDS 71 urine samples with bacterial counts >105 CFU/mL and MALDI-TOF identification score<2, in order to minimize failure rates. Identification improved in 46.5% of samples, remained unchanged in 49.3%, and worsened in 4.2%. The improvement was more evident for Gram negatives (54.3%) than for Gram positives (32%).

[556]

**TÍTULO / TITLE:** - Ultrasound-guided intra-tumor injection of combined immunotherapy cures mice from orthotopic prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Immunol Immunother. 2013 Dec;62(12):1811-9. doi: 10.1007/s00262-013-1486-7. Epub 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago) [1007/s00262-013-1486-7](#)

**AUTORES / AUTHORS:** - Mauri G; Chiodoni C; Parenza M; Arioli I; Tripodo C; Colombo MP

**INSTITUCIÓN / INSTITUTION:** - Molecular Immunology Unit, Department of Experimental Oncology and Molecular Medicine, Fondazione IRCCS Istituto Nazionale Tumori, Via Amadeo 42, 20133, Milan, Italy.

**RESUMEN / SUMMARY:** - Intra-tumor injection of immunotherapeutic agents is often the most effective, likely because of concomitant modification of tumor microenvironment. We tested an immunotherapeutic regimen consisting of CpG oligonucleotides and of adenovirus-mediated gene delivery of CCL16 chemokine directly into orthotopically implanted prostate tumors by ultrasound-guided injection, followed by systemic administration of an anti-IL-10R antibody. This combination treatment induced rapid stromal rearrangement, characterized by massive leukocyte infiltration and large areas of necrosis, a scenario that eventually led to complete tumor rejection and systemic immunity in 75 % of the treated mice. In vivo T lymphocyte depletion experiments demonstrated that the efficacy of CCL16/CpG/anti-IL-10R combination treatment relies upon CD8 T lymphocytes whereas CD4 T cells are dispensable. The results underlie the feasibility of echo-guided local immunotherapy of tumors located in visceral organs that are not easily accessible.

[557]

**TÍTULO / TITLE:** - Racial Differences in Longitudinal Changes in Serum Prostate-specific Antigen Levels: The Olmsted County Study and the Flint Men's Health Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct 15. pii: S0090-4295(13)01068-6. doi: 10.1016/j.urology.2013.08.025.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.08.025](#)

**AUTORES / AUTHORS:** - Sarma AV; St Sauver JL; Jacobson DJ; McGree ME; Klee GG; Lieber MM; Girman CJ; Hollingsworth JM; Jacobsen SJ

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Michigan, Ann Arbor, MI. Electronic address: [asarma@umich.edu](mailto:asarma@umich.edu).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To determine the distribution of, and racial differences in, changes in prostate-specific antigen (PSA) from a population-based sample of men. **MATERIALS AND METHODS:** Data from 2 prospective cohort studies of a random sample of white men, aged 40-79 years in 1990, followed biennially through 2007, and African American men, aged 40-79 years in 1996, followed through 2000, were examined to assess the longitudinal changes in PSA concentrations. Serum PSA levels were determined at each examination for both cohorts and observations after a diagnosis of prostate cancer or treatment of benign prostatic hyperplasia were censored. The observed and estimated annual percentage of change in the serum PSA levels were examined by race. **RESULTS:** At baseline, the median PSA level in the white men did not differ from the median level observed in the African

American men (white men 0.9 ng/mL; African American men 0.9 ng/mL; P = .48). However, African American men had a much more rapid increase in the PSA level over time compared with the white men (median annual percent change in PSA for white men 3.6%/y, African American men 7.9%/y; P <.001). CONCLUSION: These data suggest that African American men have more rapid rates of change in the PSA levels over time. If the difference in the rate of changes between African American and white men is an early indicator of future prostate cancer diagnosis, earlier detection in African American men could help to alleviate the racial disparities in prostate cancer diagnosis and mortality.

[558]

**TÍTULO / TITLE:** - Relation of ETS transcription factor family member ERG, androgen receptor and topoisomerase 2beta expression to TMPRSS2-ERG fusion status in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Neoplasma. 2014;61(1):95-165.

**AUTORES / AUTHORS:** - Kolar Z; Burdova A; Jamaspishvili T; Bouchal J; Kucerova R; Bienova M; Kral M; Student V

**RESUMEN / SUMMARY:** - Fusion of TMPRSS2 with ERG in prostate cells is determined by double-strand DNA breaks induced by androgen signaling and transcription stress. The enzyme topoisomerase 2beta (TOP2B) mediating DNA processing, plays an important role in DNA cleavage. The aim of this study was to analyse expression of AR, TOP2B and ERG in relation to TMPRSS2-ERG gene rearrangement and relevant clinicopathological characteristics in prostate cancer (CaP). Immunohistochemical staining and FISH were used for investigation. ERG expression in prostate cell lesions positively correlated with levels of TMPRSS2-ERG fusion gene (p<0.0001). The most significant co-expression of ERG was found with AR in CaP (p=0.001). Significantly more frequent co-expression of ERG was also revealed with TOP2B (p=0.028). ERG protein expression did not correlate with CaP differentiation status as we found no significant differences in ERG expression for different Gleason categories. We demonstrated a statistically significant positive correlation between the percentage of cells with fusion gene TMPRSS2-ERG in CaP and metastatic potential of tumors (p=0.011). Besides these positive correlations of AR with ERG (p=0.001) and TOP2B with ERG (p=0.028), we also demonstrated a significant co-expression of AR with TOP2B (p=0.007) in CaP. There was a statistically significant increase in the TOP2B H-index in locally advanced CaP in comparison with localized tumors (p=0.046). ERG expression correlates with occurrence of TMPRSS2-ERG fusion and with AR-driven malignant transformation. The results indicate that detection of the TMPRSS2-ERG fusion gene and parallel immunohistochemical examination of AR, TOP2B and ERG has diagnostic significance and may be useful in assessing the biological character of the prostate cancer as well as selecting the best treatment. Keywords: androgen receptor; ERG; topoisomerase 2beta; TMPRSS2-ERG fusion; prostate cancer.

[559]

**TÍTULO / TITLE:** - Hepatitis C virus core antigen testing in liver and kidney transplant recipients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Viral Hepat. 2013 Nov 19. doi: 10.1111/jvh.12204.

●● Enlace al texto completo (gratis o de pago) [1111/jvh.12204](#)

**AUTORES / AUTHORS:** - Heidrich B; Pischke S; Helfritz FA; Mederacke I; Kirschner J; Schneider J; Raupach R; Jackel E; Barg-Hock H; Lehner F; Klemphauer J; von Hahn T; Cornberg M; Manns MP; Ciesek S; Wedemeyer H

**INSTITUCIÓN / INSTITUTION:** - Department of Gastroenterology, Hepatology and Endocrinology, Hannover Medical School, Hannover, Germany; Integrated Research and Treatment Center Transplantation (IFB-Tx), Hannover Medical School, Hannover, Germany.

**RESUMEN / SUMMARY:** - HCV RNA levels correlate with the long-term outcome of hepatitis C in liver transplant recipients. Nucleic acid testing (NAT) is usually used to confirm HCV reinfection and to examine viral loads after liver transplantation. HCV core antigen (HCVcoreAg) testing could be an alternative to NAT with some potential advantages including very low intra- and interassay variabilities and lower costs. The performance of HCVcoreAg testing in organ transplant recipients is unknown. We prospectively studied 1011 sera for HCV RNA and HCVcoreAg in a routine real-world setting including 222 samples obtained from patients after liver or kidney transplantation. HCV RNA and HCVcoreAg test results showed a consistency of 98% with a very good correlation in transplanted patients ( $r > 0.85$ ). The correlation between HCV RNA and HCVcoreAg was higher in sera with high viral loads and in samples from patients with low biochemical disease. Patients treated with tacrolimus showed a better correlation between both parameters than individuals receiving cyclosporine A. HCV RNA/HCVcoreAg ratios did not differ between transplanted and nontransplanted patients, and HCV RNA and HCVcoreAg kinetics were almost identical during the first days after liver transplantation. HCVcoreAg testing can be used to monitor HCV viral loads in patients after organ transplantation. However, the assay is not recommended to monitor antiviral therapies.

[560]

**TÍTULO / TITLE:** - Orally administered nicotine induces urothelial hyperplasia in rats and mice.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Toxicology. 2013 Nov 19. pii: S0300-483X(13)00304-1. doi: 10.1016/j.tox.2013.11.002.

●● Enlace al texto completo (gratis o de pago) [1016/j.tox.2013.11.002](#)

**AUTORES / AUTHORS:** - Dodmane PR; Arnold LL; Pennington KL; Cohen SM

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Microbiology, University of Nebraska Medical Center, 983135 Nebraska Medical Center, Omaha, NE 68198-3135, USA. Electronic address: [pdodmane@unmc.edu](mailto:pdodmane@unmc.edu).

**RESUMEN / SUMMARY:** - Tobacco smoking is a major risk factor for multiple human cancers including urinary bladder carcinoma. Tobacco smoke is a complex mixture containing chemicals that are known carcinogens in humans and/or animals. Aromatic amines a major class of DNA-reactive carcinogens in cigarette smoke, are not present at sufficiently high levels to fully explain the incidence of bladder cancer in cigarette smokers. Other agents in tobacco smoke could be excreted in urine and enhance the carcinogenic process by increasing urothelial cell proliferation. Nicotine is one such

major component, as it has been shown to induce cell proliferation in multiple cell types in vitro. However, in vivo evidence specifically for the urothelium is lacking. We previously showed that cigarette smoke induces increased urothelial cell proliferation in mice. In the present study, urothelial proliferative and cytotoxic effects were examined after nicotine treatment in mice and rats. Nicotine hydrogen tartrate was administered in drinking water to rats (52ppm nicotine) and mice (514ppm nicotine) for 4 weeks and urothelial changes were evaluated. Histopathologically, 7/10 rats and 4/10 mice showed simple hyperplasia following nicotine treatment compared to none in the controls. Rats had an increased mean BrdU labeling index compared to controls, although it was not statistically significantly elevated in either species. Scanning electron microscopic visualization of the urothelium did not reveal significant cytotoxicity. These findings suggest that oral nicotine administration induced urothelial hyperplasia (increased cell proliferation), possibly due to a mitogenic effect of nicotine and/or its metabolites.

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[561]

**TÍTULO / TITLE:** - Immunohistochemistry for the Novel Markers Glypican 3, PAX8, and p40 (DeltaNp63) in Squamous Cell and Urothelial Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Clin Pathol. 2013 Dec;140(6):872-80. doi: 10.1309/AJCP4NSKW5TLGTDS.

●● Enlace al texto completo (gratis o de pago) [1309/AJCP4NSKW5TLGTDS](#)

**AUTORES / AUTHORS:** - Gailey MP; Bellizzi AM

**INSTITUCIÓN / INSTITUTION:** - Dept of Pathology, University of Iowa Hospitals and Clinics, University of Iowa Carver College of Medicine, Iowa City, IA 52242; [andrew-bellizzi@uiowa.edu](mailto:andrew-bellizzi@uiowa.edu).

**RESUMEN / SUMMARY:** - Objectives: To examine squamous cell carcinomas (SCCs) from diverse anatomic sites and invasive urothelial carcinomas (UCs) for expression of the oncofetal antigen glypican 3 (GPC3), the paired box transcription factor PAX8, and the DeltaN isoform of p63 (p40). Methods: Immunohistochemistry for GPC3, PAX8, and p40 was performed on whole sections of 107 SCCs from 11 anatomic sites and 49 UCs; evaluation included extent and intensity of staining. Results: GPC3 was detected in 20% of SCCs and 12% of UCs and PAX8 in 3% of SCCs, limited to the uterine cervix, and 10% of UCs. p40 Was found in 99% of SCCs and 96% of UCs. Conclusions: GPC3 expression is frequent in SCC/UC, awareness of which should guard against an incorrect diagnosis of hepatocellular carcinoma, while PAX8, limited in distribution, may have some use in suggesting a cervical or urothelial tract origin in a metastatic squamotransitional carcinoma of unknown primary. There is no drop-off in sensitivity for the diagnoses of SCC or UC with DeltaNp63-specific immunohistochemistry, and if this performance can be extended to other applications, p40 may supplant the dominant “pan-p63” antibody clone.

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[562]

**TÍTULO / TITLE:** - The expanding role of MRI in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Dec;201(6):1229-38. doi: 10.2214/AJR.12.10178.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.12.10178](https://doi.org/10.2214/AJR.12.10178)

**AUTORES / AUTHORS:** - Murphy G; Haider M; Ghai S; Sreeharsha B

**INSTITUCIÓN / INSTITUTION:** - 1 Joint Department of Medical Imaging, Toronto General Hospital, 200 Elizabeth St, Toronto, ON, Canada M5G 2C4.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this article is to review the many evolving facets of MRI in the evaluation of prostate cancer. We will discuss the roles of multiparametric MRI, including diffusion-weighted MRI, dynamic contrast-enhanced MRI, and MR spectroscopy, as adjuncts to morphologic T2-weighted imaging in detection, staging, treatment planning, and surveillance of prostate cancer. CONCLUSION. Radiologists need to understand the advantages, limitations, and potential pitfalls of the different sequences to provide optimal assessment of prostate cancer.

[563]

**TÍTULO / TITLE:** - Increased SPHK1 expression is associated with poor prognosis in bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1275-0](https://doi.org/10.1007/s13277-013-1275-0)

**AUTORES / AUTHORS:** - Meng XD; Zhou ZS; Qiu JH; Shen WH; Wu Q; Xiao J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Southwest Hospital, The Third Military Medical University, No. 30, Gaotanyanzheng Street, Shapingba District, Chongqing, 40038, China, [mengxd1977@gmail.com](mailto:mengxd1977@gmail.com).

**RESUMEN / SUMMARY:** - Upregulation of sphingosine kinase 1 (SPHK1) protein has been reported to be associated with a poor prognosis in a variety of malignant tumors. However, the role of SPHK1 in bladder cancer (BC) has not been thoroughly elucidated. The purpose of this study was to assess SPHK1 expression and to explore its contribution to BC. Real-time quantitative reverse transcriptase-polymerase chain reaction (qRT-PCR) was conducted to detect SPHK1 mRNA expression in 37 pairs of fresh-frozen BC tissues and corresponding noncancerous tissues. Results showed that SPHK1 mRNA expression level in BC tissues was significantly higher than that in corresponding noncancerous tissues. To investigate the association between SPHK1 protein expression and clinicopathological characteristics of BC, immunohistochemistry (IHC) was performed in 153 archived paraffin-embedded BC samples. Interestingly, high SPHK1 expression was significantly associated with histologic grade ( $P = 0.045$ ) and tumor stage ( $P < 0.001$ ) of patients with BC. The Kaplan-Meier survival curve showed that patients with high SPHK1 expression had significantly reduced overall 5-year survival rates ( $P < 0.001$ ). Multivariate Cox regression analysis further suggested that the increased expression of SPHK1 was an independent poor prognostic factor for this disease. In conclusion, our data offer the convincing evidence for the first time that the increased expression of SPHK1 may be involved in the pathogenesis and progression of BC. SPHK1 might be a potential marker to predict the prognosis in BC.

[564]

**TÍTULO / TITLE:** - Clinical Features of Testicular Lymphoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Haematol. 2013 Nov 14;131(3):187-192.

●● Enlace al texto completo (gratis o de pago) [1159/000353379](#)

**AUTORES / AUTHORS:** - Shih HJ; Shih LY; Chang H; Wang PN; Wu JH; Kuo MC; Hung YS; Dunn P

**INSTITUCIÓN / INSTITUTION:** - Division of Hematology-Oncology, Department of Internal Medicine, Chang Gung Memorial Hospital, Taoyuan, Taiwan, ROC.

**RESUMEN / SUMMARY:** - Testicular lymphoma is a rare condition, so large scale prospective studies are difficult to conduct. Consensus regarding standard treatment is lacking. This study retrospectively reviewed 22 patients with testicular lymphoma. One patient with diffuse large B-cell lymphoma (DLBCL) was lost to follow-up after diagnosis. Two patients with Burkitt's lymphoma had poor outcomes regardless of treatment. Thus, we analyzed the clinical features, treatments, and outcomes of 19 patients with DLBCL. The median progression-free and overall survival was 28.3 and 36.3 months, respectively. A good response to treatment was a favorable prognostic factor. Because of the high relapse rate, the outcome is poor for testicular lymphoma. Therefore, long-term follow-up is strongly recommended. © 2013 S. Karger AG, Basel.

[565]

**TÍTULO / TITLE:** - Comparison of the incidence of de novo malignancy in liver or kidney transplant recipients: analysis of 2673 consecutive cases in a single center.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplant Proc. 2013 Oct;45(8):3019-23. doi: 10.1016/j.transproceed.2013.08.061.

●● Enlace al texto completo (gratis o de pago)

[1016/j.transproceed.2013.08.061](#)

**AUTORES / AUTHORS:** - Shin M; Moon HH; Kim JM; Park JB; Kwon CH; Kim SJ; Joh JW

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea.

**RESUMEN / SUMMARY:** - PURPOSE: An increased incidence of de novo malignancy (dM) is an established complication among solid organ transplant (SOT) recipients compared with the general population. The aims of this study were to describe the incidence and cumulative risk for development of dM among our transplanted population, depending on various clinical and pathologic variables. METHODS: We retrospectively reviewed the medical records and pathologic data of SOT recipients performed from February 1995 to December 2010. RESULTS: Among 2673 consecutive SOT recipients, the dM that developed in 66 (2.5%) patients included, 16 (0.6%; 24.2% of overall dM) lymphoid dM and 50 (1.9%; 75.8% of overall dM) nonlymphoid dM. Cumulative incidence of dM in liver was significantly higher than that in kidney transplant recipients. A significantly higher cumulative incidence of dM was observed among living donor versus deceased donor SOT. Although the more frequent development of lymphoid dM was observed during the first year posttransplantation, the cumulative risk of nonlymphoid dM increased year by year, reaching a substantially higher incidence than that of lymphoid dM beyond 5 years after SOT. Comparing the various immunosuppressive regimens, the cumulative incidence was greater among

the group with basiliximab induction. However, the hazard of occurrence was unaffected by whether tacrolimus or cyclosporine was used for maintenance immunosuppression. The increased risk of dM was not dependent on recipient age or gender. CONCLUSION: This study demonstrated distinctive cumulative incidences of dM in different clinical and pathologic settings.

[566]

**TÍTULO / TITLE:** - Outcome analysis of tumors in undescended testes—a single center experience of 15 years.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct;82(4):852-6. doi: 10.1016/j.urology.2013.05.050.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.05.050](#)

**AUTORES / AUTHORS:** - Saini AK; Regmi S; Seth A; Narayan R; Singh P; Dogra PN

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, All India Institute of Medical Sciences, New Delhi, India. Electronic address: [drsaini.ak@gmail.com](mailto:drsaini.ak@gmail.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: To present our experience in managing tumors in undescended testes (UDT) in the last 15 years at our institute, in an attempt to understand the tumor behavior and the optimum approach to management in these patients. METHODS: This is a retrospective review of all patients with tumors in UDT who had registered and undergone treatment at our institute in the last 15 years. The available records of 50 of these patients were reviewed with respect to the presentation, pathologic type, treatment schedule followed, and the survival and recurrence statistics. RESULTS: There were 23 patients with seminomatous and 27 with nonseminomatous germ cell tumors. The median follow-up was 21 months (range, 4-180). The 5-year recurrence-free survival was 77.5% in patients receiving chemotherapy first and 59.5% in patients being operated first. There were 4 disease-related deaths in our patients. The 5-year overall survival estimates were 100% for stage I disease, 93.75% for stage II disease, and 76.10% for stage III disease. CONCLUSION: Most patients with UDT still presented at a higher stage, that is, stage II or stage III disease. Patients receiving chemotherapy first had lesser recurrences than those being operated first. Overall survival was dependent on the stage at presentation and comparable with the rates commonly seen for germ cell tumors in the normally descended testes.

[567]

**TÍTULO / TITLE:** - Urinary outcomes are significantly affected by nerve sparing quality during radical prostatectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Dec;82(6):1348-54. doi: 10.1016/j.urology.2013.06.067. Epub 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.06.067](#)

**AUTORES / AUTHORS:** - Kaye DR; Hyndman ME; Segal RL; Mettee LZ; Trock BJ; Feng Z; Su LM; Bivalacqua TJ; Pavlovich CP

**INSTITUCIÓN / INSTITUTION:** - James Buchanan Brady Urological Institute, Johns Hopkins University School of Medicine, Baltimore, MD.

**RESUMEN / SUMMARY:** - OBJECTIVE: To assess the effect of nerve sparing (NS) quality on self-reported patient urinary outcomes after radical prostatectomy. METHODS: A total of 102 preoperatively potent men underwent laparoscopic or robotic radical prostatectomy; NS was prospectively graded at surgery using a 0-4 scale/neurovascular bundle. Urinary functional outcomes were measured by validated Expanded Prostate Cancer Index Composite questionnaire at baseline and follow-up time points (1, 3, 6, 9, and 12 months) in 99 men who underwent various degrees of NS. Mixed linear regression was used to analyze the effect of NS quality and other clinical factors on urinary outcomes. RESULTS: Patients with at least 1 neurovascular bundle spared completely, along with its supportive tissues (NS grade 4/4), noted significantly improved Expanded Prostate Cancer Index Composite urinary functional and continence outcomes as early as 1 month postoperatively and up to 12 months. Significantly less urinary bother was also noted in these men by 9-12 months postoperatively. Multivariate analysis revealed that bilateral or unilateral excellent NS (at least 1 bundle graded 4/4), increasing time from surgery, young patient age, and lower body mass index positively and significantly affected urinary functional outcomes, including pad use. Men who received excellent unilateral NS recovered urinary function about as well as men who had both neurovascular bundles spared in similar fashion. CONCLUSION: The quality of NS significantly influences patient-defined urinary functional convalescence. Completely sparing at least 1 neurovascular bundle along with its supportive tissues has a dramatic effect on the recovery of urinary continence and quality of life in preoperatively potent men.

[568]

**TÍTULO / TITLE:** - Long-term follow-up of International Prostate Symptom Score (IPSS) in men following prostate brachytherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 19.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1188-y](#)

**AUTORES / AUTHORS:** - Li X; Fang D; Cooperberg MR; Whitson JM; Lue TF; Zhou L; Shinohara K

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, UCSF Helen Diller Family Comprehensive Cancer Center, University of California, 1600 Divisadero St, Box 1695, San Francisco, CA, 94143-1695, USA, [pineneedle@sina.com](mailto:pineneedle@sina.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: To investigate variation in the International Prostate Symptom Score (IPSS) in men following prostate brachytherapy. METHODS: From January 2004 to November 2009, 524 consecutive patients underwent prostate brachytherapy either alone or in combination with external beam radiation therapy for T1c-T3b prostate cancer. The IPSS was assessed preimplant and at 1, 6, 12, 24, 36, and 48 months after treatment. Clinical and treatment-related factors were assessed for correlations with the IPSS increase. RESULTS: The mean preimplant IPSS was 7.4, with the greatest mean score of 16.0 at 1 month. At 6 months, the mean total IPSS had decreased to 11.5, but it was still statistically significantly greater than that at baseline (<0.001). At 12 months, the IPSS was decreased to 8.6, slightly greater than baseline (p = 0.001). The IPSS of 45.4 % (69/152) patients gradually returned to preimplant levels and that of 71.1 % (108/152) patients returned to within 3 points of the baseline at 24 months. At 24, 36, and 48 months after seed implantation, the IPSS

was 8.6, 7.7, and 8.2, respectively, and none of these values differed statistically significantly from baseline ( $p > 0.05$ ). Sixteen patients (3.1 %) showed AUR, and 11 patients required catheterization. On univariate and multivariate analyses, the IPSS increase was best predicted by lower preimplant IPSS. CONCLUSION: In our series, IPSS after prostate brachytherapy peaked at 1 month and gradually returned to approximately baseline at 24 months. The IPSS increase was best predicted by lower preimplant IPSS.

[569]

**TÍTULO / TITLE:** - Prostate Type Epithelial Polyps of Urogenital Tract: A Series of 3 Cases and Literature Review.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 22. pii: S0090-4295(13)01313-7. doi: 10.1016/j.urology.2013.10.009.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.10.009](#)

**AUTORES / AUTHORS:** - Haroon S; Uddin N

**INSTITUCIÓN / INSTITUTION:** - The Department of Pathology and Microbiology, Aga Khan University, Karachi, Pakistan. Electronic address: [saroona.haroon@aku.edu](mailto:saroona.haroon@aku.edu).

**RESUMEN / SUMMARY:** - OBJECTIVE: To present clinicopathologic and immunohistochemical features of 3 cases of rare and unusual condition of urogenital tract, prostatic epithelial polyps situated in various parts of the urinary tract, with a heterogeneous presentation and a benign behavior. METHODS: Detailed data on 3 patients with polyps in the urinary tract presented from January 2008 to December 2012 were reviewed, and the clinicopathologic characteristics of the patients and disease along with various diagnostic and treatment modalities were recorded. RESULTS: All the 3 patients were aged older than 45 years. The presenting symptom hematuria was common to each patient. One patient had polypoidal growth in preprostatic (intramural) urethra; the other 2 had polyps in bladder. Each patient had other urogenital tract disease, 2 were known case of benign prostatic hyperplasia, and 1 had past history of urinary bladder carcinoma. Clinically, each of the case was misdiagnosed as aggressive lesions; however, after histopathologic diagnosis, management was undertaken according to benign result. No recurrence or metastasis was observed to date. Immunohistochemical stain prostate-specific antigen was positive in the epithelium. All 3 patients were recurrence-free on follow-up. CONCLUSION: The prostate type epithelial polyps are rare in urinary bladder and bladder urethra and are frequently associated with concurrent pathologies of urogenital tract. These are benign conditions with differential of other benign and malignant disorders.

[570]

**TÍTULO / TITLE:** - Renal cell carcinoma with smooth muscle stroma lacks chromosome 3p and VHL alterations.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mod Pathol. 2013 Nov 8. doi: 10.1038/modpathol.2013.180.

●● Enlace al texto completo (gratis o de pago) [1038/modpathol.2013.180](#)

**AUTORES / AUTHORS:** - Martignoni G; Brunelli M; Segala D; Gobbo S; Borze I; Atanesyan L; Savola S; Barzon L; Masi G; Tardanico R; Zhang S; Eble JN; Chilosi M; Bohling T; Cheng L; Delahunt B; Knuutila S

**INSTITUCIÓN / INSTITUTION:** - 1] Department of Pathology and Diagnostics, University of Verona, Verona, Italy [2] Anatomia Patologica, Pederzoli Hospital, Peschiera, Verona, Italy.

**RESUMEN / SUMMARY:** - Renal cell carcinoma with prominent smooth muscle stroma is a rare neoplasm composed of an admixture of epithelial cell with clear cytoplasm arranged in small nest and tubular structures and a stroma composed of smooth muscle. In the epithelial component, loss of chromosome 3p detected by fluorescence in situ hybridization (FISH) has been reported and on this basis these neoplasms have been viewed as variants of clear cell renal cell carcinoma. To test the validity of this classification, we have evaluated the chromosome 3 and VHL status of three of these tumors using FISH, array comparative genomic hybridization, gene sequencing, and methylation-specific multiplex ligation-dependent probe amplification analysis. None of the tumors showed deletion of chromosome 3p, VHL mutation, a significant VHL methylation, or changes in VHL copy number and all three tumors demonstrated a flat profile in the comparative genomic hybridization analysis. We conclude that renal cell carcinoma with smooth muscle stroma should be considered as an entity distinct from clear cell renal cell carcinoma. Modern Pathology advance online publication, 8 November 2013; doi:10.1038/modpathol.2013.180.

[571]

**TÍTULO / TITLE:** - Human fucosyltransferase 6 enables prostate cancer metastasis to bone.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Oct 31. doi: 10.1038/bjc.2013.690.

●● [Enlace al texto completo \(gratis o de pago\) 1038/bjc.2013.690](#)

**AUTORES / AUTHORS:** - Li J; Guillebon AD; Hsu JW; Barthel SR; Dimitroff CJ; Lee YF; King MR

**INSTITUCIÓN / INSTITUTION:** - Department of Biomedical Engineering, Cornell University, Ithaca, NY 14853, USA.

**RESUMEN / SUMMARY:** - Background: The interaction between human prostate cancer (PCa) cells and bone marrow (BM) endothelium follows a rolling-and-adhesion cascade mediated by E-selectin ligand (ESL): E-selectin. This adhesion is enabled by elevated expression of alpha-1,3-fucosyltransferases (FTs), enzymes responsible for ESL-mediated bone metastasis in humans. In contrast, the incidence of bone metastasis in mice is rare. Methods: FT 3, 6 and 7 were overexpressed in mouse PCa cells. The rolling cell number, cell-rolling velocity and transendothelial migration were characterised in vitro. Fucosyltransferases-transduced mouse PCa cells expressing luciferase were inoculated into mice via left ventricle to compare the capability of bone metastasis. Mass spectrometry and immunoprecipitation were utilised for identification of ESLs. Results: Overexpression of FT3, FT6 or FT7 restored ESLs and enabled mouse PCa cells to roll and adhere in E-selectin-functionalised microtubes, similar to trafficking of circulating PCa cells in BM vessels. Following intracardiac inoculation, FT6-transduced cells induced robust bone metastasis in mice. Inhibition of FT6 by a fucose mimetic significantly reduced bone metastasis. Importantly, comparison of FT3,

FT6 and FT7 gene expression in existing clinical samples showed significant upregulation of FT6 in PCa-distant metastases. Conclusion: FT6 is a key mediator of PCa cells trafficking to the BM. It may serve as a viable drug target in preclinical tests of therapeutics for reduction of PCa bone metastasis. British Journal of Cancer advance online publication, 31 October 2013; doi:10.1038/bjc.2013.690 [www.bjcancer.com](http://www.bjcancer.com).

[572]

**TÍTULO / TITLE:** - Comment on 'Chemotherapy for testicular cancer induces acute alterations in diastolic heart function'

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 7. doi: 10.1038/bjc.2013.703.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.703](#)

**AUTORES / AUTHORS:** - Dieckmann KP

**INSTITUCIÓN / INSTITUTION:** - Albertinen-Krankenhaus, Testicular Cancer Unit, Suentelstrasse 11a, 22457 Hamburg, Germany.

[573]

**TÍTULO / TITLE:** - Reply: Comment on 'Chemotherapy for testicular cancer induces acute alterations in diastolic heart function'

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Br J Cancer. 2013 Nov 7. doi: 10.1038/bjc.2013.704.

●● Enlace al texto completo (gratis o de pago) [1038/bjc.2013.704](#)

**AUTORES / AUTHORS:** - van Schinkel LD; Willemse PM; van der Meer RW; Burggraaf J; van Elderen SG; Smit JW; de Roos A; Osanto S; Lamb HJ

**INSTITUCIÓN / INSTITUTION:** - Department of Endocrinology, C7-q Liden University Medical Center, Albinusdreef 2, 2333ZA Leiden, The Netherlands.

[574]

**TÍTULO / TITLE:** - Role of ultrasound in revealing complications following percutaneous renal biopsy in children.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nephrol. 2013 Dec;80(6):426-32. doi: 10.5414/CN107926.

●● Enlace al texto completo (gratis o de pago) [5414/CN107926](#)

**AUTORES / AUTHORS:** - Hirano D; Fujinaga S; Nishizaki N; Kanai H; Ida H

**RESUMEN / SUMMARY:** - Background: This retrospective case series aimed to investigate the role of ultrasound immediately post-percutaneous renal biopsy (PRB) for detecting post-biopsy complications in pediatric patients. Methods: Data from 380 (male/female = 209/171) consecutive biopsies of native kidney tissue of 344 children from January 2001 to October 2009 were analyzed to investigate the role of an ultrasound immediately post-PRB and the predictive value of demographic, clinical, and baseline chemistry factors in predicting the risk of post-PRB complications. Results: Post-PRB ultrasound identified hematoma formation in 33 (8.7%) patients. Of the 19 (5.0%) patients whose hematomas were large ( $\geq 1$  cm), post-biopsy courses of 16 patients were clinically complicated. On the other hand, of the 14 patients whose hematomas were small ( $< 1$  cm), all patients but one showed an uncomplicated clinical

course. Of the 17 complications, 79.1% were detected within the first 24 hours and 21.9% (cases of resorption fever) between 24 and 144 hours post-PRB. Age  $\geq 10$  is an independent risk factor for post-PRB complication. Conclusions: Age  $\geq 10$  is an independent risk factor for post-PRB complication. After the procedure, the formation of a large hematoma predicted a complicated clinical course.

[575]

**TÍTULO / TITLE:** - Anti-androgenic activity of hydroxyxanthenes in prostate cancer LNCaP cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Fitoterapia. 2013 Sep 29;92C:9-15. doi: 10.1016/j.fitote.2013.09.014.

●● Enlace al texto completo (gratis o de pago) [1016/j.fitote.2013.09.014](http://1016/j.fitote.2013.09.014)

**AUTORES / AUTHORS:** - Shaku T; Iguchi K; Ito T; Baba M; Usui S; Oyama M; Tosa H; Iinuma M; Hirano K

**INSTITUCIÓN / INSTITUTION:** - Laboratory of Drug Metabolism and Pharmacokinetics, Gifu Pharmaceutical University, 1-25-4 Daigaku-nishi, Gifu 501-1196, Japan.

**RESUMEN / SUMMARY:** - Anti-androgens are used to treat prostate cancer. Here, we report that hydroxyxanthenes from a plant extract act as anti-androgens in androgen receptor (AR)-positive prostate cancer LNCaP cells. Anti-androgenic activity of the ethanol extract from *Garcinia subelliptica* was observed in a luciferase assay using LNCaP/MMTV cells with a stably integrated mouse mammary tumor virus (MMTV) promoter. HPLC-based activity profiling followed by a chemical library-based assay strategy enabled the rapid identification of several active principles bearing a xanthone core substituted with hydroxyl and isoprenyl groups. Among the active compounds, 2-(1,1-dimethyl-allyl)-1,4,5,6-tetrahydroxyxanthone (subelliptenone F) was identified as a potent inhibitor of AR transcriptional activity. The structure-activity relationship of some substituents on the xanthone core was also determined using the chemical library-based bioassay. A quantitative RT-PCR analysis revealed that treatment with the compound resulted in a significant reduction in AR-induced gene (KLK3) expression. Hydroxyxanthone may be a possible candidate for the development of a new anti-androgenic molecule.

[576]

**TÍTULO / TITLE:** - Biopsy and radical prostatectomy pathological patterns influence Prostate cancer gene 3 (PCA3) score.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4657-62.

**AUTORES / AUTHORS:** - De Luca S; Passera R; Bollito E; Milillo A; Scarpa RM; Papotti M; Coda R; Randone DF

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Ospedale Gradenigo, Corso Regina Margherita 8, 10153, Torino, Italy. [delucastefano@yahoo.it](mailto:delucastefano@yahoo.it).

**RESUMEN / SUMMARY:** - AIM: To evaluate the relationship between Prostate cancer gene 3 (PCA3) score and prostate cancer as assessed by Gleason Score (GS) and pathological stage in a series of Italian patients, with elevated Prostate specific antigen (PSA) undergoing radical prostatectomy (RP). PATIENTS AND METHODS: A total of

222 patients underwent RP for clinically localized prostate cancer; total PSA, free-PSA (%fPSA) and PCA3 score were collected and the possible associations among PCA3 and histological grade/pathological stage at biopsy and RP were investigated.

RESULTS: Median PCA3 scores by GS at radical prostatectomy were 51 vs. 67 (GS <7 vs. GS  $\geq$  7,  $p=0.007$ ), while scores at the biopsy were 56 vs. 67 (GS <7 vs. GS  $\geq$  7,  $p=0.007$ ), and in pT2 vs. pT3 patients they were 54 vs. 80 ( $p=0.001$ ). Positive digital rectal examination (DRE) (odds ratio (OR)=5.47,  $p=0.026$ ), pT3 pathological stage (OR=3.68,  $p=0.006$ ) and PCA3  $\geq$  35 (OR=2.04,  $p=0.030$ ) were the main risk factors for the presence of an aggressive disease (GS  $\geq$  7 at RP). CONCLUSION: PCA3 score could play an interesting role in predicting significant disease: positive DRE (OR=5.47,  $p=0.026$ ), pT3 pathological stage (OR=3.68,  $p=0.006$ ) and PCA3  $\geq$  35 (OR=2.04,  $p=0.030$ ) were the main independent risk factors for GS  $\geq$  7 at RP.

[577]

**TÍTULO / TITLE:** - Does HistoScanning play a role in detecting prostate cancer in routine clinical practice? Results from three independent studies.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 13. doi: 10.1111/bju.12568.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12568](#)

**AUTORES / AUTHORS:** - Javed S; Chadwick E; Edwards AA; Beveridge S; Laing R; Bott S; Eden C; Langley S

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Royal Surrey County Hospital NHS Foundation Trust, Egerton Road, Guildford, Surrey GU2 7XX, United Kingdom. [saqib.javed@nhs.net](mailto:saqib.javed@nhs.net).

**RESUMEN / SUMMARY:** - OBJECTIVES: To evaluate the ability of Prostate Histoscanning to detect, characterise and locally stage prostate cancer, by comparing it with transrectal ultrasound (TRUS)-guided prostate biopsies, transperineal template prostate biopsies (TTB) and whole-mount radical prostatectomy specimens. SUBJECTS AND METHODS: Study 1: We recruited 24 patients awaiting standard 12-core TRUS-guided biopsies of the prostate to undergo Prostate Histoscanning (PHS) immediately beforehand. We compared PHS with the TRUS-guided biopsy results in terms of their ability to detect cancer within the whole prostate, localise it to the correct side and to the correct region of the prostate. Lesions that were suspicious on PHS were biopsied separately. Study 2: 57 patients planned to undergo transperineal template prostate biopsies (TTB) were recruited to have PHS beforehand. We compared PHS to the TTB pathology results in terms of their ability to detect prostate cancer within the whole gland, localise it to the correct side and to the correct sextant of the prostate. Study 3: We recruited 24 patients awaiting radical prostatectomy for localised prostate cancer to undergo pre-operative PHS. We compared PHS to standardised pathologic analysis of the whole-mount prostatectomy specimens in terms of their measurement of total tumour volume within the prostate, tumour volume within prostate sextants and volume of index lesions identified by PHS. RESULTS: PHS-targeted biopsies had an overall cancer detection rate of 38.1%, compared to 62.5% with standard TRUS-guided biopsies. The sensitivity and specificity of PHS for localising tumour to the correct prostate sextant, compared to standard TRUS-guided biopsies, were 100% and 5.9%, respectively. PHS-targeted biopsies had an overall cancer detection rate of 13.4% compared to 54.4% with standard TTB. PHS had a

sensitivity and specificity for cancer detection in the posterior gland of 100% and 13%, respectively, and for the anterior gland, 6% and 82%, respectively. We found no correlation between total tumour volume estimates from PHS and radical prostatectomy pathology (Pearson correlation coefficient -0.099). Sensitivity and specificity of PHS for detecting tumour foci  $\geq 0.2$ ml in volume were 63% and 53%. CONCLUSIONS: These three independent studies of 105 patients suggest that Prostate Histoscanning does not reliably identify and characterise prostate cancer in the routine clinical setting.

[578]

**TÍTULO / TITLE:** - Active Surveillance for Low-risk Prostate Cancer in African American Men: A Multi-institutional Experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 25. pii: S0090-4295(13)01310-1. doi: 10.1016/j.urology.2013.09.038.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.09.038](#)

**AUTORES / AUTHORS:** - Odom BD; Mir MC; Hughes S; Senechal C; Santy A; Eyraud R; Stephenson AJ; Ylitalo K; Miocinovic R

**INSTITUCIÓN / INSTITUTION:** - Detroit Medical Center, Michigan State University College of Osteopathic Medicine, Detroit, MI.

**RESUMEN / SUMMARY:** - OBJECTIVE: To compare the outcomes of active surveillance (AS) series between African American men (AAM) and non-AAM diagnosed with low-risk prostate cancer at 3 medical centers. METHODS: Between 2005 and 2012, 214 men accepted AS on the basis of favorable clinical features and parameters after initial and repeat biopsy. Failure was defined as increase in Gleason score  $>6$ , total positive cores  $>33\%$ , maximum cancer volume in any core  $>50\%$ , or a prostate-specific antigen  $>10$  ng/mL. Disease progression and overall AS failure were compared between the 2 groups. RESULTS: Of 214 men, 75 were excluded, leaving 67 AAM and 72 non-AAM on AS. Median age at diagnosis was 64 and 67 years for AAM and non-AAM, respectively, and median follow-up was 34 and 46 months, respectively. During this time, 44 AAM (66%) remained on AS, and 23 (34%) underwent treatment, of whom 6 (26%) were treated by patient choice and 17 (74%) because of disease progression. In the non-AAM group, 59 (82%) men remained on AS, and 13 (18%) underwent treatment, 8 (62%) were treated by patient choice and 5 (38%) because of disease progression. The 3-year freedom from overall treatment was 74% and did not differ by race ( $P = .06$ ). The 3-year freedom from disease progression was 85%, where AAM were at significantly higher risk of disease progression (hazard ratio = 3.8; 95% confidence interval: 1.4-10.4;  $P = .01$ ). CONCLUSION: Our study suggests a higher disease progression rate in AAM who choose AS for low-risk prostate cancer compared with non-AAM, signifying a potential need for closer follow-up and more stringent enrollment criteria in AAM.

[579]

**TÍTULO / TITLE:** - Trends in the Utilization of Neoadjuvant Chemotherapy in Muscle-invasive Bladder Cancer: Results From the National Cancer Database.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 11. pii: S0090-4295(13)01173-4. doi: 10.1016/j.urology.2013.07.072.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.07.072](http://1016/j.urology.2013.07.072)

**AUTORES / AUTHORS:** - Zaid HB; Patel SG; Stimson CJ; Resnick MJ; Cookson MS; Barocas DA; Chang SS

**INSTITUCIÓN / INSTITUTION:** - Department of Urologic Surgery, Vanderbilt University Medical Center, Nashville, TN. Electronic address: [Harras.B.Zaid@vanderbilt.edu](mailto:Harras.B.Zaid@vanderbilt.edu).

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate variation in neoadjuvant chemotherapy (NAC) use among patients with  $\geq$  clinical T2 (cT2) bladder cancer and determine changes in staging at radical cystectomy (RC) associated with therapy. METHODS: Using the National Cancer Database (NCDB), we identified all patients diagnosed with organ-confined, muscle-invasive (cT2+) urothelial carcinoma of the bladder between 2006 and 2010 who underwent RC. Univariate and multivariate analyses were performed examining demographic, clinical, and hospital factors influencing the delivery of NAC. These included age, gender, race, income, geographic location, type of treating hospital, clinical stage, and patient comorbidities. RESULTS: A total of 5692 patients met our inclusion criteria, 962 (16.9%) of whom received NAC. A multivariable logistic regression model revealed several factors that negatively influenced receipt of NAC: increasing age, lower patient income, and treatment at a nonacademic institution ( $P < .01$ ). Higher clinical stage and fewer comorbid conditions were associated with higher likelihood of receiving NAC ( $P < .01$ ). The overall use of NAC increased from 7.6% in 2006 to 20.9% in 2010 ( $P < .01$ ). Those receiving NAC were significantly more likely to be downstaged at RC (31.2% vs 7.6%,  $P < .01$ ), with 10.6% achieving complete pathologic downstaging. CONCLUSION: Although the use of NAC for organ-confined muscle invasive bladder cancer remains low, it is increasing over time. Patients receiving NAC are more likely to be downstaged and achieve complete pathologic downstaging. However, there is considerable variation in treatment patterns based on both clinical and nonclinical factors.

[580]

**TÍTULO / TITLE:** - Understanding avoidance, refusal, and abandonment of chemotherapy before and after cystectomy for bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Dec;82(6):1370-5. doi: 10.1016/j.urology.2013.07.055. Epub 2013 Oct 11.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.07.055](http://1016/j.urology.2013.07.055)

**AUTORES / AUTHORS:** - Rehman S; Crane A; Din R; Raza SJ; Shi Y; Wilding G; Levine EG; George S; Pili R; Trump DL; Guru KA

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Roswell Park Cancer Institute, Buffalo, NY.

**RESUMEN / SUMMARY:** - OBJECTIVE: To analyze trends in perioperative chemotherapy and optimize use of neoadjuvant chemotherapy for bladder cancer. METHODS: From 2005-2012, 284 consecutive patients underwent robot-assisted radical cystectomy at our facility. Patients with disease  $\geq$ T2 and nodal involvement and positive surgical margins were reviewed and considered candidates for referral to medical oncology for chemotherapy. The study was conducted in two phases: phase 1 included 242 consecutive patients between 2005 and 2011, and phase 2 analyzed the

effect of changes in 42 patients during a 1-year period (2011-2012). RESULTS: In phase 1, 148 patients (61%) were candidates for neoadjuvant chemotherapy (NAC). Consultation for NAC was sought for 44 patients (29%), and 104 (71%) did not receive consultation. Of the 44 patients, 36% received NAC, 7% refused, 32% were recommended for immediate cystectomy, and 25% did not receive NAC for other reasons. Phase 2 was more stringent, with a multidisciplinary approach. Significant improvement in referral and NAC use was seen. About 78% vs 30% of patients were seen by medical oncology for consideration of NAC before robot-assisted radical cystectomy and 71% vs 36% received NAC compared with phase 1. The NAC utilization rate improved from 10.8% to 55% over 1 year with a diligent multidisciplinary approach. Medical comorbidities were the main reason for patients not receiving adjuvant chemotherapy (AC; 30% and 33%). CONCLUSION: A multidisciplinary approach and coordination of services can help optimize the use of neoadjuvant chemotherapy for bladder cancer.

[581]

**TÍTULO / TITLE:** - Capillary electrophoresis of urinary prostate glycoproteins assists in the diagnosis of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Electrophoresis. 2013 Nov 20. doi: 10.1002/elps.201300332.

●● Enlace al texto completo (gratis o de pago) [1002/elps.201300332](#)

**AUTORES / AUTHORS:** - Vermassen T; Van Praet C; Vanderschaeghe D; Maenhout T; Lumen N; Callewaert N; Hoebeke P; Van Belle S; Rottey S; Delanghe J

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology, Ghent University Hospital.

**RESUMEN / SUMMARY:** - Prostate marker assays are widely used for detection of prostate cancer (PCa) but are associated with considerable sensitivity and specificity problems. Therefore, we investigated prostatic protein glycosylation profiles as a potential biomarker. We determined the urinary asparagine-linked glycan (N-glycan) profile of prostatic proteins of healthy volunteers (n = 25), patients with benign prostate hyperplasia (n = 62; BPH) and newly diagnosed PCa patients (n = 42) using DNA-sequencer assisted fluorophore-assisted carbohydrate electrophoresis. Through squeezing of the prostate, a sufficient amount of prostatic proteins was obtained for direct structural analyses of N-glycan structures. N-glycans of PCa compared to BPH were characterized by a significant decrease in triantennary structures (p = 0.047) and overall fucosylation (p = 0.026). PSA and the urinary glycoprofile marker showed comparable overall receiver operating characteristic curve analysis as well as in the diagnostic grey zone with serum PSA values between 4 and 10 mug/L. However, when combining PSA and the urinary glycoprofile marker, the latter gave an additive diagnostic value to serum PSA (p <=0.001). In conclusion, N-glycosylation profiling demonstrated differences between BPH and PCa. These changes could lead to the discovery of a new biomarker for PCa.

[582]

**TÍTULO / TITLE:** - Re: Evaluation of Adrenal Metastases from Renal Cell Carcinoma and Hepatocellular Carcinoma: Use of Delayed Contrast-Enhanced CT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2018-9. doi: 10.1016/j.juro.2013.08.045. Epub 2013 Aug 23.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.045](#)

**AUTORES / AUTHORS:** - Siegel C

[583]

**TÍTULO / TITLE:** - RIPK3-Mediated Necroptosis Promotes Donor Kidney Inflammatory Injury and Reduces Allograft Survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Transplant. 2013 Nov;13(11):2805-18. doi: 10.1111/ajt.12447. Epub 2013 Sep 18.

●● Enlace al texto completo (gratis o de pago) [1111/ajt.12447](#)

**AUTORES / AUTHORS:** - Lau A; Wang S; Jiang J; Haig A; Pavlosky A; Linkermann A; Zhang ZX; Jevnikar AM

**INSTITUCIÓN / INSTITUTION:** - Matthew Mailing Centre for Translational Transplant Studies, Lawson Health Research Institute, London, Ontario, Canada; Department of Pathology, Western University, London, Ontario, Canada.

**RESUMEN / SUMMARY:** - Kidney transplant injury occurs with ischemia and alloimmunity. Members of the receptor interacting protein kinase family (RIPK1,3) are key regulators of "necroptosis," a newly recognized, regulated form of necrosis. Necroptosis and apoptosis death appear to be counterbalanced as caspase-8 inhibition can divert death from apoptosis to necrosis. Inhibition of necroptosis in donor organs to limit injury has not been studied in transplant models. In this study, necroptosis was triggered in caspase inhibited tubular epithelial cells (TEC) exposed to tumor necrosis factor alpha in vitro, while RIPK1 inhibition with necrostatin-1 or use of RIPK3(-/-) TEC, prevented necroptosis. In vivo, short hairpin RNA silencing of caspase-8 in donor B6 mouse kidneys increased necroptosis, enhanced high-mobility group box 1 release, reduced renal function and accelerated rejection when transplanted into BALB/c recipients. Using ethidium homodimer perfusion to assess necrosis in vivo, necrosis was abrogated in RIPK3(-/-) kidneys postischemia. Following transplantation, recipients receiving RIPK3(-/-) kidneys had longer survival ( $p = 0.002$ ) and improved renal function ( $p = 0.03$ ) when compared to controls. In summary, we show for the first time that RIPK3-mediated necroptosis in donor kidneys can promote inflammatory injury, and has a major impact on renal ischemia-reperfusion injury and transplant survival. We suggest inhibition of necroptosis in donor organs may similarly provide a major clinical benefit.

[584]

**TÍTULO / TITLE:** - Tyrosine kinase inhibitor-induced vasculopathy in clear cell renal cell carcinoma: an unrecognized antitumour mechanism.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histopathology. 2013 Sep 7. doi: 10.1111/his.12277.

●● Enlace al texto completo (gratis o de pago) [1111/his.12277](#)

**AUTORES / AUTHORS:** - Suzuki T; Sassa N; Shimoyama Y; Morikawa T; Shiroki R; Kuroda M; Fukatsu A; Kuwahara K; Yoshino Y; Hattori R; Gotoh M

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Nagoya Daini Red Cross Hospital, Nagoya, Japan.

**RESUMEN / SUMMARY:** - AIMS: To evaluate the pathological features of clear cell renal cell carcinoma (CCRCC) treated with tyrosine kinase inhibitors (TKIs), and to elucidate the mechanism of action of TKIs. METHODS AND RESULTS: Twenty cases of CCRCC treated with TKIs (sorafenib or sunitinib) were retrospectively analysed: 16 were patients who had undergone radical nephrectomy after neoadjuvant TKI therapy, and four were autopsy cases of patients who received TKI treatment. All tumours had two distinct regions: one characterized by necrosis and/or degeneration, indicating antitumour activity; and the other characterized by no or few pathological changes, indicating the absence of antitumour activity. Vasculopathy of tumour vessels was observed in or adjacent to the necrotic or degenerative areas; a decreased density of endothelial cells was noted in the tumour vessels. Few or no changes of vasculopathy were observed in tumour vessels in the other CCRCC areas, indicating the absence or low levels of antitumour activity. CONCLUSIONS: This is the first pathological report of vasculopathy in TKI-treated CCRCC cases. Our data suggest that TKIs initially induce vasculopathy in tumour vessels, and consequently cause reduction or diminution of blood supply to the CCRCCs, resulting in antitumour activity characterized by necrosis and hyalinization.

[585]

**TÍTULO / TITLE:** - Subclassification of Upper Urinary Tract Urothelial Carcinoma by Neutrophil to Lymphocyte Ratio Improves Prediction of Oncologic Outcome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 26. doi: 10.1111/bju.12582.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12582](#)

**AUTORES / AUTHORS:** - Luo HL; Chen YT; Chuang YC; Cheng YT; Lee WC; Kang CH; Chiang PH

**INSTITUCIÓN / INSTITUTION:** - Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan; Department of Urology, Kaohsiung Chang Gung Memorial Hospital and Chang Gung University College of Medicine, Kaohsiung, Taiwan.

**RESUMEN / SUMMARY:** - WHAT'S KNOWN ON THE SUBJECT? AND WHAT DOES THE STUDY ADD?: Neutrophil to lymphocyte ratio (NLR) is thought to be a prognostic factor of several malignancies. Neutrophilia was reported to be associated with prognosis of upper urinary tract cancer. OBJECTIVES: This study examine the potential role of NLR as subclassification for localized upper urinary tract cancer PATIENTS AND METHODS: From 2004 to 2010, 234 patients with localized UUT-UC underwent radical nephroureterectomy. NLR were only obtained under afebrile condition before radical surgery. Patients underwent neoadjuvant or adjuvant chemotherapy were excluded Prognostic impact of NLR was assessed with the log rank test and multivariate analyses. RESULTS: Only advanced pathological stage of more than T2 and NLR more than 3 were independently associated with metastasis ( $p < 0.001$  and  $p = 0.02$  respectively) and cancer specific mortality ( $p = 0.002$  and  $p = 0.006$  respectively). The use of  $NLR > 3$  further identified the poor prognostic group especially in patients with T3 UUT-UC in metastasis free survival and cancer specific survival (Log rank test, both  $p < 0.001$ ). CONCLUSIONS: For localized UUT-UC,

pathological stage and preoperative NLR independently predicts systemic recurrence and cancer specific death after RNU. Using NLR as subclassification of T3 UUT-UC seems to further identify the poor prognostic group and may help with clinical decisions regarding treatment intervention in clinical practice.

[586]

**TÍTULO / TITLE:** - Control of renin secretion from kidneys with renin cell hyperplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Physiol Renal Physiol. 2013 Nov 27.

●● Enlace al texto completo (gratis o de pago) [1152/ajprenal.00536.2013](#)

**AUTORES / AUTHORS:** - Kurt B; Karger C; Wagner C; Kurtz A

**INSTITUCIÓN / INSTITUTION:** - 1University of Regensburg.

**RESUMEN / SUMMARY:** - In states of loss of function mutations of the renin-angiotensin-aldosterone system kidneys develop a strong hyperplasia of renin producing cells. Those additional renin cells are located outside the classic juxtaglomerular areas, mainly in the walls of preglomerular vessels and most prominently in multilayers surrounding afferent arterioles. Since the functional behavior of those ectopic renin cells is yet unknown, we aimed to characterize the control of renin secretion from kidneys with renin cell hyperplasia. As a model we used kidneys from mice lacking aldosterone synthase (AS<sup>-/-</sup>) which displayed ten-fold elevations of renin mRNA and plasma renin concentrations. On the absolute level renin secretion from isolated AS<sup>-/-</sup> kidneys was more than 10-fold increased over wildtype kidneys. On the relative level the stimulation of renin secretion by the  $\alpha_1$ -adrenergic activator isoproterenol or by lowering of the concentration of extracellular calcium was very similar between the two genotypes. Also the inhibitory effects of angiotensin II and of the perfusion pressure were similar between the two genotypes. Deletion of connexin 40 blunted the pressure dependency of renin secretion and the stimulatory effect of low extracellular calcium on renin secretion in the same manner in kidneys of AS<sup>-/-</sup> mice like in wildtype mice. Our findings suggest a high degree of functional similarity between renin cells originating during development and located at different positions in the adult kidney. They also suggest a high similarity in the expression of membrane proteins relevant for the control of renin secretion such as  $\alpha_1$ -adrenergic receptors, angiotensin II-AT1 receptors and connexin 40.

[587]

**TÍTULO / TITLE:** - An assessment of PTV margin based on actual accumulated dose for prostate cancer radiotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Phys Med Biol. 2013 Nov 7;58(21):7733-44. doi: 10.1088/0031-9155/58/21/7733. Epub 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago) [1088/0031-9155/58/21/7733](#)

**AUTORES / AUTHORS:** - Wen N; Kumarasiri A; Nurushev T; Burmeister J; Xing L; Liu D; Glide-Hurst C; Kim J; Zhong H; Movsas B; Chetty IJ

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, Henry Ford Health System, Detroit, MI 48202, USA.

**RESUMEN / SUMMARY:** - The purpose of this work is to present the results of a margin reduction study involving dosimetric and radiobiologic assessment of cumulative dose distributions, computed using an image guided adaptive radiotherapy based framework. Eight prostate cancer patients, treated with 7-9, 6 MV, intensity modulated radiation therapy (IMRT) fields, were included in this study. The workflow consists of cone beam CT (CBCT) based localization, deformable image registration of the CBCT to simulation CT image datasets (SIM-CT), dose reconstruction and dose accumulation on the SIM-CT, and plan evaluation using radiobiological models. For each patient, three IMRT plans were generated with different margins applied to the CTV. The PTV margin for the original plan was 10 mm and 6 mm at the prostate/anterior rectal wall interface (10/6 mm) and was reduced to: (a) 5/3 mm, and (b) 3 mm uniformly. The average percent reductions in predicted tumor control probability (TCP) in the accumulated (actual) plans in comparison to the original plans over eight patients were 0.4%, 0.7% and 11.0% with 10/6 mm, 5/3 mm and 3 mm uniform margin respectively. The mean increase in predicted normal tissue complication probability (NTCP) for grades 2/3 rectal bleeding for the actual plans in comparison to the static plans with margins of 10/6, 5/3 and 3 mm uniformly was 3.5%, 2.8% and 2.4% respectively. For the actual dose distributions, predicted NTCP for late rectal bleeding was reduced by 3.6% on average when the margin was reduced from 10/6 mm to 5/3 mm, and further reduced by 1.0% on average when the margin was reduced to 3 mm. The average reduction in complication free tumor control probability (P+) in the actual plans in comparison to the original plans with margins of 10/6, 5/3 and 3 mm was 3.7%, 2.4% and 13.6% correspondingly. The significant reduction of TCP and P+ in the actual plan with 3 mm margin came from one outlier, where individualizing patient treatment plans through margin adaptation based on biological models, might yield higher quality treatments.

[588]

**TÍTULO / TITLE:** - Liposomal nanomedicines in the treatment of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Treat Rev. 2013 Oct 25. pii: S0305-7372(13)00224-7. doi: 10.1016/j.ctrv.2013.10.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.ctrv.2013.10.005](#)

**AUTORES / AUTHORS:** - Kroon J; Metselaar JM; Storm G; van der Pluijm G

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Leiden University Medical Center, Leiden, The Netherlands; Department of Targeted Therapeutics, MIRA Institute for Biomedical Technology and Technical Medicine, University of Twente, Enschede, The Netherlands. Electronic address: [j.kroon@lumc.nl](mailto:j.kroon@lumc.nl).

**RESUMEN / SUMMARY:** - Prostate cancer is the most common cancer type and the second leading cause of death from cancer in males. In most cases, no curative treatment options are available for metastatic castration-resistant prostate cancer as these tumors are highly resistant to chemotherapy. Targeted drug delivery, using liposomal drug delivery systems, is an attractive approach to enhance the efficacy of anticancer drugs and prevent side effects, thereby potentially increasing the therapeutic index. In most preclinical prostate cancer studies, passive liposomal targeting of anticancer drugs (caused by enhanced permeability and retention of the therapeutic compound) leads to an increased antitumor efficacy and decreased side

effects compared to non-targeted drugs. As a result, the total effective dose of anticancer drugs can be substantially decreased. Active (ligand-mediated) liposomal targeting of tumor cells and/or tumor-associated stromal cells display beneficial effects, but only limited preclinical studies were reported. To date, clinical studies in prostate carcinoma have been performed with liposomal doxorubicin only. These studies showed that long-circulating, PEGylated, liposomal doxorubicin generally outperforms conventional short-circulating liposomal doxorubicin, stressing the importance of passive tumor targeting for this drug in prostate carcinoma. In this review, we provide an overview of the (pre)clinical studies that focus on liposomal drug delivery in prostate carcinoma.

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[589]

**TÍTULO / TITLE:** - Urothelial Carcinoma Involving the Prostate: the Association of Revised Tumor Stage and Coexistent Bladder Cancer with Survival Following Radical Cystectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 7. doi: 10.1111/bju.12486.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12486](#)

**AUTORES / AUTHORS:** - Knoedler JJ; Boorjian SA; Tollefson MK; Cheville JC; Thapa P; Tarrell RF; Frank I

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Mayo Clinic, Rochester, Minnesota.

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate survival among patients with UC within the prostate in order to assess the impact of depth of tumor invasion as well as the importance of a concurrent bladder tumor. PATIENTS AND METHODS: We identified 201 patients who underwent RC between 1980-2006 and were found to have UC involving the prostate. All specimens were re-reviewed by a genitourinary pathologist. Survival was estimated using the Kaplan-Meier method and compared with the log-rank test. Cox hazard regression models tested the association of clinicopathologic variables with outcome. RESULTS: A total of 93 patients had pTis disease in the prostate, 43 had pT2 tumors, and 66 patients were pT4a. Median follow-up was 10.5 years. Five-year cancer-specific survival for patients with pTis, pT2, and pT4a prostate UC was 0.001). 73%, 57%, and 20% respectively (p 0.001) On multivariable analysis, higher prostate tumor stage (HR 2.09; p=0.01), positive lymph node status (HR 2.09; p=0.002), and concurrent  $\geq$ pT3 bladder cancer (HR 4.16; p=0.0006) were significantly associated with an increased risk of death from UC. CONCLUSIONS: Among patients with prostatic UC involvement, depth of tumor invasion was significantly associated with cancer-specific mortality, validating the staging reclassification. Concurrent locally advanced bladder cancer also negatively impacted survival, suggesting the potential prognostic value of reporting a secondary tumor stage in such cases.

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[590]

**TÍTULO / TITLE:** - Secondary chemoprevention of localized prostate cancer by short-term androgen deprivation to select indolent tumors suitable for active surveillance: a prospective pilot phase II study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1196-y](#)

**AUTORES / AUTHORS:** - Cussenot O; Cornu JN; Drouin SJ; Mozer P; Egrot C; Vaessen C; Haab F; Bitker MO; Roupret M

**INSTITUCIÓN / INSTITUTION:** - Institut Universitaire de Cancerologie, UPMC Univ Paris 06, GRC-05, ONCOTYPE-Uro, 75005, Paris, France.

**RESUMEN / SUMMARY:** - **PURPOSE:** To investigate the impact of 3-month androgen deprivation therapy (st-ADT) a secondary chemoprevention of indolent-localized prostate cancer (PCa). **METHODS:** A prospective phase II study enrolled men over 4 years with low-risk PCa and the following characteristics: PSA < 10 ng/mL, Gleason score of 6 (3 + 3) or less, three positive cores or less, and tumor stage T2a or less. Patients received a single sub-cutaneous injection of 22.5 mg of leuprolide acetate with Atrigel 3-month depot associated with a daily oral intake of bicalutamide 50 mg/day during 15 days around the injection. Follow-up included PSA and bioavailable testosterone blood tests every 3 months and yearly surveillance biopsies. Primary end point was the presence of PCa on biopsy at last follow-up. Secondary end points were detailed pathological features and adverse events. **RESULTS:** Overall, 98 men were included and 45 of them (45.9 %) had a negative biopsy after a median follow-up of 13 months [11-19.5]. Of the 53 patients with positive biopsy, 17 had pathologic progression because of upgraded Gleason score (11 patients), four or more positive cores (three patients) or both (three patients). The only significant predictive factor biopsy outcome was the number of positive cores at diagnosis. **CONCLUSIONS:** Secondary chemoprevention by st-ADT for localized PCa could be useful to pinpoint indolent tumors suitable for AS. Indeed, after st-ADT nearly one patient out of two had negative biopsies and 17 % had pathological progression. This is an innovative option to consider as an alternative to current AS protocols contingent upon confirmation in subsequent studies.

[591]

**TÍTULO / TITLE:** - A comparison of physical activity correlates across breast, prostate and colorectal cancer survivors in Nova Scotia, Canada.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Support Care Cancer. 2013 Nov 16.

●● Enlace al texto completo (gratis o de pago) [1007/s00520-013-2045-7](#)

**AUTORES / AUTHORS:** - Forbes CC; Blanchard CM; Mummery WK; Courneya KS

**INSTITUCIÓN / INSTITUTION:** - Faculty of Physical Education and Recreation, University of Alberta, E-488 Van Vliet Center, Edmonton, Alberta, Canada, T6G 2H9, [ccforbes@ualberta.ca](mailto:ccforbes@ualberta.ca).

**RESUMEN / SUMMARY:** - **PURPOSE:** The purpose of this study was to compare the medical, demographic and social cognitive correlates of physical activity (PA) in breast (BCS), prostate (PCS) and colorectal (CRCS) cancer survivors. **METHODS:** A stratified random sample of 2062 BC, PC and CRC survivors diagnosed between 2003 and 2011 was identified by the Nova Scotia Cancer Registry (NSCR) and mailed a questionnaire assessing PA, social-cognitive constructs from the theory of planned behaviour (TPB), and demographic and medical variables. Structural equation modelling was used to conduct path analyses of the TPB within each cancer survivor

group and an invariance analysis was used to compare the TPB across groups. RESULTS: A total of 741 completed surveys were analysed. Overall, 42 % of cancer survivors were meeting PA guidelines with no differences among the cancer sites. Treatment-related variables were strong correlates of PA in PC survivors but not for BC or CRC. Body mass index was strongly associated with PA in BC survivors but not PC or CRC. Path analyses within each cancer survivor group showed that intention was significantly associated with PA for CRCS only; planning was significantly associated with PA for BCS and PCS only; and perceived behavioural control (PBC) was significantly associated with PA for PCS only. For intention, PBC and instrumental attitude (IA) were significant correlates in all three cancer survivor groups whereas affective attitude (AA) was significant for BCS and CRCS only; and descriptive norm (DN) was significant for PCS and CRCS only. Invariance analyses revealed significantly stronger relationships for (a) intention to planning for BCS compared to PCS, (b) affective attitude to intention for CRCS compared to PCS, and (c) planning to PA for PCS compared to CRCS. CONCLUSIONS: Although BC, PC, and CRC survivors have similar levels of PA, the correlates of their PA may differ. These findings may inform cancer site-specific interventions to promote PA in cancer survivors.

[592]

**TÍTULO / TITLE:** - Direct detection of hyaluronidase in urine using cationic gold nanoparticles: A potential diagnostic test for bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biosens Bioelectron. 2013 Oct 31;54C:7-14. doi: 10.1016/j.bios.2013.10.024.

●● Enlace al texto completo (gratis o de pago) [1016/j.bios.2013.10.024](#)

**AUTORES / AUTHORS:** - Nossier AI; Eissa S; Ismail MF; Hamdy MA; Azzazy HM

**INSTITUCIÓN / INSTITUTION:** - Biochemistry Department, Faculty of Pharmacy, Misr University for Science and Technology (MUST), 6<sup>th</sup> October City, Egypt.

**RESUMEN / SUMMARY:** - Hyaluronidase (HAase) was reported as a urinary marker of bladder cancer. In this study, a simple colorimetric gold nanoparticle (AuNP) assay was developed for rapid and sensitive detection of urinary HAase activity. Charge interaction between polyanionic hyaluronic acid (HA) and cationic AuNPs stabilized with cetyl trimethyl ammonium bromide (CTAB) led to formation of gold aggregates and a red to blue color shift. HAase digests HA into small fragments preventing the aggregation of cationic AuNPs. The nonspecific aggregation of AuNPs in urine samples was overcome by pre-treatment of samples with the polycationic chitosan that was able to agglomerate all negatively charged interfering moieties before performing the assay. The developed AuNP assay was compared with zymography for qualitative detection of urinary HAase activity in 40 bladder carcinoma patients, 11 benign bladder lesions patients and 15 normal individuals, the assay sensitivity was 82.5% vs. 65% for zymography, while the specificity for both assays was 96.1%. The absorption ratio, A530/A620 of the reacted AuNP solution was used to quantify the HAase activity. The best cut off value was 93.5muU/ng protein, at which the sensitivity was 90% and the specificity was 80.8%. The developed colorimetric AuNP HAase assay is simple, inexpensive, and can aid noninvasive diagnosis of bladder cancer.

[593]

**TÍTULO / TITLE:** - New Renal Cell Carcinomas in the International Society of Urological Pathology Vancouver Classification of Renal Neoplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 11. pii: S0022-5347(13)05911-9. doi: 10.1016/j.juro.2013.11.017.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.11.017](#)

**AUTORES / AUTHORS:** - Humphrey PA

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Immunology, Washington University School of Medicine, St. Louis, Missouri.

[594]

**TÍTULO / TITLE:** - Targeted alpha-Particle Therapy of Bone Metastases in Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Dec;38(12):966-71. doi: 10.1097/RLU.0000000000000290.

●● Enlace al texto completo (gratis o de pago)

[1097/RLU.0000000000000290](#)

**AUTORES / AUTHORS:** - Jadvar H; Quinn DI

**INSTITUCIÓN / INSTITUTION:** - From the Divisions of \*Nuclear Medicine, Department of Radiology, and daggerCancer Medicine, Department of Medicine, Kenneth J. Norris Jr. Comprehensive CancerCenter, Keck School of Medicine of USC, University of Southern California, Los Angeles, CA.

**RESUMEN / SUMMARY:** - Medical oncology is moving toward personalized and precision treatments. This evolution is spearheaded by ongoing discoveries on the fundamental machinery that controls tumor and hosts microenvironment biological behavior. alpha-Particles with their high energy and short range had long been recognized as potentially useful in the treatment of cancer. More than a century after the discovery of radium by the Curies, Ra dichloride is now available in the expanding armamentarium of therapies for metastatic castration-resistant prostate cancer. This advance occurs in the context of several other novel therapeutics in advanced prostate cancer that include more effective androgen receptor pathway inhibition, better chemotherapy, and immunotherapy. We present a concise review on the therapeutic use of Ra dichloride in this clinically important setting including excerpts on the radium history, physical properties, the alphasradin in symptomatic prostate cancer clinical trial, and practical information on its use in the clinic. It is anticipated that, with the current emergence of Ra as a viable form of therapy, interest in and use of alpha-particle therapy in the management of cancer will grow.

[595]

**TÍTULO / TITLE:** - MicroRNA-490-5p inhibits proliferation of bladder cancer by targeting c-Fos.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Biophys Res Commun. 2013 Nov 29;441(4):976-81. doi: 10.1016/j.bbrc.2013.11.006. Epub 2013 Nov 9.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbrc.2013.11.006](http://1016/j.bbrc.2013.11.006)

**AUTORES / AUTHORS:** - Li S; Xu X; Xu X; Hu Z; Wu J; Zhu Y; Chen H; Mao Y; Lin Y; Luo J; Zheng X; Xie L

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The First Affiliated Hospital, School of Medicine, Zhejiang University, Qingchun Road 79, Hangzhou 310003, Zhejiang, PR China.

**RESUMEN / SUMMARY:** - MicroRNAs (miRNAs) are non-protein-coding sequences that play a crucial role in tumorigenesis by negatively regulating gene expression. Here, we found that miR-490-5p is down-regulated in human bladder cancer tissue and cell lines compared to normal adjacent tissue and a non-malignant cell line. To better characterize the function of miR-490-5p in bladder cancer, we over-expressed miR-490-5p in bladder cancer cell lines with chemically synthesized mimics. Enforced expression of miR-490-5p in bladder cancer cells significantly inhibited the cell proliferation via G1-phase arrest. Further studies found the decreased c-Fos expression at both mRNA and protein levels and Luciferase reporter assays demonstrated that c-Fos is a direct target of miR-490-5p in bladder cancer. These findings indicate miR-490-5p to be a novel tumor suppressor of bladder cancer cell proliferation through targeting c-Fos.

[596]

**TÍTULO / TITLE:** - Is the graft function of living donor renal transplants associated with renal mass matching by computed tomography angiographic volumetry?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplant Proc. 2013 Oct;45(8):2919-24. doi: 10.1016/j.transproceed.2013.08.045.

●● Enlace al texto completo (gratis o de pago)

[1016/j.transproceed.2013.08.045](http://1016/j.transproceed.2013.08.045)

**AUTORES / AUTHORS:** - Choi JY; Kwon OJ

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, College of Medicine, Hanyang University, Seoul, Korea.

**RESUMEN / SUMMARY:** - BACKGROUND: Donor renal volume, which can be easily measured by computerized tomographic angiography with 3-dimensional reconstruction, may influence graft outcomes. Low functional renal mass and donor kidney-recipient body size mismatch can lead to progressive renal injury and poor graft function. MATERIALS AND METHODS: This single-center retrospective analysis of 51 consecutive living donor renal transplantations performed between January 2005 and December 2011 defined transplant renal volume per unit recipient body surface area (BSA; mL/m<sup>2</sup>). The patients were divided into 2 groups: group I (n = 31, donor-recipient BSA ratio  $\leq$ 1) and group II (n = 20, BSA ratio >1). We analyzed the clinical characteristics and laboratory data of donors and recipients to ascertain correlations with renal volumes and graft outcomes. RESULTS: The renal volumes of living donors correlated with estimated glomerular filtration ratios (eGFR; r = .314, P = .025). Serum creatinine after renal transplantation correlated with transplanted renal volume at 1, 3, and 12 months (r = -.319, P = .048; r = -.407, P = .010; r = -.472, P = .002). Serum eGFR also correlated with transplanted renal volume at 3 and 12 months after renal

transplantation ( $r = .318$ ,  $P = .049$  and  $r = .388$ ,  $P = .015$ ). There were no significant differences between groups for acute or chronic rejection, infection or delayed graft function. However, serum creatinine levels were higher ( $P = .011$ ,  $P = .022$ , and  $P = .007$ ) and serum eGFR significantly lower in group I at 1, 3, 6, and 12 months after renal transplantation ( $P = .036$ ,  $P = .042$ ,  $P = .042$ , and  $P = .049$ , respectively). There was no significant difference in graft survival. CONCLUSIONS: Renal volume of living donors may reflect renal function and have a significant impact on graft outcomes. Renal volume matching should be considered to select donor-recipient pairs for living donor renal transplantation.

[597]

**TÍTULO / TITLE:** - Early and Late Complications of Robot-Assisted Radical Cystectomy: A Standardized Analysis by Urinary Diversion Type.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 4. pii: S0022-5347(13)05609-7. doi: 10.1016/j.juro.2013.10.022.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.022](#)

**AUTORES / AUTHORS:** - Nazmy M; Yuh B; Kawachi M; Lau CS; Linehan J; Ruel NH; Torrey RR; Yamzon J; Wilson TG; Chan KG

**INSTITUCIÓN / INSTITUTION:** - Departments of Urologic Oncology and Biostatistics (NHR), City of Hope Cancer Center, Duarte, California. Electronic address: [mnazmy@coh.org](mailto:mnazmy@coh.org).

**RESUMEN / SUMMARY:** - PURPOSE: Minimally invasive surgical treatment for bladder cancer has gained popularity but standardized data on complications are lacking. Urinary diversion type contributes to complications and to our knowledge diversion types after minimally invasive cystectomy have not yet been compared. We evaluated perioperative complications stratified by urinary diversion type in patients treated with robot-assisted radical cystectomy. MATERIALS AND METHODS: We analyzed the records of 209 consecutive patients who underwent robot-assisted radical cystectomy at our institution from 2003 to 2012 with respect to perioperative complications, including severity, time period (early and late) and diversion type. All complications were reviewed by academic urologists. Urinary diversion was also done. As outcome measurements and statistical analysis, univariate and multivariate logistic regression models were used to determine predictors of various complications. RESULTS: The American Society of Anesthesiology (ASA) score was 3 or greater in 80% of patients and continent diversion was performed in 68%. Median followup was 35 months. Within 90 days 77.5% of patients experienced any complication and 32% experienced a major complication. The 90-day mortality rate was 5.3%. Most complications were gastrointestinal, infectious and hematological. On multivariate analysis patients with ileal conduit diversion had a decreased likelihood of complications compared to patients with Indiana pouch and orthotopic bladder substitute diversion despite the selection of a more comorbid population for conduit diversion. Continent diversion was associated with a higher likelihood of urinary tract infection. Our results are comparable to those of previously reported open and minimally invasive cystectomy series. CONCLUSIONS: Open or minimally invasive cystectomy is a complex, morbid procedure. Urinary diversion is a significant contributor to complications, as is patient comorbidity. Although patients with an ileal conduit had more comorbidities, they

experienced fewer complications than those with an orthotopic bladder substitute or Indiana pouch diversion.

[598]

**TÍTULO / TITLE:** - Adaptive plan selection vs. re-optimisation in radiotherapy for bladder cancer: A dose accumulation comparison.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Oct 4. pii: S0167-8140(13)00455-6. doi: 10.1016/j.radonc.2013.08.045.

●● Enlace al texto completo (gratis o de pago) [1016/j.radonc.2013.08.045](#)

**AUTORES / AUTHORS:** - Vestergaard A; Muren LP; Sondergaard J; Elstrom UV; Hoyer M; Petersen JB

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Physics, Aarhus University Hospital, Aarhus C, Denmark. Electronic address: [annveste@rm.dk](mailto:annveste@rm.dk).

**RESUMEN / SUMMARY:** - PURPOSE: Patients with urinary bladder cancer are obvious candidates for adaptive radiotherapy (ART) due to large inter-fractional variation in bladder volumes. In this study we have compared the normal tissue sparing potential of two ART strategies: daily plan selection (PlanSelect) and daily plan re-optimisation (ReOpt). MATERIALS AND METHODS: Seven patients with bladder cancer were included in the study. For the PlanSelect strategy, a patient-specific library of three plans was generated, and the most suitable plan based on the pre-treatment cone beam CT (CBCT) was selected. For the daily ReOpt strategy, plans were re-optimised based on the CBCT from each daily fraction. Bladder contours were propagated to the CBCT scan using deformable image registration (DIR). Accumulated dose distributions for the ART strategies as well as the non-adaptive RT were calculated. RESULTS: A considerable sparing of normal tissue was achieved with both ART approaches, with ReOpt being the superior technique. Compared to non-adaptive RT, the volume receiving more than 57Gy (corresponding to 95% of the prescribed dose) was reduced to 66% (range 48-100%) for PlanSelect and to 41% (range 33-50%) for ReOpt. CONCLUSION: This study demonstrated a considerable normal tissue sparing potential of ART for bladder irradiation, with clearly superior results by daily adaptive re-optimisation.

[599]

**TÍTULO / TITLE:** - Emodin modulates epigenetic modifications and suppresses bladder carcinoma cell growth.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Carcinog. 2013 Sep 20. doi: 10.1002/mc.22084.

●● Enlace al texto completo (gratis o de pago) [1002/mc.22084](#)

**AUTORES / AUTHORS:** - Cha TL; Chuang MJ; Tang SH; Wu ST; Sun KH; Chen TT; Sun GH; Chang SY; Yu CP; Ho JY; Liu SY; Huang SM; Yu DS

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Department of Surgery, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, ROC; Department of Microbiology and Immunology, National Defense Medical Center, Taipei, Taiwan, ROC; Graduate Institutes of Life Sciences, National Defense Medical Center, Taipei,

Taiwan, ROC; Department of Biochemistry, National Defense Medical Center, Taipei, Taiwan, ROC.

**RESUMEN / SUMMARY:** - The deregulation of epigenetics was involved in early and subsequent carcinogenic events. Reversing cancer epigenetics to restore a normal epigenetic condition could be a rational approach for cancer treatment and specialized prevention. In the present study, we found that the expression levels of two epigenetic markers, histone H3K27 trimethylation (H3K27me3), was low but histone H3S10 phosphorylation (pH3Ser10) was high in human bladder cancer tissues, which showed opposite expression patterns in their normal counterparts. Thus, we investigated whether a natural product, emodin, has the ability to reverse these two epigenetic modifications and inhibit bladder cancer cell growth. Emodin significantly inhibited the cell growth of four bladder cancer cell lines in a dose- and time-dependent manner. Emodin treatment did not induce specific cell cycle arrest, but it altered epigenetic modifications. Emodin treatment resulted in the suppression of pH3Ser10 and increased H3K27me3, contributing to gene silencing in bladder cancer cells. Microarray analysis demonstrated that oncogenic genes including fatty acid binding protein 4 (FABP4) and fibroblast growth factor binding protein 1 (HBP17), RGS4, tissue inhibitor of metalloproteinase 3 (TIMP3), WNT5b, URB, and collagen, type VIII, alpha 1 (COL8A1) responsible for proliferation, survival, inflammation, and carcinogenesis were significantly repressed by emodin. The ChIP assays also showed that emodin increased H3K27me3 but decreased pH3Ser10 modifications on the promoters of repressed genes, which indicate that emodin reverses the cancer epigenetics towards normal epigenetic situations. In conclusion, our work demonstrates the significant anti-neoplastic activity of emodin on bladder cancer cells and elucidates the novel mechanisms of emodin-mediated epigenetic modulation of target genes. Our study warrants further investigation of emodin as an effective therapeutic or preventive agent for bladder cancer. © 2013 Wiley Periodicals, Inc.

[600]

**TÍTULO / TITLE:** - Molecular biology of testicular germ cell tumors: Unique features awaiting clinical application.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Crit Rev Oncol Hematol. 2013 Oct 11. pii: S1040-8428(13)00211-4. doi: 10.1016/j.critrevonc.2013.10.001.

●● Enlace al texto completo (gratis o de pago) [1016/j.critrevonc.2013.10.001](#)

**AUTORES / AUTHORS:** - Boublikova L; Buchler T; Stary J; Abrahamova J; Trka J

**INSTITUCIÓN / INSTITUTION:** - Department of Pediatric Hematology and Oncology, 2<sup>nd</sup> Faculty of Medicine, Charles University and University Hospital in Motol, Prague, Czech Republic; Department of Oncology, 1<sup>st</sup> Faculty of Medicine, Charles University and Thomayer Hospital, Prague, Czech Republic. Electronic address: [ludmila.boublikova@lfmotol.cuni.cz](mailto:ludmila.boublikova@lfmotol.cuni.cz).

**RESUMEN / SUMMARY:** - Testicular germ cell tumors (TGCTs) are the most common solid tumors in young adult men characterized by distinct biologic features and clinical behavior. Both genetic predispositions and environmental factors probably play a substantial role in their etiology. TGCTs arise from a malignant transformation of primordial germ cells in a process that starts prenatally, is often associated with a certain degree of gonadal dysgenesis, and involves the acquirement of several specific

aberrations, including activation of SCF-CKIT, amplification of 12p with up-regulation of stem cell genes, and subsequent genetic and epigenetic alterations. Their embryonic and germ origin determines the unique sensitivity of TGCTs to platinum-based chemotherapy. Contrary to the vast majority of other malignancies, no molecular prognostic/predictive factors nor targeted therapy is available for patients with these tumors. This review summarizes the principal molecular characteristics of TGCTs that could represent a potential basis for development of novel diagnostic and treatment approaches.

[601]

**TÍTULO / TITLE:** - Radiotherapy and concurrent metronomic chemotherapy in hormone-refractory prostate carcinoma: a Phase I study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4585-9.

**AUTORES / AUTHORS:** - Morganti AG; Massaccesi M; Caravatta L; Macchia G; Picardi V; Deodato F; Ippolito E; Mignogna S; Ferro M; Cilla S; Mattiucci GC; Valentini V

**INSTITUCIÓN / INSTITUTION:** - Department of Radiotherapy, Research and Care Foundation "Giovanni Paolo II", Catholic University of Sacred Heart, Largo A. Gemelli 1, 86100 Campobasso, Italy. [gmacchia@rm.unicatt.it](mailto:gmacchia@rm.unicatt.it).

**RESUMEN / SUMMARY:** - AIM: To determine the maximum tolerated dose of hypofractionated radiotherapy (HFRT) plus concurrent metronomic chemotherapy in patients with hormone-refractory prostate cancer (HRPC). PATIENTS AND METHODS: A Phase I clinical trial was performed with cohorts of three to six patients per group. Eligible patients had HRPC without distant metastases. The radiotherapy dose was escalated in a stepwise fashion as follows: 60, 65, and 70 Gy at levels 1, 2, and 3, respectively (25 fractions: levels 1-2, and 26 fractions: level 3). RESULTS: Nine patients were enrolled. The radiotherapy dose was escalated from 60 to 70 Gy without any dose-limiting toxicity. The most common grade ½ toxicities were hematuria, dysuria, diarrhea and rectal-perirectal pain. The overall objective response rate was 9/9 (100%) (95% CI=66.4%-100%). The median time-to-progression was 19 months. CONCLUSION: In the challenging setting of HRPC, HFRT up to 70 Gy with concurrent metronomic chemotherapy was well-tolerated and yielded encouraging disease control.

[602]

**TÍTULO / TITLE:** - Spacer length impacts the efficacy of targeted docetaxel conjugates in prostate-specific membrane antigen expressing prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Drug Target. 2013 Dec;21(10):968-80. doi: 10.3109/1061186X.2013.833207.

●● Enlace al texto completo (gratis o de pago) [3109/1061186X.2013.833207](#)

**AUTORES / AUTHORS:** - Peng ZH; Sima M; Salama ME; Kopeckova P; Kopecek J

**INSTITUCIÓN / INSTITUTION:** - Department of Pharmaceutics and Pharmaceutical Chemistry/CCCD .

**RESUMEN / SUMMARY:** - Abstract Combination of targeted delivery and controlled release is a powerful technique for cancer treatment. In this paper, we describe the design, synthesis, structure validation and biological properties of targeted and non-

targeted N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer-docetaxel conjugates. Docetaxel (DTX) was conjugated to HPMA copolymer via a tetrapeptide spacer (-GFLG-). 3-(1,3-dicarboxypropyl)-ureido]pentanedioic acid (DUPA) was used as the targeting moiety to actively deliver DTX for treatment of Prostate-Specific Membrane Antigen (PSMA) expressing prostate cancer. Short and long spacer DUPA monomers were prepared, and four HPMA copolymer - DTX conjugates (non-targeted, two targeted with short spacer of different molecular weight and targeted with long spacer) were prepared via Reversible Addition-Fragmentation Chain Transfer (RAFT) copolymerization. Following confirmation of PSMA expression on C4-2 cell line, the DTX conjugates' in vitro cytotoxicity was tested against C4-2 tumor cells and their anticancer efficacies were assessed in nude mice bearing s.c. human prostate adenocarcinoma C4-2 xenografts. The in vivo results show that the spacer length between targeting moieties and HPMA copolymer backbone can significantly affect the treatment efficacy of DTX conjugates against C4-2 tumor bearing nu/nu mice. Moreover, histological analysis indicated that the DUPA-targeted DTX conjugate with longer spacer had no toxicity in major organs of treated mice.

[603]

**TÍTULO / TITLE:** - Outcomes following iodine-125 prostate brachytherapy with or without neoadjuvant androgen deprivation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiother Oncol. 2013 Oct 31. pii: S0167-8140(13)00510-0. doi: 10.1016/j.radonc.2013.09.022.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.radonc.2013.09.022](#)

**AUTORES / AUTHORS:** - Ohashi T; Yorozu A; Saito S; Momma T; Toya K; Nishiyama T; Yamashita S; Shiraishi Y; Shigematsu N

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Keio University School of Medicine, Tokyo, Japan; Department of Radiology, National Hospital Organization Saitama Hospital, Japan. Electronic address: [ohashi@rad.med.keio.ac.jp](mailto:ohashi@rad.med.keio.ac.jp).

**RESUMEN / SUMMARY:** - **PURPOSE:** To report the biochemical failure-free survival (BFFS), cause-specific survival (CSS), and overall survival (OS) outcomes of patients treated with iodine-125 (I-125) brachytherapy for clinically localized prostate cancer. **METHODS AND MATERIALS:** Between 2003 and 2009, I-125 permanent prostate brachytherapy without supplemental external-beam radiotherapy was performed for 663 patients with low-risk and low-tier intermediate-risk (defined as organ-confined disease, PSA <10ng/mL, and Gleason score 3+4 with biopsy positive core rate <33%) prostate cancer. Early in the study period, the preplanning method was used in the first 104 patients, and later the real-time planning method was used. Biochemical failure was determined using the American Society for Therapeutic Radiology Oncology (ASTRO) and Phoenix definitions. **RESULTS:** The 7-year BFFS rates for the ASTRO and Phoenix definitions were 96.1% and 95.9%, respectively. The corresponding BFFS rates by risk group were 97.6% and 96.7% for low-risk, and 91.8% and 93.6% for low-tier intermediate-risk disease (p=0.007 and 0.08, respectively). The median times to biochemical failure in those who failed were 29.5 and 43.9 months according to the ASTRO and Phoenix definitions, respectively. The 7-year CSS and OS were 99.1% and 96.4%. There was no significant difference in CSS or OS between the low-risk and low-tier intermediate-risk groups. In multivariate Cox regression analysis, risk group

and prostate D90 were independent predictors of BFFS for the ASTRO definition, while only the prostate D90 was significant for the Phoenix definition. CONCLUSION: I-125 prostate brachytherapy results in excellent 7-year BFFS, CSS, and OS for low-risk and low-tier intermediate-risk prostate cancer.

[604]

**TÍTULO / TITLE:** - Comparison of endorectal coil and nonendorectal coil T2W and diffusion-weighted MRI at 3 Tesla for localizing prostate cancer: Correlation with whole-mount histopathology.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Magn Reson Imaging. 2013 Nov 15. doi: 10.1002/jmri.24317.

●● [Enlace al texto completo \(gratis o de pago\) 1002/jmri.24317](#)

**AUTORES / AUTHORS:** - Turkbey B; Merino MJ; Gallardo EC; Shah V; Aras O; Bernardo M; Mena E; Daar D; Rastinehad AR; Linehan WM; Wood BJ; Pinto PA; Choyke PL

**INSTITUCIÓN / INSTITUTION:** - Molecular Imaging Program, NCI, NIH, Bethesda, Maryland, USA.

**RESUMEN / SUMMARY:** - PURPOSE: To compare utility of T2-weighted (T2W) MRI and diffusion-weighted MRI (DWI-MRI) obtained with and without an endorectal coil at 3 Tesla (T) for localizing prostate cancer. MATERIALS AND METHODS: This Institutional Review Board-approved study included 20 patients (median prostate-specific antigen, 8.4 ng/mL). Patients underwent consecutive prostate MRIs at 3T, first with a surface coil alone, then with combination of surface, endorectal coils (dual coil) followed by robotic assisted radical prostatectomy. Lesions were mapped at time of acquisition on dual-coil T2W, DWI-MRI. To avoid bias, 6 months later nonendorectal coil T2W, DWI-MRI were mapped. Both MRI evaluations were performed by two readers blinded to pathology with differences resolved by consensus. A lesion-based correlation with whole-mount histopathology was performed. RESULTS: At histopathology 51 cancer foci were present ranging in size from 2 to 60 mm. The sensitivity of the endorectal dual-coil, nonendorectal coil MRIs were 0.76, 0.45, respectively. PPVs for endorectal dual-coil, nonendorectal coil MRI were 0.80, 0.64, respectively. Mean size of detected lesions with nonendorectal coil MRI were larger than those detected by dual-coil MRI (22 mm versus 17.4 mm). CONCLUSION: Dual-coil prostate MRI detected more cancer foci than nonendorectal coil MRI. While nonendorectal coil MRI is an attractive alternative, physicians performing prostate MRI should be aware of its limitations. J. Magn. Reson. Imaging 2013. Esta es una cita bibliográfica que va por delante de la publicación en papel. La fecha indicada en la cita provista, NO corresponde con la fecha o la cita bibliográfica de la publicación en papel. La cita bibliográfica definitiva (con el volumen y su paginación) saldrá en 1 ó 2 meses a partir de la fecha de la emisión electrónica-online. \*\*\* This is a bibliographic record ahead of the paper publication. The given date in the bibliographic record does not correspond to the date or the bibliographic citation on the paper publication. The publisher will provide the final bibliographic citation (with the volume, and pagination) within 1 or 2 months from the date the record was published online. © 2013 Wiley Periodicals, Inc.

[605]

**TÍTULO / TITLE:** - Re: Medium-term Outcomes of Active Surveillance for Localized Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Dec;64(6):1013-4. doi: 10.1016/j.eururo.2013.09.030.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.030](#)

**AUTORES / AUTHORS:** - Mir MC; Stephenson AJ

**INSTITUCIÓN / INSTITUTION:** - Center for Urologic Oncology, Glickman Urologic and Kidney Institute, Cleveland, OH, USA.

[606]

**TÍTULO / TITLE:** - Intraoperative management of renal allograft venous-calyceal fistula and incidental renal cell carcinoma during renal transplantation: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Transplant Proc. 2013 Nov;45(9):3421-3. doi: 10.1016/j.transproceed.2013.07.058.

●● Enlace al texto completo (gratis o de pago)

[1016/j.transproceed.2013.07.058](#)

**AUTORES / AUTHORS:** - Khurana K; Modlin C

**INSTITUCIÓN / INSTITUTION:** - Glickman Urological & Kidney Institute, Cleveland Clinic, Cleveland, Ohio, USA. Electronic address: [khurank@ccf.org](mailto:khurank@ccf.org).

**RESUMEN / SUMMARY:** - This case report describes rare intraoperative complications during renal allotransplantation. A 59-year-old man underwent an expanded criteria deceased donor renal transplantation. A wedge biopsy, as per institution protocol, was performed prior to surgery. After vascular anastomoses, the kidney was reperfused; immediate significant hematuria was noted from the ureter. After exploration, compression of the wedge biopsy site stopped the bleeding, suggesting a venous-calyceal fistula. An incision at the wedge biopsy site was made to do an open repair, yielding a small suspicious lesion. Frozen section confirmed clear cell renal carcinoma, which was completely resected. The hematuria resolved after renorrhaphy, and we proceeded with ureteral reimplantation. Postoperatively, the patient was maintained on immunosuppression, free of recurrence at eight months. The surgeon must be aware of the possibilities of unusual complications as well as treatment options. This study provides a treatment strategy to address these challenging intraoperative complications.

[607]

**TÍTULO / TITLE:** - Diabetes mellitus without metformin intake is associated with worse oncologic outcomes after radical nephroureterectomy for upper tract urothelial carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Surg Oncol. 2013 Sep 20. pii: S0748-7983(13)00805-6. doi: 10.1016/j.ejso.2013.09.016.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejso.2013.09.016](#)

**AUTORES / AUTHORS:** - Rieken M; Xylinas E; Kluth L; Trinh QD; Lee RK; Fajkovic H; Novara G; Margulis V; Lotan Y; Martinez-Salamanca JI; Matsumoto K; Seitz C; Remzi M; Karakiewicz PI; Scherr DS; Briganti A; Kautzky-Willer A; Bachmann A; Shariat SF  
**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Weill Cornell Medical College, New York-Presbyterian Hospital, New York, NY, USA; Department of Urology, University Hospital Basel, Basel, Switzerland.

**RESUMEN / SUMMARY:** - AIMS: Evidence suggests a detrimental effect of diabetes mellitus (DM) on cancer incidence and outcomes. To date, the effect of DM and its treatment on prognosis in upper tract urothelial carcinoma (UTUC) remains uninvestigated. We tested the hypothesis that DM and metformin use impact oncologic outcomes of patients treated with radical nephroureterectomy (RNU) for UTUC. METHODS: Retrospective analysis of 2492 patients with UTUC treated at 23 institutions with RNU without neoadjuvant therapy. Cox regression models addressed the association of DM and metformin use with disease recurrence, cancer-specific mortality and any-cause mortality. RESULTS: A total of 365 (14.3%) patients had DM and 194 (7.8%) patients used metformin. Within a median follow-up of 36 months, 663 (26.6%) patients experienced disease recurrence, 545 patients (21.9%) died of UTUC and 884 (35.5%) patients died from any cause. Diabetic patients who did not use metformin were at significantly higher risk of disease recurrence and cancer-specific death compared to non-diabetic patients and diabetic patients who used metformin. In multivariable Cox regression analyses, DM treated without metformin was associated with worse recurrence-free survival (HR: 1.44, 95% CI 1.10-1.90, p = 0.009) and cancer-specific mortality (HR: 1.49, 95% CI 1.11-2.00, p = 0.008). CONCLUSIONS: Diabetic UTUC patients without metformin use have significantly worse oncologic outcomes than diabetics who used metformin and non-diabetics. The possible mechanism behind the impact of DM on UTUC biology and the potentially protective effect of metformin need further elucidation.

[608]

**TÍTULO / TITLE:** - Epidermal growth factor enhances androgen receptor-mediated bladder cancer progression and invasion via potentiation of AR transactivation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2013 Dec;30(6):2917-22. doi: 10.3892/or.2013.2792. Epub 2013 Oct 10.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2792](#)

**AUTORES / AUTHORS:** - Hsieh TF; Chen CC; Ma WL; Chuang WM; Hung XF; Tsai YR; Lin MH; Zhang Q; Zhang C; Chang C; Shyr CR

**INSTITUCIÓN / INSTITUTION:** - Sex Hormone Research Center and Graduate Institute of Clinical Medical Science, China Medical University/Hospital, Taichung 404, Taiwan, R.O.C.

**RESUMEN / SUMMARY:** - Androgen receptor (AR) plays a critical role in bladder cancer (BCa) development. Our early studies found AR knock-out mice (with few androgens and deleted AR) failed to develop BCa, yet 50% of castrated mice (with few androgens and existing AR) still developed BCa in an N-butyl-N-(4-hydroxybutyl)nitrosamine (BBN) carcinogen-induced BCa mouse model, suggesting the existing AR in BCa of castrated mice may still play important roles in promoting BCa development at the castration level of androgens. The mechanism underlying this and/or which factors

potentiate AR function at the castration level of androgen remains unclear. Epidermal growth factor (EGF), a key player in BCa progression, has been demonstrated to be able to potentiate AR transactivation in prostate cancer. In the present study, we found that EGF could increase BCa cell growth, migration and invasion in the presence of AR under the low amount of androgen and EGF was able to potentiate AR transactivation through EGFR by activating PI3K/AKT and MAPK pathway at castration androgen level. The increased suppression effects by EGFR inhibitor of PD168393 on AR function after addition of anti-androgen, Casodex, further suggested AR might play a key role in the effects of EGF on BCa progression and metastasis. Collectively, our results indicate that EGF may be able to potentiate AR transactivation that leads to enhancing BCa progression, which may help us to develop a better therapeutic approach to treat BCa via targeting both EGF and AR signaling.

[609]

**TÍTULO / TITLE:** - Metastatic Behavior of Upper Tract Urothelial Carcinoma After Radical Nephroureterectomy: Association with Primary Tumor Location.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Surg Oncol. 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1245/s10434-013-3349-z](#)

**AUTORES / AUTHORS:** - Tanaka N; Kikuchi E; Kanao K; Matsumoto K; Kobayashi H; Ide H; Miyazaki Y; Obata J; Hoshino K; Shirotake S; Akita H; Kosaka T; Miyajima A; Momma T; Nakagawa K; Hasegawa S; Nakajima Y; Jinzaki M; Oya M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Keio University School of Medicine, Tokyo, Japan.

**RESUMEN / SUMMARY:** - **PURPOSE:** To investigate the site-specific pattern of disease recurrence and/or metastasis and the associated patient outcomes after radical nephroureterectomy (RNU) in upper tract urothelial carcinoma (UTUC). **METHODS:** A total of 733 patients with UTUC from a retrospective multi-institutional cohort were included, with a median follow-up of 34 months. Associated patient outcomes were analyzed by multivariate analysis. To evaluate the influence of primary tumor location, we divided it into four areas: renal pelvis, and upper, middle, and lower ureter. **RESULTS:** A total of 218 patients experienced disease recurrence, with the majority of relapses occurring within the first 3 years. Cumulative incidence rates of first disease recurrence at 1 and 3 years were 18.9 and 29.8 %, respectively. Of these patients, 38.5 % developed distant recurrence; 17.4 % experienced both local and distant recurrences; and 44.0 % developed isolated local recurrence. The predominant sites of distant metastasis were lung, liver, and bone. Multivariate analysis revealed that the prevalence of local recurrence and lung metastasis was significantly associated, with primary tumor location being independent of other clinicopathological variables. Lower/middle ureter tumors had a higher rate of local recurrence in the pelvic cavity, and renal pelvic tumors had a higher prevalence of distant relapse in the lungs. Similar results were obtained when rerunning the data set by excluding patients who received adjuvant chemotherapy (n = 131). **CONCLUSIONS:** This multi-institutional study provided a detailed picture of metastatic behavior after RNU, and primary tumor locations were associated with unique patterns of metastatic spread in UTUC patients.

[610]

**TÍTULO / TITLE:** - Human kallikrein 2 (KLK2) promotes prostate cancer cell growth via function as a modulator to promote the ARA70-enhanced androgen receptor transactivation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Oct 11.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1253-6](#)

**AUTORES / AUTHORS:** - Shang Z; Niu Y; Cai Q; Chen J; Tian J; Yeh S; Lai KP; Chang C

**INSTITUCIÓN / INSTITUTION:** - Chawnsang Chang Sex Hormone Research Center, Tianjin Institute of Urology, The Second Hospital of Tianjin Medical University, Tianjin, 300211, China.

**RESUMEN / SUMMARY:** - Recent data suggested that tissue human kallikrein 2 (KLK2) might be involved in the carcinogenesis and tumor metastasis of prostate cancer (PCa). However, the detailed pathophysiological roles of KLK2 in PCa remain unclear. We report here that KLK2 may be treated as a potential therapeutic target in castration-resistant PCa (CRPC). Histologic analyses show that the increased KLK2 expression is correlated with higher cell proliferation rate and lower cell apoptosis index in CRPC specimens. Adding functional KLK2 cDNA into high passage LNCaP cells led to increased cell growth, and knockdown of KLK2 expression with KLK2-siRNA in LNCaP cells resulted in increased cell apoptosis with cell growth arrest at the G1 phase. Results from in vitro colony formation assay and in vivo xenografted PCa tissues also demonstrated that targeting KLK2 led to suppressed growth of PCa in the castration-resistant stage. Further mechanism dissection shows that KLK2 may cooperate with the AR coregulator, ARA70, to enhance AR transactivation that may result in alteration of PCa formation. Together, these results suggested KLK2 might become a new therapeutic target to battle the CRPC and KLK2-siRNA may be developed as an alternative approach to suppress PCa growth.

[611]

**TÍTULO / TITLE:** - Underactivation of the adiponectin-adiponectin receptor 1 axis in clear cell renal cell carcinoma: implications for progression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Exp Metastasis. 2013 Oct 5.

●● Enlace al texto completo (gratis o de pago) [1007/s10585-013-9618-1](#)

**AUTORES / AUTHORS:** - Kleinmann N; Duivenvoorden WC; Hopmans SN; Beatty LK; Qiao S; Gallino D; Lhotak S; Daya D; Paschos A; Austin RC; Pinthus JH

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Department of Surgery, McMaster University, Hamilton, ON, Canada.

**RESUMEN / SUMMARY:** - Energy-sensing pathways, normally coordinated by 5' AMP-activated protein kinase (AMPK), are dysregulated in renal cell carcinoma (RCC). Obesity can accentuate the pre-existing pro-tumorigenic metabolic machinery in RCC cells through its associated obesogenic hormonal milieu, characterized by lower circulating levels of adiponectin. In RCC patients, low adiponectin levels associate clinically with more aggressive disease. We investigated the adiponectin signaling pathway in RCC, focusing on adiponectin receptor 1 (AdipoR1) and associated activation of AMPK. AdipoR1 protein in RCC and normal surrounding renal tissues was

determined by Western blot analysis and immunohistochemistry. Anti-tumorigenic effects of adiponectin in RCC cells in vitro were investigated via VEGF and MMP ELISA and invasion assays. Using in vivo models of RCC, the effect of AdipoR1-knockdown (shRNA) on tumor latency, growth and dissemination were determined. AdipoR1 protein was significantly reduced in clear cell RCC specimens. Adiponectin treatment inhibited VEGF, MMP-2 and MMP-9 secretion and activity and invasive and migratory capacities of RCC cells. AMPK $\alpha$ 1-knockdown (shRNA) attenuated adiponectin's effects. In cells stably expressing AdipoR1-specific shRNA, AMPK activation by adiponectin was significantly reduced compared to cells expressing control shRNA. In vivo, AdipoR1 knockdown increased the growth, dissemination and angiogenesis of RCC. These findings suggest that deficiencies in the entire adiponectin hormonal axis (the hormone and its receptor) result in underactivation of AMPK leading to increased angiogenic and invasive capacities of RCC. The established link between obesity and RCC can therefore be further explained by the adiponectin deficiency in obese individuals together with reduced AdipoR1 protein in RCC.

[612]

**TÍTULO / TITLE:** - International Variations and Trends in Testicular Cancer Incidence and Mortality.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov 14. pii: S0302-2838(13)01201-3. doi: 10.1016/j.eururo.2013.11.004.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.eururo.2013.11.004](#)

**AUTORES / AUTHORS:** - Znaor A; Lortet-Tieulent J; Jemal A; Bray F

**INSTITUCIÓN / INSTITUTION:** - Section of Cancer Information, International Agency for Research on Cancer, Lyon, France. Electronic address: [znaora@iarc.fr](mailto:znaora@iarc.fr).

**RESUMEN / SUMMARY:** - CONTEXT: Testicular cancer (TC) is the most common cancer in men aged 15-44 yr in many countries that score high or very high on the Human Development Index (HDI). Despite the very good prognosis for TC, wide variations in mortality rates have been reported internationally. OBJECTIVE: To describe and contrast global variations and recent trends in TC incidence and mortality rates. EVIDENCE ACQUISITION: To compare TC incidence and mortality rates, we used GLOBOCAN 2008 estimates. We used the Cancer Incidence in Five Continents series to analyse recent trends in TC incidence in 41 countries by way of joinpoint analysis. To examine recent trends in mortality, we used the World Health Organisation mortality database. EVIDENCE SYNTHESIS: Northern Europe remains the highest TC incidence area, with the highest rates observed in Norway and Denmark. Incidence rates continue to increase in most countries worldwide, more markedly in Southern Europe and Latin America, while attenuating in Northern Europe, the United States, and Australia. Mortality from TC shows a different pattern, with higher rates in some countries of medium to high HDI. The highest mortality rates were seen in Chile and Latvia, as well as in selected Central European and Eastern European countries. In high-income countries, TC mortality rates are declining or stable at very low levels of magnitude, while no significant decreases were observed in middle-income regions in Latin America and Asia. CONCLUSIONS: The rises in TC incidence appear to be recently attenuating in countries with the highest HDIs, with corresponding mortality rates either continuing to decline or stabilising at very low levels. In a number of

countries transiting towards higher levels of development, the TC incidence is increasing while mortality rates are stable or increasing. PATIENT SUMMARY: In this study we looked at international testicular cancer trends. We found that testicular cancer is becoming more common in low- and middle-income countries, where the optimal treatment might not yet be available.

[613]

**TÍTULO / TITLE:** - Effectiveness of haemodiafiltration with ultrafiltrate regeneration in the reduction of light chains in multiple myeloma with renal failure.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nefrologia. 2013 Nov 13;33(6):788-796. doi: 10.3265/Nefrologia.pre2013.Sep.12176.

●● Enlace al texto completo (gratis o de pago)

[3265/Nefrologia.pre2013.Sep.12176](#)

**AUTORES / AUTHORS:** - Pendon-Ruiz de Mier MV; Alvarez-Lara MA; Ojeda-Lopez R; Martin-Malo A; Carracedo J; Caballero-Villarraso J; Alonso C; Aljama P

**RESUMEN / SUMMARY:** - Acute kidney failure in multiple myeloma (MM) occurs in 12%-20% of patients and is a poor prognostic factor for patient survival. Recent studies have shown that dialysis with a High-Cut-Off membrane (HCO) removes free light chains (FLC) effectively although with significant albumin loss. Other adsorption-based techniques, such as haemodiafiltration with ultrafiltrate regeneration by adsorption in resin (SUPRA-HFR), have not been studied. We present three cases of MM, all haemodialysis-dependent since diagnosis. Two cases were IgG kappa and one was IgA lambda. All patients were treated with chemotherapy and SUPRA-HFR. The aim of this study was to evaluate the effectiveness of SUPRA-HFR in the reduction of FLC and its effect on albumin. We collected blood samples pre- and post-dialysis, and ultrafiltrate (UF) samples pre- and post-resin 5 minutes into the session and 5 minutes from the end. The mean reduction rate of FLC in blood per session in the three patients was 53% and 63% (kappa) and 38% (lambda). In the UF, the mean FLC reduction rate was close to 99%, both at the start and at the end of dialysis, without the removal of albumin. With the results obtained we can conclude that this technique achieves an effective reduction of FLC, which is maintained throughout the session, without resin saturation and without albumin loss. Therefore, SUPRA-HFR is effective as an adjunctive therapy for MM.

[614]

**TÍTULO / TITLE:** - Prostate Sparing Cystectomy for Bladder Cancer: 20 Years Single Center Experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 25. pii: S0022-5347(13)05984-3. doi: 10.1016/j.juro.2013.11.031.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.11.031](#)

**AUTORES / AUTHORS:** - Mertens LS; Meijer RP; de Vries RR; Nieuwenhuijzen JA; van der Poel HG; Bex A; van Rhijn BW; Meinhardt W; Horenblas S

**INSTITUCIÓN / INSTITUTION:** - Dept. of Urology. The Netherlands Cancer Institute - Antoni van Leeuwenhoek, Amsterdam, The Netherlands.

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the long-term oncological and functional results after prostate sparing cystectomy (PSC) for bladder cancer (BC). METHODS: Between 1994-2013, 120 patients with cT1-4N0-3 BC were treated with PSC, of which 110 had a follow-up of  $\geq 2$  years and were eligible for analysis. In order to rule out tumour in the bladder neck, prostatic urethra or prostate cancer, all patients underwent preoperative transurethral biopsy of the bladder neck, prostatic urethra, PSA, measurement and transrectal ultrasound with biopsies. Oncological outcome (disease specific (DSS) and recurrence free survival (RFS); recurrence rates, prostate cancer and functional results (continence, voiding, erectile and ejaculatory function) were assessed. RESULTS: Mean age was 56.2 years (SD: 8.3 years). The median follow-up was 77.0 months (interquartile range: 57-116 months). The 2- and 5-year DSS rates were 76.2% and 66.5%, respectively; the 2- and 5-year RFS rates 71.2% and 66.6%. The distant and local recurrence rates were 34.2% and 10.0%. One of the local recurrences was in the remnant prostatic urothelium. Prostate cancer was diagnosed in 2.7%. Complete daytime and nighttime continence was achieved in 96.2% and 81.9%, respectively. Erectile function and antegrade ejaculation were intact in 89.7% and 35.5% of the patients. CONCLUSIONS: Our long-term data show that, for a subset of carefully selected BC patients without evidence of urothelial carcinoma in the prostatic urethra/bladder neck and no prostate cancer, PSC is an oncologically safe procedure with excellent functional results.

[615]

**TÍTULO / TITLE:** - Re: advanced transitional cell carcinoma of the bladder in a 16-year-old girl with hinman syndrome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2234-5. doi: 10.1016/j.juro.2013.08.037. Epub 2013 Aug 26.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.037](http://1016/j.juro.2013.08.037)

**AUTORES / AUTHORS:** - Canning DA

[616]

**TÍTULO / TITLE:** - Re: contracted bladder developing after prostate brachytherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2095. doi: 10.1016/j.juro.2013.08.041. Epub 2013 Aug 26.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.041](http://1016/j.juro.2013.08.041)

**AUTORES / AUTHORS:** - Kaplan SA

[617]

**TÍTULO / TITLE:** - The Relationship Between Characteristics Of Inguinal Lymph-Nodes And Pelvic Lymph-Node Involvement In Penile Squamous Cell Carcinoma: A Single-Institutional Experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 18. pii: S0022-5347(13)05978-8. doi: 10.1016/j.juro.2013.10.140.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.140](http://1016/j.juro.2013.10.140)

**AUTORES / AUTHORS:** - Giovanni L; Mario C; Tullio T; Luigi P; Davide B; Silvia S; Andrea G; Crestani A; Daniele R; Patrizia G; Andrea N; Giorgio P; Maurizio C; Roberto S; Nicola N

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Fondazione IRCCS Istituto Nazionale dei Tumori, Milano, Italy.

**RESUMEN / SUMMARY:** - **PURPOSE:** We aimed to determine the predictors of pelvic lymph-node metastases (LNM) in patients with penile cancer. **METHODS:** A total of 188 node-positive inguinal groins from 142 patients treated for penile cancer were retrieved. Logistic regression models (LRMs) were fitted to test the predictors of pelvic LNM. The minimum p-value method was used to determine the most significant cut-off values for each predictor. **RESULTS:** Pelvic LNM were observed in 45 (31.7%) cases. Five-year cancer-specific survival (CSS) rates were 71.0% vs. 33.2% in patients with inguinal vs. pelvic LNM. The most significant cut-off values were 3 and 30 mm for the number and diameter of inguinal LNM. From the univariable LRMs, the number of inguinal LNM (OR: 1.92;  $p < 0.001$ ), the diameter of inguinal LNM (OR: 1.03;  $p = 0.001$ ), and the presence of extra-nodal extension (ENE) (OR: 8.01;  $p < 0.001$ ) emerged as significant predictors of pelvic LNM. In addition, these variables were independent predictors of pelvic LNM in multivariable LRMs ( $p \leq 0.012$ ). Patients with  $\geq 3$  inguinal LNM and patients with a LNM diameter  $\geq 30$  mm had respectively a 4.77- and 2.53-fold higher risk of harboring pelvic LNM ( $p \leq 0.006$ ). The proportion of pelvic LNM significantly increased from 0% in cases with no risk factors to 57.1% when all of the three risk factors were observed ( $p < 0.001$ ). **CONCLUSIONS:** Number and diameter of inguinal LNM, as well as ENE, are significantly associated with pelvic LNM. These variables should be taken into account to determine the need of pelvic lymph-node dissection. Patients with no risk factors may be spared pelvic lymph-node dissection.

[618]

**TÍTULO / TITLE:** - Icilin inhibits E2F1-mediated cell cycle regulatory programs in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Biophys Res Commun. 2013 Nov 29;441(4):1005-10. doi: 10.1016/j.bbrc.2013.11.015. Epub 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbrc.2013.11.015](http://1016/j.bbrc.2013.11.015)

**AUTORES / AUTHORS:** - Lee S; Chun JN; Kim SH; So I; Jeon JH

**INSTITUCIÓN / INSTITUTION:** - Department of Biochemistry, University of Utah School of Medicine, Salt Lake City, UT 84112-5650, USA.

**RESUMEN / SUMMARY:** - Aberrant expression of cell cycle regulators have been implicated in prostate cancer development and progression. Therefore, understanding transcriptional networks controlling the cell cycle remain a challenge in the development of prostate cancer treatment. In this study, we found that icilin, a super-cooling agent, down-regulated the expression of cell cycle signature genes and caused G1 arrest in PC-3 prostate cancer cells. With reverse-engineering and an unbiased interrogation of a prostate cancer-specific regulatory network, master regulator analysis discovered that icilin affected cell cycle-related transcriptional modules and identified E2F1 transcription factor as a target master regulator of icilin. Experimental analyses confirmed that icilin reduced the activity and expression levels of E2F1.

These results demonstrated that icilin inactivates a small regulatory module controlling the cell cycle in prostate cancer cells. Our study might provide insight into the development of cell cycle-targeted cancer therapeutics.

[619]

**TÍTULO / TITLE:** - Prostate cancer biomarker profiles in urinary sediments and exosomes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Nov 7. pii: S0022-5347(13)05884-9. doi: 10.1016/j.juro.2013.11.001.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.11.001](#)

**AUTORES / AUTHORS:** - Dijkstra S; Birker IL; Smit FP; Leyten GH; de Reijke TM; van Oort IM; Mulders PF; Jannink SA; Schalken JA

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Radboud University Medical Center, Geert Grooteplein Zuid 10, P.O. Box 9101, 6500 HB Nijmegen, The Netherlands.

**RESUMEN / SUMMARY:** - PURPOSE: Urinary biomarker tests for the diagnosis of prostate cancer (PCa) have gained considerable interest. Urine is a complex mixture that can be subfractionated. In this study we evaluated two urinary fractions that contain nucleic acids, i.e. cell pellet and exosomes. The influence of a digital rectal examination (DRE) before urine collection was also studied and PCa specific biomarkers PCA3 and TMPRSS2-ERG were assayed. MATERIALS AND METHODS: Urine samples before and after DRE were prospectively obtained from 30 subjects scheduled for prostate biopsy. Cell pellet and exosomes were isolated and used for biomarker analysis. Analytical and diagnostic performance was tested using Student's t-test and ROC curves. RESULTS: Unlike the exosome fraction, urinary sediment gene expression analysis is compromised by amorphous precipitation in 10% of all specimens. The DRE results in increased mRNA levels in both fractions. This was particularly relevant for the exosomal fraction, since after DRE the number of samples, in which the cancer specific markers were below the analytical detection limit, decreased. The diagnostic performance of the biomarkers was comparable to that in large clinical studies. In exosomes, the biomarkers needed to be normalized for PSA mRNA, whereas the cell pellets absolute PCA3 levels had diagnostic value. CONCLUSIONS: Exosomes contain characteristics to serve as a stable substrate for biomarker analysis. Thereby, DRE enhances analytical performance of biomarker analysis in exosomes and cell pellet. Diagnostic performance of biomarkers in exosomes is different from the cell pellet. Its clinical utility needs to be prospectively assessed in larger clinical cohorts.

[620]

**TÍTULO / TITLE:** - Measuring and Predicting Prostate Cancer Related Quality of Life Changes Using the EPIC-CP.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Sep 25. pii: S0022-5347(13)05509-2. doi: 10.1016/j.juro.2013.09.040.

●● Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.09.040](#)

**AUTORES / AUTHORS:** - Chipman JJ; Sanda MG; Dunn RL; Wei JT; Litwin MS; Crociani CM; Regan MM; Chang P

**INSTITUCIÓN / INSTITUTION:** - (a)Department of Biostatistics and Computational Biology, Dana-Farber Cancer Institute, Boston, Massachusetts.

**RESUMEN / SUMMARY:** - **PURPOSE:** We expanded the clinical usefulness of the Expanded Prostate Cancer Index Composite (EPIC) for Clinical Practice (CP) by evaluating its responsiveness to health related quality of life changes, defining the minimally important differences for an individual patient change in each domain and applying it to a sexual outcome prediction model. **MATERIALS AND METHODS:** In 1,201 subjects from a previously described multicenter longitudinal cohort we modeled the EPIC-CP domain scores of each treatment group before treatment, and at short-term and long-term followup. We considered a posttreatment domain score change from pretreatment of 0.5 SD or greater clinically significant and  $p \leq 0.01$  statistically significant. We determined the domain minimally important differences using the pooled 0.5 SD of the 2, 6, 12 and 24-month posttreatment changes from pretreatment values. We then recalibrated an EPIC-CP based nomogram model predicting 2-year post-prostatectomy functional erection from that developed using EPIC-26. **RESULTS:** For each health related quality of life domain EPIC-CP was sensitive to similar posttreatment health related quality of life changes with time, as was observed using EPIC-26. The EPIC-CP minimally important differences in changes in the urinary incontinence, urinary irritation/obstruction, bowel, sexual and vitality/hormonal domains were 1.0, 1.3, 1.2, 1.6 and 1.0, respectively. The EPIC-CP based sexual prediction model performed well (AUC 0.76). It showed robust agreement with its EPIC-26 based counterpart with 10% or less predicted probability differences between models in 95% of individuals and a mean +/- SD difference of 0.0 +/- 0.05 across all individuals. **CONCLUSIONS:** EPIC-CP is responsive to health related quality of life changes during convalescence and it can be used to predict 2-year post-prostatectomy sexual outcomes. It can facilitate shared medical decision making and patient centered care.

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[621]

**TÍTULO / TITLE:** - Re: Intermittent versus Continuous Androgen Deprivation in Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Dec;190(6):2093-4. doi: 10.1016/j.juro.2013.08.102. Epub 2013 Sep 7.

- Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.08.102](http://1016/j.juro.2013.08.102)

**AUTORES / AUTHORS:** - Taneja SS

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[622]

**TÍTULO / TITLE:** - Serum N-glycan alteration associated with renal cell carcinoma detected by high-throughput glycan analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Urol. 2013 Oct 15. pii: S0022-5347(13)05660-7. doi: 10.1016/j.juro.2013.10.052.

- Enlace al texto completo (gratis o de pago) [1016/j.juro.2013.10.052](http://1016/j.juro.2013.10.052)

**AUTORES / AUTHORS:** - Hatakeyama S; Amano M; Tobisawa Y; Yoneyama T; Tsuchiya N; Habuchi T; Nishimura SI; Ohyama C

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Hirosaki University Graduate School of Medicine, Hirosaki, Japan.

**RESUMEN / SUMMARY:** - **PURPOSE:** Biomarkers for early detection and prediction of survival in patients with renal cell carcinoma (RCC) have not been established. We developed a novel glycoblotting method that allows high-throughput, comprehensive, and quantitative analysis of glycans in human serum. The aim of this study was to identify alterations in serum N-glycans associated with RCC. **MATERIALS AND METHODS:** We performed a comprehensive N-glycan structural analysis of sera from 64 RCC patients and 34 age-matched healthy volunteers using glycoblotting methods and matrix-assisted laser desorption/ionization-time of flight mass spectrometry. The peak intensity of N-glycan was analyzed using logistic regression analysis and a receiver operating characteristic curve to select candidate N-glycans. Candidate N-glycans with a statistically significant relationship with RCC or overall survival were independently evaluated using a Cox regression model to elucidate superiority compared to other conventional RCC biomarkers. **RESULTS:** We identified 56 types of N-glycans in sera from healthy volunteers and RCC patients. Peaks 40 and 43 were significantly more intense in RCC patients than in healthy volunteers. The intensity of peak 19 was significantly higher, and the intensity of peak 49 was significantly lower in RCC patients who survived for longer periods. A multivariate analysis revealed that peaks 19 and 49 were independent predictors of overall survival. **CONCLUSION:** Serum N-glycan analysis is a promising approach to discover new biomarkers for RCC. Further study is warranted to validate our results.

[623]

**TÍTULO / TITLE:** - Real-time estimation of prostate tumor rotation and translation with a kV imaging system based on an iterative closest point algorithm.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Phys Med Biol. 2013 Dec 7;58(23):8517-33. doi: 10.1088/0031-9155/58/23/8517. Epub 2013 Nov 15.

●● [Enlace al texto completo \(gratis o de pago\) 1088/0031-9155/58/23/8517](#)

**AUTORES / AUTHORS:** - Tehrani JN; O'Brien RT; Poulsen PR; Keall P

**INSTITUCIÓN / INSTITUTION:** - Radiation Physics Laboratory, Sydney Medical School, University of Sydney, NSW, Australia.

**RESUMEN / SUMMARY:** - Previous studies have shown that during cancer radiotherapy a small translation or rotation of the tumor can lead to errors in dose delivery. Current best practice in radiotherapy accounts for tumor translations, but is unable to address rotation due to a lack of a reliable real-time estimate. We have developed a method based on the iterative closest point (ICP) algorithm that can compute rotation from kilovoltage x-ray images acquired during radiation treatment delivery. A total of 11 748 kilovoltage (kV) images acquired from ten patients (one fraction for each patient) were used to evaluate our tumor rotation algorithm. For each kV image, the three dimensional coordinates of three fiducial markers inside the prostate were calculated. The three dimensional coordinates were used as input to the ICP algorithm to calculate the real-time tumor rotation and translation around three axes. The results show that the root mean square error was improved for real-time calculation of tumor

displacement from a mean of 0.97 mm with the stand alone translation to a mean of 0.16 mm by adding real-time rotation and translation displacement with the ICP algorithm. The standard deviation (SD) of rotation for the ten patients was 2.3 degrees , 0.89 degrees and 0.72 degrees for rotation around the right-left (RL), anterior-posterior (AP) and superior-inferior (SI) directions respectively. The correlation between all six degrees of freedom showed that the highest correlation belonged to the AP and SI translation with a correlation of 0.67. The second highest correlation in our study was between the rotation around RL and rotation around AP, with a correlation of -0.33. Our real-time algorithm for calculation of rotation also confirms previous studies that have shown the maximum SD belongs to AP translation and rotation around RL. ICP is a reliable and fast algorithm for estimating real-time tumor rotation which could create a pathway to investigational clinical treatment studies requiring real-time measurement and adaptation to tumor rotation.

[624]

**TÍTULO / TITLE:** - Myeloma kidney: the importance of assessing the response by monitoring free light chains in serum.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nefrologia. 2013 Nov 13;33(6):862-864. doi: 10.3265/Nefrologia.pre2013.Jul.12103.

●● Enlace al texto completo (gratis o de pago)

[3265/Nefrologia.pre2013.Jul.12103](#)

**AUTORES / AUTHORS:** - Martin-Gomez MA; Garcia-Marcos SA; Caba-Molina M; Palacios-Gomez ME; Gomez-Morales M; Claver-Ferre C

[625]

**TÍTULO / TITLE:** - Prostatic atrophy: its spatial proximity to carcinoma and intraepithelial neoplasia based on annotation of digital slides.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Oct 21. pii: S0046-8177(13)00333-X. doi: 10.1016/j.humpath.2013.07.041.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.07.041](#)

**AUTORES / AUTHORS:** - Iczkowski KA; Torkko KC; Wilson RS; Lucia MS; Bostwick DG  
**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Medical College of Wisconsin, Milwaukee, WI 53226. Electronic address: [kaiczkowski@mcw.edu](mailto:kaiczkowski@mcw.edu).

**RESUMEN / SUMMARY:** - Whether atrophy is a precursor to high-grade prostatic intraepithelial neoplasia (HGPIN) and cancer is controversial. A virtual slide set comprising 48 prostatectomy cases was used to investigate associations among the amounts and spacing of these entities. Foci of atrophy without inflammation (A), atrophy with inflammation (AI), cancer (by patterns), and HGPIN were digitally annotated. Atrophy's proximity to cancer and HGPIN was assessed with two measurements: abutment (touching) or nearness ( $\leq 2$  mm without touching). Area sums per specimen were computed for A, AI, cancer, and HGPIN. Abutment rates of AI and A foci to cancer were 23% versus 21% ( $p = \text{NS}$ ); for nearness, 29% of AI foci were near to cancer versus 12% of A ( $P = .0001$ ). Abutment or nearness of A and AI to HGPIN were in the 1.4% to 2.4% range. When A, AI, or HGPIN abutted cancer, it was

disproportionately to Gleason grade 3 cancer foci even after adjusting for the lesser frequency of higher-grade cancer foci. Area sums of A, AI, or (A + AI) per specimen showed no correlations with those of HGPIN, and mostly negative ones with area sum and with tumor volume of cancer. In conclusion, atrophy with inflammation showed some preferential spatial association to cancer, although area sums of atrophy with or without inflammation correlated negatively with those of cancer. These divergent spatial associations suggest that atrophy and inflammation in biopsy specimens may have clinical relevance. The frequency of inflammatory atrophy (AI) merging with HGPIN was far less than reported previously, weakening the theory that AI gives rise to HGPIN.

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[626]

**TÍTULO / TITLE:** - Clear cell papillary renal cell carcinoma is the fourth most common histologic type of renal cell carcinoma in 290 consecutive nephrectomies for renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Oct 31. pii: S0046-8177(13)00337-7. doi: 10.1016/j.humpath.2013.08.004.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.08.004](#)

**AUTORES / AUTHORS:** - Zhou H; Zheng S; Truong LD; Ro JY; Ayala AG; Shen SS

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Genomic Medicine, Houston Methodist Hospital, Weill Cornell Medical College of Cornell University, Houston, TX 77030, USA; Department of Pathology and Laboratory Medicine, Weill Cornell Medical College of Cornell University, Houston, TX 77030, USA.

**RESUMEN / SUMMARY:** - Clear cell papillary renal cell carcinoma (CCP-RCC) has recently been recognized as a distinct subtype of renal cell carcinoma (RCC) due to its unique morphologic, immunohistochemical, and genetic features and indolent clinical behavior. However, the incidence of this tumor in a nephrectomy series for renal mass has not been fully investigated. Twelve cases of CCP-RCC were identified from a total of 290 consecutive partial (n = 137) or radical nephrectomies (n = 153) for RCC from 2010 to 2012 in our hospital. In this series, CCP-RCC was the fourth most common (4.1%) kidney tumor following clear cell (conventional) (70%), papillary (16.6%), and chromophobe (5.9%) RCCs. The average age of the CCP-RCC patients was 58.2 years (range, 18-81 years), with an equal sex distribution. Four cases (33.3%) were associated with end-stage renal disease. Of the 12 CCP-RCCs, 9 presented as solitary tumors; 2 coexisted with clear cell RCC; and 1 with papillary RCC. The average size of tumors was 2.5 cm (range, 0.8-6.0 cm). All tumors were pT1 (10 pT1a and 2 pT1b). Two cases were initially misclassified as clear cell RCC. Strong positive cytokeratin 7 stain and negative stains with alpha-methylacyl-CoA racemase and RCC marker differentiate CCP-RCC from low-grade clear cell RCC with similar histologic features. We conclude that CCP-RCC is a common renal neoplastic entity, representing the fourth most common (4.1%) RCC. It can be easily misclassified due to its overlapping features with low-grade clear cell RCC. In equivocal cases, immunohistochemical stains with a small panel of markers (cytokeratin 7, alpha-methylacyl-CoA racemase, RCC marker, or CD10) are warranted in making the correct histologic classification.

[627]

**TÍTULO / TITLE:** - Dysregulation of mammalian target of rapamycin pathway in upper tract urothelial carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hum Pathol. 2013 Dec;44(12):2668-76. doi: 10.1016/j.humpath.2013.07.008. Epub 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [1016/j.humpath.2013.07.008](#)

**AUTORES / AUTHORS:** - Munari E; Fujita K; Faraj S; Chaux A; Gonzalez-Roibon N; Hicks J; Meeker A; Nonomura N; Netto GJ

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Johns Hopkins University, Baltimore, MD 21287, USA. Electronic address: [gnetto1@jhmi.edu](mailto:gnetto1@jhmi.edu).

**RESUMEN / SUMMARY:** - Upper tract urothelial carcinoma (UTUC) accounts for 5% to 10% of all urothelial carcinomas. Despite many shared features, key clinical and molecular genetic differences between upper tract and bladder urothelial carcinomas are becoming apparent. We have previously demonstrated alterations of mammalian target of rapamycin (mTOR) pathway in bladder carcinoma with a potential impact on biological behavior. In the current study, we evaluated the expression status and prognostic significance of mTOR pathway members in UTUC. Archival formalin-fixed and paraffin-embedded tissues from 99 primary UTUCs were retrieved from one of the authors' institution. Tissue microarrays were constructed with triplicate tumor samples and paired nonneoplastic urothelium. Tissue microarrays were analyzed using immunohistochemistry for mTOR pathway members: PTEN, phos-AKT, phos-mTOR, phos-S6, phos-4EBP1, and related markers p27 and c-MYC; correlation with clinicopathologic parameters and outcome was performed. We found significantly lower expression of PTEN, phos-AKT, phos-mTOR, phos-S6, phos-4EBP1, p27, and c-MYC in UTUC compared with paired benign urothelium ( $P < .0005$ ). We found a strong positive correlation between PTEN and phos-AKT. Moderate correlation was observed between phos-mTOR and phos-S6, PTEN and p27, phos-AKT and p27, phos-S6 and p27, phos-mTOR and c-MYC, phos-S6 and c-MYC, and p27 and c-MYC. None of the evaluated biomarkers were associated with increased hazard ratios for tumor recurrence or for cancer-specific mortality, when adjusting for relevant clinicopathologic variables. Dysregulation of the mTOR pathway was observed in UTUC compared with normal urothelium, implicating a potential pathogenic role in tumor development. In our cohort, expression of the evaluated biomarkers had no prognostic value.

[628]

**TÍTULO / TITLE:** - Development of a peptide-based vaccine targeting TMPRSS2:ERG fusion-positive prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Immunol Immunother. 2013 Dec;62(12):1831-40. doi: 10.1007/s00262-013-1482-y. Epub 2013 Oct 23.

●● Enlace al texto completo (gratis o de pago) [1007/s00262-013-1482-y](#)

**AUTORES / AUTHORS:** - Kissick HT; Sanda MG; Dunn LK; Arredouani MS

**INSTITUCIÓN / INSTITUTION:** - Urology Division, Department of Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, 3 Blackfan Circle, E/CLS-447, Boston, MA, 02215, USA.

**RESUMEN / SUMMARY:** - Identification of novel vaccine targets is critical for the design and advancement of prostate cancer (PCa) immunotherapy. Ideal targets are proteins that are abundant in prostate tumors while absent in extra-prostatic tissues. The fusion of the androgen-regulated TMPRSS2 gene with the ETS transcription factor ERG occurs in approximately 50 % of prostate cancer cases and results in aberrant ERG expression. Because expression of ERG is very low in peripheral tissue, we evaluated the suitability of this protein as an antigen target in PCa vaccines. ERG-derived HLA-A\*0201-restricted immunogenic epitopes were identified through a 3-step strategy that included in silico, in vitro, and in vivo validation. Algorithms were used to predict potential HLA-A\*0201-binding epitopes. High-scoring epitopes were tested for binding to HLA-A\*0201 using the T2-based stabilization assay in vitro. Five peptides were found to bind HLA-A\*0201 and were subsequently tested for immunogenicity in humanized, HLA-A\*0201 transgenic mice. The in vivo screening identified three immunogenic peptides. One of these peptides, ERG295, overcame peripheral tolerance in HLA-A\*0201 mice that expressed prostate-restricted ERG. Also, this peptide induced an antigen-specific response against ERG-expressing human prostate tumor cells. Finally, tetramer assay showed detectable and responsive ERG295-specific cytotoxic lymphocytes in peripheral blood of HLA-A\*0201(+) prostate cancer patients. Detection of ERG-specific CTLs in both mice and the blood of prostate cancer patients indicates that ERG-specific tolerance can be overcome. Additionally, these data suggest that ERG is a suitable target antigen for PCa immunotherapy.

[629]

**TÍTULO / TITLE:** - Anatomic segmentation improves prostate cancer detection with artificial neural networks analysis of H magnetic resonance spectroscopic imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Magn Reson Imaging. 2013 Nov 15. doi: 10.1002/jmri.24487.

●● Enlace al texto completo (gratis o de pago) [1002/jmri.24487](#)

**AUTORES / AUTHORS:** - Matulewicz L; Jansen JF; Bokacheva L; Vargas HA; Akin O; Fine SW; Shukla-Dave A; Eastham JA; Hricak H; Koutcher JA; Zakian KL

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Physics, Memorial Sloan-Kettering Cancer Center, New York, New York, USA; Department of Radiotherapy and Brachytherapy Planning, Maria Skłodowska-Curie Memorial Cancer Center and Institute of Oncology, Gliwice, Poland.

**RESUMEN / SUMMARY:** - **PURPOSE:** To assess whether an artificial neural network (ANN) model is a useful tool for automatic detection of cancerous voxels in the prostate from 1 H-MRSI datasets and whether the addition of information about anatomical segmentation improves the detection of cancer. **MATERIALS AND METHODS:** The Institutional Review Board approved this HIPAA-compliant study and waived informed consent. Eighteen men with prostate cancer (median age, 55 years; range, 36-71 years) who underwent endorectal MRI/MRSI before radical prostatectomy were included in this study. These patients had at least one cancer area on whole-mount histopathological map and at least one matching MRSI voxel suspicious for cancer detected. Two ANN models for automatic classification of MRSI voxels in the prostate were implemented and compared: model 1, which used only spectra as input, and model 2, which used the spectra plus information from anatomical segmentation. The models were trained, tested and validated using spectra from voxels that the

spectroscopist had designated as cancer and that were verified on histopathological maps. RESULTS: At ROC analysis, model 2 (AUC = 0.968) provided significantly better (P = 0.03) classification of cancerous voxels than did model 1 (AUC = 0.949). CONCLUSION: Automatic analysis of prostate MRSI to detect cancer using ANN model is feasible. Application of anatomical segmentation from MRI as an additional input to ANN improves the accuracy of detecting cancerous voxels from MRSI. J. Magn. Reson. Imaging 2013. © 2013 Wiley Periodicals, Inc.

[630]

**TÍTULO / TITLE:** - Recent Advances in Cross-sectional Renal Imaging-An Oncologic Perspective: The Current Concepts and the Future Challenges.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Comput Assist Tomogr. 2013 Nov-Dec;37(6):962-70. doi: 10.1097/RCT.0000000000000033.

●● Enlace al texto completo (gratis o de pago)

[1097/RCT.0000000000000033](#)

**AUTORES / AUTHORS:** - Ganeshan D; Notohamiprodjo M; Nikolaidis P; Sanyal R; Bhosale P

**INSTITUCIÓN / INSTITUTION:** - From the \*Department of Diagnostic Radiology, MD Anderson Cancer Center, Houston, TX; daggerSection Chief General Radiology, Department of Clinical Radiology, University Hospitals Munich, Munich, Germany; double daggerNorthwestern Memorial Hospital, Chicago, IL; and section signBody Imaging and Emergency Radiology Section, University of Alabama in Birmingham, Birmingham, AL.

**RESUMEN / SUMMARY:** - Renal imaging remains a critical tool to differentiate and manage benign from malignant renal disorders. Conventional multidetector computed tomography (CT) and magnetic resonance (MR) provide great anatomical details, although lack functional information and specificity. The lack of resolution undermines the functional capabilities of nuclear medicine imaging. Functional MR imaging has shown strong utility in imaging of renal masses, with evolving techniques such as diffusion, perfusion, and blood oxygen level-dependent sequences. At the same time, newer techniques like dual-energy CT and CT perfusion are also showing promise in renal oncologic imaging. This article will discuss the recent advances in MR imaging and CT techniques pertaining to renal oncological applications.

[631]

**TÍTULO / TITLE:** - Change in expression of cyclin G2 in kidney cancer cell and its significance.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Nov 23.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1415-6](#)

**AUTORES / AUTHORS:** - Cui DW; Sun GG; Cheng YJ

**INSTITUCIÓN / INSTITUTION:** - Department of Urinary Surgery, Tangshan Works Hospital, Tangshan, 063000, China.

**RESUMEN / SUMMARY:** - This study aims to analyze the expression and clinical significance of cyclin G2 (CCNG2) in kidney carcinoma, and the biological effect in its

cell line by CCNG2 overexpression. Immunohistochemistry and western blot were used to analyze CCNG2 protein expression in 63 cases of kidney cancer and normal tissues to study the relationship between CCNG2 expression and clinical factors. CCNG2 lentiviral vector and empty vector were respectively transfected into kidney ACHN cell line. During immunohistochemistry, the level of CCNG2 protein expression was found to be significantly lower in kidney cancer tissue than normal tissues ( $P < 0.05$ ). After Western blot, the relative amount of CCNG2 protein in kidney cancer tissue was respectively found to be significantly lower than in normal tissues ( $P < 0.05$ ). The level of CCNG2 protein expression was not correlated with gender, age, tumor size, and pathological types ( $P > 0.05$ ), but it was correlated with lymph node metastasis, clinic stage, and histological grade ( $P < 0.05$ ). Loss of CCNG2 expression correlated significantly with poor overall survival time by Kaplan-Meier analysis ( $P < 0.05$ ). The result of biological function show that ACHN cell-transfected CCNG2 had a lower survival fraction, higher percentage of the G0/G1 phases, and lower CDK2 protein expression compared with ACHN cell-untransfected CCNG2 ( $P < 0.05$ ). CCNG2 expression decreased in kidney cancer and correlated significantly with lymph node metastasis, clinical stage, histological grade, and poor overall survival, suggesting that CCNG2 may play important roles as a negative regulator to kidney cancer ACHN cell by promoting degradation of CDK2.

[632]

**TÍTULO / TITLE:** - Ki67 and TP53 expressions predict recurrence of non-muscle-invasive bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Nov 17.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1384-9](#)

**AUTORES / AUTHORS:** - Wang L; Feng C; Ding G; Ding Q; Zhou Z; Jiang H; Wu Z

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Huashan Hospital, Fudan University, Shanghai, China.

**RESUMEN / SUMMARY:** - Tumor markers Ki67, TP53, and TP63 are common labels in the diagnosis of bladder cancer (BCa) around the world. The combination of those biomarkers may have advantages in predicting BCa prognosis and non-muscle-invasive bladder cancer (NMIBC) postoperative recurrence. We investigated the immunohistochemical profiles of 313 bladder cancer samples classified under the WHO/ISUP (2004) grading scale and the UICC-TNM (2002) classification. Then we investigated their predictive value in the tumor recurrence of 270 NMIBC patients after TURBT. Expression of Ki67 correlates with grade, stage, tumor size, and tumor numbers. Semiquantitative evaluation of TP53 correlates with grade and invasive conditions. The positive expression rate of TP63 correlated with tumor grade and stage. The combined effect of TP53 and Ki67 revealed a predictive value in NMIBC recurrence. However, the positive TP63 expression did not show any protective effect in NMIBC recurrence. The expression of TP53 and Ki67 could be used to predict the risk of NMIBC recurrence postoperatively.

[633]

**TÍTULO / TITLE:** - Lower Urinary Tract Symptom Improvement After Radical Prostatectomy Correlates With Degree of Prostatic Inflammation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 15. pii: S0090-4295(13)01289-2. doi: 10.1016/j.urology.2013.07.080.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.07.080](http://1016/j.urology.2013.07.080)

**AUTORES / AUTHORS:** - Burriss MB; Cathro HP; Kowalik CG; Jensen D; Culp SH; Steers WD; Krupski TL

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Virginia Health System, Charlottesville, VA, Canada.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To determine if prostatic inflammation at the time of radical prostatectomy (RP) was associated with the International Prostate Symptom Score (IPSS). **METHODS:** We performed a proof of principle analytic case control study of patients who underwent RP between January 2005 and August 2008 for lower urinary tract symptoms (LUTS). We reviewed pathology slides of those who had a change of 4 points or greater, as measured by the IPSS and correlated inflammation with change in IPSS. Multivariate linear regression analyses were performed to determine the association of IPSS with degree of inflammation based on the number of inflammatory cells. **RESULTS:** Of 249 patients, 136 had complete data and 47 (18.8%) underwent pathologic review. The median change in IPSS for the study cohort was -7.0 points compared to +1.0 point for the control cohort. On univariate analysis, the average improvement in IPSS in patients with severe inflammation was ( $r = -6.02$ , 95% confidence interval [CI] -11.0 to -1.1,  $P = .018$ ) after RP. On multivariate analysis, adjusting for age, body mass index (BMI), year of surgery, history of prostatitis, Gleason score, prostate-specific antigen (PSA), prostate weight, and nerve sparing status, only patients with severe prostatic inflammation had significant improvement in their IPSS ( $r = -5.93$ , 95% CI -10.81 to -1.04,  $P = .004$ ). **CONCLUSION:** Prostatic inflammation measured in prostatectomy specimens is associated with worse baseline IPSS than matched cohorts. Specifically, severe inflammation is an independent predictor of IPSS improvement at 1 year after RP.

[634]

**TÍTULO / TITLE:** - Imaging of primary and secondary renal lymphoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Nov;201(5):W712-9. doi: 10.2214/AJR.13.10669.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.13.10669](http://2214/AJR.13.10669)

**AUTORES / AUTHORS:** - Ganeshan D; Iyer R; Devine C; Bhosale P; Paulson E

**INSTITUCIÓN / INSTITUTION:** - 1 All authors: Department of Diagnostic Radiology, Division of Diagnostic Imaging, Body Imaging Section, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Blvd, Unit 1473, Houston, TX 77030-4009.

**RESUMEN / SUMMARY:** - **OBJECTIVE.** This article reviews the CT and MRI patterns of primary and secondary renal lymphomas and discusses the role of percutaneous biopsy in diagnosis and management. **CONCLUSION.** Renal lymphoma has a variable imaging spectrum and may mimic renal cell carcinoma. An awareness of the typical and atypical imaging features of both primary and secondary renal lymphomas can

help the radiologist to suggest these diagnoses and recommend biopsy when appropriate.

[635]

**TÍTULO / TITLE:** - Partial Penectomy and Penile Reconstruction. Initial Surgical Management of Localized Penile Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 5. pii: S0210-4806(13)00161-7. doi: 10.1016/j.acuro.2013.04.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.04.005](#)

**AUTORES / AUTHORS:** - Perez-Nino J; Fernandez N; Sarmiento G

**INSTITUCIÓN / INSTITUTION:** - Urologo, Profesor Asistente Facultad de Medicina Pontificia Universidad Javeriana, Hospital Universitario San Ignacio, Bogota, Colombia. Electronic address: [jaime.perez@javeriana.edu.co](mailto:jaime.perez@javeriana.edu.co).

**RESUMEN / SUMMARY:** - INTRODUCTION: Surgical management for penile carcinoma is mutilating and affects significantly quality of life. Hereby we present our experience on penile reconstruction (PR) immediately after oncologic resection. MATERIALS AND METHODS: We included all patients from January 2007 until April 2012 who underwent PR after partial penectomy (PP). Patients included in the study were seen at four different hospitals. All procedures were done by the same surgeon. Information included were: oncological status at the moment of surgery, surgical technique used for reconstruction. Each case was also registered photographically. On follow-up visits data about outcome and patient's satisfaction were registered. RESULTS: During the study period 15 patients underwent PR. Average age at the moment of surgery was 49 years. Average follow-up was 15 months. In 12 patients PR was made at the same time as PP. Of those, four cases underwent glans resurfacing, 2 glandectomy, 6 partial penectomy, and the remaining 3 have had PP in a different time in the past. Every case underwent a split thickness graft procedure. Only 2 patients had postoperative complications. One of them presented urethral stricture and the other graft ischemia. Three patients had positive nodes at the moment of PP and two during the follow-up. None of the cases have presented local recurrence and only one died. On follow-up the remaining patients refer a good quality of life and felt happy with aesthetic results. CONCLUSIONS: Given the results presented hereby we propose that PR must be part of the same procedure as the PP.

[636]

**TÍTULO / TITLE:** - Accurate detection of upper tract urothelial carcinoma in tissue and urine by means of quantitative GDF15, TMEFF2 and VIM promoter methylation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer. 2013 Oct 4. pii: S0959-8049(13)00841-1. doi: 10.1016/j.ejca.2013.08.025.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejca.2013.08.025](#)

**AUTORES / AUTHORS:** - Monteiro-Reis S; Leca L; Almeida M; Antunes L; Monteiro P; Dias PC; Morais A; Oliveira J; Henrique R; Jeronimo C

**INSTITUCIÓN / INSTITUTION:** - Cancer Epigenetics Group, Research Center of the Portuguese Oncology Institute - Porto, Rua Dr. Antonio Bernardino de Almeida, 4200-

072 Porto, Portugal; Department of Genetics, Portuguese Oncology Institute - Porto, Rua Dr. Antonio Bernardino de Almeida, 4200-072 Porto, Portugal.

**RESUMEN / SUMMARY:** - AIM OF THE STUDY: Upper tract urothelial carcinoma (UTUC) accounts for 5-10% of all urothelial tumours. It is mostly diagnosed at advanced stages, entailing a worse prognosis, owing to the lack of early and specific symptoms as well as of effective diagnostic tools. We previously identified a panel of epigenetic biomarkers (GDF15, TMEFF2 and VIM promoter methylation) that accurately identifies bladder cancer in urine. Herein, we assessed the performance of the same panel for UTUC detection and prognosis, in tissue and urine. MATERIAL AND METHODS: Methylation levels of reference and target genes were determined using real-time quantitative methylation-specific polymerase chain reaction (MSP) in bisulphite-modified DNA of 57 UTUC tissues, 36 normal upper tract urothelium (NUTUs), 22 urines from UTUC suspects and 20 urines from controls. Receiver operator characteristics (ROC)-curve analysis was performed to determine the performance of the biomarker panel and survival analyses were conducted to evaluate their prognostic value. RESULTS: Methylation levels of GDF15, TMEFF2 and VIM were significantly higher in UTUC compared to NUTUs ( $P=0.022$ ;  $P<0.001$ ;  $P<0.001$ , respectively). The panel accurately identified UTUC with 100% and 91% sensitivity, corresponding to an area under the curve of 1.000 and 0.923 in tissue and urines, respectively, with 100% specificity. Low VIM promoter methylation levels independently predicted poor disease-specific survival. CONCLUSIONS: GDF15, TMEFF2 and VIM promoter methylation allows for accurate identification of UTUC, in tissue and urine and VIM methylation provides relevant prognostic information, especially in high-stage disease. This assay may improve the clinical management of UTUC patients.

[637]

**TÍTULO / TITLE:** - The role of magnetic resonance imaging in the diagnosis and management of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov;112 Suppl 2:6-20. doi: 10.1111/bju.12381.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12381](#)

**AUTORES / AUTHORS:** - Thompson J; Lawrentschuk N; Frydenberg M; Thompson L; Stricker P

**INSTITUCIÓN / INSTITUTION:** - St Vincents Prostate Cancer Centre, Garvan Institute of Medical Research, Department of Surgery Research, University of New South Wales, Sydney, New South Wales.

**RESUMEN / SUMMARY:** - BACKGROUND: The diagnosis of prostate cancer has long been plagued by the absence of an imaging tool that reliably detects and localises significant tumours. Recent evidence suggests that multi-parametric MRI could improve the accuracy of diagnostic assessment in prostate cancer. This review serves as a background to a recent USANZ position statement. It aims to provide an overview of MRI techniques and to critically review the published literature on the clinical application of MRI in prostate cancer. TECHNICAL ASPECTS: The combination of anatomical (T2-weighted) MRI with at least two of the three functional MRI parameters - which include diffusion-weighted imaging, dynamic contrast-enhanced imaging and spectroscopy - will detect greater than 90% of significant (moderate to high risk) tumours; however MRI is less reliable at detecting tumours that are small (<0.5 cc), low

grade (Gleason score 6) or in the transitional zone. The higher anatomical resolution provided by 3-Tesla magnets and endorectal coils may improve the accuracy, particularly in primary tumour staging. SCREENING: The use of mpMRI to determine which men with an elevated PSA should undergo biopsy is currently the subject of two large clinical trials in Australia. MRI should be used with caution in this setting and then only in centres with established uro-radiological expertise and quality control mechanisms in place. There is sufficient evidence to justify using MRI to determine the need for repeat biopsy and to guide areas in which to focus repeat biopsy. IMAGE-DIRECTED BIOPSY: MRI-directed biopsy is an exciting concept supported by promising early results, but none of the three proposed techniques have so far been proven superior to standard biopsy protocols. Further evidence of superior accuracy and core-efficiency over standard biopsy is required, before their costs and complexities in use can be justified. TREATMENT SELECTION AND PLANNING: When used for primary-tumour staging (T-staging), MRI has limited sensitivity for T3 disease, but its specificity of greater than 95% may be useful in men with intermediate-high risk disease to identify those with advanced T3 disease not suitable for nerve sparing or for surgery at all. MRI appears to be of value in planning dosimetry in men undergoing radiotherapy, and in guiding selection for and monitoring on active surveillance.

[638]

**TÍTULO / TITLE:** - Evaluation of the Anti-Tumor Activity of Dacomitinib in Models of Human Bladder Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Med. 2013 Oct 23. doi: 10.2119/molmed.2013.00108.

●● Enlace al texto completo (gratis o de pago) [2119/molmed.2013.00108](#)

**AUTORES / AUTHORS:** - Grivas PD; Day KC; Karatsinides A; Paul A; Shakir N; Owainati I; Liebert M; Kunju P; Thomas D; Hussain M; Day ML

**INSTITUCIÓN / INSTITUTION:** - Division of Hematology/Oncology, Department of Internal Medicine, University of Michigan Translational Oncology Program, University of Michigan University of Michigan Comprehensive Cancer Center, University of Michigan.

**RESUMEN / SUMMARY:** - Members of the Human Epidermal Receptors (HER) family play a significant role in bladder cancer progression and may underlie the development of chemotherapy resistance. Dacomitinib is an irreversible tyrosine kinase inhibitor with structural specificity for the catalytic domains of EGFR, HER2 and HER4 that has exhibited vigorous efficacy against other solid tumors. We evaluated the anti-tumor activity of Dacomitinib in human bladder cancer cell lines expressing varying levels of HER family receptors. These cell lines were also established as bladder cancer xenografts in NOD/SCID mice to assess Dacomitinib activity in vivo. Significant cytotoxic and cytostatic effects were noted in cells expressing elevated levels of the Dacomitinib target receptors with apoptosis and cell cycle arrest being the predominant mechanisms of anti-tumor activity. Cells expressing lower levels of HER receptors were much less sensitive to Dacomitinib. Interestingly, Dacomitinib was more active than either Trastuzumab or Cetuximab in vitro, and exhibited increased growth inhibition of bladder tumor xenografts compared to Lapatinib. Pharmacodynamic effects of Dacomitinib included decreased E-cadherin expression, reduction of EGFR

and ERK phosphorylation and reduced mitotic count. Dacomitinib also inhibited tumor growth in a chemotherapy-resistant xenograft and when combined with chemotherapy in a sensitive xenograft exhibited superior anti-tumor effects compared to individual treatments. Evaluation in xenograft-bearing mice revealed that this combination was broadly feasible and well-tolerated. In conclusion, Dacomitinib exhibited pronounced activity both as single-agent and when combined with chemotherapy in human bladder cancer models. Further investigation of Dacomitinib in the preclinical and clinical trial settings is being pursued.

[639]

**TÍTULO / TITLE:** - Prognostic Value Of Microna Expression Pattern In Upper Tract Urothelial Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 1. doi: 10.1111/bju.12551.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12551](#)

**AUTORES / AUTHORS:** - Izquierdo L; Ingelmo-Torres M; Mallofre C; Lozano JJ; Verhasselt-Crinquette M; Leroy X; Colin P; Comperat E; Roupret M; Alcaraz A; Mengual L

**INSTITUCIÓN / INSTITUTION:** - Department and Laboratory of Urology. Hospital Clinic. Institut d'Investigacions Biomediques August Pi i Sunyer (IDIBAPS), Universitat de Barcelona, España. [lizquier@clinic.ub.es](mailto:lizquier@clinic.ub.es).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To examine the microRNA (miRNA) expression pattern in tumour samples of progressing and non-progressing upper tract urothelial carcinoma (UTUC) patients in order to identify putative miRNAs that may be used as prognostic markers. **SUBJECTS AND METHODS:** Multicenter, retrospective study of formalin-fixed paraffin embedded tissue samples from 150 UTUC patients who underwent radical nephroureterectomy. Global miRNA expression patterns were analyzed in 18 selected samples from UTUC patients using TaqMan arrays. Differential expression of five key miRNAs was validated by quantitative PCR in an independent cohort of 132 samples from UTUC patients. Tumour progression and cancer-specific survival predicting models, including miRNA expression patterns, were developed by Cox regression analysis. **RESULTS:** Twenty-six miRNAs were found to be aberrantly expressed between progressing and non-progressing UTUC patients and five of these were selected for subsequent studies. The regression analysis identified tumour stage and miR-31 and miR-149 expression as independently associated with tumour progression and tumour stage and miR-149 expression as independently associated with cancer-specific survival. The risk scores (RS) derived from these miRNAs models were able to discriminate two groups with a highly significant different probability of tumour progression (HR 4,78; p<0.001) and death (HR 2.76; p=0.0036). **CONCLUSION:** There is a differential miRNA expression pattern between progressing and non-progressing UTUC patients. Identification of new miRNAs associated with a high probability of tumour recurrence and cancer-specific survival in UTUC patients and their combination in a robust, easy-to-use and reliable algorithm may contribute to tailor treatment and surveillance strategies in these patients.

[640]

**TÍTULO / TITLE:** - Tumor Suppressor Candidate TUSC3 Expression during Rat Testis Maturation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biosci Biotechnol Biochem. 2013 Oct 23;77(10):2019-24. Epub 2013 Oct 7.

**AUTORES / AUTHORS:** - Khalid AM; Asano A; Hosaka YZ; Takeuchi T; Yamano Y

**INSTITUCIÓN / INSTITUTION:** - Laboratory of Veterinary Biochemistry, Faculty of Agriculture, Tottori University.

**RESUMEN / SUMMARY:** - Analysis of microarray data obtained by comparing gene expression between 2-week-old infant and 7-week-old mature SD rat testes revealed novel targets involved in tumor suppression. Reverse-transcription polymerase chain reaction and Northern blotting indicated that Tusc3 gene expression was upregulated in the normal maturing testis and prostate and other organs such as the cerebrum and ovary. Tumor suppressor candidate 3 protein expression was detected in these same organs at a size of about 40 kDa, in accord with the predicted molecular size. In situ hybridization and immunohistochemistry showed that mRNA and protein localization were prevalent in the testis spermatocytes and interstitial cells such as the Leydig cells, as well as prostate epithelial cells. These data suggest that TUSC3 is deeply involved in spermatogenesis in the testis, inducing sperm differentiation and maturation, and plays a role in normal prostate development and tumor suppression.

[641]

**TÍTULO / TITLE:** - Learning curve in the application of a hydrogel spacer to protect the rectal wall during radiotherapy of localized prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct;82(4):963-8. doi: 10.1016/j.urology.2013.07.014.

•• Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.07.014](http://1016/j.urology.2013.07.014)

**AUTORES / AUTHORS:** - Pinkawa M; Klotz J; Djukic V; Schubert C; Escobar-Corral N; Caffaro M; Piroth MD; Holy R; Eble MJ

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, RWTH Aachen University, Aachen, Germany. Electronic address: [MPinkawa@ukaachen.de](mailto:MPinkawa@ukaachen.de).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To evaluate the effect of increasing experience on hydrogel dimensions, rectal dose, and acute toxicity, and to discuss important technical issues gained from this experience. **METHODS:** Sixty-four consecutive patients with prostate cancer were included in this analysis (G1/G2 corresponding to first/second 32 patients) after injection of 10 mL spacer gel. All patients were treated with a 5-field intensity-modulated radiotherapy technique to 76-78 Gy. Treatment toxicity was evaluated with a validated quality of life questionnaire (expanded prostate cancer index composite) before and after radiotherapy. **RESULTS:** Rectum volume could be entirely excluded from the planning target volume in 31% in G1 vs 56% in G2 (P = .04). Increasing symmetry was detected comparing the first 15 patients to the subsequent rest, with mean differences between right and left of 0.6 cm vs 0.3 cm at the midgland (P = .03). Mean distance between prostate and anterior rectal wall increased from 0.8 cm/1.1 cm/0.8 cm (G1) at the base/middle/apex to 1.3 cm/1.5 cm/1.2 cm (G2), respectively, so that the dose to the rectum decreased significantly (6% vs 2% of the volume inside the 70 Gy isodose; P <.01). Bowel function and bother

score changes were smaller comparing baseline with last day of radiotherapy levels (mean 16/18 in G1 vs 9/12 in G2). CONCLUSION: A learning curve could be demonstrated in our patient population, respecting improved and more symmetrical spacer placement, improved treatment planning, and less treatment-related acute toxicity. Several important technical aspects need to be considered.

[642]

**TÍTULO / TITLE:** - Cancer and the kidney: individualizing dosage according to renal function.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Oncol. 2013 Nov;24(11):2713-4. doi: 10.1093/annonc/mdt431.

●● Enlace al texto completo (gratis o de pago) [1093/annonc/mdt431](#)

**AUTORES / AUTHORS:** - Launay-Vacher V

**INSTITUCIÓN / INSTITUTION:** - Service ICAR-Department of Nephrology, Pitie-Salpetriere Hospital, Paris, France.

[643]

**TÍTULO / TITLE:** - Three-dimensional cell groups with disordered nuclei and cellular discohesion (3DDD) are associated with high sensitivity and specificity for cystoscopic urine cytopathological diagnosis of low-grade urothelial neoplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diagn Cytopathol. 2013 Nov 23. doi: 10.1002/dc.23069.

●● Enlace al texto completo (gratis o de pago) [1002/dc.23069](#)

**AUTORES / AUTHORS:** - Mai KT; Ball CG; Kos Z; Belanger EC; Islam S; Sekhon H

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Laboratory Medicine, The Ottawa Hospital and University of Ottawa, Ontario, Canada.

**RESUMEN / SUMMARY:** - Cystoscopic urine obtained before the resection of low-grade urothelial carcinoma (LGUC), with adequate cytological sampling of the tumor, frequently revealed the presence of three-dimensional cell groups with disordered nuclei and cellular discohesion (3DDD). 936 cystoscopic urine specimens were categorized into five groups: Group 1 (80 specimens) with biopsy-proven LGUC within 6 months of cytologic examination, Group 2 (23 specimens) with biopsy proven LGUC within 6 to 36 months of cytologic examination, Group 3 (527 specimens) with a history of LGUC but no tumor for a period of greater than 3 years, Group 4 (300 specimens) with no association with LGUC, and Group 5 (6 specimens) with urinary lithiasis. Specimens with scant cellularity accounted for 20% of those in Group 1. For 3DDD in detecting LGUC in adequate cystoscopic urine, the sensitivity was 70%, specificity was 94%. Two- or three-dimensional cell groups with ordered nuclei and/or cellular non-discohesion were often seen in specimens from Groups 4 or 5. The 3DDD was present in a significant number of cases with concurrent negative cystoscopic findings but also positive LGUC in ensuing follow-up. In these cases, 3DDD with or without tumor identified at concurrent cystoscopy were found to be morphologically similar. Furthermore, the presence of 3DDD in 8% of Group 3 likely represents urothelial dysplasia that is not cystoscopically detectable. The high specificity and sensitivity of 3DDD is demonstrated. These findings are consistent with the decreased cell

adhesion and disordered nuclear arrangement of low grade urothelial neoplasia. Diagn. Cytopathol. 2013; © 2013 Wiley Periodicals, Inc.

[644]

**TÍTULO / TITLE:** - Evolving epidemiologic trends in nonclear cell renal cell cancer: an analysis of the California Cancer Registry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Oct;82(4):840-5. doi: 10.1016/j.urology.2013.07.020.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urology.2013.07.020](#)

**AUTORES / AUTHORS:** - Pai A; Brunson A; Brown M; Pan CX; Lara PN Jr

**INSTITUCIÓN / INSTITUTION:** - Division of Hematology and Oncology, Department of Internal Medicine, University of California Davis School of Medicine, Sacramento, CA.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To evaluate the California Cancer Registry in order to define nonclear cell renal cell cancer (RCC) clinical features and outcomes, identify prognostic variables, and generate hypotheses for further study. **METHODS:** Patients with invasive RCC tumors in the California Cancer Registry from 1998 to 2009 (n = 38,251) were analyzed, of which 4483 (11.7%) were of the nonclear cell type. Baseline clinical demographics and tumor characteristics were collected. Primary outcome measures were 3-year cause-specific survival (CSS) and overall survival (OS). **RESULTS:** Of 4483 nonclear cell RCC cases, 3304 (73.7%) were diagnosed between 2004 and 2009. Histologic distribution was as follows: papillary 63.9%, chromophobe 33.6%, and "other" 2.5% (including medullary and collecting duct tumors). Univariate analysis showed that chromophobe histology, female sex, and higher socioeconomic status were associated with significantly better OS and CSS. Patients in the later era (2004-2009) appeared to have better OS. Multivariate analysis showed the following to be independently associated with outcomes (hazard ratios shown for CSS and OS, respectively): chromophobe (0.48, 0.56; P <.001), medullary/collecting duct (2.99, 2.42; P <.001), no nephrectomy (2.84, 3.18; P <.001), regional stage (5.84, 1.98; P <.001), distant stage (25.7, 7.67; P <.001), and non-Hispanic blacks (1.5, P = .006; 1.25, P = .03). **CONCLUSION:** This large registry analysis demonstrated emerging epidemiologic trends in this uncommon RCC subset. Clinical variables associated with CSS and OS were identified that can potentially inform the design of future clinical trials in nonclear cell RCC.

[645]

**TÍTULO / TITLE:** - Retroperitoneal Hemorrhage from Kidney Angiomyolipoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Gen Intern Med. 2013 Nov 14.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s11606-013-2627-6](#)

**AUTORES / AUTHORS:** - Shimamura Y; Morishita Y; Takizawa H

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[646]

**TÍTULO / TITLE:** - Diagnosis of Complex Renal Cystic Masses and Solid Renal Lesions Using PET Imaging: Comparison of <sup>11</sup>C-Acetate and <sup>18</sup>F-FDG PET Imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Nov 7.

●● Enlace al texto completo (gratis o de pago)

[1097/RLU.0000000000000287](https://doi.org/10.1097/RLU.0000000000000287)

**AUTORES / AUTHORS:** - Oyama N; Ito H; Takahara N; Miwa Y; Akino H; Kudo T; Okazawa H; Fujibayashi Y; Komatsu K; Tsukahara K; Yokoyama O

**INSTITUCIÓN / INSTITUTION:** - From the \*Department of Urology, Faculty of Medical Sciences, and daggerBiomedical Imaging Research Center, University of Fukui, Fukui; double daggerDepartment of Radioisotope Medicine, Atomic Bomb Disease Institute, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki; section signMolecular Imaging Center, National Institute of Radiological Sciences, Anagawa, Chiba; and paragraph signDepartment of Urology, Fukui Red Cross Hospital, Fukui, Japan.

**RESUMEN / SUMMARY:** - PURPOSE: The study aims to assess the usefulness of PET with C-acetate and F-FDG to differentiate renal cell carcinoma (RCC) from complicated renal cysts. METHODS: Thirty-one patients were enrolled, 14 patients with complicated renal cysts (12 with Bosniak III and 2 with Bosniak IV) and 17 patients with 19 solid renal tumors. The patients underwent both C-acetate PET and FDG PET. Nephrectomy or partial nephrectomy was performed after the PET scans. RESULTS: In 29 patients, 32 renal lesions were diagnosed as RCC. Twenty-three of the 32 RCCs (72%) had positive C-acetate PET findings, whereas only 7 FDG PET studies were positive (22%). Considering the relationship between tumor size measured by macroscopic appearance of resected tumors and PET results, 22 of 25 (88%) tumors more than 1.5 cm showed positive C-acetate PET findings. In 12 patients with Bosniak III renal cysts, 10 renal lesions were diagnosed as RCC. In this subgroup, 5 of the 10 RCCs (50%) had positive C-acetate PET findings, whereas 2 RCCs (20%) had positive FDG PET findings. None of the cases with benign findings had positive C-acetate PET or FDG PET scans. CONCLUSIONS: C-acetate PET demonstrates a pronounced increase in tracer uptake in RCC, especially in renal tumors more than 1.5 cm, and displays a higher sensitivity than FDG PET. These preliminary data show that C-acetate may be a useful PET tracer to exclude RCC in complex renal cysts.

[647]

**TÍTULO / TITLE:** - Management of Painful Pelvic Bone Metastasis of Renal Cell Carcinoma Using Embolization, Radio-frequency Ablation, and Cementoplasty: A Prospective Evaluation of Efficacy and Safety.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cardiovasc Intervent Radiol. 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1007/s00270-013-0740-x](https://doi.org/10.1007/s00270-013-0740-x)

**AUTORES / AUTHORS:** - Pellerin O; Medioni J; Vulser C; Dean C; Oudard S; Sapoval M

**INSTITUCIÓN / INSTITUTION:** - Faculte de Medecine, Universite Paris Descartes - Sorbonne Paris Cite, Paris, France, [olivier.pellerin@egp.aphp.fr](mailto:olivier.pellerin@egp.aphp.fr).

**RESUMEN / SUMMARY:** - PURPOSE: To measure the impact on pain relief and patient quality of life using embolization radio-frequency ablation and cementoplasty (ERC) for local combination therapeutic management of painful pelvic bone metastasis of renal cell carcinoma (RCC). MATERIALS AND METHODS: This prospective monocentric registry was approved by our Local Institutional Review Board. Between January 2008 and January 2013, all consecutive patients who fully met the inclusion criteria were enrolled in the ERC-procedure prospective registry. They were assigned to follow-up at discharge and again at 1 and 6 months. Efficacy was evaluated using a pain visual analog scale (VAS), and narcotic consumption and quality of life were assessed using the Brief Pain Inventory questionnaire. RESULTS: Fifty-two patients were enrolled, among whom 58 lesions were treated. Technical success was obtained in all procedures. The median VAS score decreased from 7 +/- 1.4 (ranges 5-10) at baseline to 3 +/- 1.5 (ranges 0-6) at discharge, 2 +/- 1.5 (ranges 0-5) at 1 month ( $p < 0.0001$ ), and 2 +/- 1.6 (ranges 0-5) at 6 months. In 28 patients (54 %), narcotic consumption was halved at discharge and halved in 40 (77 %) patients at 1 and 6 months compared with baseline. Five patients had complete pain relief at 1 month. A major improvement in quality of life, especially regarding mood and motion, was observed in all patients. CONCLUSION: This specific approach to painful bone metastasis is efficient and safe and yields sustained results. The ERC procedure could be suggested for patients with RCC bone metastasis.

[648]

**TÍTULO / TITLE:** - The relationship between solar UV exposure, serum vitamin D levels and serum prostate-specific antigen levels, in men from New South Wales, Australia: the CHAMP study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Nov 5.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1201-5](#)

**AUTORES / AUTHORS:** - Nair-Shalliker V; Smith DP; Clements M; Naganathan V; Litchfield M; Waite L; Handelsman D; Seibel MJ; Cumming R; Armstrong BK

**INSTITUCIÓN / INSTITUTION:** - Cancer Research Division, Cancer Council New South Wales, 153 Dowling Street, Woolloomooloo, Sydney, NSW, 2011, Australia, [visalinin@nswcc.org.au](mailto:visalinin@nswcc.org.au).

**RESUMEN / SUMMARY:** - PURPOSE: We aim to determine the relationship between season, personal solar UV exposure, serum 25(OH)D and 1,25(OH)2D and serum prostate-specific antigen (PSA) levels. METHODS: Questionnaire data and blood samples were collected at baseline from participants of the Concord Health and Ageing in Men Project ( $n = 1,705$ ), aged 70 and above. They were grouped as men 'free of prostate disease' for those with no record of having prostate cancer, benign prostatic hyperplasia, or prostatitis and with serum PSA levels below 20 ng/mL, and 'with prostate disease' for those with a record of either of these diseases or with serum PSA levels 20 ng/mL or above. Personal solar UV exposure (sUV) was estimated from recalled hours of outdoor exposure and weighted against ambient solar UV radiation. Sera were analysed to determine levels of PSA, 25(OH)D and 1,25(OH)2D, and analysed using multiple regression, adjusting for age, BMI and region of birth. RESULTS: The association between sUV and serum PSA levels was conditional upon season ( $p$  interaction = 0.04). There was no direct association between serum PSA

and 25(OH)D in both groups of men. There was a positive association between serum PSA and 1,25(OH)2D in men with prostate disease (mean = 110.6 pmol/L; p heterogeneity = 0.03), but there was no such association in men free of prostate disease (mean = 109.3 pmol/L; p heterogeneity = 0.8). CONCLUSION: The association between PSA and sUV may only be evident at low solar UV irradiance, and this effect may be independent of serum vitamin D levels.

[649]

**TÍTULO / TITLE:** - Cyclooxygenase 2 genotypes influence prostate cancer susceptibility in Japanese Men.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1358-y](#)

**AUTORES / AUTHORS:** - Sugie S; Tsukino H; Mukai S; Akioka T; Shibata N; Nagano M; Kamoto T

**INSTITUCIÓN / INSTITUTION:** - Departments of Urology, Faculty of Medicine, University of Miyazaki, 5200 Kihara, Kiyotake-cho, Miyazaki, 889-1692, Japan.

**RESUMEN / SUMMARY:** - This study aims to evaluate the relationship between the cyclooxygenase 2 (COX2) G1195A (rs689465) polymorphism and the risk of prostate cancer in a Japanese population and the associations between COX2 polymorphisms and clinicopathological characteristics, including Gleason grade and prostate-specific antigen (PSA) grade. We recruited 134 patients with prostate cancer and 86 healthy controls matched for age and smoking status. The COX2 G1195A polymorphism status was determined by polymerase chain reaction and restriction fragment length polymorphism analysis. Genotype distributions ( $p = 0.028$ ) and allelic frequencies ( $p = 0.014$ ) differed significantly between prostate cancer and control groups in terms of the COX2 G1195A polymorphism (Pearson's chi 2 test). Logistic regression analysis of case and control outcomes showed an odds ratio between the GG and AA genotypes of 3.15 (95 % confidence interval = 1.27-8.08,  $p = 0.014$ ), indicating an increased risk of prostate cancer associated with the AA genotype. Subset analysis revealed no significant associations between this polymorphism and clinicopathological characteristics of prostate cancer. This study demonstrated a relationship between the COX2 G1195A variant and prostate cancer risk. This polymorphism may merit further investigation as a potential genomic marker for the early detection of prostate cancer. Our results support the hypothesis that rs689465 influences susceptibility to prostate cancer; however, prostate cancer progression was not associated with rs689465 in a Japanese population.

[650]

**TÍTULO / TITLE:** - Are There Useful CT Features to Differentiate Renal Cell Carcinoma From Lipid-Poor Renal Angiomyolipoma?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Nov;201(5):1017-28. doi: 10.2214/AJR.12.10204.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.12.10204](#)

**AUTORES / AUTHORS:** - Yang CW; Shen SH; Chang YH; Chung HJ; Wang JH; Lin AT; Chen KK

**INSTITUCIÓN / INSTITUTION:** - 1 Division of Urology, Department of Surgery, Taipei Veterans General Hospital, Taipei, Taiwan.

**RESUMEN / SUMMARY:** - **OBJECTIVE.** This study was an attempt to identify key CT features that can potentially be used to differentiate between lipid-poor renal angiomyolipoma and renal cell carcinoma (RCC). **MATERIALS AND METHODS.** We conducted an analysis of patients who received nephrectomy or renal biopsy from 2002 to 2011 with suspected RCC. We included tumors smaller than 7 cm with a completed three-phase CT examination. A radiologist and a urology fellow, blinded to histopathologic diagnosis, recorded the imaging findings by consensus and compared the values for each parameter between lipid-poor angiomyolipoma, RCC subtypes, and RCC as a group. Multivariate logistic regression analysis was performed for each univariate significant feature. **RESULTS.** The sample in our study consisted of 132 patients with 135 renal tumors, including 51 men (age range, 26-84 years; mean age, 57 years) and 81 women (age range, 29-91 years; mean age, 57 years). These tumors included 33 lipid-poor angiomyolipomas, 54 clear-cell RCC, 31 chromophobe RCC, and 17 papillary RCC. Multivariate analysis revealed four significant parameters for differentiating RCC as a group from lipid-poor angiomyolipoma (angular interface,  $p = 0.023$ ; hypodense rim,  $p = 0.045$ ; homogeneity,  $p = 0.005$ ; unenhanced attenuation  $> 38.5$  HU,  $p < 0.001$ ), five for clear-cell RCC, two for chromophobe RCC, and one for papillary RCC. Lipid-poor angiomyolipoma and clear-cell RCC showed early strong enhancement and a washout pattern, whereas chromophobe RCC and papillary RCC showed gradual enhancement over time. **CONCLUSION.** Specific CT features can potentially be used to differentiate lipid-poor renal angiomyolipoma from renal cell carcinoma.

[651]

**TÍTULO / TITLE:** - Adrenal adenoma and metastasis from clear cell renal cell carcinoma: can they be differentiated using standard MR techniques?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Radiol. 2013 Nov 19.

●● Enlace al texto completo (gratis o de pago) [1177/0284185113512301](#)

**AUTORES / AUTHORS:** - Woo S; Cho JY; Kim SY; Kim SH

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Seoul National University College of Medicine, Seoul, Republic of Korea.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Chemical-shift magnetic resonance imaging (MRI) has been known to successfully differentiate adenomas from metastases. However, there has been concern that metastasis from extra-adrenal primary malignancies which contain high lipid content such as clear cell renal cell carcinoma (RCC) could mimic adrenal adenomas. **PURPOSE:** To evaluate the ability of MR to differentiate adrenal adenoma from metastasis using chemical-shift imaging and MR feature analysis in patients with clear cell RCC. **MATERIAL AND METHODS:** This study was institutional review board-approved; informed consent was waived. Eleven patients with 13 metastases and 13 patients with 15 adrenal adenomas in patients with clear cell RCC for evaluation of an adrenal mass underwent MR. Signal intensity on in- and opposed-phases, signal intensity index (SII), size, T2 SI, cystic change, necrosis,

and hemorrhage were evaluated. Statistical analyses included Student t-test and Fisher exact test. If available, precontrast CT attenuation of the adrenal adenomas was measured. SII was correlated with attenuation using Pearson correlation coefficient. RESULTS: Mean size of adenomas was smaller than that of metastases ( $P < 0.002$ ). Mean SII of adenomas ( $45.0\% \pm 24.6$ ) was significantly greater than that of metastases ( $6.6\% \pm 4.7$ ;  $P < 0.001$ ). With a threshold of 16.5% for SII, the sensitivity, specificity, and accuracy for adenomas were 80%, 100%, and 89.2%, respectively. All six lipid-rich adenomas were diagnosed as adrenal adenoma. Three of eight (37.5%) lipid-poor adenomas were misdiagnosed as metastases. While up to 53.8% (7/13) of the metastases demonstrated cystic change, necrosis, or hemorrhage, only one (6.7%) adenoma exhibited cystic change or necrosis ( $P < 0.05$  for all). Precontrast attenuation and SII were significantly correlated:  $r = -0.810$  ( $P < 0.001$ ). CONCLUSION: In patients with clear cell RCC who underwent MR for adrenal masses, SII and MR features such as cystic change, necrosis, and hemorrhage were helpful in differentiating adenomas from metastases.

[652]

**TÍTULO / TITLE:** - Diffusion-weighted MRI, C-choline PET and F-fluorodeoxyglucose PET for predicting the Gleason score in prostate carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Radiol. 2013 Nov 6.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00330-013-3045-1](#)

**AUTORES / AUTHORS:** - Chang JH; Lim Joon D; Lee ST; Hiew CY; Esler S; Gong SJ; Wada M; Clouston D; O'Sullivan R; Goh YP; Tochon-Danguy H; Chan JG; Bolton D; Scott AM; Khoo V; Davis ID

**INSTITUCIÓN / INSTITUTION:** - Radiation Oncology Centre, Austin Health, 300 Waterdale Road, Heidelberg, VIC, 3084, Australia, [joe.chang@austin.org.au](mailto:joe.chang@austin.org.au).

**RESUMEN / SUMMARY:** - OBJECTIVES: To evaluate the accuracy of transrectal ultrasound-guided (TRUS) biopsy, diffusion-weighted (DW) magnetic resonance imaging (MRI), 11C-choline (CHOL) positron emission tomography (PET), and 18F-fluorodeoxyglucose (FDG) PET in predicting the prostatectomy Gleason risk (GR). METHODS: The study included 21 patients who underwent TRUS biopsy and multi-technique imaging before radical prostatectomy. Values from five different tests (TRUS biopsy, DW MRI, CHOL PET, FDG PET, and combined DW MRI/CHOL PET) were correlated with the prostatectomy GR using Spearman's rho. Tests that were found to have significant correlations were used to classify patients into GR groups. RESULTS: The following tests had significant correlations with prostatectomy GR: TRUS biopsy ( $\rho = 0.617$ ,  $P = 0.003$ ), DW MRI ( $\rho = -0.601$ ,  $P = 0.004$ ), and combined DW MRI/CHOL PET ( $\rho = -0.623$ ,  $P = 0.003$ ). CHOL PET alone and FDG PET only had weak correlations. The correct GR classification rates were 67 % with TRUS biopsy, 67 % with DW MRI, and 76 % with combined DW MRI/CHOL PET. CONCLUSIONS: DW MRI and combined DW MRI/CHOL PET have significant correlations and high rates of correct classification of the prostatectomy GR, the strength and accuracy of which are comparable with TRUS biopsy. KEY POINTS: \* Accurate determination of the Gleason score is essential for prostate cancer management. \* DW MRI +/- CHOL PET correlated significantly with prostatectomy Gleason score. \* These correlations are similar to that between TRUS biopsy and prostatectomy.

[653]

**TÍTULO / TITLE:** - Extraperitoneal Laparoscopic Adenectomy (Madigan) versus Bipolar Transurethral Resection of the Prostate for Benign Prostatic Hyperplasia Greater than 80 ml: Complications and Functional Outcomes after 3-Year Follow-up.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 14.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0374](#)

**AUTORES / AUTHORS:** - Xie J; Tan Y; Wang F; Xuan Q; Sun Y; Xiao J; Zhu Y; Zhou L

**INSTITUCIÓN / INSTITUTION:** - Anhui Provincial Hospital Affiliated to Anhui Medical University, Department of Urology, Hefei, China ; [xiejjinbo@hotmail.com](mailto:xiejjinbo@hotmail.com).

**RESUMEN / SUMMARY:** - Abstract Purpose: To compare the performance of voluminous benign prostatic hyperplasia (BPH) patients who have received laparoscopic simple prostatectomy (LSP) with the patients who have received bipolar transurethral resection of the prostate (B-TURP) in their perioperative and 3 years' follow-up period. Methods: 90 patients with prostate volumes greater than 80 ml (range 80-130 ml) randomly assigned to either LSP or B-TURP surgery types. The patients were followed up at 1, 3, 6, 12, 24, and 36 months postoperatively. Perioperative and follow-up characteristics were then recorded and compared. Results: More blood loss, greater resected adenoma volume and shorter catheterization duration were recorded in LSP group than that of B-TURP group (140.1±81.5 vs 93.1±54.0 ml; 65.3±13.8 vs 49.0±12.7 ml; 3.3±1.2 vs 3.8±1.0 d; P <0.05). None of patients in LSP group reported complications out of 30 days, while one case of urethral stricture, 36 cases of retrograde ejaculation, one case of bladder neck contracture and 2 cases of recurrence were recorded in B-TURP group. At 1, 3, 6 and 12 months postoperatively, there were no significant differences in terms of PVR, Qmax and I-PSS score between the two groups (P >0.05). In contrast, the differences became significant at 24 and 36 months (P <0.05). Conclusions: Compared with B-TURP, LSP with Madigan technique is accompanied by less residual adenoma, shorter catheterization time but more blood loss. What is more, the risk of late complications is lower with LSP, and in terms of functional outcomes LSP appears to be better than B-TURP beyond 2 years.

[654]

**TÍTULO / TITLE:** - Splenogonadal Fusion: A Rare Etiology of Solid Testicular Mass.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov 4. pii: S0090-4295(13)01202-8. doi: 10.1016/j.urology.2013.09.019.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.09.019](#)

**AUTORES / AUTHORS:** - Kocher NJ; Tomaszewski JJ; Parsons RB; Cronson BR; Altman H; Kutikov A

**INSTITUCIÓN / INSTITUTION:** - Division of Urologic Oncology, Department of Surgical Oncology, Fox Chase Cancer Center, Temple University School of Medicine, Philadelphia, PA.

**RESUMEN / SUMMARY:** - A 35-year-old man presented with a painless left scrotal mass. Pathologic examination after orchiectomy revealed splenogonadal fusion.

Splenogonadal fusion is an exceptionally rare, typically benign, congenital anomaly. Splenogonadal fusion should be included in the differential diagnosis of a left-sided testicular mass.

[655]

**TÍTULO / TITLE:** - Prostatic Elasticity: A New Non-invasive Parameter to Assess Bladder Outlet Obstruction Caused by Benign Prostatic Hyperplasia (a Canine Experiment).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urology. 2013 Nov;82(5):1114-9. doi: 10.1016/j.urology.2013.07.042. Epub 2013 Oct 25.

●● Enlace al texto completo (gratis o de pago) [1016/j.urology.2013.07.042](http://1016/j.urology.2013.07.042)

**AUTORES / AUTHORS:** - Fu S; Zhang M; Wang Y; Li Q; Tang J

**INSTITUCIÓN / INSTITUTION:** - Department of Ultrasound, Chinese PLA General Hospital, Beijing, China.

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate the change of prostatic elasticity during the development of benign prostatic hyperplasia (BPH) and its correlation with the degree of bladder outlet obstruction (BOO) in the canine model of BOO caused by BPH. MATERIALS AND METHODS: Ten male beagle dogs were selected in this study. To establish canine model of BOO caused by BPH, each beagle underwent castration surgery followed by encapsulating the prostate with a double layer of nylon mesh and then treating the beagles with a combination of steroids for 12 weeks. Transrectal ultrasound (TRUS) examination and urodynamic evaluation were performed before and at 4, 8, and 12 weeks of hormone administration. Prostatic volume, Young modulus of prostatic tissue, and urodynamic parameters were compared at each time instance, and the correlation between the Young modulus of the prostatic tissue and urodynamic parameters were evaluated. RESULTS: All beagles developed BOO caused by BPH over the time period of the study. Prostatic volume, Young modulus of prostatic tissue, and urodynamic parameters had statistically significant differences before and after 4, 8, and 12 weeks of hormone administration ( $P < .05$ ). Young modulus of prostatic tissue showed a very significant correlation with urodynamic parameters, including maximum urine flow ( $Q_{max}$ ) ( $r = -0.802$ ,  $P < .01$ ),  $Q_{ave}$  ( $r = -0.711$ ,  $P < .01$ ),  $P_{ves@open}$  ( $r = 0.638$ ,  $P < .01$ ),  $P_{ves@Q_{max}}$  ( $r = 0.699$ ,  $P < .01$ ),  $P_{det@Q_{max}}$  ( $r = 0.757$ ,  $P < .01$ ), and  $P_{detmax}$  ( $r = 0.739$ ,  $P < .01$ ). CONCLUSION: Young modulus of prostatic tissue increased during the development of the BPH. There was a significant correlation between Young modulus of prostatic tissue and the degree of BOO.

[656]

**TÍTULO / TITLE:** - Local recurrence after radical nephrectomy for kidney cancer: management and prediction of outcomes. a multi-institutional study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Surg Oncol. 2013 Oct 30. doi: 10.1002/jso.23473.

●● Enlace al texto completo (gratis o de pago) [1002/jso.23473](http://1002/jso.23473)

**AUTORES / AUTHORS:** - Paparel P; Bigot P; Matillon X; Bensalah K; Salomon L; Baumert H; Bastide C; Thuret R; Karsenty G; Long JA; Ammi M; Bessedé T; Bin S; Roux A; Escudier B; Rioux Leclercq N; Pignot G; Soulie M; Patard JJ

**INSTITUCIÓN / INSTITUTION:** - Cancerology Committee of the French Association of Urology (CCAFU), Paris, France; Department of Urology, Lyon Sud University Hospital, Claude Bernard University Lyon 1, Lyon, France.

**RESUMEN / SUMMARY:** - BACKGROUND: Local recurrence (LR) after radical nephrectomy (RN) for kidney cancer is uncommon. Our objectives were to analyse characteristics and therapeutic options of LR after RN and to identify survival prognostic factors. MATERIALS AND METHODS: From a multi-institutional retrospective database, we identified 72 patients who experienced LR after RN. RESULTS: Mean time to LR was 26.5 +/- 3.3 months. The location of the recurrence was renal fossa, regional lymph node, homolateral adrenal and both renal fossa and regional lymph node for 43 (59.7%), 27 (37.5%), 9 (12.5%) and 7 (9.7%) patients, respectively. Patients were treated by surgery, systemic therapies, combination of therapies and palliative treatment in 24 (33.3%), 18 (25%), 24 (33.3%) and 6 (8.4%) cases, respectively. Within a mean follow-up of 26.4 +/- 3.3 months from the date of local recurrence, 12 (16.6%) patients were alive without disease, 30 (41.7%) patients were alive with disease, 30 patients (41.6%) died including 28 (38.8%) from the disease. In multivariate analysis, time to recurrence <1 year (P < 0.001; HR: 4.81) and surgical treatment (P = 0.027; HR: 0.33) were predictive factors. CONCLUSIONS: Local recurrence after radical nephrectomy is associated with poor prognosis. The time to recurrence and the completeness of the surgical treatment are major prognostic factors. J. Surg. Oncol. 2013;9999:XX-XX. © 2013 Wiley Periodicals, Inc.

[657]

**TÍTULO / TITLE:** - Innovations in diagnostic imaging of localized prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Sep 28.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1172-6](#)

**AUTORES / AUTHORS:** - Pummer K; Rieken M; Augustin H; Gutsch T; Shariat SF

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Medical University Graz, Auenbruggerplatz 5/6, Graz, 8036, Austria, [karl.pummer@medunigraz.at](mailto:karl.pummer@medunigraz.at).

**RESUMEN / SUMMARY:** - PURPOSE: In recent years, various imaging modalities have been developed to improve diagnosis, staging, and localization of early-stage prostate cancer (PCa). METHODS: A MEDLINE literature search of the time frame between 01/2007 and 06/2013 was performed on imaging of localized PCa. RESULTS: Conventional transrectal ultrasound (TRUS) is mainly used to guide prostate biopsy. Contrast-enhanced ultrasound is based on the assumption that PCa tissue is hypervascularized and might be better identified after intravenous injection of a microbubble contrast agent. However, results on its additional value for cancer detection are controversial. Computer-based analysis of the transrectal ultrasound signal (C-TRUS) appears to detect cancer in a high rate of patients with previous biopsies. Real-time elastography seems to have higher sensitivity, specificity, and positive predictive value than conventional TRUS. However, the method still awaits prospective validation. The same is true for prostate histoscanning, an ultrasound-based method for tissue characterization. Currently, multiparametric MRI provides

improved tissue visualization of the prostate, which may be helpful in the diagnosis and targeting of prostate lesions. However, most published series are small and suffer from variations in indication, methodology, quality, interpretation, and reporting.

CONCLUSIONS: Among ultrasound-based techniques, real-time elastography and C-TRUS seem the most promising techniques. Multiparametric MRI appears to have advantages over conventional T2-weighted MRI in the detection of PCa. Despite these promising results, currently, no recommendation for the routine use of these novel imaging techniques can be made. Prospective studies defining the value of various imaging modalities are urgently needed.

[658]

**TÍTULO / TITLE:** - Epithelial cell adhesion molecule (EpCAM) is associated with prostate cancer metastasis and chemo/radioresistance via the PI3K/Akt/mTOR signaling pathway.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Biochem Cell Biol. 2013 Dec;45(12):2736-48. doi: 10.1016/j.biocel.2013.09.008. Epub 2013 Sep 25.

●● Enlace al texto completo (gratis o de pago) [1016/j.biocel.2013.09.008](#)

**AUTORES / AUTHORS:** - Ni J; Cozzi P; Hao J; Beretov J; Chang L; Duan W; Shigdar S; Delprado W; Graham P; Bucci J; Kearsley J; Li Y

**INSTITUCIÓN / INSTITUTION:** - Cancer Care Centre and Prostate Cancer Institute, St George Hospital, Kogarah, NSW 2217, Australia; St George Clinical School, University of New South Wales (UNSW), Kensington, NSW 2052, Australia.

**RESUMEN / SUMMARY:** - Prostate cancer (CaP) is the second leading malignancy in men. The role of epithelial cell adhesion molecule (EpCAM), also known as CD326, in CaP progression and therapeutic resistance is still uncertain. Here, we aimed to investigate the roles of EpCAM in CaP metastasis and chemo/radioresistance. Expression of EpCAM in CaP cell lines and human CaP tissues was assessed using immunofluorescence and immunohistochemistry, respectively. EpCAM was knocked down (KD) in PC-3, DU145 and LNCaP-C4-2B cells using small interfering RNA (siRNA), and KD results were confirmed by confocal microscope, Western blotting and quantitative real time polymerase chain reaction (qRT-PCR). Cell growth was evaluated by proliferation and colony formation assays. The invasive potential was assessed using a matrigel chamber assay. Tumorigenesis potential was measured by a sphere formation assay. Chemo-/radiosensitivity were measured using a colony formation assay. Over-expression of EpCAM was found in primary CaP tissues and lymph node metastases including cancer cells and surrounding stromal cells. KD of EpCAM suppressed CaP proliferation and invasive ability, reduced sphere formation, enhanced chemo-/radiosensitivity, and down-regulated E-cadherin, p-Akt, p-mTOR, p-4EBP1 and p-S6K expression in CaP cells. Our findings suggest that EpCAM plays an important role in CaP proliferation, invasion, metastasis and chemo-/radioresistance associated with the activation of the PI3K/Akt/mTOR signaling pathway and is a novel therapeutic target to sensitize CaP cells to chemo-/radiotherapy.

[659]

**TÍTULO / TITLE:** - Antidepressants and testicular cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Causes Control. 2013 Nov 26.

●● Enlace al texto completo (gratis o de pago) [1007/s10552-013-0327-5](#)

**AUTORES / AUTHORS:** - Friedman GD; Schwalbe J; Achacoso N; Meng MV; Kroenke CH; Habel LA

**INSTITUCIÓN / INSTITUTION:** - Division of Research, Kaiser Permanente Medical Care Program, Northern California, 2000 Broadway, Oakland, CA, 94612, USA, [gary.friedman@kp.org](mailto:gary.friedman@kp.org).

**RESUMEN / SUMMARY:** - PURPOSE: Re-examine association of fluoxetine and paroxetine with risk of testicular cancer noted in drug screening, with 4 years more follow-up and expanded study of these and other antidepressant drugs. METHODS: In the Kaiser Permanente Medical Care Program in Northern California, 906 men with testicular cancer diagnosed August 1996-December 2010 were compared with 38,253 matched controls with race/ethnicity recorded regarding receipt of antidepressant drugs at least 2 years before diagnosis or control index date. Analyses emphasized duration of use and histological subgroups. RESULTS: With control for race/ethnicity and use of other antidepressant drugs, odds ratios (OR) and 95 % confidence intervals (CI) for associations with testicular cancer were as follows: fluoxetine 1.22 (0.88-1.71), paroxetine 1.19 (0.78-1.83), and 1.21 (0.92-1.58) for all serotonin reuptake inhibitors. There was no statistically significant association with risk of all testicular cancers or their histological subtypes for any individual drug or for tricyclics or all antidepressants combined except for citalopram with all testicular cancers 2.55 (1.43-4.52) and those of mixed histology 4.36 (1.50-12.68) and nefazodone with embryonal cancers 9.79 (1.85-51.81). These could readily be chance findings in the context of the many analyses that were performed. Duration of use was not associated with risk of the drugs and drug groups with sufficient numbers of exposed cases for analysis. CONCLUSIONS: We found little evidence to support a testicular carcinogenic effect of fluoxetine, paroxetine, or other antidepressant drugs, but a weakly positive association is not ruled out. The signals in prior screening may have been due to chance and/or uncontrolled confounding.

[660]

**TÍTULO / TITLE:** - The perlman syndrome: Familial renal dysplasia with Wilms tumor, fetal gigantism and multiple congenital anomalies.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Am J Med Genet A. 2013 Nov;161(11):2691-6. doi: 10.1002/ajmg.a.36316.

●● Enlace al texto completo (gratis o de pago) [1002/ajmg.a.36316](#)

**AUTORES / AUTHORS:** - Neri G; Martini-Neri ME; Katz BE; Opitz JM

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Genetics, Shodair Children's Hospital, Helena, MT; Istituto di Genetica Umana, Facolta di Medicina "A. Gemelli", UCSC, Ospedale S. Giovanni, Roma, Italy.

**RESUMEN / SUMMARY:** - INTRODUCTION: The ensuing paper by Professor Giovanni Neri and colleagues was originally published in 1984, American Journal of Medical Genetics 19:195-207. The original article described a new family with a condition that the authors designated as the Perlman syndrome. This disorder, while uncommon, is an important multiple congenital anomaly and dysplasia syndrome; the causative gene

was recently identified. This paper is a seminal work and is graciously republished by Wiley-Blackwell in the Special Festschrift issue honoring Professor Neri. John C. Carey Editor-in-Chief We describe a familial syndrome of renal dysplasia, Wilms tumor, hyperplasia of the endocrine pancreas, fetal gigantism, multiple congenital anomalies and mental retardation. This condition was previously described by Perlman et al. [1973, 1975] and we propose to call it the "Perlman syndrome." It appears to be transmitted as an autosomal recessive trait. The possible relationships between dysplasia, neoplasia and malformation are discussed. © 2013 Wiley Periodicals, Inc.

[661]

**TÍTULO / TITLE:** - MRI-Safe Robot for Targeted Transrectal Prostate Biopsy: Animal Experiments.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 10. doi: 10.1111/bju.12335.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12335](#)

**AUTORES / AUTHORS:** - Srimathveeravalli G; Kim C; Petrisor D; Ezell P; Coleman J; Hricak H; Solomon SB; Stoianovici D

**INSTITUCIÓN / INSTITUTION:** - Dept. of Radiology, Memorial Sloan-Kettering Cancer Center.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To study the feasibility and safety of using an MRI-Safe robot for assisting MRI-guided transrectal needle placement and biopsy in the prostate using a canine model. To determine the accuracy and precision afforded by the use of the robot while targeting a desired location in the organ. **MATERIALS AND METHODS:** In a study approved by the Institutional Animal Care and Use Committee, six healthy adult male beagles with prostate sized at least 15mm x 15mm at the largest transverse section were chosen for the procedure. The probe portion of the robot was placed into the rectum of the dog, images were acquired and image to robot registration was performed. Images acquired after placement of the robot were reviewed and a radiologist selected targets for needle placement in the gland. Depending upon the size of the prostate, up to a maximum of 6 needle placements were performed on each dog. Following needle placement, robot-assisted core biopsies were performed on four animals which had larger gland volumes and extracted cores were analyzed for potential diagnostic value. **RESULTS:** Robot-assisted MRI-guided needle placements were performed to target a total of 30 locations in six dogs, achieving a targeting accuracy of 2.58mm (mean) and precision of 1.31mm (standard deviation). All needle placements were successfully completed on the first attempt. The average time to select a desired target location in the prostate, align the needle-guide to that point, insert the needle, and perform the biopsy was approximately 3 minutes. For this targeting accuracy study, the inserted needle was also imaged after its placement in the prostate, which took an additional 6-8 minutes. SNR analysis indicated that the presence of the robot within the scanner bore had minimal impact on the quality of the images acquired. Analysis of intact biopsy core samples indicated that the samples contained prostatic tissues, appropriate for making a potential diagnosis. Dogs used in the study did not experience device or procedure related complications. **CONCLUSIONS:** Results from this preclinical pilot animal study suggest that MRI-targeted biopsies transrectal biopsies are feasible to perform and this procedure may be safely assisted by an MRI-safe robotic device.

[662]

**TÍTULO / TITLE:** - A novel approach for establishing benchmark CBCT/CT deformable image registrations in prostate cancer radiotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Phys Med Biol. 2013 Nov 21;58(22):8077-97. doi: 10.1088/0031-9155/58/22/8077. Epub 2013 Oct 31.

●● [Enlace al texto completo \(gratis o de pago\) 1088/0031-9155/58/22/8077](#)

**AUTORES / AUTHORS:** - Kim J; Kumar S; Liu C; Zhong H; Pradhan D; Shah M; Cattaneo R; Yechieli R; Robbins JR; Elshaikh MA; Chetty IJ

**RESUMEN / SUMMARY:** - Deformable image registration (DIR) is an integral component for adaptive radiation therapy. However, accurate registration between daily cone-beam computed tomography (CBCT) and treatment planning CT is challenging, due to significant daily variations in rectal and bladder fillings as well as the increased noise levels in CBCT images. Another significant challenge is the lack of 'ground-truth' registrations in the clinical setting, which is necessary for quantitative evaluation of various registration algorithms. The aim of this study is to establish benchmark registrations of clinical patient data. Three pairs of CT/CBCT datasets were chosen for this institutional review board approved retrospective study. On each image, in order to reduce the contouring uncertainty, ten independent sets of organs were manually delineated by five physicians. The mean contour set for each image was derived from the ten contours. A set of distinctive points (round natural calcifications and three implanted prostate fiducial markers) were also manually identified. The mean contours and point features were then incorporated as constraints into a B-spline based DIR algorithm. Further, a rigidity penalty was imposed on the femurs and pelvic bones to preserve their rigidity. A piecewise-rigid registration approach was adapted to account for the differences in femur pose and the sliding motion between bones. For each registration, the magnitude of the spatial Jacobian ( $|JAC|$ ) was calculated to quantify the tissue compression and expansion. Deformation grids and finite-element-model-based unbalanced energy maps were also reviewed visually to evaluate the physical soundness of the resultant deformations. Organ DICE indices (indicating the degree of overlap between registered organs) and residual misalignments of the fiducial landmarks were quantified. Manual organ delineation on CBCT images varied significantly among physicians with overall mean DICE index of only 0.7 among redundant contours. Seminal vesicle contours were found to have the lowest correlation amongst physicians (DICE = 0.5). After DIR, the organ surfaces between CBCT and planning CT were in good alignment with mean DICE indices of 0.9 for prostate, rectum, and bladder, and 0.8 for seminal vesicles. The Jacobian magnitudes  $|JAC|$  in the prostate, rectum, and seminal vesicles were in the range of 0.4-1.5, indicating mild compression/expansion. The bladder volume differences were larger between CBCT and CT images with mean  $|JAC|$  values of 2.2, 0.7, and 1.0 for three respective patients. Bone deformation was negligible ( $|JAC|$  = approximately 1.0). The difference between corresponding landmark points between CBCT and CT was less than 1.0 mm after DIR. We have presented a novel method of establishing benchmark DIR accuracy between CT and CBCT images in the pelvic region. The method incorporates manually delineated organ surfaces and landmark points as well as pixel similarity in the optimization, while ensuring bone rigidity and avoiding

excessive deformation in soft tissue organs. Redundant contouring is necessary to reduce the overall registration uncertainty.

[663]

**TÍTULO / TITLE:** - Urodynamic Assessment of Bladder and Urethral Sphincter Function Before and After Robot-assisted Radical Prostatectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Actas Urol Esp. 2013 Oct 8. pii: S0210-4806(13)00282-9. doi: 10.1016/j.acuro.2013.07.006.

●● Enlace al texto completo (gratis o de pago) [1016/j.acuro.2013.07.006](http://1016/j.acuro.2013.07.006)

**AUTORES / AUTHORS:** - Barnoiu OS; Vozmediano-Chicharro R; Garcia-Galisteo E; Soler-Martinez J; Del Rosa-Samaniego JM; Machuca-Santacruz J; Baena-Gonzalez V

**INSTITUCIÓN / INSTITUTION:** - Servicio de Urología, Hospital Carlos Haya, Málaga, España. Electronic address: [barnoiu@yahoo.com](mailto:barnoiu@yahoo.com).

**RESUMEN / SUMMARY:** - INTRODUCTION: Affection of the bladder after open prostatectomy is demonstrated. Decrease in bladder capacity and bladder compliance, detrusor hyper- or hypo-activity and voiding dysfunction are observed. We propose to investigate the effects of robotic surgery on bladder and sphincter function through the comparative study of preoperative and postoperative urodynamic values 3 months after prostatectomy. MATERIAL AND METHODS: Prospective study of 32 consecutive patients undergoing robotic prostatectomy. They all underwent urodynamic study one month before the intervention and 3 months after the radical prostatectomy. RESULTS: Twenty five percent of patients undergoing robotic prostatectomy showed detrusor hyperactivity accompanied by a decrease in bladder compliance of 30.2 to 21.8 ml/cmH<sub>2</sub>O. Urethral profile showed diminished functional length of 67 to 44 mm and decreased maximum urethral pressure of 48.5 to 29.3 cmH<sub>2</sub>O. After robotic prostatectomy 21.8% of patients had detrusor hypoactivity, obstruction decreased between 28.1% to 12.5%. CONCLUSIONS: Decreased bladder compliance, detrusor hypo- or hyperactivity and obstruction improvement observed in the study of the flow pressure have been associated with sphincter involvement. It is part of the complex of lower urinary tract dysfunction that occurs after robotic prostatectomy.

[664]

**TÍTULO / TITLE:** - Optimizing bone health and minimizing skeletal morbidity in men with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematol Oncol Clin North Am. 2013 Dec;27(6):1261-83. doi: 10.1016/j.hoc.2013.08.009. Epub 2013 Sep 20.

●● Enlace al texto completo (gratis o de pago) [1016/j.hoc.2013.08.009](http://1016/j.hoc.2013.08.009)

**AUTORES / AUTHORS:** - McKay RR; Taplin ME; Choueiri TK

**INSTITUCIÓN / INSTITUTION:** - Lank Center for Genitourinary Oncology, Department of Medical Oncology, Dana-Farber Cancer Institute, Brigham and Women's Hospital, Harvard Medical School, 450 Brookline Avenue, Boston, MA 02215, USA.

**RESUMEN / SUMMARY:** - Maintaining bone health is important in the management of men with prostate cancer. Patients receiving androgen deprivation therapy are at increased risk for treatment-related osteoporosis, and patients with bone metastases

are at increased risk for skeletal morbidity related to debilitating skeletal-related events (SREs). Optimizing bone health in these patients includes lifestyle modifications, calcium/vitamin D supplementation, and osteoclast-targeted agents in select high-risk patients. No agent is approved for the prevention of bone metastases. Novel systemic agents have shown a beneficial effect bone by directly affecting tumor growth. Integration of these anticancer agents with osteoclast-targeted agents warrants further investigation.

[665]

**TÍTULO / TITLE:** - Apoptotic markers in a prostate cancer cell line: effect of ellagic acid.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Oncol Rep. 2013 Dec;30(6):2804-10. doi: 10.3892/or.2013.2757. Epub 2013 Sep 30.

●● Enlace al texto completo (gratis o de pago) [3892/or.2013.2757](#)

**AUTORES / AUTHORS:** - Vanella L; Di Giacomo C; Acquaviva R; Barbagallo I; Cardile V; Kim DH; Abraham NG; Sorrenti V

**INSTITUCIÓN / INSTITUTION:** - Department of Drug Science, Section of Biochemistry, University of Catania, I-95125 Catania, Italy.

**RESUMEN / SUMMARY:** - Ellagic acid (EA) inhibits cell growth and induces apoptosis in cultured cells; however, the precise molecular mechanism involved in EA-induced apoptosis in prostate cancer cells is unknown. The aim of the present study was to delineate possible apoptotic pathway(s) involved in the EA-mediated chemotherapeutic effects in the LNCaP human prostatic cancer cell line. EA produced anti-proliferative effects through inhibition of rapamycin (mTOR) activation and a reduction in intracellular levels of beta-catenin. Moreover, we demonstrated that EA induced apoptosis via downregulation of the anti-apoptotic proteins, silent information regulator 1 (SIRT1), human antigen R (HuR) and heme oxygenase-1 (HO-1). EA modulated the expression of apoptosis-inducing factor (AIF) resulting in a significant increase in reactive oxygen species (ROS) levels and the activation of caspase-3. Finally, we demonstrated that EA reduced both transforming growth factor-beta (TGF-beta) and interleukin-6 (IL-6) levels. EA treatment resulted in the increased expression of the tumor suppressor protein p21 and increased the percentage of apoptotic cells. In conclusion, the results suggest that EA treatment represents a new and highly effective strategy in reducing prostate cancer carcinogenesis.

[666]

**TÍTULO / TITLE:** - Differentiation of oncocytoma from chromophobe renal cell carcinoma (RCC): can novel molecular biomarkers help solve an old problem?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Clin Pathol. 2013 Oct 29. doi: 10.1136/jclinpath-2013-201895.

●● Enlace al texto completo (gratis o de pago) [1136/jclinpath-2013-201895](#)

**AUTORES / AUTHORS:** - Ng KL; Rajandram R; Morais C; Yap NY; Samaratunga H; Gobe GC; Wood ST

**INSTITUCIÓN / INSTITUTION:** - Centre for Kidney Disease Research, School of Medicine, The University of Queensland, Translational Research Institute, Brisbane, Australia.

**RESUMEN / SUMMARY:** - Standard treatment of renal neoplasms remains surgical resection, and nephrectomy for localised renal cell carcinoma (RCC) still has the best chance of cure with excellent long-term results. For smaller renal masses, especially stage T1a tumours less than 4 cm, nephron-sparing surgery is often employed. However, small incidentally detected renal masses pose an important diagnostic dilemma as a proportion of them may be benign and could be managed conservatively. Renal oncocytoma is one such lesion that may pose little risk to a patient if managed with routine surveillance rather than surgery. Additionally, lower-risk RCC, such as small chromophobe RCC, may be managed in a similar way, although with more caution than the renal oncocytomas (RO). The ability to differentiate ROs from chromophobe RCCs, and from other RCCs with a greater chance of metastasis, would guide the physician and patient towards the most appropriate management, whether nephron-sparing surgical resection or conservative surveillance. Consistent accurate diagnosis of ROs is likely to remain elusive until modern molecular biomarkers are identified and applied routinely. This review focuses on the differentiation of renal oncocytomas and chromophobe RCCs. It summarises the history, epidemiology and clinical presentation of the renal neoplasms, explains the diagnostic dilemma, and describes the value, or not, of current molecular markers that are in development to assist in diagnosis of the renal neoplasms.

[667]

**TÍTULO / TITLE:** - CT of Renal Cell Carcinoma: Assessment of Collecting System Invasion.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Dec;201(6):W821-7. doi: 10.2214/AJR.13.10785.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.13.10785](#)

**AUTORES / AUTHORS:** - Karlo CA; Paolo PL; Hricak H; Tickoo SK; Russo P; Akin O

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology, Memorial Sloan-Kettering Cancer Center, Radiology Academic Offices, Rm C278, 1275 York Ave, New York, NY 10065.

**RESUMEN / SUMMARY:** - **OBJECTIVE.** Although renal collecting system invasion is not considered in the current TNM staging system, this finding may be relevant in terms of treatment planning and prognosis. The objective of this study was to investigate the frequency of collecting system invasion in renal cell carcinoma (RCC) and to assess the diagnostic performance of excretory phase CT for the assessment of collecting system invasion. **MATERIALS AND METHODS.** We conducted a retrospective study of 261 patients (171 men and 90 women; average age, 61 years; age range, 32-86 years) who underwent CT before nephrectomy for RCC between November 2008 and July 2011 at a single institution. On excretory phase contrast-enhanced CT images, two radiologists independently determined whether RCC components caused a filling defect within the collecting system and whether the RCC was in contact to the collecting system wall or separated from it. Histopathology served as the standard of reference. Interreader agreement and diagnostic performance tests for the detection of

collecting system invasion were calculated. RESULTS. Histopathology identified collecting system invasion exclusively in clear cell RCC that showed a filling defect within the collecting system on excretory phase CT images (5.4%, 14/261). Tumors separated from or in contact with the collecting system on imaging (both readers; 94.6%, 247/261) did not show collecting system invasion on histopathology (sensitivity, 100%; specificity, 100%). Interreader agreement was excellent (kappa, 0.965; 95% CI, 0.93-0.99). CONCLUSION. CT provides reliable assessment of collecting system invasion in patients with RCC, with excellent sensitivity and specificity.

[668]

**TÍTULO / TITLE:** - Rare transformation in repeat renal biopsies suggests a different pathogenesis of segmental and global lesions in proliferative lupus nephritis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephrol Dial Transplant. 2013 Dec;28(12):2929-32. doi: 10.1093/ndt/gft343. Epub 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [1093/ndt/gft343](#)

**AUTORES / AUTHORS:** - Tesar V

**INSTITUCIÓN / INSTITUTION:** - Department of Nephrology, 1<sup>st</sup> Faculty of Medicine, Charles University and General University Hospital, Prague, Czech Republic.

[669]

**TÍTULO / TITLE:** - MRI, Enhanced CT, and FDG PET/CT in Basal Cell Carcinoma of the Prostate.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago)

[1097/RLU.0000000000000280](#)

**AUTORES / AUTHORS:** - Dong A; Zuo C; Lu J; Wang Y

**INSTITUCIÓN / INSTITUTION:** - From the Departments of \*Nuclear Medicine; daggerRadiology; and double daggerPathology, Changhai Hospital, Second Military Medical University, Shanghai, China.

**RESUMEN / SUMMARY:** - Primary basal cell carcinoma of the prostate is a very rare neoplasm with a good prognosis. A 55-year-old man presented with urinary frequency for 2 months. Serum prostate-specific antigen level was normal. T2-weighted MR images showed an inhomogeneously hyperintense tumor in the prostate. Enhanced CT showed heterogeneous enhancement of the tumor. FDG PET/CT showed strong FDG uptake of the tumor with SUVmax of 14.1. Prostate biopsy findings revealed basal cell carcinoma with high proliferation index.

[670]

**TÍTULO / TITLE:** - Incremental Detection Rate of Prostate Cancer By HI-Real Time Elastography Targeted Biopsies In Combination To A Conventional 10 Core Biopsy In 1024 Consecutive Men.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12517.

- Enlace al texto completo (gratis o de pago) [1111/bju.12517](http://1111/bju.12517)

**AUTORES / AUTHORS:** - Salomon G; Drews N; Autier P; Beckmann A; Heinzer H; Hansen J; Michl U; Schlomm T; Haese A; Steuber T; Graefen M; Becker A

**INSTITUCIÓN / INSTITUTION:** - Martini-Clinic, Prostate Cancer Center Hamburg-Eppendorf, Hamburg, Germany.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** To quantify the incremental detection rate of a targeted biopsy in addition to a randomized 10-core biopsy. **MATERIAL AND METHODS:** This retrospective study analyzed 1024 patients who consecutively underwent a 4-core real time Elastography targeted biopsies (RTE) in addition to a randomized 10-core transrectal ultrasound (TRUS) guided biopsy in a primary or rebiopsy setting. Overall detection rate and detection rate of 10-core randomized, RTE guided biopsy and incremental detection rate have been calculated. **RESULTS:** Overall, randomized and RTE targeted biopsies detection rates were 46.2 % (n=473), 39.1 % (n=400) and 29.0 % (n=297) for the combination, the 10 core and RTE-4 core biopsy scheme, respectively. RTE-4 core targeted biopsies found an additional 73 patients (increase in overall detection rate by 7.1%). Of those, 34 patients harbored significant Gleason 4 or 5 PCa, diagnosed by RTE-4 biopsy only. Moreover, PCa with a Gleason grade of 4 or 5 was detected by RTE-4 biopsies in 30 patients, who showed low grade PCa  $\leq$  Gleason 3 only in systematic 10 core biopsy. These were not detected by the 10-core randomized biopsies. Therefore, RTE-4 core targeted biopsies incremented men diagnosed with PCA by 18.3%. Incremental detection rate was better in re-biopsy patients (24.8%) compared to patients having their first biopsy (14.7%). **CONCLUSIONS:** RTE targeted biopsies seems to be an appropriate method to increase detection rate of PCA. Nevertheless, RTE targeted biopsies missed a high proportion of patients with PCA and should therefore be considered as an addition to randomized biopsies.

[671]

**TÍTULO / TITLE:** - Imaging appearance of renal epithelioid angiomyolipomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Comput Assist Tomogr. 2013 Nov-Dec;37(6):957-61. doi: 10.1097/RCT.0b013e3182a77674.

- Enlace al texto completo (gratis o de pago)

[1097/RCT.0b013e3182a77674](http://1097/RCT.0b013e3182a77674)

**AUTORES / AUTHORS:** - Ryan MJ; Francis IR; Cohan RH; Davenport MS; Weizer A; Hafez K; Kunju LP

**INSTITUCIÓN / INSTITUTION:** - From the \*Departments of Radiology, daggerUrology, and double daggerPathology, University of Michigan Hospitals, Ann Arbor, MI.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** This study aimed to describe the computed tomographic (CT) imaging appearance of renal epithelioid angiomyolipomas (eAMLs). **METHODS:** The CT scans and electronic medical records of 8 patients with histologically confirmed eAMLs identified by biopsy and/or surgical excision who had available imaging performed between 1995 and 2012 were reviewed. Preoperative CT imaging appearance, histologic features, and clinical follow-up were recorded for each patient. **RESULTS:** Macroscopic fat was identified in 3 (38%) of 8 eAMLs on preoperative CT imaging. Seven of the eAMLs demonstrated postcontrast enhancement of greater than 20 Hounsfield units. None of the eAMLs showed

evidence of local invasion, vascular involvement, or distant metastases on the initial preoperative CT; however, 1 patient developed local recurrence and another developed distant metastatic disease on follow-up imaging. CONCLUSIONS: Epithelioid angiomyolipomas may or may not demonstrate macroscopic fat. Those with macroscopic fat do not possess any CT imaging characteristics that allow them to be distinguished from typical angiomyolipomas. Epithelioid angiomyolipomas without macroscopic fat are indistinguishable from renal cancers.

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[672]

**TÍTULO / TITLE:** - Percutaneous image-guided biopsy of prostate cancer metastases yields samples suitable for genomics and personalised oncology.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Exp Metastasis. 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [1007/s10585-013-9617-2](#)

**AUTORES / AUTHORS:** - Hong MK; Sapre N; Phal PM; Macintyre G; Chin X; Pedersen JS; Ryan A; Kerger M; Costello AJ; Corcoran NM; Hovens CM

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Department of Surgery, Royal Melbourne Hospital, University of Melbourne, Parkville, VIC, Australia,  
[m.k.hong@ausdoctors.net](mailto:m.k.hong@ausdoctors.net).

**RESUMEN / SUMMARY:** - Personalised oncology through mutational profiling of cancers requires the procurement of fresh frozen tumour samples for genomics applications. While primary cancers are often surgically excised and therefore yield such tissue, metastases in the setting of a known cancer diagnosis are not routinely sampled prior to systemic therapy. Our study aimed to determine the suitability of extracted nucleic acids for genomics applications using distant metastatic prostate cancer samples obtained via percutaneous or surgical biopsy. Patients with metastatic prostate cancer were recruited for image-guided biopsy of metastases. Patients undergoing surgical procedures for the complications of metastases were also recruited. Tissue samples were flash frozen and cryosectioned for histological examination. DNA and RNA were simultaneously extracted and genomic DNA hybridised onto SNP arrays for genome-wide copy number analysis. 37 samples of metastatic tissue from seven patients with prostate cancer were obtained. Five of these underwent image-guided biopsies whilst two had therapeutic surgical procedures performed. 22 biopsy samples were obtained across the image-guided biopsy patients with 80 % of samples being successfully processed for downstream analysis. Nucleic acid yield from these samples were satisfactory for genomics applications. Copy number analysis revealed a median estimated tumour purity of 53 % and all samples showed chromosomal abnormalities suggestive of malignancy. The procurement of osseous metastatic prostate cancer from live patients, including the use of image-guided biopsy, is safe and feasible. Sufficient tissue can be obtained in a manner such that extracted nucleic acids are suitable for genomics research.

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[673]

**TÍTULO / TITLE:** - Peptide conjugates of 4-aminocyclophosphamide as prodrugs of phosphoramidate mustard for selective activation by prostate-specific antigen (PSA).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Bioorg Med Chem. 2013 Dec 1;21(23):7507-14. doi: 10.1016/j.bmc.2013.09.039. Epub 2013 Sep 25.

●● Enlace al texto completo (gratis o de pago) [1016/j.bmc.2013.09.039](https://doi.org/10.1016/j.bmc.2013.09.039)

**AUTORES / AUTHORS:** - Jiang Y; Hu L

**INSTITUCIÓN / INSTITUTION:** - Department of Medicinal Chemistry, Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, 160 Frelinghuysen Road, Piscataway, NJ 08854, USA.

**RESUMEN / SUMMARY:** - In our continued effort to develop prodrugs of phosphoramidate mustard, conjugates of 4-aminocyclophosphamide (4-NH<sub>2</sub>-CPA) with three PSA-specific peptides were synthesized and evaluated as substrates of PSA. These include conjugates of cis-(2R,4R)-4-NH<sub>2</sub>-CPA with a tetrapeptide Succinyl-Ser-Lys-Leu-Gln-OH, a hexapeptide Succinyl-His-Ser-Ser-Lys-Leu-Gln-OH, and a pentapeptide Glutaryl-Hyp-Ala-Ser-Chg-Gln-OH. These conjugates were cleaved by PSA efficiently and exclusively after the expected glutamine residue to release 4-NH<sub>2</sub>-CPA, the activated prodrug form of phosphoramidate mustard. The cleavage was most efficient for the pentapeptide conjugate 3 (Glutaryl-Hyp-Ala-Ser-Chg-Gln-NH-CPA), which showed a half-life of 55min with PSA, followed by the hexapeptide conjugate 2 (Succinyl-His-Ser-Ser-Lys-Leu-Gln-NH-CPA) and the tetrapeptide conjugate 1 (Succinyl-Ser-Lys-Leu-Gln-NH-CPA) with half-lives of 6.5 and 12h, respectively. These results indicate a potential of the conjugate 3 as an anticancer prodrug of phosphoramidate mustard for selective PSA activation.

[674]

**TÍTULO / TITLE:** - A Case of Renal Cell Carcinoma with Inferior Vena Cava Tumor Thrombus Diagnosed during Pregnancy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 21.

●● Enlace al texto completo (gratis o de pago) [1159/000354351](https://doi.org/10.1159/000354351)

**AUTORES / AUTHORS:** - Katayama H; Ito A; Kakoi N; Shimada S; Saito H; Arai Y  
**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Tohoku University Graduate School of Medicine, Sendai, Japan.

**RESUMEN / SUMMARY:** - Renal cell carcinoma (RCC) during pregnancy is rare, and the treatment of this condition requires appropriate steps to treat both the patient and the fetus. To the best of our knowledge, this is the first report to describe a case of RCC with tumor thrombus in the inferior vena cava (IVC) occurring during pregnancy. The affected 46-year-old pregnant woman with placenta previa was clinically diagnosed with cT3bN0M0 RCC at 25 weeks gestation. Therapeutic considerations included risk of sudden pulmonary embolism, risk of thrombosis or intraoperative hemorrhage, and safe delivery of the fetus. After extensive consultation with obstetricians and pediatricians, the surgical management was divided into two steps. First, the patient underwent Caesarean section and simultaneous hysterectomy at 26 weeks gestation. Then, 16 days after delivery, when hemodynamics and hemostasis had improved due to termination of gestation, the patient underwent radical nephrectomy with concomitant IVC thrombectomy. © 2013 S. Karger AG, Basel.

[675]

**TÍTULO / TITLE:** - Neoadjuvant and adjuvant hormonal and chemotherapy for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematol Oncol Clin North Am. 2013 Dec;27(6):1189-204. doi: 10.1016/j.hoc.2013.08.004. Epub 2013 Sep 21.

●● Enlace al texto completo (gratis o de pago) [1016/j.hoc.2013.08.004](#)

**AUTORES / AUTHORS:** - Lam ET; Glode LM

**INSTITUCIÓN / INSTITUTION:** - Division of Medical Oncology, University of Colorado Anschutz Medical Campus, Mailstop 8117, 12801 East 17<sup>th</sup> Avenue, Aurora, CO 80045, USA. Electronic address: [elaine.lam@ucdenver.edu](mailto:elaine.lam@ucdenver.edu).

**RESUMEN / SUMMARY:** - Most men treated with radical prostatectomy or radiation therapy for localized prostate cancer will be cured of prostate cancer; however, some men will experience treatment failure. Androgen deprivation therapy is well established in the treatment of metastatic prostate cancer. Adjuvant androgen deprivation therapy, following prostatectomy and/or radiotherapy, has been studied in the high-risk prostate cancer setting to try to reduce the risk of recurrence and improve patient outcomes. In this review, we discuss the current data for neoadjuvant and adjuvant therapy with androgen suppression, chemotherapy, and approaches with the newer hormonal agents.

[676]

**TÍTULO / TITLE:** - The reasons behind variation in Gleason grading of prostatic biopsies: areas of agreement and misconception among 266 European pathologists.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histopathology. 2013 Sep 14. doi: 10.1111/his.12284.

●● Enlace al texto completo (gratis o de pago) [1111/his.12284](#)

**AUTORES / AUTHORS:** - Berney DM; Algaba F; Camparo P; Comperat E; Griffiths D; Kristiansen G; Lopez-Beltran A; Montironi R; Varma M; Egevad L

**INSTITUCIÓN / INSTITUTION:** - Queen Mary University of London, London, UK.

**RESUMEN / SUMMARY:** - AIMS: The Gleason scoring system underwent revision at the International Society of Urological Pathology (ISUP) conference in 2005. It is not known how uropathologists have interpreted its recommendations. METHOD AND RESULTS: A web-based survey to European Network of Uropathology members received replies from 266 pathologists in 22 countries. Eighty-nine per cent claimed to follow ISUP recommendations. Key areas of disagreement included the following. Smoothly rounded cribriform glands were assigned Gleason pattern (GP) 3 by 51% and GP 4 by 49%. Necrosis was diagnosed as GP 5 by 62%. Any amount of secondary pattern of higher grade in needle biopsies was included in the Gleason score by 58%. Tertiary GP of higher grade on needle biopsies was included in the Gleason score by only 58%. If biopsy cores were embedded separately, only 56% would give a Gleason score for each core/slide examined; 68% would give a concluding Gleason score and the most common method was a global Gleason score (77%). Among those who blocked multiple biopsy cores together, 46% would only give an overall Gleason score for the case. CONCLUSION: Misinterpretation of ISUP 2005 is widespread, and may explain the variation in Gleason scoring seen. Clarity and uniformity in teaching ISUP 2005 recommendations is necessary.

[677]

**TÍTULO / TITLE:** - Contemporary management of renal cell carcinoma (RCC) in Victoria: implications for longer term outcomes and costs.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov;112 Suppl 2:36-43. doi: 10.1111/bju.12204.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12204](#)

**AUTORES / AUTHORS:** - Ta AD; Bolton DM; Dimech MK; White V; Davis ID; Coory M; Millar J; Giles G

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, The Austin and Repatriation Medical Centre, Heidelberg; Department of Urology, The Austin and Repatriation Medical Centre, Heidelberg.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To describe the contemporary patterns of care for renal cell carcinoma (RCC) using a whole of population series from Victoria. **PATIENTS AND METHODS:** Retrospective review of medical records of all patients diagnosed and treated for RCC in Victoria in 2009. Patients were identified via the State-wide Victorian Cancer Registry. Patient demographic characteristics, symptoms, stage, and first-line treatment were assessed. Associations between case residential location (metropolitan or rural) and treatment were examined using multivariate logistic regression after adjusting for age, sex, socioeconomic status, treatment in private or public hospital and comorbidity. **RESULTS:** Data were obtained for 499 of 577 eligible patients. In all, 413 patients (83%) underwent surgery. Laparoscopic radical nephrectomy (RN) was the most common procedure for Stage I pT1a/pT1b tumours (51.2%); partial nephrectomy (PN) was performed for 27% of Stage I RCC. In multivariate analysis, regional patients were less likely to receive PN (odds ratio [OR] 0.39, 95% confidence interval [CI] 0.18-0.85) for Stage I RCC, and less likely to receive systemic therapy for Stage IV RCC (OR 0.06, 95% CI 0.01-0.41). Multidisciplinary team meetings were recorded for only 25% of patients and 3% were enrolled in a clinical trial. **CONCLUSION:** Most contemporary patients diagnosed with RCC are still treated with RN, including those with smaller tumours amenable to PN. This may impact future outcomes, including increased risk of chronic kidney disease and its potential financial healthcare burden. Patterns of treatment also appear to differ between metropolitan and regional populations.

[678]

**TÍTULO / TITLE:** - Editorial comment on 'Contemporary management of renal cell carcinoma in Victoria: implications for longer term outcomes and costs'.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov;112 Suppl 2:44-5. doi: 10.1111/bju.12379.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12379](#)

**AUTORES / AUTHORS:** - Nicol D

**INSTITUCIÓN / INSTITUTION:** - Royal Marsden Hospital, Urology, London, United Kingdom. [davidnicol@gmail.com](mailto:davidnicol@gmail.com).

[679]

**TÍTULO / TITLE:** - 17(E)-Picolinylidene androstane derivatives as potential inhibitors of prostate cancer cell growth: Antiproliferative activity and molecular docking studies.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Bioorg Med Chem. 2013 Dec 1;21(23):7257-66. doi: 10.1016/j.bmc.2013.09.063. Epub 2013 Oct 3.

●● Enlace al texto completo (gratis o de pago) [1016/j.bmc.2013.09.063](#)

**AUTORES / AUTHORS:** - Ajdukovic JJ; Djurendic EA; Petri ET; Klisuric OR; Celic AS; Sakac MN; Jakimov DS; Gasi KM

**INSTITUCIÓN / INSTITUTION:** - Department of Chemistry, Biochemistry and Environmental Protection, Faculty of Sciences, University of Novi Sad, Trg Dositeja Obradovica 3, 21000 Novi Sad, Serbia. Electronic address: [Jovana.Ajdukovic@dh.uns.ac.rs](mailto:Jovana.Ajdukovic@dh.uns.ac.rs).

**RESUMEN / SUMMARY:** - We report a rapid and efficient synthesis of A-ring modified 17 $\alpha$ -picolyl and 17(E)-picolinylidene androstane derivatives from dehydroepiandrosterone. Compounds were validated spectroscopically and structurally characterized by X-ray crystallography. Virtual screening by molecular docking against clinical targets of steroidal anticancer drugs (ER $\alpha$ , AR, Aromatase and CYP17A1) suggests that 17(E)-picolinylidene, but not 17 $\alpha$ -picolyl androstanes could specifically interact with CYP17A1 (17 $\alpha$ -hydroxylase) with similar geometry and affinity as Abiraterone, a 17-pyridinyl androstane drug clinically used in the treatment of prostate cancer. In addition, several 17(E)-picolinylidene androstanes demonstrated selective antiproliferative activity against PC3 prostate cancer cells, which correlates with Abiraterone antiproliferative activity and predicted CYP17A1 binding affinities. Based on these preliminary results, 17(E)-picolinylidene androstane derivatives could be a promising starting point for the development of new compounds for the treatment of prostate cancer.

[680]

**TÍTULO / TITLE:** - Suppression of SCIN inhibits human prostate cancer cell proliferation and induces G0/G1 phase arrest.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2014 Jan;44(1):161-6. doi: 10.3892/ijo.2013.2170. Epub 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2170](#)

**AUTORES / AUTHORS:** - Wang D; Sun SQ; Yu YH; Wu WZ; Yang SL; Tan JM

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Fuzhou General Hospital, Fuzhou 350025, P.R. China.

**RESUMEN / SUMMARY:** - SCIN is a calcium regulated actin severing and capping protein. Its homologue in zebrafish is found to be related with cell death. In the present study, we found that SCIN is highly expressed in human prostate cancer specimens. However, the functions of SCIN in human prostate carcinoma cells are largely unknown. To address the function of SCIN in prostate carcinoma cells, we used lentivirus-mediated RNAi to knock down SCIN expression in PC3 cells, a prostate carcinoma cell line. We found that in vitro silencing of SCIN could inhibit the proliferation and colony formation ability of PC3 cells. Furthermore, cell cycle analysis showed that reduced SCIN expression lead to G0/G1 cell cycle arrest through the regulation of cell cycle-related genes, such as p21Waf1/Cip1, cyclin-dependent kinase

inhibitor 2A (CDKN2A, p16Ink4A) and cyclin A2. These results suggest that SCIN plays an important role in the proliferation of prostate cancer cells and lentivirus-mediated inhibition of SCIN expression may be a potential therapeutic method for the treatment of prostate cancer.

[681]

**TÍTULO / TITLE:** - Non-invasive urodynamics predicts outcome prior to surgery for prostatic obstruction.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov;112 Suppl 2:61-4. doi: 10.1111/bju.12382.

●● [Enlace al texto completo \(gratis o de pago\) 1111/bju.12382](#)

**AUTORES / AUTHORS:** - Losco G; Keedle L; King Q

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Palmerston North Hospital, MidCentral DHB, Palmerston North, New Zealand.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** To assess whether the penile cuff non-invasive urodynamic test serves as an effective diagnostic tool for predicting outcomes prior to disobstructive surgery for men presenting with voiding lower urinary tract symptoms. Patients with proven urodynamic obstruction do better after surgery. The current gold standard, invasive pressure-flow studies, imposes cost, resource demand, discomfort and inconvenience to patients. **PATIENTS AND METHODS:** Patients undergoing surgery for prostatic obstruction at Palmerston North Hospital had pre-operative non-invasive urodynamics and completed an International Prostate Symptom Score (IPSS). Catheterised patients were excluded. Two months post-operatively they completed a further IPSS score. An improvement of seven or greater was defined as a clinically successful outcome. Results were compared with the outcome predicted by the nomogram supplied with the urodynamic device. **RESULTS:** Data was obtained for 62 patients with mean age 70 years (range 49 to 86 years; SD 9 years). Follow-up was complete for all patients. Thirty-eight patients underwent transurethral resection and 24 holmium laser enucleation of the prostate. Mean IPSS score was 21 (range 5 to 35; SD 6) pre-operatively and 11 (range 1 to 31; SD 9) post-operatively. Thirty-five patients were predicted obstructed and 27 not obstructed. 94% of those predicted obstructed had a successful outcome ( $p < 0.01$ ). 70% predicted as not obstructed did not have a successful outcome after surgery ( $p < 0.01$ ). **CONCLUSION:** The penile cuff test is an exciting adjunct in the decision to proceed to surgery for prostatic obstruction. Patients predicted to be obstructed have an excellent likelihood of a good surgical outcome, yet 30% of those shown not to be obstructed will still do well. Whilst numbers in our study are small, outcomes compare favourably with published results on invasive urodynamic methods.

[682]

**TÍTULO / TITLE:** - Myoglobin expression in renal cell carcinoma is regulated by hypoxia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Exp Mol Pathol. 2013 Dec;95(3):307-12. doi: 10.1016/j.yexmp.2013.09.003. Epub 2013 Sep 25.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.yexmp.2013.09.003](#)

**AUTORES / AUTHORS:** - Behnes CL; Bedke J; Schneider S; Kuffer S; Strauss A; Bremmer F; Strobel P; Radzun HJ

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University of Gottingen, Robert-Koch-Strasse 40, 37075 Gottingen, Germany. Electronic address: [clbehnes@med.uni-goettingen.de](mailto:clbehnes@med.uni-goettingen.de).

**RESUMEN / SUMMARY:** - Myoglobin is a member of the hemoprotein superfamily, which additionally includes hemoglobin, neuroglobin and cytoglobin. Cytoplasmic localized myoglobin functions as a radical scavenger and prevents hypoxia. Besides muscle tissue MB expression could also be observed in other tissues as well as in different types of cancer. For the correlation between the expression of myoglobin, hypoxia-inducible-factor-1alpha, and capillary density tissue of 86 different renal cell carcinomas were immunohistochemically stained with myoglobin-specific and hypoxia-inducible-factor-1alpha-specific antibodies as well as with CD31 antibody. Four different renal carcinoma cell lines were cultivated under hypoxic conditions and the expression of myoglobin and hypoxia-inducible-factor-1alpha was evaluated by real-time PCR and Western blot. Renal cell carcinoma including clear cell, papillary, and chromophobe subtypes expressed myoglobin with an inverse relationship to capillary density being highly significant for clear cell renal cell carcinoma. For hypoxia-inducible-factor-1alpha a significant correlation with capillary density could also be observed in clear cell RCC. In renal cell carcinoma cell lines hypoxia induced a significant increase of myoglobin expression up to 62 fold, whereas hypoxia-inducible-factor-1alpha only increased up to 5 fold. The PCR results of myoglobin expression could be confirmed by Western blot. Myoglobin seems to be a sensitive marker for hypovascularized tumor entities especially during the early phase of hypoxia. Such neoplasias may benefit from an antiangiogenic therapy.

[683]

**TÍTULO / TITLE:** - Age Distribution for Partial and Radical Nephrectomy: Whose Nephrons are Being Spared?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Adv Ther. 2013 Oct;30(10):924-32. doi: 10.1007/s12325-013-0061-0. Epub 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1007/s12325-013-0061-0](#)

**AUTORES / AUTHORS:** - von Klot C; Herrmann TR; Wegener G; Kuczyk MA; Hupe MC; Akkoyun M; Peters I; Kramer MW; Merseburger AS

**INSTITUCIÓN / INSTITUTION:** - Department of Urology and Urological Oncology, Hannover Medical School, Carl-Neuberg-Str. 1, 30625, Hannover, Germany, [klot.christoph@mh-hannover.de](mailto:klot.christoph@mh-hannover.de).

**RESUMEN / SUMMARY:** - INTRODUCTION: Nephron sparing surgery (NSS) is recommended for patients with T1 renal cell carcinoma (RCC) whenever surgically feasible. By analyzing data from all urological clinics in the whole state of Lower Saxony, Germany, regardless of clinic size or level of expertise, we investigated whether current practice reflects the need for NSS in older patients on a broader scale. METHODS: From 2005 to 2010, more than 100 medical facilities and urological clinics in Lower Saxony, Germany were evaluated for their individual rates of partial nephrectomy (PN) and radical nephrectomy (RN) based on patient's age in 5-year intervals. RESULTS: Sufficient data on age were available for 3,332 out of 3,693

patients with RCC undergoing surgery. PN rates for all patients and for those with T1 RCC were 19.9% and 29.5%, respectively. For all patients with RCC, the rates for PN and RN below the median age (<66.8 years) were 365 (21.9%) and 1,302 (78.1%) and above the median age were 297 (17.8%) and 1,368 (82.2%), respectively (P = 0.003). For patients with T1 RCC, the rates for PN and RN below the median age (<66.5 years) were 341 (32.6%) and 704 (67.4%) and above the median age were 277 (26.4%) and 774 (73.6%), respectively (P = 0.002). The highest rate for each type of surgery was seen in those aged 65-70 years, except for patients with T1 RCC receiving RN who were mostly operated on when aged 70-75 years. CONCLUSION: The rate of PN for all patients with RCC in this series and especially for patients with T1 RCC is significantly lower in older patients, thereby not reflecting the need and understanding for NSS in the higher age segment. Broader education and teaching of NSS might improve treatment of RCC in the future.

[684]

**TÍTULO / TITLE:** - Enhanced cytotoxicity of optimized liposomal genistein via specific induction of apoptosis in breast, ovarian and prostate carcinomas.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Drug Target. 2013 Dec;21(10):1001-11. doi: 10.3109/1061186X.2013.847099. Epub 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [3109/1061186X.2013.847099](#)

**AUTORES / AUTHORS:** - Phan V; Walters J; Brownlow B; Elbayoumi T

**INSTITUCIÓN / INSTITUTION:** - Arizona College of Osteopathic Medicine, Midwestern University, Glendale, AZ, USA and.

**RESUMEN / SUMMARY:** - Abstract Clinical use of genistein against cancer is limited by its extremely low aqueous solubility, poor bioavailability and pharmacokinetics. Based on structural analogy with steroidal compounds, liposomal vehicle compositions were designed and optimized for maximum incorporation of genistein's flavonoid structure. Model conventional and stealth liposomes of genistein (GenLip) - incorporating unsaturated phospholipids and cholesterol - have demonstrated enhanced drug solubilization (over 350-folds > aqueous drug solution), shelf-life stability, and extended release profile. Owing to effective cellular delivery, preservation of genistein's antioxidant activity was confirmed through marked neutralization of peroxides via GenLip, in both quantitative and microscopic fluorescent-probe oxidation assays. Furthermore, significant broad-spectrum anticancer efficacy of GenLip, in murine and human cancer cell lines (p < 0.05-0.001), was achieved in a concentration and time-dependent manner - approx. 5-7 lower IC50 values versus all non-incorporated drug controls. Indicative of key pro-apoptotic activity, GenLip produced DNA laddering, with 1/3 of free drug solution content, and resulted in the highest induction level of P53-independent apoptotic pathway markers, compared to all treatments, in our assays (namely, mitochondrial polarization, and caspase-3/7 enzymes). Our proof-of-principle pharmaceutical design of genistein-loaded liposomes shows optimal loading capacity and physico-chemical properties, which improved cellular delivery and specific pro-apoptotic effectiveness of incorporated drug, against various cancers.

[685]

**TÍTULO / TITLE:** - An extensive epidemiological investigation of a kidney cancer cluster in a chemical plant: what have we learned?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Occup Environ Med. 2013 Aug 16. doi: 10.1136/oemed-2013-101477.

●● Enlace al texto completo (gratis o de pago) [1136/oemed-2013-101477](#)

**AUTORES / AUTHORS:** - Iwatsubo Y; Benezet L; Boutou-Kempf O; Fevotte J; Garras L; Goldberg M; Luce D; Pilorget C; Imbernon E

**INSTITUCIÓN / INSTITUTION:** - Departement sante travail, Institut de veille sanitaire (InVS), , Saint Maurice, France.

**RESUMEN / SUMMARY:** - OBJECTIVES: In 2003, a cluster of renal cell carcinoma (RCC) cases was reported among men working at a French chemical plant using a proprietary process to produce vitamin A. The 10 index cases yielded a standardised incidence ratio of 13.1 for 1994-2002. Nine of these 10 cases were diagnosed by a plant-specific abdominal ultrasonography screening programme that targeted exposure to an intermediate chemical, 4-chloro-1,1-dimethoxy-3-methyl-2-butene, commonly named 'chloracetal C5', suspected as the cause by some experts. Epidemiological investigations sought to examine the relations between occupational exposures and RCC. METHODS: A retrospective cohort mortality study and a nested case-control study were conducted. The cohort study included all workers who had been employed at the plant for at least 6 months between 1960 and 2003. The case-control study included an extensive search within the region for other kidney cancer cases among the cohort members. Industrial hygienists assessed occupational exposure. RESULTS: From 1968 to 2006, no significant excess mortality was observed for all causes of death or for all cancers. We found excess mortality for kidney cancer only among women. The nested case-control study showed a dose-response relation for cumulative exposure to chloracetal C5: the OR rose from 2.5 in the low-exposure category to 10.5 in the high-exposure group. Adjustment for screening attenuated this relation. CONCLUSIONS: The results of the case-control study were consistent with the positive results of in vivo genotoxic tests and suggest that chloracetal C5 can have a causal role in RCC.

[686]

**TÍTULO / TITLE:** - Fifteen-year Survivor of Renal Cell Carcinoma After Metastasectomies for Multiple Bone Metastases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Orthopedics. 2013 Nov 1;36(11):e1454-7. doi: 10.3928/01477447-20131021-32.

●● Enlace al texto completo (gratis o de pago) [3928/01477447-20131021-32](#)

**AUTORES / AUTHORS:** - Kato S; Murakami H; Takeuchi A; Demura S; Yoshioka K; Kawahara N; Tomita K; Tsuchiya H

**RESUMEN / SUMMARY:** - This article describes a patient with multiple metastases from renal cell carcinoma who survived and maintained an ambulatory status for 15 years with no recurrence in the spine after en bloc resection of solitary spinal metastasis. Skeletal metastasis from renal cell carcinoma is common, second only to lung metastasis. Surgery plays an important role in the treatment of the metastasis because of its resistance to chemotherapy and radiotherapy. A 60-year-old man had T1N2M1

renal cell carcinoma in the right kidney and synchronous bone metastases at T12 vertebral body and the right humerus. The patient underwent right nephrectomy and en bloc resection of T12 metastasis at the same time using a retroperitoneal approach. He also underwent curetted total excision of metastasis in the right humerus. He underwent radiotherapy and an additional 7 tumor excision surgeries in the right humerus due to repeated tumor recurrences and a pulmonary metastasectomy in the right lung. Thirteen years after initial surgery, he underwent right forequarter amputation due to tumor recurrence and surgical site infection. Fifteen years after initial surgery, he is still alive with no evidence of disease. He has been ambulatory with no tumor recurrence in the spine for 15 years. En bloc resection of solitary spinal metastasis allowed the patient to be ambulatory without recurrence. This contrasts with curetted total excision of bone metastasis in the humerus that resulted in repeated recurrences and surgeries and loss of the arm.

[687]

**TÍTULO / TITLE:** - Renal carcinomas associated with Xp11.2 translocations: Are CT findings suggestive of the diagnosis?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Radiol. 2013 Oct 21. pii: S0009-9260(13)00416-9. doi: 10.1016/j.crad.2013.08.004.

●● Enlace al texto completo (gratis o de pago) [1016/j.crad.2013.08.004](#)

**AUTORES / AUTHORS:** - He J; Huan Y; Qiao Q; Zhang J; Zhang JS

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Xijing Hospital, China.

**RESUMEN / SUMMARY:** - AIM: The purpose of the present study was to summarize the computed tomography (CT) features of renal carcinomas associated with Xp11.2 translocations, and determine whether the diagnosis can be reliably deduced from imaging findings. MATERIALS AND METHODS: Radiological studies of six patients (aged from 9-29 years) with renal carcinoma associated with Xp11.2 translocations were retrospectively analysed. RESULTS: The tumours varied in size from 3.3-11 cm (mean 5.4 cm). Unenhanced CT and cortical, medullary, and pelvic-phase contrast-enhanced CT imaging was undertaken in all cases. Unenhanced CT revealed that tumours had a relatively increased radiodensity (4/6, ranged from 45-60 HU) and suggested the possibility of diffuse haemorrhage. Three of the six cases showed irregular and boundary calcification of the lesion. Contrast-enhanced CT showed relatively well demarcated tumours with heterogeneous enhancement (6/6). Prolonged enhancement of tumours might be a common sign (6/6) in Xp11.2 translocations. Three out of the six cases were combined with retroperitoneal lymph nodes metastasis. CONCLUSION: Renal carcinomas associated with Xp11.2 translocations should be considered, particularly in children and young patients, when the lesion has calcification and is hyper-dense on unenhanced CT, and has prolonged enhancement on contrast-enhanced images.

[688]

**TÍTULO / TITLE:** - Imaging in prostate carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematol Oncol Clin North Am. 2013 Dec;27(6):1163-87. doi: 10.1016/j.hoc.2013.08.003.

●● Enlace al texto completo (gratis o de pago) [1016/j.hoc.2013.08.003](http://1016/j.hoc.2013.08.003)

**AUTORES / AUTHORS:** - Zukotynski K; Haider MA

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Imaging, Sunnybrook Health Sciences Centre, University of Toronto, 2075 Bayview Avenue, Toronto, Ontario M4N 3M5, Canada; Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115, USA. Electronic address: [kzukotynski@partners.org](mailto:kzukotynski@partners.org).

**RESUMEN / SUMMARY:** - Imaging plays a central role in the detection, diagnosis, staging, and follow-up of prostate carcinoma. This article discusses the role of multiple imaging modalities in the diagnosis and staging of prostate cancer, with attention to imaging features of localized and metastatic disease, imaging adjuncts to improve prostate biopsy, and potential imaging biomarkers. In addition, the role of imaging in the management of prostate cancer, with emphasis on surveillance, evaluation of response to new therapies, and detection of recurrent disease is described. Lastly, future directions in prostate cancer imaging are presented.

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[689]

**TÍTULO / TITLE:** - Words of wisdom. Re: Low serum neutrophil count predicts a positive prostate biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Nov;64(5):855-7. doi: 10.1016/j.eururo.2013.08.040.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.08.040](http://1016/j.eururo.2013.08.040)

**AUTORES / AUTHORS:** - Taioli E; Freedland SJ; Vidal AC

**INSTITUCIÓN / INSTITUTION:** - North Shore Long Island Jewish Health System, The Feinstein Institute for Medical Research, Manhasset, NY, USA.

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[690]

**TÍTULO / TITLE:** - Multiagent chemotherapy for metastatic adenocarcinoma of the seminal vesicle.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Drugs. 2014 Jan;25(1):115-9. doi: 10.1097/CAD.0000000000000030.

●● Enlace al texto completo (gratis o de pago)

[1097/CAD.0000000000000030](http://1097/CAD.0000000000000030)

**AUTORES / AUTHORS:** - Guindalini RS; Mak MP; Takahashi TK; Testa L; Dzik C

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology and Oncology, Cancer Institute of the State of Sao Paulo, Medical School of the University of Sao Paulo, Sao Paulo, Brazil.

**RESUMEN / SUMMARY:** - Adenocarcinoma of the seminal vesicle is a rare condition, with fewer than 60 cases described in the literature. Most reports highlight the histopathological characteristics of the tumor; however, the role of chemotherapy, especially in the metastatic setting, is poorly described. In this paper, we describe a patient with metastatic disease, who sustained a response to modified FOLFOX6 as

first-line therapy. This platinum-based combination therapy seems effective in this scenario and may provide an opportunity for extended survival and relief of symptoms.

[691]

**TÍTULO / TITLE:** - Magnetic-particle-based, ultrasensitive chemiluminescence enzyme immunoassay for free prostate-specific antigen.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anal Chim Acta. 2013 Nov 1;801:91-6. doi: 10.1016/j.aca.2013.09.050. Epub 2013 Sep 28.

●● Enlace al texto completo (gratis o de pago) [1016/j.aca.2013.09.050](http://1016/j.aca.2013.09.050)

**AUTORES / AUTHORS:** - Liu R; Wang C; Jiang Q; Zhang W; Yue Z; Liu G

**INSTITUCIÓN / INSTITUTION:** - College of Electronic Information and Optical Engineering, Nankai University, Tianjin 300071, China.

**RESUMEN / SUMMARY:** - We report a magnetic-particle (MMP)-based chemiluminescence enzyme immunoassay (CLEIA) for free prostate-specific antigen (f-PSA) in human serum. In this method, the f-PSA is sandwiched between the anti-PSA antibody coated MMPs and alkaline phosphatase (ALP)-labeled anti-f-PSA antibody. The signal produced by the emitted photons from the chemiluminescent substrate (4-methoxy-4-(3-phosphatophenyl)-spiro-(1,2-dioxetane-3,2'-adamantane)) is directly proportional to the amount of f-PSA in a sample. The present MMP-based assay can detect f-PSA in the range of 0.1-30 ng mL<sup>-1</sup> with the detection limit of 0.1 ng mL<sup>-1</sup>. The linear detection range could match the concentration range within the "diagnostic gray zone" of serum f-PSA levels (4-10 ng mL<sup>-1</sup>). The detection limit was sufficient for measuring clinically relevant f-PSA levels (>4 ng mL<sup>-1</sup>). Furthermore, the method was highly selective; it was unaffected by cross-reaction with human glandular kallikrein-2, a kallikrein-like serine protease that is 80% similar to f-PSA. The proposed method was finally applied to determine f-PSA in 40 samples of human sera. Results obtained using the method showed high correlation with those obtained using a commercially available microplate CLEIA kit (correlation coefficient, 0.9821). This strategy shows great potential application in the fabrication of diagnostic kits for determining f-PSA in serum.

[692]

**TÍTULO / TITLE:** - Application of a new technique, spiral tissue microarrays constructed using needle biopsy specimens, to prostate cancer research.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2014 Jan;44(1):195-202. doi: 10.3892/ijo.2013.2173. Epub 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2173](http://3892/ijo.2013.2173)

**AUTORES / AUTHORS:** - Komiya A; Kato T; Hori T; Fukuoka J; Yasuda K; Fuse H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Toyama, Japan.

**RESUMEN / SUMMARY:** - Tissue microarrays were constructed using prostate needle biopsy specimens obtained from 58 patients who underwent radical prostatectomy for localized or locally advanced prostate cancer (PC). We used the spiral array (SA) technique, a novel approach for tissue array construction in a spiral form, which has advantages over small needle biopsy specimens. Roll-shaped tissue pieces produced

by slicing a prostate biopsy tissue block and trimming the cancer segment were used to obtain a tissue array block. Cancer segments measuring >3 mm were incorporated into the tissue arrays. Cancer fragments (n=253) were obtained from formalin-fixed, paraffin-embedded needle biopsy specimens. The median number of cancer fragments per patient was four (1-8, min-max). On SA, the median number of confirmed cancer fragments per patient was four (1-7) and 224 cancer fragments (88.5%) were confirmed histologically. Each core of reeled tissue contained at least one cancer fragment. The expressions of multiple prognostic molecular markers for PC (Ki-67, p53 and bcl-2) were immunohistochemically measured using the SA. The Ki-67 and bcl-2 expressions were significantly associated with the Gleason score (GS). A univariate analysis identified Ki-67, bcl-2 and GS as significant predictors of cancer-specific survival, p53 and bcl-2 as significant predictors of overall survival and Ki-67, adjuvant androgen deprivation and GS as significant predictors of biochemical progression. In a multivariate analysis, p53 was independently associated with overall survival, while adjuvant androgen deprivation and GS were associated with biochemical progression. These results indicate that SA has potential as a new tool for translational research on PC.

[693]

**TÍTULO / TITLE:** - MDCT Evaluation of Ureteral Tumors: Advantages of 3D Reconstruction and Volume Visualization.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Dec;201(6):1239-47. doi: 10.2214/AJR.13.10880.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.13.10880](#)

**AUTORES / AUTHORS:** - Raman SP; Horton KM; Fishman EK

**INSTITUCIÓN / INSTITUTION:** - 1 All authors: Department of Radiology, Johns Hopkins University, JHOC 3251, 601 N Caroline St, Baltimore, MD 21287.

**RESUMEN / SUMMARY:** - OBJECTIVE. This article reviews the use of CT urography in diagnosing ureteral transitional cell carcinomas, different CT urography protocols, CT findings suggestive of ureteral malignancy, and the importance of 3D reconstructions. CONCLUSION. The ureters can be problematic to evaluate on CT, partly because of difficulties in obtaining adequate ureteral distention and opacification. Proper diagnosis hinges not only on appropriate interpretation of the axial images but also on the utilization of a 3D technique (volume rendering or maximum intensity projection) as an ancillary tool.

[694]

**TÍTULO / TITLE:** - Retrospective analysis of the efficacy of two cycles of M-VAC neoadjuvant chemotherapy followed by radical cystectomy for muscle-invasive bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4497-503.

**AUTORES / AUTHORS:** - Kitagawa Y; Izumi K; Miwa S; Kadono Y; Konaka H; Mizokami A; Namiki M

**INSTITUCIÓN / INSTITUTION:** - Department of Integrative Cancer Therapy and Urology, Kanazawa University Graduate School of Medical Science, Takaramachi 13-1, Kanazawa, Ishikawa, Japan. [yasukita@med.kanazawa-u.ac.jp](mailto:yasukita@med.kanazawa-u.ac.jp).

**RESUMEN / SUMMARY:** - **BACKGROUND:** Neoadjuvant chemotherapy before radical cystectomy for muscle-invasive bladder cancer is a commonly used treatment modality. However, in terms of chemotherapeutic regimens and the number of cycles of neoadjuvant chemotherapy, there is yet no international consensus, as various studies indicate the efficacy of several platinum-based combination chemotherapeutic regimens. We determined the efficacy of two cycles of neoadjuvant chemotherapy with methotrexate, vinblastine, adriamycin, and cisplatin followed by radical cystectomy. **PATIENTS AND METHODS:** The study population included patients with clinical stage T2 - T4a, N0, M0 bladder cancer who underwent radical cystectomy. Clinical courses were compared between 27 patients treated with two cycles of M-VAC neoadjuvant chemotherapy and 25 treated with cystectomy alone. **RESULTS:** The incidence of pT0 was 25.9% in the group treated with neoadjuvant chemotherapy. The probabilities of disease-free and cause-specific survival were significantly higher in patients treated with, than without neoadjuvant chemotherapy. On univariate Cox proportional hazards regression analysis for the patients treated with neoadjuvant chemotherapy, pathological stage and the pathological findings of venous involvement were significant prognostic factors. **CONCLUSION:** The results of this retrospective study demonstrated the clinical effectiveness of two cycles of neoadjuvant M-VAC chemotherapy for muscle-invasive bladder cancer.

[695]

**TÍTULO / TITLE:** - Mobile phone radiation during pubertal development has no effect on testicular histology in rats.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Toxicol Ind Health. 2013 Oct 9.

●● [Enlace al texto completo \(gratis o de pago\) 1177/0748233713500820](#)

**AUTORES / AUTHORS:** - Tumkaya L; Kalkan Y; Bas O; Yilmaz A

**INSTITUCIÓN / INSTITUTION:** - Department of Histology and Embryology, Faculty of Medicine, Recep Tayyip Erdogan University, Rize, Turkey.

**RESUMEN / SUMMARY:** - Mobile phones are extensively used throughout the world. There is a growing concern about the possible public health hazards posed by electromagnetic radiation emitted from mobile phones. Potential health risk applies particularly to the most intensive mobile phone users-typically, young people. The aim of this study was to investigate the effects of mobile phone exposure to the testes, by assessing the histopathological and biochemical changes in the testicular germ cells of rats during pubertal development. A total of 12 male Sprague Dawley rats were used. The study group (n = 6) was exposed to a mobile phone for 1 h a day for 45 days, while the control group (n = 6) remained unexposed. The testes were processed with routine paraffin histology and sectioned. They were stained with hematoxylin-eosin, caspase 3, and Ki-67 and then photographed. No changes were observed between the groups (p > 0.05). The interstitial connective tissue and cells of the exposed group were of normal morphology. No abnormalities in the histological appearance of the seminiferous tubules, including the spermatogenic cycle stage, were observed. Our

study demonstrated that mobile phones with a low specific absorption rate have no harmful effects on pubertal rat testicles.

[696]

**TÍTULO / TITLE:** - Signalling pathways in succinate dehydrogenase B-associated renal carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histopathology. 2013 Aug 12. doi: 10.1111/his.12250.

●● [Enlace al texto completo \(gratis o de pago\) 1111/his.12250](#)

**AUTORES / AUTHORS:** - Fleming S; Mayer NJ; Vlatkovic LJ; McLean J; McConachie M; Baty D

**INSTITUCIÓN / INSTITUTION:** - Division of Molecular Medicine, University of Dundee, Dundee, UK.

**RESUMEN / SUMMARY:** - AIMS: Renal tumours have recently been described in association with mutations in the gene encoding the B subunit of succinate dehydrogenase, a mitochondrial Krebs cycle and electron transport chain enzyme (SDHB-associated renal cell carcinomas). The aim of this study was to investigate the roles of different signalling pathways in the pathogenesis of these tumours. METHODS AND RESULTS: We used immunohistochemistry and antibodies against phospho-specific epitopes to examine the activity of three potential signalling pathways in tumour cells of three genetically confirmed cases of SDHB-associated renal cell carcinomas. We found no evidence supporting a role for either the mTOR [p-mTOR (Ser2448), p-S6 riboprotein (Ser235/236)] or hypoxia-inducible (carbonic anhydrase 9 and EGFR) pathways. However, there was immunohistochemical reactivity for phosphorylated AMP-dependent kinase (p-AMPK Thr172) and glycogen synthase kinase 3 (GSK3) phosphorylation (p-GSK3 Ser12), and nuclear expression of cyclin D1. CONCLUSIONS: We suggest that these tumours may arise through a mechanism involving ATP depletion, activation of AMPK, and induction of cyclin D1, and that this may be a unique pathway of tumour development that has the potential for therapeutic intervention in these rare tumours.

[697]

**TÍTULO / TITLE:** - Total submission of pelvic lymphadenectomy tissues removed during radical prostatectomy for prostate cancer increases lymph node yield and detection of micrometastases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histopathology. 2013 Aug 26. doi: 10.1111/his.12262.

●● [Enlace al texto completo \(gratis o de pago\) 1111/his.12262](#)

**AUTORES / AUTHORS:** - Perry-Keene J; Ferguson P; Samaratunga H; Nacey JN; Delahunt B

**INSTITUCIÓN / INSTITUTION:** - Aquesta Pathology, Brisbane, QLD, Australia; Royal Brisbane Hospital, Brisbane, QLD, Australia.

**RESUMEN / SUMMARY:** - AIMS: The detection of lymph node metastases has prognostic and therapeutic implications for patients undergoing radical prostatectomy for prostate cancer. Macroscopic identification of pelvic lymph nodes in surgical lymphadenectomy specimens can be difficult, with a potential for incomplete

submission of lymph nodes for microscopic examination. This study was undertaken to determine whether complete sampling of lymphadenectomy specimens would improve the detection of metastatic disease in patients undergoing radical prostatectomy. **METHODS AND RESULTS:** We examined 109 pelvic lymphadenectomies accompanying radical prostatectomy specimens to assess the benefit of complete submission of the lymph node packets to detect extra lymph nodes and metastatic disease. We found that blocking the residual tissue, after all palpable lymph nodes had been identified, increased the mean number of lymph nodes from 3.8 to 10.8, with an average of 0.84 macroscopically undetectable nodes being recovered per block submitted. Metastatic prostate cancer was identified in eight cases, one of which had cancer in an impalpable lymph node only. **CONCLUSIONS:** Submission of all pelvic lymphadenectomy tissue for histological examination improves the yield of lymph nodes and the detection of metastatic prostate cancer.

[698]

**TÍTULO / TITLE:** - Serum miR-210 as a potential biomarker of early clear cell renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Oncol. 2014 Jan;44(1):53-8. doi: 10.3892/ijo.2013.2169. Epub 2013 Nov 7.

●● Enlace al texto completo (gratis o de pago) [3892/ijo.2013.2169](#)

**AUTORES / AUTHORS:** - Iwamoto H; Kanda Y; Sejima T; Osaki M; Okada F; Takenaka A

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Division of Urology, Faculty of Medicine, Tottori University, Tottori 683-8503, Japan.

**RESUMEN / SUMMARY:** - Early detection and treatment are critical in the management of renal cell carcinoma (RCC). However, there is no standard serum biomarker to facilitate early diagnosis or prognostic stratification in patients with RCC. Recent reports suggest that circulating microRNAs (miRNAs) have great potential as biomarkers for diagnosis and prognosis in patients with several types of cancers. Further, many studies using miRNA microarray analysis demonstrated that miR-210 expression in clear cell carcinoma (CCC), which is the largest subtype of RCC, was significantly upregulated in tumor tissue. Therefore, we investigated whether serum miR-210 could be a useful biomarker for the diagnosis and progression of CCC. This study included 34 CCC patients and 23 healthy controls (HC). First, we analyzed tissue miR-210 levels in tumor tissues and matched normal tissues from the 34 CCC patients. Second, we investigated the serum miR-210 levels in the 34 CCC patients and the 23 HC patients. Real-time polymerase chain reaction (PCR) was used to measure miRNA levels. Moreover, we examined the correlation between serum miR-210 levels and the clinicopathological parameters. Among patients with CCC, expression of miR-210 was higher in tumor tissues compared to normal tissues ( $P < 0.001$ ). Serum miR-210 levels were higher in CCC patients compared to HCs ( $P = 0.001$ ). Receiver operating characteristic (ROC) curve analysis showed an area under the ROC curve (AUC) of 0.77 (95% confidence interval, 0.65-0.89) and a sensitivity and specificity of 65 and 83%, respectively. In addition, there was no significant association between serum miR-210 levels and age, sex, tumor size or existence of metastasis at diagnosis among the 34 CCC patients. In conclusion, serum

miR-210 upregulation may occur in the early stage of CCC and serum miR-210 can be a useful biomarker for early CCC in humans.

[699]

**TÍTULO / TITLE:** - An interobserver reproducibility study on invasiveness of bladder cancer using virtual microscopy and heatmaps.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histopathology. 2013 Dec;63(6):756-66. doi: 10.1111/his.12214. Epub 2013 Sep 16.

●● [Enlace al texto completo \(gratis o de pago\) 1111/his.12214](#)

**AUTORES / AUTHORS:** - Comperat E; Egevad L; Lopez-Beltran A; Camparo P; Algaba F; Amin M; Epstein JI; Hamberg H; Hulsbergen-van de Kaa C; Kristiansen G; Montironi R; Pan CC; Heloir F; Treurniet K; Sykes J; Van der Kwast TH

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Groupe Hospitalier La Pitie-Salpetriere, Universite Pierre et Marie Curie, Paris, France.

**RESUMEN / SUMMARY:** - AIMS: The distinction between non-invasive (pTa) and invasive (pT1) non-muscle invasive bladder cancer (NMIBC) is subject to considerable interobserver variation. We aimed to generate a teaching set of images based on the diagnostic opinions of a panel of expert genitourinary pathologists. METHODS AND RESULTS: Twenty-five transurethral resection specimens initially reported as pT1 NMIBC from two university hospitals were selected on the basis of potential uncertainty of stromal invasion. Digitized slides were reviewed independently by a panel of eight genitourinary pathologists, who annotated any invasive area if present. Annotations were reviewed by the lead panel, and heatmaps of annotated areas were constructed. Reasons for discrepancies were analysed, and kappa scores were calculated to determine agreement among the eight panellists. Full agreement by the eight panellists was obtained in 11 of 25 cases (44%), with a multi-rater (Fleiss) kappa of 0.47 ( $P < 0.0001$ ). After joint review of the seven discordant (agreement <75% of panellists) cases, consensus was obtained for six cases, and a teaching set of images was generated. CONCLUSIONS: Interobserver agreement among the panellists in the selected cases was moderate, but consensus could be reached in almost all cases. Heatmaps proved to be instrumental in generating a teaching set of images for standardization of histological criteria for NMIBC invasion.

[700]

**TÍTULO / TITLE:** - Cystic partially regressed clear cell renal cell carcinoma: a potential mimic of multilocular cystic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Histopathology. 2013 Dec;63(6):767-79. doi: 10.1111/his.12239. Epub 2013 Oct 7.

●● [Enlace al texto completo \(gratis o de pago\) 1111/his.12239](#)

**AUTORES / AUTHORS:** - Williamson SR; Maclennan GT; Lopez-Beltran A; Montironi R; Tan PH; Martignoni G; Grignon DJ; Eble JN; Idrees MT; Scarpelli M; Cheng L

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Laboratory Medicine, Henry Ford Health System, Detroit, MI, USA.

**RESUMEN / SUMMARY:** - AIMS: To study clear cell renal cell carcinomas with predominant cystic and sclerotic components, in which a solid epithelial component precluded a diagnosis of multilocular cystic renal cell carcinoma. We designated these tumours 'cystic partially regressed clear cell renal cell carcinoma.' METHODS AND RESULTS: Twenty-seven tumours were studied, from patients with a median age of 58 years; the stage was most often pT1 (89%). The Fuhrman grade was 2 (48%), 1 (33%), or 3 (19%). The solid epithelial component constituted up to 30% of the tumour volume (median, 10%), whereas the cystic component constituted 15-80% (median, 65%), and the sclerotic component 10-70% (median, 20%). Thin fibrovascular septa lined by cells with clear cytoplasm were almost always present, resembling multilocular cystic renal cell carcinoma. Both zones of sclerosis and fibrovascular septa often contained inconspicuous epithelial cells. Sclerotic areas ranged in appearance from a cellular fibroblastic reaction to scar-like with a residual network of capillaries resembling haemangioma. No patient developed recurrence or metastasis. CONCLUSIONS: Cystic partially regressed clear cell renal cell carcinoma is an uncommon pattern of clear cell renal cell carcinoma, being composed of cysts with solid epithelial and sclerotic components that differentiate it from multilocular cystic renal cell carcinoma.

[701]

**TÍTULO / TITLE:** - Impact of concomitant carcinoma in situ on upstaging and outcome following radical cystectomy for bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Nov 10.

- [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1207-z](#)

**AUTORES / AUTHORS:** - Yafi FA; Aprikian AG; Chin JL; Fradet Y; Izawa J; Estey E; Fairey A; Rendon R; Cagiannos I; Lacombe L; Lattouf JB; Saad F; Bell D; Drachenberg D; Kassouf W

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery (Urology), McGill University, Montreal, QC, Canada, [faysalyafi@gmail.com](mailto:faysalyafi@gmail.com).

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the impact of concomitant carcinoma in situ (CIS) on upstaging and outcome of patients treated with radical cystectomy with pelvic lymph node dissection. METHODS: We collected and pooled a database of 1,968 patients who have undergone radical cystectomy between 1998 and 2008 in eight academic centers across Canada. Collected variables included patient's age, gender, tumor grade, histology and the presence of concomitant CIS with either cTa-1 or cT2 disease, dates of recurrence and death. RESULTS: In the presence of concomitant CIS, upstaging following radical cystectomy occurred in 48 and 55 % of patients with cTa-1 and cT2 disease, respectively. On univariate analysis, the presence of concomitant CIS with cT2 disease was associated with upstaging ( $p < 0.0001$ ), and the presence of concomitant CIS with cTa-1 disease was also associated with upstaging but did not reach statistical significance ( $p = 0.0526$ ). On multivariate analyses, the presence of concomitant CIS with either cTa-1 or cT2 tumors was independently prognostic of disease upstaging ( $p = 0.0001$  and  $0.0186$ , respectively). However, on multivariate analysis that incorporates pathologic stage, concomitant CIS was not significantly associated with worse overall, recurrence-free or disease-specific survival. CONCLUSION: These results demonstrate that while the presence of

concomitant CIS on cystectomy specimens does not independently affect outcomes, its presence is significantly predictive of a higher rate of upstaging at radical cystectomy.

[702]

**TÍTULO / TITLE:** - Re: intermittent versus continuous androgen deprivation in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Dec;64(6):1014-5. doi: 10.1016/j.eururo.2013.09.031.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.031](#)

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[703]

**TÍTULO / TITLE:** - Re: Do Adenocarcinomas of the Prostate with Gleason Score (GS)  $\leq 6$  Have the Potential to Metastasize to Lymph Nodes?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Dec;64(6):1013. doi: 10.1016/j.eururo.2013.09.029.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.029](#)

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[704]

**TÍTULO / TITLE:** - Analysis of Intracorporeal Compared with Extracorporeal Urinary Diversion After Robot-assisted Radical Cystectomy: Results from the International Robotic Cystectomy Consortium.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Urol. 2013 Oct 9. pii: S0302-2838(13)01036-1. doi: 10.1016/j.eururo.2013.09.042.

●● Enlace al texto completo (gratis o de pago) [1016/j.eururo.2013.09.042](#)

**AUTORES / AUTHORS:** - Ahmed K; Khan SA; Hayn MH; Agarwal PK; Badani KK; Balbay MD; Castle EP; Dasgupta P; Ghavamian R; Guru KA; Hemal AK; Hollenbeck BK; Kibel AS; Menon M; Mottrie A; Nepple K; Pattaras JG; Peabody JO; Poulakis V; Pruthi RS; Redorta JP; Rha KH; Richstone L; Saar M; Scherr DS; Siemer S; Stoeckle M; Wallen EM; Weizer AZ; Wiklund P; Wilson T; Woods M; Khan MS

**INSTITUCIÓN / INSTITUTION:** - MRC Centre for Transplantation, King's College London, Department of Urology, Guy's Hospital, London, UK.

**RESUMEN / SUMMARY:** - BACKGROUND: Intracorporeal urinary diversion (ICUD) has the potential benefits of a smaller incision, reduced pain, decreased bowel exposure, and reduced risk of fluid imbalance. OBJECTIVE: To compare the perioperative outcomes of patients undergoing extracorporeal urinary diversion (ECUD) and ICUD

following robot-assisted radical cystectomy (RARC). DESIGN, SETTING, AND PARTICIPANTS: We reviewed the database of the International Robotic Cystectomy Consortium (IRCC) (18 international centers), with 935 patients who had undergone RARC and pelvic lymph node dissection (PLND) between 2003 and 2011. INTERVENTION: All patients within the IRCC underwent RARC and PLND as indicated. The urinary diversion was performed either intracorporeally or extracorporeally. OUTCOME MEASUREMENTS AND STATISTICAL ANALYSIS: Demographic data, perioperative outcomes, and complications in patients undergoing ICUD or ECUD were compared. All patients had at least a 90-d follow-up. The Fisher exact test was used to summarize categorical variables and the Wilcoxon rank sum test or Kruskal-Wallis test for continuous variables. RESULTS AND LIMITATIONS: Of 935 patients who had RARC and PLND, 167 patients underwent ICUD (ileal conduit: 106; neobladder: 61), and 768 patients had an ECUD (ileal conduit: 570; neobladder: 198). Postoperative complications data were available for 817 patients, with a minimum follow-up of 90 d. There was no difference in age, gender, body mass index, American Society of Anesthesiologists grade, or rate of prior abdominal surgery between the groups. The operative time was equivalent (414min), with the median hospital stay being marginally longer for the ICUD group (9 d vs 8 d,  $p=0.086$ ). No difference in the reoperation rates at 30 d was noted between the groups. The 90-d complication rate was not significant between the two groups, but a trend favoring ICUD over ECUD was noted (41% vs 49%,  $p=0.05$ ). Gastrointestinal complications were significantly lower in the ICUD group ( $p \leq 0.001$ ). Patients with ICUD were at a lower risk of experiencing a postoperative complication at 90 d (32%) (odds ratio: 0.68; 95% confidence interval, 0.50-0.94;  $p=0.02$ ). Being a retrospective study was the main limitation. CONCLUSIONS: Robot-assisted ICUD can be accomplished safely, with comparable outcomes to open urinary diversion. In this cohort, patients undergoing ICUD had a relatively lower risk of complications.

[705]

**TÍTULO / TITLE:** - Occult ovarian Leydig cell tumor: when laboratory tells more than imaging.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocrine. 2013 Oct 4.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s12020-013-0066-0](#)

**AUTORES / AUTHORS:** - Paragliola RM; Torino F; Senes P; Castellino L; Salutari V; Pontecorvi A; Scambia G; Corsello SM

**INSTITUCIÓN / INSTITUTION:** - Endocrinology Unit, Università Cattolica del Sacro Cuore, Largo Agostino Gemelli 8, 00168, Rome, Italy.

**RESUMEN / SUMMARY:** - Hyperandrogenism is a common finding in premenopausal age and is generally caused by polycystic ovarian syndrome or other benign disease. Androgen-secreting tumors represent only 0.2 % of the causes of hyperandrogenism and usually present with severe clinical features, abrupt onset, and very high androgens levels. We describe here three cases of occult ovarian Leydig cell tumors suspected on the basis of severe clinical features of hyperandrogenism rapidly worsening, with elevated serum total testosterone levels, in which bilateral ovariectomy was performed and tumor was confirmed by post-operative histology. In all three cases, imaging was negative for ovarian tumor. Moreover, in one case the confounding

concomitant finding of bilateral adrenal masses posed an additional challenge. Our experience highlights that testosterone levels represent the most helpful marker in the diagnosis of androgen-secreting ovarian tumor. In the absence of imaging findings, bilateral ovariectomy should be indicated, if supported by unequivocal clinical and laboratory data.

[706]

**TÍTULO / TITLE:** - Detection of specific chromosomal aberrations in urine using BCA-1 (oligo-CGH-array) enhances diagnostic sensitivity and predicts the aggressiveness of non-muscle-invasive bladder transitional cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Nov 7.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1191-3](#)

**AUTORES / AUTHORS:** - Cussenot O; Sighar K; Mohammed M; Hugonin S; Ondet V; Larre S; Lacave R; Roupret M; Cancel-Tassin G

**INSTITUCIÓN / INSTITUTION:** - CeRePP, Paris, France, [olivier.cussenot@wanadoo.fr](mailto:olivier.cussenot@wanadoo.fr).

**RESUMEN / SUMMARY:** - INTRODUCTION: Bladder carcinoma (B-TCC) is the fifth most prevalent carcinoma in the United States (US) or Europe. In addition, B-TCC is the most expensive carcinoma per patient between diagnosis and death, because of its 50-80 % recurrence rate. B-TCC is an optimal carcinoma for which to detect DNA alterations in urine, which is easily obtainable. Chromosomal aberrations in tumors have been closely related to the carcinogenesis process. MATERIAL AND METHODS: We developed a highly specific and sensitive oligo-CGH-array for the diagnosis and follow-up of B-TCC, based on the detection of chromosomal aberrations in urine samples. One hundred and sixty-four urine samples were analyzed. The qualitative results, including chromosomal aberrations, were obtained. Quantitative results are expressed as a percentage of chromosomal alterations on the autosomes. RESULTS: From the urine samples, we were able to differentiate B-TCC from non-malignant conditions with an accuracy of 100 % for patients without history of B-TCC. For follow-up of B-TCC in clinical practice, at least a deletion (8p; 9p; 9q) or a cut-off of >2 % of chromosomal imbalance was considered as a positive test. According to our criteria, 100 % of high-grade tumors were diagnosed, and the sensitivity to predict positive cystoscopy was 95 % (specificity 73 %). A cut-off >9 % was a strong signature of high-grade TCC (odds ratio 53 CI 95 % 7-417; p = 0.0002). CONCLUSION: We developed a sensitive clinical tool for the detection of B-TCC using DNA extracted from patient urine. This tool is also able to identify low-grade B-TCC and identify high-risk patients harboring a high-grade disease.

[707]

**TÍTULO / TITLE:** - Arsenic in drinking water and renal cancers in rural Bangladesh.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Occup Environ Med. 2013 Nov;70(11):768-73. doi: 10.1136/oemed-2013-101443. Epub 2013 Aug 28.

●● [Enlace al texto completo \(gratis o de pago\) 1136/oemed-2013-101443](#)

**AUTORES / AUTHORS:** - Mostafa MG; Cherry N

**INSTITUCIÓN / INSTITUTION:** - National Institute of Cancer Research and Hospital, Dhaka, Bangladesh.

**RESUMEN / SUMMARY:** - OBJECTIVES: Data on the role of arsenic in renal cancer are suggestive but inconclusive. The present analysis aimed to determine whether renal cancers were more likely in Bangladeshi villagers exposed to high arsenic concentration in well water and, if so, whether this excess was limited to transitional cell cancers (TCC) or occurred also for renal cell cancers (RCC). METHODS: Histology/cytology results from renal biopsies carried out at a single clinic in Dhaka, Bangladesh, from January 2008 to October 2011 were classified into four groups: RCC, TCC, other malignancy and benign. Patients aged  $\geq 18$  years using hand-pumped well water were identified by questionnaire, blind to diagnosis. Arsenic concentration was estimated from British Geological Survey reports for administrative area (thana) of residence. In a case-referent design (with benign results as referents), ORs were calculated by multilevel logistic regression adjusted for confounding. Time since well installation and smoking were examined by stratification. RESULTS: Among 1489 cases included, 896 were RCC, 90 TCC and 503 benign. Arsenic concentration was estimated for 301 thanas with 63% of cases and 40% referents with arsenic concentration  $\geq 50$  microg/L ( $p < 0.001$ ). Risk increased monotonically with arsenic concentration  $\geq 50$  microg/L for both cell types (RCC and TCC). Risk estimates were greater in thana with early well installation where risk was increased for RCC in exposure stratum  $10 < 50$  microg/L (OR=2.47 95% CI 1.52 to 4.01). Stratification by 'ever smoked' confirmed the presence of risk in non-smokers. CONCLUSIONS: The relationship between arsenic concentration and both RCC and TCC suggests that arsenic is a causal factor in renal cancer.

[708]

**TÍTULO / TITLE:** - Carnosine mitigates apoptosis and protects testicular seminiferous tubules from gamma-radiation-induced injury in mice.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Andrologia. 2013 Nov 12. doi: 10.1111/and.12193.

●● Enlace al texto completo (gratis o de pago) [1111/and.12193](#)

**AUTORES / AUTHORS:** - Haeri SA; Rajabi H; Fazelpour S; Hosseinimehr SJ

**INSTITUCIÓN / INSTITUTION:** - Faculty of Medical Sciences, Department of Medical Physics, Tarbiat Modares University, Tehran, Iran.

**RESUMEN / SUMMARY:** - This study investigated the radioprotective effects of a naturally occurring dipeptide, carnosine, on testicular damage. Carnosine was administered (10, 50 and 100 mg kg<sup>-1</sup> body weight) to male mice via intraperitoneal injection for 4 days prior to gamma irradiation (2 Gy). Apoptosis with the TUNEL assay and histopathological parameters were evaluated 12-h and 14-day post-irradiation. Pre-treatment with carnosine before irradiation significantly reduced the frequency of TUNEL-positive cells induced by radiation treatment at all doses by reduction factors of 1.8, 2.47 and 2.23 for carnosine at 10, 50 and 100 mg kg<sup>-1</sup> bw, respectively, unlike that observed in the radiation alone group. Exposure to ionising radiation decreased sperm count and reduced the height and diameter of seminiferous epithelial tubules. Pre-treatment with all doses of carnosine significantly augmented seminiferous epithelial height and tubule diameter and also increased the number of germinal cells in comparison to the group treated with radiation only. These results indicate that

carosine prevents testicular dysfunction induced by gamma-irradiation via an anti-apoptotic effect; this restoration of proper testicular function ultimately leads to the recovery of spermatogenesis.

[709]

**TÍTULO / TITLE:** - Conservative surgery in synchronic bilateral renal carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Esp Urol. 2013 Oct;66(8):823-6.

**AUTORES / AUTHORS:** - Dellavedova T; Nobile RH; Ponzano R; Minuzzi G; Minuzzi F

**INSTITUCIÓN / INSTITUTION:** - FUCDIM. Cordoba.Argentina.

**RESUMEN / SUMMARY:** - OBJECTIVE: To describe a case of staged conservative treatment of a synchronic bilateral renal tumor, a real surgical challenge. METHODS: 46-year old obese female who consulted for fever; bilateral solid masses > 70 mm were detected and surgical treatment was offered. RESULTS: Staged conservative treatment consisting in selective embolization of both lesions and subsequent surgery was performed. Right partial nephrectomy with ipsilateral adrenalectomy was done first, and 90 days later left partial nephrectomy. Pathology revealed, clear cell carcinomas with negative surgical margins in both cases in addition to a right adrenal adenoma. After 48 months of follow up, the patient remains free of local or systemic disease with normal renal function. CONCLUSIONS: The objective for these patients is a complete resection of the tumors and preservation of as much renal tissue as possible. Conservative surgery has proven to be an effective therapy to achieve both goals in cases of bilateral synchronic renal tumors.

[710]

**TÍTULO / TITLE:** - Chromophobe Renal Cell Carcinoma: Multiphase MDCT Enhancement Patterns and Morphologic Features.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - AJR Am J Roentgenol. 2013 Dec;201(6):1268-76. doi: 10.2214/AJR.13.10813.

●● Enlace al texto completo (gratis o de pago) [2214/AJR.13.10813](#)

**AUTORES / AUTHORS:** - Raman SP; Johnson PT; Allaf ME; Netto G; Fishman EK

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Radiology, Johns Hopkins University, JHOC 3251, 601 N Caroline St, Baltimore, MD 21287.

**RESUMEN / SUMMARY:** - OBJECTIVE. The purpose of this investigation is to retrospectively describe morphologic features, enhancement characteristics, and clinical outcomes in a series of pathologically proven chromophobe renal cell carcinomas (RCCs). MATERIALS AND METHODS. Thirty-five patients who were imaged at a single institution between 2005 and 2012 with pathologically proven chromophobe RCC were identified, all of whom underwent preoperative renal protocol CT (unenhanced, arterial, venous, and delayed images). The morphologic characteristics of each tumor (e.g., necrosis, tumor composition, and calcification), as well as attenuation values (in Hounsfield units) of the tumor, aorta, inferior vena cava, and kidney were evaluated by a board-certified radiologist. In addition, information regarding patient demographics and survival was obtained by a separate radiologist from the electronic medical record. RESULTS. Sixty percent of the patients were men,

with a mean age of 60.2 years. Forty-six percent of cases were incidentally identified, without patient symptoms. None of the patients had evidence of distant metastatic disease, either on initial staging CT or over the course of follow-up (mean, 2.0 years). Mean maximal tumor diameter was 5.24 cm. Forty-six percent of tumors were homogeneous, 85% of lesions were either completely solid or mostly solid, 14% showed calcifications, and 34% showed a central scar or necrosis. Mean maximum attenuation values were 87.9 HU (arterial phase), 83.9 HU (venous phase), and 60.6 HU (delayed phase), with an average delayed washout of 31%. Tumor-to-cortex ratios for the three enhanced phases were 0.59, 0.48, and 0.50, respectively. CONCLUSION. Chromophobe RCCs were found to have a wider variability of CT features than previously reported, although they do have a greater propensity for homogeneity and the presence of a central scar or necrosis. Their enhancement characteristics fall in between those of clear cell and papillary RCC, although there is considerable overlap.

[711]

**TÍTULO / TITLE:** - MRI and FDG PET/CT Findings of Malignant Fibrous Histiocytoma of the Prostate.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Nov 7.

●● Enlace al texto completo (gratis o de pago)

[1097/RLU.0000000000000232](http://1097/RLU.0000000000000232)

**AUTORES / AUTHORS:** - Dong A; Gong J; Wang Y; Zuo C

**INSTITUCIÓN / INSTITUTION:** - From the Departments of \*Nuclear Medicine, daggerRadiology, and double daggerPathology, Changhai Hospital, Second Military Medical University, Shanghai, China.

**RESUMEN / SUMMARY:** - Malignant fibrous histiocytoma primarily arising from the prostate is extremely rare. A 43-year-old man presented with dysuria for 12 months. Serum prostate-specific antigen level was normal. T2-weighted MR images showed a well-circumscribed tumor with inhomogeneous intensity in the prostate. The patient underwent transurethral resection of the prostate. Prostate malignant fibrous histiocytoma was histopathologically confirmed. FDG PET/CT was performed showing extremely high FDG uptake of the tumor with SUVmax of 46.8.

[712]

**TÍTULO / TITLE:** - Vitamin D hydroxylases CYP2R1, CYP27B1 and CYP24A1 in renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Clin Invest. 2013 Dec;43(12):1282-90. doi: 10.1111/eci.12176. Epub 2013 Oct 12.

●● Enlace al texto completo (gratis o de pago) [1111/eci.12176](http://1111/eci.12176)

**AUTORES / AUTHORS:** - Urbschat A; Paulus P; von Quernheim QF; Bruck P; Badenhoop K; Zeuzem S; Ramos-Lopez E

**INSTITUCIÓN / INSTITUTION:** - Faculty of Medicine, Goethe University Hospital, Frankfurt am Main, Germany.

**RESUMEN / SUMMARY:** - BACKGROUND: There is increasing evidence that vitamin D metabolites influence carcinogenesis. Besides its role in mineral homeostasis,

calcitriol, the active metabolite of vitamin D (1,25(OH)<sub>2</sub> D<sub>3</sub>), is known to possess antiproliferative, proapoptotic and immunomodulatory effects in cancer. Concerning the synthesis of vitamin D, the hydroxylases CYP2R1, CYP27B1 and CYP24A1 play a critical role, and the latter molecule determines the biological half-life of 1,25(OH)<sub>2</sub> D<sub>3</sub>, which is synthesized in the proximal renal tubules. MATERIALS AND METHODS: The adjacency of these two biological processes prompted us to investigate the gene expression of CYP2R1, CYP27B1 and CYP24A1 in patients with ccRCC. Using RT-PCR, we retrospectively compared mRNA expression profiles from human ccRCC tumour samples with those derived from the corresponding adjacent healthy tissues (n = 30). RESULTS: We observed that all three genes (CYP2R1, CYP27B1 and CYP24A1) were upregulated in tumours compared with normal tissue (P < 0.0001). Moreover, CYP24A1 displayed a significantly higher expression in tumours than CYP27B1 (P < 0.05) and CYP2R1 (P < 0.0001), whereas no differences in the expression of these genes were found in healthy renal tissue. Gene expression of CYP2R1, CYP27B1 and CYP24A did not differ between pathological classifications (TNM, grading, presence of metastasis). CONCLUSION: We thus conclude that upregulated gene expression of the catabolizing CYP24A1 as well as the synthesizing CYP2R1 and CYP27B1 may lead to a misbalance of vitamin D metabolites in ccRCC and thus contributing to its pathogenesis.

[713]

**TÍTULO / TITLE:** - Renal cell carcinoma metastatic to meningioma: tumor-to-tumor metastasis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Neuropathol. 2013 Oct 16.

●● Enlace al texto completo (gratis o de pago) [5414/NP300680](#)

**AUTORES / AUTHORS:** - Carr K; He L; Weaver K; Nickols HH

[714]

**TÍTULO / TITLE:** - IMPACT OF HERNIAS ON PERITONEAL DIALYSIS TECHNIQUE SURVIVAL AND RESIDUAL RENAL FUNCTION.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Perit Dial Int. 2013 Oct 31.

●● Enlace al texto completo (gratis o de pago) [3747/pdi.2012.00255](#)

**AUTORES / AUTHORS:** - Balda S; Power A; Papalois V; Brown E

**INSTITUCIÓN / INSTITUTION:** - Imperial Renal and Transplant Center, Hammersmith Hospital, London, United Kingdom.

**RESUMEN / SUMMARY:** - OBJECTIVE: We evaluated the effect of hernias and their surgical or conservative management on peritoneal dialysis (PD) technique survival and residual renal function. METHODS: This 10-year single-center retrospective case-control study (January 2001 - January 2011) compared patient survival, PD technique survival, and residual renal function in patients with a history of abdominal hernias and in a control cohort matched for age and PD vintage. RESULTS: Of 73 hernias identified in 63 patients (mean age: 55 years; 63% men), umbilical hernias were the most frequent (40%), followed by inguinal (33%), incisional, and epigastric hernias. Some hernias were surgically repaired before (n = 10) or at the time of PD catheter insertion

(n = 11), but most (71%) were diagnosed and managed after initiation of PD. Overall, 49 of 73 (67%) hernias were treated surgically. In 53% of subjects, early postoperative dialysis was not needed; only 7 patients required temporary hemodialysis. The occurrence of a hernia and its treatment did not significantly affect residual renal function. After a hernia diagnosis or repair, 86% of patients were able to continue with PD. CONCLUSIONS: The incidence of abdominal hernia and hernia management in patients on PD do not significantly influence residual renal function or PD technique survival. Timely management of hernias is advisable and does not preclude continuation with PD as a dialysis modality.

[715]

**TÍTULO / TITLE:** - IS DIALYSIS MODALITY A FACTOR IN THE SURVIVAL OF PATIENTS INITIATING DIALYSIS AFTER KIDNEY TRANSPLANT FAILURE?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Perit Dial Int. 2013 Oct 1.

●● [Enlace al texto completo \(gratis o de pago\) 3747/pdi.2012.00280](#)

**AUTORES / AUTHORS:** - Perl J; Dong J; Rose C; Jassal SV; Gill JS

**INSTITUCIÓN / INSTITUTION:** - Division of Nephrology, St. Michael's Hospital and The Keenan Research Centre in the Li Ka Shing Knowledge Institute, Toronto, Ontario, Canada.

**RESUMEN / SUMMARY:** - BACKGROUND: Kidney transplant failure (TF) is among the leading causes of dialysis initiation. Whether survival is similar for patients treated with peritoneal dialysis (PD) and with hemodialysis (HD) after TF is unclear and may inform decisions concerning dialysis modality selection. METHODS: Between 1995 and 2007, 16 113 adult dialysis patients identified from the US Renal Data System initiated dialysis after TF. A multivariable Cox proportional hazards model was used to evaluate the impact of initial dialysis modality (1 865 PD, 14 248 HD) on early (1-year) and overall mortality in an intention-to-treat approach. RESULTS: Compared with HD patients, PD patients were younger (46.1 years vs 49.4 years,  $p < 0.0001$ ) with fewer comorbidities such as diabetes mellitus (23.1% vs 25.7%,  $p < 0.0001$ ). After adjustment, survival among PD patients was greater within the first year after dialysis initiation [adjusted hazard ratio (AHR): 0.85; 95% confidence interval (CI): 0.74 to 0.97], but lower after 2 years (AHR: 1.15; 95% CI: 1.02 to 1.29). During the entire period of observation, survival in both groups was similar (AHR for PD compared with HD: 1.09; 95% CI: 1.0 to 1.20). In a sensitivity analysis restricted to a cohort of 1865 propensity-matched pairs of HD and PD patients, results were similar (AHR: 1.03; 95% CI: 0.93 to 1.14). Subgroups of patients with a body mass index exceeding 30 kg/m<sup>2</sup> [AHR: 1.26; 95% CI: 1.05 to 1.52) and with a baseline estimated glomerular filtration rate (eGFR) less than 5 mL/min/1.73 m<sup>2</sup> (AHR: 1.45; 95% CI: 1.05 to 1.98) experienced inferior overall survival when treated with PD. CONCLUSIONS: Compared with HD, PD is associated with an early survival advantage, inferior late survival, and similar overall survival in patients initiating dialysis after TF. Those data suggest that increased initial use of PD among patients returning to dialysis after TF may be associated with improved outcomes, except among patients with a higher BMI and those who initiate dialysis at lower levels of eGFR. The reasons behind the inferior late survival seen in PD patients are unclear and require further study.

[716]

**TÍTULO / TITLE:** - A cancer vaccine based on the marine antimicrobial peptide pardaxin (GE33) for control of bladder-associated tumors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biomaterials. 2013 Dec;34(38):10151-9. doi: 10.1016/j.biomaterials.2013.09.041. Epub 2013 Sep 24.

●● Enlace al texto completo (gratis o de pago)

[1016/j.biomaterials.2013.09.041](http://1016/j.biomaterials.2013.09.041)

**AUTORES / AUTHORS:** - Huang HN; Rajanbabu V; Pan CY; Chan YL; Wu CJ; Chen JY

**INSTITUCIÓN / INSTITUTION:** - Department of Food Science, National Taiwan Ocean University, 2, Pei-Ning Road, Keelung, Taiwan.

**RESUMEN / SUMMARY:** - The marine antimicrobial peptide (AMP) GE33, also known as pardaxin, possesses antimicrobial and anticancer properties, and modulates host signaling. GE33 has cytotoxic effects on murine bladder carcinoma (MBT-2) cells. Here, we investigated the potential of GE33 combined with inactivated MBT-2 as a cancer vaccine. The presence of up to 12.5 µg of GE33 did not inhibit the proliferation or endogenous nitrous oxide (NO) levels of RAW264.7 cells. However, the secretion of MCP-1, IL-6, and IL-12 by RAW264.7 cells was affected by GE33. We proceeded to test the effectiveness of the vaccine by immunizing mice at 7, 14, and 21 days of age, and injecting live MBT-2 cells on the 28<sup>th</sup> day. Tumor growth by the 58<sup>th</sup> day was attenuated in mice treated with the vaccine, as compared to the control group. Induction of MBT-2 specific-tumor antigens was increased in mice immunized with our vaccine. Furthermore, activation of T-cell receptors, cytotoxic T-cells, and NK cells was enhanced, and these showed high specificity for targeting tumor cells. Finally, immunization controlled excess recruitment of monocytes, lymphocytes, T-helper cells, and NK cells, and decreased the expression of VEGF. This report provides empirical evidence that our GE33-based vaccine enhances antitumor immunity in mice.

[717]

**TÍTULO / TITLE:** - Fine-Needle aspiration cytology of primary renal angiosarcoma with histopathologic and immunocytochemical correlation: A Case Report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diagn Cytopathol. 2013 Oct 25. doi: 10.1002/dc.23051.

●● Enlace al texto completo (gratis o de pago) [1002/dc.23051](http://1002/dc.23051)

**AUTORES / AUTHORS:** - Grapsa D; Sakellariou S; Politi E

**INSTITUCIÓN / INSTITUTION:** - Cytopathology Department, Areteion University Hospital, Athens, Greece.

**RESUMEN / SUMMARY:** - Primary renal angiosarcoma is an extremely rare neoplasm, with fewer than 28 cases reported thus far in the English literature. We report for the first time the cytomorphology and immunocytochemistry of this tumor in liquid-based (ThinPrep) fine-needle aspiration (FNA) samples in correlation with the conventional cytologic and histopathologic findings. Conventional smears showed pleomorphic tumor cells focally arranged in structures suggesting anastomosing vascular channels, while ThinPrep smears were less cellular with fewer and smaller tumor cells arranged in clusters or rosette-like formations. Immunocytochemical staining demonstrated positive results for vimentin, CD31, and CD34 and negative staining for epithelial

markers, thus supporting the diagnosis of a mesenchymal tumor of vascular origin. The diagnosis of primary renal angiosarcoma was established after histopathologic evaluation of a metastatic liver nodule. The cytological differential diagnosis of this neoplasm and the utility of the ThinPrep method as a diagnostic adjunct to conventional FNA cytology are further discussed. *Diagn. Cytopathol.* 2013. © 2013 Wiley Periodicals, Inc.

[718]

**TÍTULO / TITLE:** - Reduced expression of Slit2 in renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Med Oncol.* 2014 Jan;31(1):768. doi: 10.1007/s12032-013-0768-4. Epub 2013 Nov 15.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s12032-013-0768-4](#)

**AUTORES / AUTHORS:** - Ma WJ; Zhou Y; Lu D; Dong D; Tian XJ; Wen JX; Zhang J  
**INSTITUCIÓN / INSTITUTION:** - Department of Immunology, School of Basic Medical Sciences, Key Laboratory of Medical Immunology (Ministry of Health), Peking University Health Science Center, No. 38 Xueyuan Road, Beijing, 100191, China.

**RESUMEN / SUMMARY:** - Slit2, initially identified as an important axon guidance molecule in the nervous system, was suggested to be involved in multiple cellular processes. Recently, Slit2 was reported to function as a potential tumor suppressor in diverse tumors. In this study, we systematically analyzed the expression level of Slit2 in renal cell carcinoma. Compared to paired adjacent non-malignant tissues, both Slit2 mRNA and protein expression were significantly down-regulated in renal cell carcinoma (RCC). Methylation-specific PCR showed that Slit2 promoter was methylated in two renal carcinoma cell lines. Pharmacologic demethylation dramatically induced Slit2 expression in cancer cell lines with weak expression of Slit2. Besides, bisulfite genomic sequencing confirmed that dense methylation existed in Slit2 promoter. Furthermore, in paired RCC samples, Slit2 methylation was observed in 8 out of 38 patients (21.1%), which was well correlated with the down-regulation of Slit2 in RCC. Therefore, Slit2 may also be a potential tumor suppressor in RCC, which is down-regulated in RCC partially due to promoter methylation.

[719]

**TÍTULO / TITLE:** - Urinary bladder melanosis associated with urothelial dysplasia and invasive urothelial carcinoma: a report of two cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Anal Quant Cytol Histol.* 2013 Oct;35(5):294-300.

**AUTORES / AUTHORS:** - Patel P; Gotto G; Kavanagh A; Al Bashir S; Bismar TA; Trpkov K

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology and Laboratory Medicine, University of Calgary and Calgary Laboratory Services, Calgary, Alberta, Canada.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Melanosis is defined as an abnormal or excessive deposition of melanin within cells and/or tissues. It typically presents as a cutaneous or buccal mucosal lesion, but rare cases of bladder melanosis have also been documented. Melanosis of the urinary bladder is typically considered a benign condition, but it has also been described in association with malignant melanoma and

urothelial carcinoma. CASES: We report the cases of 2 patients who presented with melanosis of the urinary bladder. One patient presented with melanosis of the urinary bladder together with urothelial dysplasia. Melanosis was incidentally identified during a cystoscopy for ureteral stones. A second patient presented with hematuria and was found to have a muscle invasive urothelial carcinoma with focal small nested morphology together with melanosis. We also present a literature review of the bladder melanosis and an overview of other bladder melanocytic lesions, which include primary and metastatic melanoma and blue nevus. CONCLUSION: Initial evaluation for bladder melanosis should include cystoscopy and upper urinary tract imaging. Biopsy is essential to establish the diagnosis and rule out associated malignancy.

[720]

**TÍTULO / TITLE:** - Granular cell tumor of the bladder: a case report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anal Quant Cytol Histol. 2013 Oct;35(5):289-93.

**AUTORES / AUTHORS:** - Olaya M; Vicioso L; Hierro I; Quinonero A; Matilla A; Lopez-Beltran A

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Hospital Universitario Virgen de la Victoria, University of Malaga, España. [olayaposada@gmail.com](mailto:olayaposada@gmail.com)

**RESUMEN / SUMMARY:** - BACKGROUND: Granular cell tumor is usually a benign tumor, generally believed to be of neural origin, most commonly affecting the tongue and skin. Although it can present in any part of the body, the bladder is a rare location, with only 16 cases found in the English-language literature. CASE: We report the case of a 54-year-old woman with hematuria who had a solid tumor in the posterior wall of the bladder. Histological study of the samples obtained by transurethral resection revealed a granular cell tumor, confirmed by immunohistochemical techniques. CONCLUSION: Granular cell tumors of the bladder are rare and generally benign but frequently present macroscopic features resembling those of urothelial carcinoma. The similarity can lead to an erroneous clinical diagnosis and unnecessary, aggressive treatment. A careful histopathological assessment is essential for an accurate diagnosis.

[721]

**TÍTULO / TITLE:** - Downregulation of clusterin expression in human testicular seminoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cell Physiol Biochem. 2013;32(4):1117-23. doi: 10.1159/000354511. Epub 2013 Nov 8.

●● [Enlace al texto completo \(gratis o de pago\) 1159/000354511](#)

**AUTORES / AUTHORS:** - Liu B; Han MT; Zhang J; Lu P; Li J; Song N; Wang Z; Yin C; Zhang W

**INSTITUCIÓN / INSTITUTION:** - State Key Laboratory of Reproductive Medicine and Department of Urology, The First Affiliated Hospital of Nanjing Medical University, Nanjing, China.

**RESUMEN / SUMMARY:** - Background: Clusterin, a heterodimeric glycoprotein of approximately 80 kDa, exists extensively in human body fluids. The abnormal

expression of clusterin is closely related to the occurrence, progression, and prognosis of tumors. Up to now, few studies have focused on clusterin in human testicular cancer. This study describes an extensive exploration of the presence and expression of clusterin in testicular seminoma. Methods: Tumor tissues and normal testis tissues were collected from 13 patients with testicular seminoma and 16 patients undergoing surgical castration for prostate cancer. Real-time polymerase chain reaction (PCR) was performed to detect the expression difference of clusterin mRNA between testicular seminoma and normal testis. Western blot and immunohistochemical analysis were performed to detect the presence and expression difference of clusterin protein between two groups. Results: Real-time PCR showed the expression of clusterin mRNA in testicular seminoma to be significantly lower than in normal testis (only 13% relative quantification). Western blot analysis indicated marked reductions in the expression of clusterin protein in testicular seminoma. Similar results were observed upon immunohistochemical analysis. Conclusion: In testicular seminoma and normal testis, clusterin exists in its heterodimeric secretory isoform. Clusterin expression is significantly lower in testicular seminoma than in normal testis. This is the first comprehensive study of the presence and expression of clusterin in human testicular cancer. © 2013 S. Karger AG, Basel.

[722]

**TÍTULO / TITLE:** - Sonographically Guided Transhepatic Core Biopsies of Right Renal and Adrenal Masses: Safety and Short-term Follow-up.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Ultrasound Med. 2013 Nov;32(11):2013-21. doi: 10.7863/ultra.32.11.2013.

●● Enlace al texto completo (gratis o de pago) [7863/ultra.32.11.2013](#)

**AUTORES / AUTHORS:** - Park SY; Park BK; Kim CK

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology and Center for Imaging Science, Samsung Medical Center, Sungkyunkwan University School of Medicine, 50 Ilwon-dong, Kangnam-ku, Seoul 135-710, Korea. [rapark@skku.edu](mailto:rapark@skku.edu).

**RESUMEN / SUMMARY:** - Objectives- The purpose of this study was to retrospectively evaluate the accuracy and safety of sonographically guided transhepatic biopsies of right upper renal and adrenal masses. Methods- Ten sonographically guided transhepatic biopsies were performed in 10 patients with 6 right upper renal masses and 4 right adrenal masses that were invisible or inaccessible via an extrahepatic route. The control population comprised 19 sonographically guided extrahepatic biopsies that were performed in 19 patients with 18 right upper renal masses and 1 right adrenal mass. Transhepatic and extrahepatic biopsies were compared with respect to the diagnostic and complication rates. The mass sizes, biopsy distances, numbers and lengths of cores, and biopsy durations were also compared. Results- The diagnostic rates of transhepatic and extrahepatic biopsies were 90% (9 of 10) and 89% (17 of 19), respectively ( $P > .999$ ). The complication rates of transhepatic and extrahepatic biopsies were 10% (1 of 10) and 21% (4 of 19;  $P > .999$ ). None of these biopsies resulted in major complications. The mean mass sizes, biopsy distances, and numbers of cores  $\pm$  SD for transhepatic and extrahepatic biopsies were 33.0  $\pm$  14.3 and 46.9  $\pm$  18.5 mm, 100.5  $\pm$  17.9 and 76.5  $\pm$  9.9 mm, and 2.7  $\pm$  0.9 and 4.0  $\pm$  0.7, respectively ( $P = .046, .038, \text{ and } .001$ ). However, the core lengths and biopsy

durations were not significantly different between these biopsies ( $P = .91$  and  $.077$ ).  
Conclusions- Sonographically guided transhepatic core biopsies appear to be feasible and safe procedures for the histologic diagnosis of right upper renal and adrenal masses that are either invisible or inaccessible via an extrahepatic route.

[723]

**TÍTULO / TITLE:** - A comparative study of glycoproteomes in androgen-sensitive and -independent prostate cancer cell lines.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cell Biochem. 2013 Oct 9.

●● Enlace al texto completo (gratis o de pago) [1007/s11010-013-1857-6](#)

**AUTORES / AUTHORS:** - Drabik A; Ciolczyk-Wierzbicka D; Dulinska-Litewka J; Bodzon-Kulakowska A; Suder P; Silberring J; Laidler P

**INSTITUCIÓN / INSTITUTION:** - Department of Biochemistry and Neurobiology, AGH University of Science and Technology, Mickiewicza 30 Ave, 30-059, Krakow, Poland, [drabik@agh.edu.pl](mailto:drabik@agh.edu.pl).

**RESUMEN / SUMMARY:** - Prostate cancer is one of the most common malignancies in men and is predicted to be the second leading cause of cancer-related deaths. After 6-18 months, hormone ablation treatment results in androgen-independent growth of cancer cells, metastasis and progression. The mechanism of androgen-independent growth of prostatic carcinoma cells is still unknown. Identification of factors that facilitate the transition from androgen-dependent to independent states is crucial in designing future diagnostics and medication strategies. To understand the biochemical meaning of hormone dependency deprivation, glycoproteins enriched profiles were compared between DU145 (hormone non-responding) and LNCaP (hormone responding) prostate cancer cells. These results allow for anticipation on the important role of glycosylation in malignant transformation. Both Tn antigen and complex antennary N-oligosaccharides were recognized. Their occurrence might be involved in the development and progression of tumor, and failure of hormone ablation therapy. Among identified proteins in androgen-sensitive cells nucleolin (P19338) was found that is widely described as apoptosis inhibitor, and also transporter of molecules from the membrane to the cytoplasm or nucleus. In addition, 14-3-3 protein family (P27348, P31946, P61981, P63104, P62258, Q04917, and P31947) was investigated across available databases as it forms stable complexes with glycoproteins. Our studies indicate that isoforms: sigma and eta were found in androgen-dependent prostate cancer cells, while other isoforms were present in androgen non-responding cells. 14-3-3 binding partners are involved in cancer pathogenesis. These findings may contribute to a better understanding of prostate cancer tumorigenesis and to a more efficient prognosis and individual therapy in a future. However, it still remains to be revealed how important those changes are for androgen dependency loss in prostate cancer patients carried out on clinically relevant populations.

[724]

**TÍTULO / TITLE:** - Educating Young Men About Testicular Cancer: Support for a Comprehensive Testicular Cancer Campaign.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Health Commun. 2013 Oct 11.

●● Enlace al texto completo (gratis o de pago) [1080/10810730.2013.811320](http://1080/10810730.2013.811320)

**AUTORES / AUTHORS:** - Wanzer MB; Foster SC; Servoss T; Labelle S

**INSTITUCIÓN / INSTITUTION:** - a Department of Communication Studies , Canisius College , Buffalo , New York , USA.

**RESUMEN / SUMMARY:** - Despite the prevalence of testicular cancer among men 15-39 years of age, little has been done to increase awareness of this disease or educate males about its prevention. To fill this gap, the Standard Model of Health Communication was incorporated to design and implement a comprehensive testicular cancer campaign among male college students. To test the effectiveness of these messages, college students (N = 220) completed measures before and after the campaign. In addition, the authors obtained a control group of male college students (N = 52) who were not exposed to the messages. Survey items assessed awareness of testicular cancer and behaviors related to testicular cancer. Participants' knowledge of testicular cancer and likelihood of conducting a testicular self-exam increased significantly after being exposed to the campaign information. Men who were exposed to testicular cancer messages were more knowledgeable about testicular cancer and were more likely to conduct testicular self-examinations than were men in the control group.

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[725]

**TÍTULO / TITLE:** - Free circulating DNA as a biomarker of prostate cancer: comparison of quantitation methods.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4521-9.

**AUTORES / AUTHORS:** - Ramachandran K; Speer CG; Fiddy S; Reis IM; Singal R

**INSTITUCIÓN / INSTITUTION:** - Sylvester Comprehensive Cancer Center, 1475 NW 12<sup>th</sup> Ave, Miami, FL-33136, U.S.A. [rsingal@med.miami.edu](mailto:rsingal@med.miami.edu).

**RESUMEN / SUMMARY:** - AIM: To identify a simpler method of free circulating DNA (fcDNA) quantitation that may improve the specificity of the prostate cancer prostate-specific antigen (PSA) screening test. MATERIALS AND METHODS: The patient group consisted of 241 men with elevated PSA/abnormal digital rectal exam (DRE), undergoing prostate biopsy. Serum fcDNA levels were measured by UV absorbance and PicoGreen. Results were compared to previously published quantitative polymerase chain reaction (qPCR) data. RESULTS: We found that levels of fcDNA measured by PicoGreen correlated well with those measured by qPCR (r=0.8552). In the patient group with PSA >4 to 10 ng/ml, those with fcDNA (PicoGreen) >53.1 ng/ml were at increased risk for prostate cancer compared to those with fcDNA ≤ 53.1 ng/ml. Moreover, we found that measuring fcDNA levels by PicoGreen does not compromise the negative predictive value, accuracy or specificity of the qPCR fcDNA test. CONCLUSION: If validated in larger studies, PicoGreen quantitation of fcDNA could serve as a simple method to aid in prostate cancer diagnosis.

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[726]

**TÍTULO / TITLE:** - Patterns in immunohistochemical usage in extended core prostate biopsies: comparisons among genitourinary pathologists and nongenitourinary pathologists.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Pathol Lab Med. 2013 Nov;137(11):1630-4. doi: 10.5858/arpa.2012-0517-OA.

●● Enlace al texto completo (gratis o de pago) [5858/arpa.2012-0517-OA](#)

**AUTORES / AUTHORS:** - Plourde A; Gross A; Jiang Z; Owens CL

**INSTITUCIÓN / INSTITUTION:** - From the Department of Pathology, University of California San Francisco, San Francisco (Dr Plourde); the Department of Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School and the Institute for Aging Research, Hebrew SeniorLife, Boston, Massachusetts (Dr Gross); and the Department of Pathology, University of Massachusetts Medical School, Worcester (Dr Jiang and Dr Owens).

**RESUMEN / SUMMARY:** - Context.-Immunohistochemical (IHC) stains have known utility in prostate biopsies and are widely used to augment routine staining in difficult cases. Patterns in IHC utilization and differences based on pathologist training and experience is understudied in the peer-reviewed literature. Objectives.-To compare the rates of IHC usage between specialized (genitourinary; [GU]) and nonspecialized (non-GU) pathologists in extended core prostate biopsies (ECPBs) and the effects of diagnosis; and in cancer cases Gleason grade, disease extent, and perineural invasion on the rate. Design.-Consecutive ECPBs from 2009-2011 were identified and billing data were used to determine the number of biopsies and IHC stains per case. Diagnoses were mapped and in cancer cases, Gleason grade, extent of disease, and perineural invasion were recorded. Pathologists were classified as GU or non-GU on the basis of training and experience. Results.-A total of 618 ECPBs were included in the study. Genitourinary pathologists ordered significantly fewer IHC tests per case and per biopsy than non-GU pathologists. The rate of ordering was most disparate for biopsies of cancerous and benign lesions. For biopsies of cancerous lesions, high-grade cancer, bilateral disease, and perineural invasion decreased the rate of ordering in both groups. In cancer cases, GU pathologists ordered significantly fewer stain tests for highest Gleason grade of 3 + 3 = 6, for patients with focal disease and for patients with multiple positive bilateral cores. The effect of the various predictors on IHC ordering rates was similar in both groups. Conclusions.-Genitourinary pathologists ordered significantly fewer IHC stain tests than non-GU pathologists in ECPBs. Guidelines to define when IHC workup is necessary and not necessary may be helpful to guide workups.

[727]

**TÍTULO / TITLE:** - Identification and validation of dysregulated metabolic pathways in metastatic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumour Biol. 2013 Oct 19.

●● Enlace al texto completo (gratis o de pago) [1007/s13277-013-1245-6](#)

**AUTORES / AUTHORS:** - White NM; Newsted DW; Masui O; Romaschin AD; Siu KW; Yousef GM

**INSTITUCIÓN / INSTITUTION:** - Department of Laboratory Medicine and the Keenan Research Centre, Li Ka Shing Knowledge Institute of St. Michael's Hospital, 30 Bond Street, Toronto, M5B 1W8, Canada.

**RESUMEN / SUMMARY:** - Metastatic renal cell carcinoma (mRCC) is a devastating disease with a 5-year survival rate of approximately 9 % and low response to chemotherapy and radiotherapy. Targeted therapies have slightly improved patient survival, but are only effective in a small subset of patients, who eventually develop resistance. A better understanding of pathways contributing to tumor progression and metastasis will allow for the development of novel targeted therapies and accurate prognostic markers. We performed extensive bioinformatics coupled with experimental validation on proteins dysregulated in mRCC. Gene ontology analysis showed that many proteins are involved in oxidation reduction, metabolic processes, and signal transduction. Pathway analysis showed metabolic pathways are altered in mRCC including glycolysis and pyruvate metabolism, the citric acid cycle, and the pentose phosphate pathway. RT-qPCR analysis showed that genes involved in the citric acid cycle were downregulated in metastatic RCC while genes of the pentose phosphate pathway were overexpressed. Protein-protein interaction analysis showed that most of the 198 proteins altered in mRCC clustered together and many were involved in glycolysis and pyruvate metabolism. We identified 29 reported regions of chromosomal aberrations in metastatic disease that correlate with the direction of protein dysregulation in mRCC. Furthermore, 36 proteins dysregulated in mRCC are predicted to be targets of metastasis-related miRNAs. A more comprehensive understanding of the pathways dysregulated in metastasis can be useful for the development of new therapies and novel prognostic markers. Also, multileveled analyses provide a unique "snapshot" of the molecular "environment" in RCC with prognostic and therapeutic implications.

[728]

**TÍTULO / TITLE:** - Age Is Predictive of Immediate Postoperative Urinary Continence after Radical Retropubic Prostatectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Oct 19.

●● Enlace al texto completo (gratis o de pago) [1159/000353414](#)

**AUTORES / AUTHORS:** - Campodonico F; Manuputty EE; Campora S; Puntoni M; Maffezzini M

**INSTITUCIÓN / INSTITUTION:** - Urology Unit, Galliera Hospital, Genova, Italy.

**RESUMEN / SUMMARY:** - Introduction: Immediate continence is a goal to take into consideration for better patient satisfaction after radical prostatectomy. Factors predicting urinary continence at catheter removal were investigated. Materials and Methods: We evaluated preoperative, operative, clinical, hormonal and pathological variables in a homogeneous series of radical retropubic prostatectomies (RRPs) following the principles of urinary sphincter restoration technique. Results: The study included 201 patients who underwent RRP. The overall immediate continence rate at catheter removal was 67.7% (136 patients); 28.8% (58 patients) were using one protective pad daily and 3.5% (7 patients) were incontinent. At 6-month follow-up incontinence had reached the lowest level of 2.5% (5 patients) and at 12 months the patients using one pad daily had decreased to 11.9% (24 patients). Multivariate logistic

analysis showed that the only two factors independently associated with immediate continence were age <65 years (OR = 2.63, 95% CI 1.13-5.88, p = 0.02) and potency (OR = 3.6, 95% CI 1.2-10.7, p = 0.01) adjusting for D'Amico risk group, surgical margins, extracapsular extension, clinical stage, PSA, testosterone, LH and FSH. No significant association was noted for PSA, hormonal levels, hospital stay, prostate size, clinical stage, risk group, TNM stage, pathological Gleason score or extracapsular extension. Conclusions: In our series age <65 years was associated with immediate continence after RRP. Moreover, patients who were immediately continent had a 3.6-fold probability to be potent within 12 months. © 2013 S. Karger AG, Basel.

[729]

**TÍTULO / TITLE:** - Transrectal prostate biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Clin North Am. 2013 Nov;40(4):457-72. doi: 10.1016/j.ucl.2013.07.012. Epub 2013 Sep 11.

●● Enlace al texto completo (gratis o de pago) [1016/j.ucl.2013.07.012](#)

**AUTORES / AUTHORS:** - Ismail MT; Gomella LG

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, VA Medical Center, 1601 Kirkwood Highway, Wilmington, DE 19805, USA; Department of Urology, Thomas Jefferson University, 1025 Walnut Street, 1102, Philadelphia, PA 19107, USA.

**RESUMEN / SUMMARY:** - Grayscale transrectal ultrasonographic prostate biopsy using local anesthesia remains the standard approach to the definitive diagnosis of prostate cancer. Careful patient evaluation and preparation are essential to maximize the results and minimize the complications of the biopsy procedure.

[730]

**TÍTULO / TITLE:** - Parathyroid Carcinoma in the Setting of Tertiary Hyperparathyroidism after Renal Transplant.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Pathol. 2013 Nov 14.

●● Enlace al texto completo (gratis o de pago) [1007/s12022-013-9278-3](#)

**AUTORES / AUTHORS:** - Nasrallah MP; Fraker DL; Livolsi VA

**INSTITUCIÓN / INSTITUTION:** - University of Pennsylvania, 3400 Spruce St, Philadelphia, PA, 19104, USA, [maclean.nasrallah@uphs.upenn.edu](mailto:maclean.nasrallah@uphs.upenn.edu).

[731]

**TÍTULO / TITLE:** - Office-based Management of Nonmuscle Invasive Bladder Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Clin North Am. 2013 Nov;40(4):473-9. doi: 10.1016/j.ucl.2013.07.004. Epub 2013 Aug 6.

●● Enlace al texto completo (gratis o de pago) [1016/j.ucl.2013.07.004](#)

**AUTORES / AUTHORS:** - Meeks JJ; Herr HW

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Northwestern University, Feinberg School of Medicine, 303 East Chicago Avenue, Tarry 16-703, Chicago, IL 60611, USA.

**RESUMEN / SUMMARY:** - Bladder cancer is extremely common in the United States and extremely costly because of the high cost of surveillance. In some patients, office-based surveillance may be a safe, cost-reducing alternative. This article attempts to identify ideal candidates and highlights surveillance strategies that can be employed in an office-based setting.

[732]

**TÍTULO / TITLE:** - Screening for bladder cancer with urinary tumor markers in chemical workers with exposure to aromatic amines.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Arch Occup Environ Health. 2013 Oct 16.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00420-013-0916-3](#)

**AUTORES / AUTHORS:** - Pesch B; Taeger D; Johnen G; Gawrych K; Bonberg N; Schwentner C; Wellhauser H; Kluckert M; Leng G; Nasterlack M; Lotan Y; Stenzl A; Bruning T

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**RESUMEN / SUMMARY:** - **PURPOSE:** To validate urinary markers for the early detection of bladder cancer (BC) in chemical workers. **METHODS:** UroScreen was conducted as a validation study for tumor markers within the frame of a health surveillance program of the German Social Accident Insurance for active or retired workers with former exposure to aromatic amines. From 2003 to 2010, 1,609 men took part in voluntary annual screens. Cytology, the quantitative NMP22® assay, and UroVysion were applied to 7,091 urine samples. **RESULTS:** Fifteen out of 21 tumors were detected following test positivity. The UroVysion/NMP22 panel detected 14 out of 21 tumors versus 8 tumors with cytology alone (sensitivity 66.7 vs. 44.4 %, specificity 94.5 vs. 98.5 %). The sensitivity of the panel increased to 85.7 % in samples collected  $\leq 12$  months before diagnosis and when papillomas were excluded, compared to 58.3 % with cytology. About 3 % of NMP22 tests were false-positive. UroVysion results overlapped with cytology due to the preselection of atypical cells. NMP22 was less and UroVysion more frequently positive in diluted urine samples. Leukocytes confounded NMP22 but not UroVysion. The low incidence of BC in this study population yielded low positive predictive values of the markers and high costs per tumor detected with screening. **CONCLUSIONS:** UroVysion in combination with NMP22 detected more cases than cytology alone, at the expense of a lower specificity. High costs per detected case resulted from a lower BC incidence than in the past when levels of occupational exposure to aromatic amines were higher. Currently, it cannot be recommended to apply these markers for screening in asymptomatic workers. The increase in sensitivity is not balanced by the high costs of UroVysion and the false-positive tests of NMP22.

[733]

**TÍTULO / TITLE:** - PITX2 and non-canonical Wnt pathway interaction in metastatic prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Exp Metastasis. 2013 Oct 26.

●● Enlace al texto completo (gratis o de pago) [1007/s10585-013-9620-7](http://1007/s10585-013-9620-7)

**AUTORES / AUTHORS:** - Vela I; Morrissey C; Zhang X; Chen S; Corey E; Strutton GM; Nelson CC; Nicol DL; Clements JA; Gardiner EM

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Princess Alexandra Hospital, Brisbane, QLD, Australia.

**RESUMEN / SUMMARY:** - The non-canonical Wnt pathway, a regulator of cellular motility and morphology, is increasingly implicated in cancer metastasis. In a quantitative PCR array analysis of 84 Wnt pathway associated genes, both non-canonical and canonical pathways were activated in primary and metastatic tumors relative to normal prostate. Expression of the Wnt target gene PITX2 in a prostate cancer (PCa) bone metastasis was strikingly elevated over normal prostate (over 2,000-fold) and primary prostate cancer (over 200-fold). The elevation of PITX2 protein was also evident on tissue microarrays, with strong PITX2 immunostaining in PCa skeletal and, to a lesser degree, soft tissue metastases. PITX2 is associated with cell migration during normal tissue morphogenesis. In our studies, overexpression of individual PITX2A/B/C isoforms stimulated PC-3 PCa cell motility, with the PITX2A isoform imparting a specific motility advantage in the presence of non-canonical Wnt5a stimulation. Furthermore, PITX2 specific shRNA inhibited PC-3 cell migration toward bone cell derived chemoattractant. These experimental results support a pivotal role of PITX2A and non-canonical Wnt signaling in enhancement of PCa cell motility, suggest PITX2 involvement in homing of PCa to the skeleton, and are consistent with a role for PITX2 in PCa metastasis to soft and bone tissues. Our findings, which significantly expand previous evidence that PITX2 is associated with risk of PCa biochemical recurrence, indicate that variation in PITX2 expression accompanies and may promote prostate tumor progression and metastasis.

[734]

**TÍTULO / TITLE:** - The tumor-suppressive microRNA-143/145 cluster inhibits cell migration and invasion by targeting GOLM1 in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Hum Genet. 2013 Nov 28. doi: 10.1038/jhg.2013.121.

●● Enlace al texto completo (gratis o de pago) [1038/jhg.2013.121](http://1038/jhg.2013.121)

**AUTORES / AUTHORS:** - Kojima S; Enokida H; Yoshino H; Itesako T; Chiyomaru T; Kinoshita T; Fuse M; Nishikawa R; Goto Y; Naya Y; Nakagawa M; Seki N

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Teikyo University Chiba Medical Center, Chiba, Japan.

**RESUMEN / SUMMARY:** - Our recent study of microRNA (miRNA) expression signature of prostate cancer (PCa) has revealed that the microRNA-143/145 (miR-143/145) cluster is significantly downregulated in cancer tissues, suggesting that these cluster miRNAs are candidate tumor suppressors. The aim of this study was to investigate the functional significance of the miR-143/145 cluster in PCa cells and to identify novel targets regulated by these cluster miRNAs in PCa. Restoration of miR-143 or miR-145 in PCa cell lines (PC3 and DU145) revealed that these miRNAs significantly inhibited cancer cell migration and invasion. Gene expression data and in silico analysis demonstrated that Golgi membrane protein 1 (GOLM1) resembling a type II golgi transmembrane protein was a potential target of miR-143/145 cluster target gene.

Gene expression studies and luciferase reporter assays showed that GOLM1 was directly regulated by the miR-143/145 cluster. Silencing of GOLM1 resulted in significant inhibition of cell migration and invasion in PCa cells. Furthermore, the expression of GOLM1 was upregulated in cancer tissues by immunohistochemistry. Loss of the tumor-suppressive miR-143/145 cluster enhanced cancer cell migration and invasion in PCa through directly regulating GOLM1. Our data on target genes regulated by the tumor-suppressive miR-143/145 cluster provide new insights into the potential mechanisms of PCa oncogenesis and metastasis. Journal of Human Genetics advance online publication, 28 November 2013; doi:10.1038/jhg.2013.121.

[735]

**TÍTULO / TITLE:** - Prostate cancer derived prostatic acid phosphatase promotes an osteoblastic response in the bone microenvironment.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Exp Metastasis. 2013 Nov 17.

●● Enlace al texto completo (gratis o de pago) [1007/s10585-013-9625-2](#)

**AUTORES / AUTHORS:** - Larson SR; Chin J; Zhang X; Brown LG; Coleman IM; Lakely B; Tenniswood M; Corey E; Nelson PS; Vessella RL; Morrissey C

**INSTITUCIÓN / INSTITUTION:** - Genitourinary Cancer Research Laboratory, Department of Urology, University of Washington, Box 356510, Seattle, WA, 98195, USA.

**RESUMEN / SUMMARY:** - Approximately 90 % of patients who die of prostate cancer (PCa) have bone metastases, often promoting osteoblastic lesions. We observed that 88 % of castration-resistant PCa (CRPC) bone metastases express prostatic acid phosphatase (PAP), a soluble secreted protein expressed by prostate epithelial cells in predominately osteoblastic (n = 18) or osteolytic (n = 15) lesions. Additionally, conditioned media (CM) of an osteoblastic PCa xenograft LuCaP 23.1 contained significant levels of PAP and promoted mineralization in mouse and human calvaria-derived cells (MC3T3-E1 and HCO). To demonstrate that PAP promotes mineralization, we stimulated MC3T3-E1 cells with PAP and observed increased mineralization, which could be blocked with the specific PAP inhibitor, phosphonic acid. Furthermore, the mineralization promoted by LuCaP 23.1 CM was also blocked by phosphonic acid, suggesting PAP is responsible for the mineralization promoting activity of LuCaP 23.1. In addition, gene expression arrays comparing osteoblastic to osteolytic CRPC (n = 14) identified betacellulin (BTC) as a gene upregulated during the osteoblastic response in osteoblasts during new bone formation. Moreover, BTC levels were increased in bone marrow stromal cells in response to LuCaP 23.1 CM in vitro. Because new bone formation does occur in osteoblastic and can occur in osteolytic CRPC bone metastases, we confirmed by immunohistochemistry (n = 36) that BTC was highly expressed in osteoblasts involved in new bone formation occurring in both osteoblastic and osteolytic sites. These studies suggest a role for PAP in promoting the osteoblastic reaction in CRPC bone metastases and identify BTC as a novel downstream protein expressed in osteoblasts during new bone formation.

[736]

**TÍTULO / TITLE:** - Preserved renal function after percutaneous radiofrequency ablation for renal tumors: experience of a single institution.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4669-73.

**AUTORES / AUTHORS:** - Ofude M; Kitagawa Y; Koda W; Ueno S; Kadono Y; Konaka H; Mizokami A; Gabata T; Namiki M

**INSTITUCIÓN / INSTITUTION:** - Department of Integrative Cancer Therapy and Urology, Kanazawa University Graduate School of Medical Science, 13-1 Takaramachi, Kanazawa, Ishikawa, Japan, 920-8640. [yasukita@med.kanazawa-u.ac.jp](mailto:yasukita@med.kanazawa-u.ac.jp).

**RESUMEN / SUMMARY:** - BACKGROUND: Percutaneous radiofrequency ablation (RFA) for small renal tumors has been reported to be effective in patients with poor surgical status. We retrospectively analyzed clinical outcomes, including renal function, after RFA. PATIENTS AND METHODS: We retrospectively analyzed data of 24 patients with small renal tumors treated by RFA in our institution from January 2007 to November 2012. RESULTS: A total of 36 tumors (35 renal cell carcinomas and one colon cancer metastasis) with a mean diameter of 21.1 mm (10-45 mm) in 24 patients were treated. Complete ablation was achieved in 22 patients (91.7%). There were two recurrences in other sites of the kidney (8.3%) and two distant metastases (8.3%) during the mean follow-up period of 21 months (1-57 months). No severe perioperative complications were observed. No significant difference in serum creatinine levels before and after RFA procedures in the 22 evaluable patients, nor in seven patients with a solitary kidney. CONCLUSION: RFA for small renal tumors is a safe treatment with sufficient preservation of renal function, even in patients with a solitary kidney.

[737]

**TÍTULO / TITLE:** - Testis-sparing Surgery for the Conservative Management of Small Testicular Masses: An Update.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):5205-10.

**AUTORES / AUTHORS:** - Brunocilla E; Gentile G; Schiavina R; Borghesi M; Franceschelli A; Pultrone CV; Chessa F; Romagnoli D; Ghanem SM; Gacci M; Martorana G; Colombo F

**INSTITUCIÓN / INSTITUTION:** - 9 Palagi Street, 40138 Bologna, Italy. [mark.borghesi@gmail.com](mailto:mark.borghesi@gmail.com).

**RESUMEN / SUMMARY:** - BACKGROUND: Malignant germ cell tumours represent the vast majority of palpable testicular masses, and radical orchiectomy is still considered the standard-of-care. Testis-sparing surgery (TSS) could be an alternative to radical orchiectomy in patients diagnosed with small testicular masses (STMs). The aim of this article was to review the current indications and the oncological and functional outcomes of TSS when performed for STMs. MATERIALS AND METHODS: We performed a non-systematic review of literature using the Medline database, including a free-text protocol using the terms "testis sparing surgery", "partial orchiectomy", "testis tumour" and "sex cord tumour". Only the articles reporting data on organ-sparing surgery for testicular neoplasms were evaluated. RESULTS: No randomized controlled trials comparing TSS with radical orchiectomy have been reported. Indications for TSS are controversial, especially for patients with normal contra-lateral testis. For testicular masses of less than 2 cm, TSS seems to be the best treatment option. Frozen-section examination is an essential assessment at the time of TSS, and allows for discrimination of benign from malignant neoplasms. Intermediate- and long-

term follow-up results showed no significant risk of local and distant recurrences in the main series reported in literature. CONCLUSION: According to currently available data, TSS is a safe and effective treatment for STMs in selected patients, and bypasses surgical overtreatment, without compromising oncological and functional outcomes. Further studies are needed in order to confirm the oncological safety of this procedure.

[738]

**TÍTULO / TITLE:** - The role of urine markers, white light cystoscopy and fluorescence cystoscopy in recurrence, progression and follow-up of non-muscle invasive bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 29.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1035-1](#)

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**RESUMEN / SUMMARY:** - Non-muscle invasive bladder cancer (NMIBC) accounts for approximately 70 % of all bladder cancer cases and represents a heterogeneous pathological entity, characterized by a variable natural history and oncological outcome. The combination of cystoscopy and urine cytology is considered the gold standard in the initial diagnosis of bladder cancer, despite the limited sensitivity. The first step in NMIBC management is transurethral resection of the bladder tumour (TURBT). This procedure is marked by a significant risk of leaving residual disease. The primary landmark in NMIBC is the high recurrence rate. Fluorescence cystoscopy improves the bladder cancer detection rate, especially for flat lesions, and improves the recurrence-free survival by decreasing residual tumour. Progression to muscle invasive tumours constitutes the second important landmark in NMIBC evolution. Stage, grade, associated CIS and female gender are the major prognostic factors in this regard. The evolution to MIBC has a major negative impact upon the survival rate and quality of life of these patients. Fluorescence cystoscopy improves the detection rate of bladder cancer but does not improve the progression-free survival. Urine markers such as ImmunoCyt and Uro Vysion (FISH) have also limited additional value in diagnosis and prognosis of NMIBC patients. Major drawbacks are the requirement of a specialized laboratory and the additional costs. In this review, the risks of recurrence and progression are analysed and discussed. The impact of white light cystoscopy, fluorescence cystoscopy and urine markers is reviewed. Finally, the means and recommendations regarding follow-up are discussed.

[739]

**TÍTULO / TITLE:** - Chemoprevention of prostate cancer by major dietary phytochemicals.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4163-74.

**AUTORES / AUTHORS:** - Bommareddy A; Eggleston W; Prelewicz S; Antal A; Witczak Z; McCune DF; Vanwert AL

**INSTITUCIÓN / INSTITUTION:** - Assistant professor, Department of Pharmaceutical Sciences, Nesbitt School of Pharmacy, Wilkes University, 84 W. South Street, Wilkes-Barre, Pennsylvania 18766, U.S.A. [ajay.bommareddy@wilkes.edu](mailto:ajay.bommareddy@wilkes.edu).

**RESUMEN / SUMMARY:** - Prostate cancer continues to be one of the most commonly diagnosed diseases and the second leading cause of cancer-related deaths among men in the United States. Options exist to treat localized disease, including surgery, radiation therapy, and hormonal therapy, but clinical management of advanced prostate cancer is challenging. In the past few decades, chemoprevention involving naturally-occurring compounds has emerged as a promising and cost-effective approach to reduce incidence and morbidity of prostate cancer by inhibiting the precancerous events before the occurrence of clinical disease. The present review focuses on summarizing the recent advances in studies of major dietary phytochemicals and their role in prostate cancer development.

[740]

**TÍTULO / TITLE:** - Surgical management of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematol Oncol Clin North Am. 2013 Dec;27(6):1111-35. doi: 10.1016/j.hoc.2013.08.010.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.hoc.2013.08.010](#)

**AUTORES / AUTHORS:** - Wright JL; Izard JP; Lin DW

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Washington School of Medicine, 1959 Northeast Pacific, Seattle, WA 98195, USA; Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, 1100 Fairview Avenue North, Seattle, WA 98109, USA.

**RESUMEN / SUMMARY:** - Surgery remains a mainstay in the management of localized prostate cancer. This article addresses surgical aspects germane to the management of men with prostate cancer, including patient selection for surgery, nerve-sparing approaches, minimization of positive surgical margins, and indications for pelvic lymph node dissection. Outcomes for men with high-risk prostate cancer following surgery are reviewed, and the present role of neoadjuvant therapy before radical prostatectomy is discussed. In addition, there is a review of the published literature on surgical ablative therapies for prostate cancer.

[741]

**TÍTULO / TITLE:** - Giant angiomyolipoma in the upper pole of the right kidney.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Esp Urol. 2013 Oct;66(8):828-9.

**AUTORES / AUTHORS:** - Peran Teruel M; Fernandez Anguita PJ; Martinez Ruiz J; Nunez Sarrion MA; Gimenez Bachs JM; Virseda Rodriguez J

**INSTITUCIÓN / INSTITUTION:** - Servicio de Urología. Complejo Hospitalario. Universitario Albacete. Albacete. Spain.

[742]

**TÍTULO / TITLE:** - Penile metastasis from primary bladder tumour.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Esp Urol. 2013 Oct;66(8):815-7.

**AUTORES / AUTHORS:** - Valsero Herguedas ME; Sanz Ruiz A; Pascual Samaniego M; Garcia Lagarto E; Bedate Nunez M; Fernandez del Busto E

**INSTITUCIÓN / INSTITUTION:** - Urology Department and Hospital Clinico Universitario. Valladolid, Spain.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** We present a case of cutaneous metastasis caused by a bladder tumor. **METHODS:** 68 year old male, diagnosed with an ISUP high grade urothelial carcinoma, affecting the whole bladder wall, including the perivesicular fat and macroscopic metastasis in the left ilio-obturator chain (T3N2MO), who presents painless induration on the dorsal surface of the glans penis with non-exudative ulcerated areas, evolving over several months. Given the negative serology result, the lesion was biopsied for anatomopathological study. **RESULTS:** The histopathological study of the lesion corresponded to a cutaneous metastasis from high grade urothelial carcinoma. **CONCLUSION:** Approximately 370 cases of penile metastasis have been described and the primary tumor is located in the bladder in 30-35% of them. Presentation of these lesions is very heterogeneous and requires anatomopathological study of the lesion for definitive diagnosis.

[743]

**TÍTULO / TITLE:** - The utility of PSMA and PSA immunohistochemistry in the cytologic diagnosis of metastatic prostate carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Diagn Cytopathol. 2013 Nov 22. doi: 10.1002/dc.23075.

●● [Enlace al texto completo \(gratis o de pago\) 1002/dc.23075](#)

**AUTORES / AUTHORS:** - Bernacki KD; Fields KL; Roh MH

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University of Michigan Medical School, Ann Arbor, Michigan.

**RESUMEN / SUMMARY:** - The diagnosis of metastatic prostate carcinoma frequently requires the use of immunohistochemical adjuncts. Immunohistochemistry for prostate-specific antigen (PSA) is commonly used for this purpose but can be of limited utility. Recently, prostate-specific membrane antigen (PSMA) has been shown to be a promising marker for the identification of metastatic prostate carcinoma in surgical specimens. The utility of this marker has yet to be reported for cytology specimens. We sought to compare the sensitivities of PSMA and PSA immunohistochemistry and investigate the specificity of PSMA by utilizing cell block preparations from cytologic cases of metastatic prostate carcinoma (n = 19) and carcinomas of nonprostatic origin (n = 33). The sensitivity of PSMA immunohistochemistry was higher (16/19; 84%) in detecting metastatic prostate carcinomas than that of PSA immunohistochemistry (11/19; 58%). Strong, diffuse staining for PSMA was seen in 13 (81%) of 16 PSMA-positive cases whereas strong, diffuse staining for PSA was observed in six (55%) of 11 PSA-positive cases. Positivity for either PSMA or PSA was seen in 17 of 19 cases of metastatic prostate carcinoma for a combined sensitivity of 89%. PSMA immunohistochemistry was completely negative in 32 of 33 cytology cases of nonprostatic carcinomas. Therefore, the specificity of this marker was 97% in this study. In conclusion, our results indicate that PSMA is a highly sensitive and specific

immunomarker for the detection of metastatic prostate carcinoma in cytology specimens. Diagn. Cytopathol. 2013; © 2013 Wiley Periodicals, Inc.

[744]

**TÍTULO / TITLE:** - A prostatic urethral lift for benign prostatic hyperplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med Lett Drugs Ther. 2013 Nov 11;55(1427):91.

[745]

**TÍTULO / TITLE:** - Cause and Consequence of Cancer/Testis Antigen Activation in Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Annu Rev Pharmacol Toxicol. 2013 Oct 11.

●● Enlace al texto completo (gratis o de pago) [1146/annurev-pharmtox-011112-140326](#)

**AUTORES / AUTHORS:** - Whitehurst AW

**INSTITUCIÓN / INSTITUTION:** - Simmons Cancer Center, UT Southwestern Medical Center, Dallas, TX 75390-8807; email: [angelique.whitehurst@utsouthwestern.edu](mailto:angelique.whitehurst@utsouthwestern.edu).

**RESUMEN / SUMMARY:** - Tumor cells frequently exhibit widespread epigenetic aberrations that significantly alter the repertoire of expressed proteins. In particular, it has been known for nearly 25 years that tumors frequently reactivate genes whose expression is typically restricted to germ cells. These gene products are classified as cancer/testis antigens (CTAs) owing to their biased expression pattern and their immunogenicity in cancer patients. Whereas these genes have been pursued as targets for anticancer vaccines, whether these reactivated testis proteins have roles in supporting tumorigenic features is less studied. Recent evidence now indicates that these proteins can be directly employed by the tumor cell regulatory environment to support cell-autonomous behaviors. Here, we review the history of the CTA field and present recent findings indicating that CTAs can play functional roles in supporting tumorigenesis. Expected final online publication date for the Annual Review of Pharmacology and Toxicology Volume 54 is January 06, 2014. Please see <http://www.annualreviews.org/catalog/pubdates.aspx> for revised estimates.

[746]

**TÍTULO / TITLE:** - Cyclooxygenase-2 inhibitor suppresses tumour progression of prostate cancer bone metastases in nude mice.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 15. doi: 10.1111/bju.12503.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12503](#)

**AUTORES / AUTHORS:** - Garcia M; Velez R; Romagosa C; Majem B; Pedrola N; Rigau M; Guiu M; Gomis RR; Morote J; Reventos J; Doll A

**INSTITUCIÓN / INSTITUTION:** - Research Unit in Biomedicine and Translational and Pediatric Oncology, Research Institute Vall d'Hebron University Hospital (VHIR), Barcelona, España; Universitat Autònoma de Barcelona, Barcelona, España.

[marta.garcia.lopez@vhir.org](mailto:marta.garcia.lopez@vhir.org).

**RESUMEN / SUMMARY:** - OBJECTIVE: To assess whether celecoxib, a selective cyclooxygenase-2 (COX-2) inhibitor with anticancer properties, has an inhibitory effect on tumour establishment and progression of prostate cancer bone metastases. MATERIAL AND METHODS: PC-3 stable luciferase expressing cells were injected into male nude mice by intracardiac and intratibial injections and then recorded the effect of celecoxib on bone metastases using bioluminescence image analysis. In cases of chemoprevention, mice received 3 mg/kg of celecoxib from one week before cell implantation until the end of the study, and to test the therapeutic effect, mice received celecoxib one week after cell implantation until the end of the study. Tumour tissue samples were histological examined and COX-2 expression was quantified at the protein level. RESULTS: Celecoxib significantly decreased cell viability and the proliferation of human prostate cancer cells in vitro in a dose-dependent manner. Bone metastases were detected after intracardiac injection in nude mice. Celecoxib (15 ppm) administered before intracardiac injection did not inhibit the cellular metastatic potential, as the number of bone metastases were similar in both groups. However, celecoxib did decrease metastatic progression in the osseous environment when cells were injected directly into the tibia ( $p < 0.05$ ). At the protein level, COX-2 expression was significantly decreased in the celecoxib treatment group ( $p < 0.01$ ). CONCLUSION: In a preclinical mice model, celecoxib administered orally at standard human dose inhibits the progression of established prostate cancer bone metastases.

[747]

**TÍTULO / TITLE:** - Germline SDHC mutation presenting as recurrent SDH deficient GIST and renal carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathology. 2013 Dec;45(7):689-91. doi: 10.1097/PAT.000000000000018.

●● Enlace al texto completo (gratis o de pago)

[1097/PAT.000000000000018](#)

**AUTORES / AUTHORS:** - Gill AJ; Lipton L; Taylor J; Benn DE; Richardson AL; Frydenberg M; Shapiro J; Clifton-Bligh RJ; Chow CW; Bogwitz M

**INSTITUCIÓN / INSTITUTION:** - \*Cancer Diagnosis and Pathology Group, Kolling Institute of Medical Research, Royal North Shore Hospital, St Leonards daggerDepartment of Anatomical Pathology, Royal North Shore Hospital, St Leonards double daggerSydney Medical School, University of Sydney, Sydney section signCancer Genetics, Hormones and Cancer Group, Kolling Institute of Medical Research, Royal North Shore Hospital, St Leonards, NSW ||Genetic Medicine and Familial Cancer Centre, Royal Melbourne Hospital, Parkville paragraph signDepartment of Surgery, Monash Medical School, Melbourne \*\*Department of Medical Oncology, Cabrini Hospital, Melbourne daggerdaggerDepartment of Medicine, Monash Medical School, Monash University, Melbourne double daggerdouble daggerDepartment of Anatomical Pathology, Royal Children's Hospital, Parkville, Vic Australia.

[748]

**TÍTULO / TITLE:** - Thermally targeted p21 peptide enhances bortezomib cytotoxicity in androgen-independent prostate cancer cell lines.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Drugs. 2013 Oct 9.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1097/CAD.0000000000000036](#)

**AUTORES / AUTHORS:** - Mikecin AM; Walker LR; Kuna M; Raucher D

**INSTITUCIÓN / INSTITUTION:** - aDepartment of Biochemistry, University of Mississippi Medical Center, Jackson, Mississippi, USA bDepartment of Molecular Medicine, Rudjer Boskovic Institute, Zagreb, Croatia.

**RESUMEN / SUMMARY:** - Prostate cancer remains one of the most common malignancies in men. Besides surgical resection, treatments for prostate cancer include hormone therapy, chemotherapy, and radiation therapy. Advancement of prostate cancer to an androgen-independent state limits the potential of conventional therapeutic approaches. Bortezomib, an FDA-approved proteasomal inhibitor for the treatment of myeloid leukemia, has been shown to have a positive effect on the inhibition of prostate cancer growth. Unfortunately, bortezomib has a very narrow therapeutic window, which can lead to severe side effects. Elastin-like polypeptide (ELP) is a genetically engineered, thermally responsive macromolecular carrier that enables a targeted delivery of the bound molecule because of its soluble property under normal physiologic conditions. In addition, ELP aggregates in response to mild hyperthermia. Using ELP as a carrier, it is possible to improve the pharmacological properties of the therapeutic drug as well as reduce toxicity in normal tissues. In this work, we have investigated the combination treatment of androgen-independent prostate cancer cells with bortezomib and the C-terminal part of the p21 protein bound to the ELP carrier. We have found that combination treatment with bortezomib and ELP-bound p21 protein leads to increased cell cycle arrest as well as apoptosis with respect to single treatments. We believe that this approach represents a promising direction for the treatment of androgen-independent prostate cancer.

[749]

**TÍTULO / TITLE:** - Positron emission tomography/computerized tomography in the evaluation of primary non-Hodgkin's lymphoma of prostate.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Gastroenterol. 2013 Oct 21;19(39):6699-702. doi: 10.3748/wjg.v19.i39.6699.

●● [Enlace al texto completo \(gratis o de pago\)](#) [3748/wjg.v19.i39.6699](#)

**AUTORES / AUTHORS:** - Pan B; Han JK; Wang SC; Xu A

**INSTITUCIÓN / INSTITUTION:** - Bo Pan, Jian-Kui Han, PET/CT Center, Qilu Hospital, the First Affiliated Hospital of Shandong University, Jinan 250012, Shandong Province, China.

**RESUMEN / SUMMARY:** - Primary malignant lymphoma of the prostate is exceedingly rare. Here we report a case of a 65-year-old man who presented with increased urinary frequency, urinary urgency, and urinary incontinence for two years. Benign prostatic hypertrophy was suspected at primary impression. Ultrasound revealed a hypoechoic lesion of the prostate. The total serum prostate-specific antigen was within normal range. Positron emission tomography/computerized tomography (PET/CT)

showed a hypermetabolic prostatic lesion. Prostate biopsy was consistent with a non-germinal center diffuse large B cell lymphoma. There was complete remission of the prostatic lesion following six cycles of chemotherapy as shown on the second PET/CT imaging. (18)F-fluoro-deoxy glucose PET/CT is not only a complement to conventional imaging, but also plays a significant role in the diagnosis and evaluation of treatment response of prostatic lymphoma.

[750]

**TÍTULO / TITLE:** - Microarray profiling of human renal cell carcinoma: identification for potential biomarkers and critical pathways.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Kidney Blood Press Res. 2013;37(4-5):506-13. doi: 10.1159/000355726. Epub 2013 Nov 10.

●● Enlace al texto completo (gratis o de pago) [1159/000355726](#)

**AUTORES / AUTHORS:** - Li W; Zhu W; Che J; Sun W; Liu M; Peng B; Zheng J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Shanghai Tenth People's Hospital, Tongji University, Shanghai, 200072, China.

**RESUMEN / SUMMARY:** - Aims: The aim of this study was to screen several novel genes associated with renal cell carcinoma (RCC), and analyze the gene functions and signal pathways which were critical to RCCs with DNA microarray. Methods: The gene expression profile of GSE781 was downloaded from Gene Expression Omnibus database, including 9 RCC samples and 9 healthy controls. Compared with the control samples, differentially expressed genes (DEGs) of RCC was identified by packages in R. The selected DEGs were further analyzed using bioinformatics methods. Gene ontology (GO) enrichment analysis was performed using Gene Set Analysis Toolkit and protein-protein interaction (PPI) network was constructed with prePPI. Then, pathway enrichment analysis to PPI network was performed using WebGestalt software. Results: A total of 429 DEGs were down-regulated and 418 DEGs were up-regulated in RCC samples compared to healthy controls. A total of 11 remarkable enhanced functions and 13 suppressed functions were identified. PPI nodes of high degrees, such as JAK2, IL8, BMP2, FN1 and NCR1, were obtained. The DEGs were classified and significantly enriched in cytokine and cytokine receptor pathway. Conclusion: The hub genes we find from RCC samples are not only bio-markers, but also may provide the groundwork for a combination therapy approach for RCCs. © 2013 S. Karger AG, Basel.

[751]

**TÍTULO / TITLE:** - Management of hormone-sensitive metastatic prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematol Oncol Clin North Am. 2013 Dec;27(6):1221-41. doi: 10.1016/j.hoc.2013.08.007. Epub 2013 Sep 21.

●● Enlace al texto completo (gratis o de pago) [1016/j.hoc.2013.08.007](#)

**AUTORES / AUTHORS:** - Agarwal N; Hussain M

**INSTITUCIÓN / INSTITUTION:** - Division of Medical Oncology, Huntsman Cancer Institute, University of Utah, 2000 Circle of Hope, Suite 2123, Salt Lake City, UT 84112, USA.

**RESUMEN / SUMMARY:** - Targeting gonadal androgen synthesis (often in conjunction with blockade of androgen receptor) is the cornerstone of treatment of hormone-sensitive metastatic prostate cancer (HSPC). Despite the failure of androgen deprivation therapy, most tumors maintain some dependence on androgen or androgen receptor signaling for proliferation. This article reviews the current standard of care for metastatic HSPC, mechanisms of treatment resistance, novel drugs targeting the androgen signaling pathway, biomarkers predicting response to treatment and survival, future directions, and ongoing clinical trials in HSPC.

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[752]

**TÍTULO / TITLE:** - Distal Phalangeal Necrosis in the Extremities as a Paraneoplastic Syndrome in Prostate Cancer: An Extremely Rare Case.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 23.

●● Enlace al texto completo (gratis o de pago) [1159/000354648](#)

**AUTORES / AUTHORS:** - Akin Y; Yucel S; Baykara M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Erzincan University School of Medicine, Erzincan, Turkey.

**RESUMEN / SUMMARY:** - Paraneoplastic syndromes (PNSs) are rare disorders which are triggered by an altered immune system response to a neoplasm. Although prostate cancer (PCa) is the second most common urological malignancy associated with PNSs, literature is lacking in defining the cases representing different PNSs in PCa. Herein, we present a 50-year-old man with fulminant distal phalangeal necrosis in the lower extremities after a diagnosis of PCa. Additionally, we review the literature in light of this case. © 2013 S. Karger AG, Basel.

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[753]

**TÍTULO / TITLE:** - Giant Bilateral Renal Angiomyolipomas: A Case Report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Oct 31.

●● Enlace al texto completo (gratis o de pago) [1159/000353556](#)

**AUTORES / AUTHORS:** - Cavicchioli FM; D'Elia C; Cerruto MA; Artibani W

**INSTITUCIÓN / INSTITUTION:** - Urology Clinic, AOUI Verona, Verona, Italy.

**RESUMEN / SUMMARY:** - Angiomyolipoma (AML) is a mesenchymal renal tumor composed of variable proportions of adipose tissue as well as vascular and smooth muscle elements. It can cause important, potentially life-threatening complications. The aim of this case report is to show a conservative treatment modality of this disease. A 50-year-old man underwent ultrasonography and then computed tomography showing the presence of bilateral renal masses of 27.5 x 19.5 x 21 cm on the left kidney and 28.5 x 19.6 x 27.5 cm on the right, respectively. Serum creatinine was normal; an ultrasonography-guided biopsy of the left kidney did not allow a diagnosis with absolute certainty, but was suggestive of AML. The patient also underwent total body magnetic resonance imaging, which was negative for pathological findings. He underwent a strict regime of surveillance with magnetic resonance imaging every 4-5 months, and at the last follow-up he was asymptomatic and serum creatinine was still normal. The management of giant AML is a complex and multifactorial

decision. Patients can knowingly choose an active surveillance program, even in case of giant AMLs. © 2013 S. Karger AG, Basel.

[754]

**TÍTULO / TITLE:** - Minimally Invasive Percutaneous Management of Large Bladder Stones with a Laparoscopic Entrapment Bag.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 12.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0127](#)

**AUTORES / AUTHORS:** - Tan YK; Gupta DM; Weinberg A; Matteis AJ; Kotwal S; Gupta M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Columbia University, New York, New York.

**RESUMEN / SUMMARY:** - Abstract Introduction: The treatment of large volume bladder stones is a management conundrum. Transurethral methods are plagued by long operative times, trauma to the bladder mucosa, and the need for a postoperative urethral catheter. Open cystolithotomy has higher morbidity. We present the percutaneous management of bladder stones with the novel use of a laparoscopic entrapment bag. Materials and Methods: Twenty-five patients (mean age 65.7), including 22 men and 3 women, 4 with a neurogenic bladder and 21 with a prior diagnosis of benign prostatic hyperplasia, underwent our novel technique. The mean number of stones was 6.8+/-8.0 (range, 1 to 30) and total stone burden 10.4+/-10.5 cm (range, 3.0 to 50.0 cm). Using regional or general anesthesia and flexible cystoscopic guidance, percutaneous bladder access was achieved. The tract was balloon dilated to 30F and stones captured in a laparoscopic entrapment bag. The bag's opening was exteriorized and stone fragmentation and comminution were achieved using a nephroscope and pneumatic or ultrasonic lithotripters. The bag was extracted and a 22F suprapubic catheter was inserted into the bladder; the patient was discharged the next day after a voiding trial. The procedure was done without fluoroscopy. No foley catheter was necessary. Results: All patients were rendered stone free. The mean estimated blood loss was 11.1+/-3.93 mL (range, 10 to 25 mL). The mean operative time was 102.3 minutes. There was minimal trauma to the bladder mucosa and no complications of fluid extravasation, hematuria, or urethral trauma were noted. All patients were discharged within 24 hours of the operation. Conclusion: Percutaneous cystolithotomy with the use of an entrapment bag is an efficient, safe technique for treating large volume bladder calculi. We recommend this technique as an alternative to open surgery for patients with too large a stone burden to remove transurethrally.

[755]

**TÍTULO / TITLE:** - Novel Multisensor Probe for Monitoring Bladder Temperature During Locoregional Chemohyperthermia for Nonmuscle-Invasive Bladder Cancer: Technical Feasibility Study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 10.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0179](#)

**AUTORES / AUTHORS:** - Cordeiro ER; Geijssen DE; Zum Vorde Sive Vording PJ; Schooneveldt G; Sijbrands J; Hulshof MC; de la Rosette J; de Reijke TM; Crezee H

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Urology, Academic Medical Center , Amsterdam, The Netherlands .

**RESUMEN / SUMMARY:** - Abstract Background and Purpose: The effectiveness of locoregional hyperthermia combined with intravesical instillation of mitomycin C to reduce the risk of recurrence and progression of intermediate- and high-risk nonmuscle-invasive bladder cancer is currently investigated in clinical trials. Clinically effective locoregional hyperthermia delivery necessitates adequate thermal dosimetry; thus, optimal thermometry methods are needed to monitor accurately the temperature distribution throughout the bladder wall. The aim of the study was to evaluate the technical feasibility of a novel intravesical device (multi-sensor probe) developed to monitor the local bladder wall temperatures during loco-regional C-HT. Materials and Methods: A multisensor thermocouple probe was designed for deployment in the human bladder, using special sensors to cover the bladder wall in different directions. The deployment of the thermocouples against the bladder wall was evaluated with visual, endoscopic, and CT imaging in bladder phantoms, porcine models, and human bladders obtained from obduction for bladder volumes and different deployment sizes of the probe. Finally, porcine bladders were embedded in a phantom and subjected to locoregional heating to compare probe temperatures with additional thermometry inside and outside the bladder wall. Results: The 7.5 cm thermocouple probe yielded optimal bladder wall contact, adapting to different bladder volumes. Temperature monitoring was shown to be accurate and representative for the actual bladder wall temperature. Conclusions: Use of this novel multisensor probe could yield a more accurate monitoring of the bladder wall temperature during locoregional chemohyperthermia.

[756]

**TÍTULO / TITLE:** - Technique for Office-Based, Ultrasound-Guided Percutaneous Biopsy of Renal Cortical Neoplasms Using a Novel Transducer for Facilitated Ultrasound Targeting.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 8. doi: 10.1111/bju.12489.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12489](#)

**AUTORES / AUTHORS:** - Menhadji AD; Nguyen V; Okhunov Z; Bucur P; Chu WH; Cho J; Billingsley J; Morrison D; Kelly CR; Landman J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of California, Irvine.

**RESUMEN / SUMMARY:** - OBJECTIVES: - To help clarify which small renal cortical neoplasms (RCNs) require surgery through the use of office-based, ultrasound-guided percutaneous renal biopsy - We report our preliminary experience performing biopsies of small RCNs using a novel transducer for facilitated ultrasound targeting PATIENTS AND METHODS: - Biopsies were done using a facilitated ultrasound targeting technology which incorporates a needle guide and onscreen beam-steered technology to permit highly precise needle deployment - Patient and tumor characteristics, procedure time, complications, and biopsy efficacy were documented - Wong-Baker pain levels were obtained before, during, and one hour after the procedure RESULTS: - Seven patients underwent biopsy, six for RCNs and one for medical renal disease - The mean patient age was 68.5 years (range 54-79), and mean tumor diameter was

2.55 cm (range 2.0-2.9) - Mean pain levels before, during, and 1 hour after the procedure were 0, 1.6, and 0.5, respectively - There were no intra- or post-procedural complications - Biopsy results were diagnostic in 5 of the 6 RCN cases and in the single case of medical renal disease CONCLUSIONS: - Our preliminary experience demonstrates that office-based percutaneous renal biopsy with this technique is safe and effective - An international multi-center study is planned to confirm these preliminary results.

[757]

**TÍTULO / TITLE:** - Molecular diagnostics in the neoplasms of the pancreas, liver, gall bladder, and extrahepatic biliary tract.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Lab Med. 2013 Dec;33(4):875-80. doi: 10.1016/j.cll.2013.08.002. Epub 2013 Oct 9.

●● Enlace al texto completo (gratis o de pago) [1016/j.cll.2013.08.002](#)

**AUTORES / AUTHORS:** - Weindel M; Zulfiqar M; Bhalla A; Shidham VB

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Detroit Medical Center, Karmanos Cancer Center, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201, USA.

**RESUMEN / SUMMARY:** - Pancreatic neoplasms, including ductal adenocarcinoma, intraductal papillary mucinous neoplasm, solid pseudopapillary neoplasm, pancreatic endocrine neoplasms, acinar cell carcinoma, and ampullary carcinoma, are associated with different genetic abnormalities. Liver neoplasms, including hepatic adenomas, hepatocellular carcinomas, and cholangiocarcinomas, are associated with identifiable risk factors and genetic changes. Gall bladder adenomas and adenocarcinomas arise from distinct molecular pathways. The molecular abnormalities seen in these tumors are not used routinely in the molecular diagnostic laboratory.

[758]

**TÍTULO / TITLE:** - Transitional cell and clear cell renal carcinoma: differentiation of distinct histological types with multiphase CT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Radiol. 2013 Nov 15.

●● Enlace al texto completo (gratis o de pago) [1177/0284185113510493](#)

**AUTORES / AUTHORS:** - Bata P; Tarnoki DL; Tarnoki AD; Novak PK; Gyebnar J; Kekesi D; Szendroi A; Fejer B; Szasz AM; Nyirady P; Karlinger K; Berczi V

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology and Oncotherapy, Semmelweis University, Budapest, Hungary.

**RESUMEN / SUMMARY:** - BACKGROUND: Transitional cell carcinoma (TCC) may mimic renal cell carcinoma (RCC) when it develops in a similar location, therefore, differentiation with imaging techniques might be challenging. Preoperative differentiation may have a significant role indicating the type of surgical treatment (nephrectomy vs. ureteronephrectomy). PURPOSE: To retrospectively analyze the differences in the contrast enhancement of TCC and RCC. MATERIAL AND METHODS: Images of 20 RCC and 12 TCC (mean ages, 62.3 +/- 14.1 and 67.4 +/- 12.0 years, respectively) were analyzed from patients who underwent multiphase

computed tomography (CT) examinations following 1.5 mL/kg non-ionic contrast agent administration. Unenhanced corticomedullary (30-45 s), nephrographic (70-90 s), and excretory (300-480 s) phases were imaged. The attenuation characteristics of RCC and TCC were compared to the attenuation of the normal renal cortex. RESULTS: Significant differences were found in the attenuation ratios between RCC or TCC in the corticomedullary (P = 0.040) and nephrographic (P = 0.004) phases using three regions of interest (ROIs) of 10 mm<sup>2</sup> size. If measuring ROIs comprising the complete tumor lesion instead of three small ROIs, no significant difference was observed in the attenuation ratios between RCC in TCC in any phases. CONCLUSION: Our study reports significant attenuation differences between RCC and TCC in the corticomedullary and nephrographic phases by multiphase CT. The findings underscore the importance of multiphase CT in the differentiation of these two different entities. Using multiple small (three) ROIs is more accurate than measuring the whole tumor attenuation.

[759]

**TÍTULO / TITLE:** - Impact of size of region-of-interest on differentiation of renal cell carcinoma and renal cysts on multi-phase CT: Preliminary findings.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Radiol. 2013 Oct 27. pii: S0720-048X(13)00551-2. doi: 10.1016/j.ejrad.2013.10.020.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejrad.2013.10.020](#)

**AUTORES / AUTHORS:** - Rosenkrantz AB; Matza BW; Portnoy E; Melamed J; Taneja SS; Wehrli NE

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, NYU Langone Medical Center, 550 First Avenue, New York, NY 10016, United States. Electronic address: [Andrew.Rosenkrantz@nyumc.org](mailto:Andrew.Rosenkrantz@nyumc.org).

**RESUMEN / SUMMARY:** - INTRODUCTION: To assess impact of size of regions-of-interest (ROI) on differentiation of RCC and renal cysts using multi-phase CT, with focus on differentiating papillary RCC (pRCC) and cysts given known hypovascularity of pRCC. METHODS: 99 renal lesions (23 pRCC, 47 clear-cell RCC, 7 chromophobe RCC, 22 cysts) underwent multi-phase CT. Subjective presence of visual enhancement was recorded for each lesion. Whole-lesion (WL) ROIs, and small ( $\leq 5\text{mm}^2$ ), medium (average size of small and large ROIs), and large (half of lesion diameter) peripherally located partial-lesion (PL) ROIs, were placed on non-contrast and nephrographic phases. Impact of ROI size in separating cysts from all RCC and from pRCC based on increased attenuation between phases was assessed using ROC analysis. RESULTS: Visual enhancement was perceived in 96% of ccRCC, 61% of pRCC, and 9% of cysts. AUCs for separating all RCC and cysts for WL-ROI and small, medium, and large PL-ROIs were 91%, 96%, 91% and 93%, and among lesions without visible enhancement were 60%, 79%, 67% and 67%. AUCs for separating pRCC and cysts for WL-ROI and small, medium, and large PL-ROIs were 78%, 92%, 82% and 84%, and among lesions without visible enhancement were 64%, 88%, 69% and 69%. CONCLUSION: Small PL-ROIs had higher accuracy than WL-ROI or other PL-ROIs in separating RCC from cysts, with greater impact in differentiating pRCC from cysts and differentiating lesions without visible enhancement. Thus, when evaluating renal lesions using multi-phase

CT, we suggest placing small peripheral ROIs for highest accuracy in distinguishing renal malignancy and benign cysts.

[760]

**TÍTULO / TITLE:** - Prediction of metastatic status in non-seminomatous testicular cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 29.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1194-0](#)

**AUTORES / AUTHORS:** - Ruf CG; Sachs S; Khalili-Harbi N; Isbarn H; Wagner W; Matthies C; Meineke V; Fisch M; Chun FK; Abend M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Federal Armed Forces Hospital, 22049, Hamburg, Germany, [Dr.ChristianRuf@gmx.de](mailto:Dr.ChristianRuf@gmx.de).

**RESUMEN / SUMMARY:** - PURPOSE: To examine the significance of 90 biomarkers for predicting metastatic status in non-seminomatous germ cell tumors (NSGCT). By predicting metastatic status, it may be possible to eliminate unnecessary therapeutic or diagnostic efforts. MATERIALS AND METHODS: We investigated 552 males who were diagnosed with non-metastatic (n = 273) and metastatic (n = 279) NSGCT between 2000 and 2011. The sample included cancers of different histologies: embryonal cell carcinoma (n = 131), teratoma (n = 55), and mixed histology (n = 366). We collected and analyzed more than 90 parameters via logistic regression: demographic characteristics, medical history, histopathological parameters, and levels of tumor markers and hormones. RESULTS: Testis histology (p = 0.004), clinical symptoms (p = 0.0005), tumor length (p = 0.005), infiltration of the rete testis (p = 0.008), invasion of lymphatic (pL1) and blood vessels (pV1) (p < 0.0001), and levels of enzymes such as LDH, betaHCG, AFP, and FSH (p values as small as <0.0001) were associated with metastatic status. With one model, we identified 14 out of 76 (18.4 %) metastatic NSGCT cases with 93-100 % certainty (positive predictive value) at 99 % specificity by the peripheral blood levels of LDH (day of operation) in combination with FSH measurements (1 day after operation). A second model included pV, tumor length, and FSH (1 day after operation). It identified 25 out of 90 (27.8 %) non-metastatic NSGCT with approximately 90 % certainty (negative predictive value) at 94-98 % sensitivity. CONCLUSIONS: No single parameter was able to discriminate metastatic from non-metastatic NSGCT, but combinations of parameters in two predictive models accurately identified the metastatic status in 23 % of the cases in our sample.

[761]

**TÍTULO / TITLE:** - F-fluorocholine PET/CT compared with extended pelvic lymph node dissection in high-risk prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 20.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1189-x](#)

**AUTORES / AUTHORS:** - Kjolhede H; Ahlgren G; Almquist H; Liedberg F; Lyttkens K; Ohlsson T; Bratt O

**INSTITUCIÓN / INSTITUTION:** - Section of Urology, Department of Surgery, Vaxjo Hospital, Lund University, SE-351 85, Vaxjo, Sweden, [henrik.kjolhede@med.lu.se](mailto:henrik.kjolhede@med.lu.se).

**RESUMEN / SUMMARY:** - PURPOSE: To compare 18F-fluorocholine positron-emission tomography/computed tomography (PET/CT) with extended pelvic lymph node dissection (ePLND) for the detection of lymph node metastases in a large cohort of patients with high-risk prostate cancer. MATERIALS AND METHODS: Patients with prostate-specific antigen levels between 20 and 99 ng/mL and/or Gleason score 8-10 cancers, planned for treatment with curative intent following a negative or inconclusive standard bone scan, were investigated with 18F-fluorocholine PET/CT followed by an ePLND. None of the patients received hormonal therapy prior to these staging procedures. Results for PET/CT were compared on a per-patient basis with histopathology from ePLND. Sensitivity, specificity, positive and negative predictive values were calculated. RESULTS: PET/CT detected a total of 76 suspected lymph node metastases and four suspected bone metastases in 33 (29 %) of the 112 included patients. Of these, 35 suspected lymph node metastases, only within the anatomical template area of an ePLND, were found in 21 of the patients. Histopathology of the ePLND specimens detected 117 lymph node metastases in 48 (43 %) of the 112 patients. Per-patient sensitivity, specificity, positive and negative predictive values for 18F-fluorocholine PET/CT for lymph node metastases within the ePLND template were 0.33, 0.92, 0.76 and 0.65, respectively. Only 11 patients had lymph nodes larger than 10 mm that would have been reported by CT alone. CONCLUSIONS: 18F-fluorocholine PET/CT detects lymph node metastases in a significant proportion of patients with high-risk prostate cancer with a high specificity, but low sensitivity.

[762]

**TÍTULO / TITLE:** - Prognostic implication of TIM-3 in clear cell renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Neoplasma. 2014;61(1):35-40.

**AUTORES / AUTHORS:** - Yuan J; Jiang B; Zhao H; Huang Q

**RESUMEN / SUMMARY:** - Clear cell renal carcinoma (ccRCC) is the most common tumor of the kidney in adults. The prognosis of ccRCC remains unsatisfactory. Recently, Tcell immunoglobulin mucin-3 (TIM-3), a novel transmembrane protein, has been implicated in tumor biology. Its role in ccRCC remains unknown. The aim of this study was to investigate the roles of TIM-3 as a prognostic marker in patients with ccRCC. TIM-3 protein expression was determined by immunohistochemistry and Western blot from 137 ccRCC tumor samples and adjacent normal renal tissues. We performed also the cell proliferation assay using 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-2H tetrazolium bromide (MTT) and cell invasion assay. The effects of small interfering RNA (siRNA)-mediated knockdown of TIM-3 (TIM-3 siRNA) in two human ccRCC cell lines were evaluated. TIM-3 expression was higher in ccRCC tissue than in the adjacent normal renal tissue ( $P < 0.001$ ). High TIM-3 expression was an independent predictor of both cancer-specific survival and progression-free survival. TIM-3 protein was expressed in both ccRCC cell lines. Knockdown of TIM-3 suppressed the proliferation and invasion capacity of ccRCC cell lines. TIM-3 expression was associated with poor prognosis in ccRCC. Taken together, TIM-3 is a potential prognostic marker in ccRCC. Keywords: TIM-3; clear cell renal cell carcinoma; prognosis; marker.

[763]

**TÍTULO / TITLE:** - XRCC1 Arg194Trp and Arg280His Polymorphisms in Bladder Cancer Susceptibility: A Meta-Analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Crit Rev Eukaryot Gene Expr. 2013;23(4):339-54.

**AUTORES / AUTHORS:** - Liu C; Yin Q; Li L; Jiao G; Wang M; Wang Y

**INSTITUCIÓN / INSTITUTION:** - Department of Oncology, Changhai Hospital, Second Military Medical University, P.R.China.

**RESUMEN / SUMMARY:** - The XRCC1 Arg194Trp and Arg280His polymorphisms were likely to be involved with the development of bladder cancer. However, there had been inconsistent reports of association. This meta-analysis of literatures was performed to draw a more precise estimation of the relationship. We systematically searched PubMed, Embase, and Web of Science for relevant articles with a time limit of April 25, 2013. Summary odds ratios (ORs) with 95% confidence intervals (CIs) were used to assess the strength of association between the two polymorphisms and bladder cancer susceptibility using a random-effects model. This meta-analysis including 14 case-control studies evaluated the associations between the two XRCC1 polymorphisms and bladder cancer susceptibility. Overall, for Arg194Trp, significant associations were found in TT versus CC (OR = 1.78, 95% CI = 1.12-2.82) and the recessive model (OR = 1.71, 95% CI = 1.11-2.65); for Arg280His, significant associations were also found in AG versus GG (OR = 1.63, 95% CI = 1.24-2.13) and the dominant model (OR = 1.39, 95% CI = 1.07-1.82). When stratified by ethnicity, in Asian population, significant associations were found for Arg194Trp polymorphism in TT versus CC (OR = 2.99, 95% CI = 1.48-6.06), the dominant model (OR = 1.33, 95% CI = 1.03-1.72) and the recessive model (OR = 2.72, 95% CI = 1.36-5.45), and for Arg280His in GA versus GG (OR = 2.13, 95% CI = 1.63-2.97), but no significant associations were found in no-Asian population. This meta-analysis suggested that XRCC1 Arg194Trp and Arg280His polymorphisms were risk factors for increasing bladder cancer in Asian population.

[764]

**TÍTULO / TITLE:** - Ureteroscopic Biopsy of Upper Tract Urothelial Carcinoma: Comparison of Basket and Forceps.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 19.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013.0220](#)

**AUTORES / AUTHORS:** - Kleinmann N; Healy KA; Hubosky SG; Margel D; Bibbo M; Bagley DH

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Urology, Thomas Jefferson University, Philadelphia, Pennsylvania.

**RESUMEN / SUMMARY:** - Abstract Purpose: To compare two different biopsy devices for upper tract urothelial carcinoma (UTUC) and evaluate the pathologic result obtained by these devices. Patients and Methods: From January 2008 to December 2010, 414 ureteroscopies were performed and 504 biopsies were taken for evaluation of UTUC. Two biopsy devices were compared: 2.4F stainless steel flat wire basket and 3F cup biopsy forceps. The effect of the biopsy device on obtaining an adequate pathologic

specimen was evaluated using univariate and multivariate binary logistic regression analysis. We also investigated whether tumor grade determination was affected by the biopsy device among patients with a diagnostic biopsy. Results: Diagnosis was successful in 63% and 94% in the forceps and basket groups, respectively ( $P < 0.0001$ ). Among biopsies with a definite diagnosis of UTUC, specific grade was determined in 80% and 93% in the forceps and basket groups, respectively ( $P = 0.033$ ). In subgroup analysis of tumors larger than 10 mm in diameter, diagnosis was obtained in 80% and 94% in the forceps and basket groups, respectively ( $P = 0.037$ ). Cytologic evaluation was found to increase diagnostic rates. Conclusions: The stainless steel flat wire basket was shown to be superior to the 3F cup biopsy forceps in terms of obtaining tissue diagnosis and providing specific grade.

[765]

**TÍTULO / TITLE:** - Metastatic castration-resistant prostate cancer: changing landscape with cabazitaxel.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Drugs. 2013 Nov 8.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1097/CAD.0000000000000045](#)

**AUTORES / AUTHORS:** - Fernandez O; Afonso J; Vazquez S; Campos B; Lazaro M; Leon L; Anton Aparicio LM

**INSTITUCIÓN / INSTITUTION:** - aOncology Service, Ourense's Hospital Complex, Ourense bMedical Oncology Service, Arquitecto Marcide's University Hospital cMedical Oncology Service, Lucus Augusti's University Hospital, Lugo dMedical Oncology Service, Xeral Cies de Vigo's University Hospital Complex, Pontevedra eMedical Oncology Service, Santiago s University Clinical Hospital, A Coruna.

**RESUMEN / SUMMARY:** - Docetaxel is the standard first-line chemotherapy for men with metastatic castration-resistant prostate cancer. Until recently, there was no standard therapy after failure of docetaxel treatment. Cabazitaxel has been shown to improve overall survival in this setting. As a result, the treatment paradigm for mCRPC is changing rapidly. The improved survival shown with cabazitaxel provides an important new opportunity to treat men with mCRPC after docetaxel treatment. Despite the toxicity recorded in the pivotal study, subsequent trials have shown that cabazitaxel is a safe drug. Patient selection and the optimal interval between prior docetaxel treatment and cabazitaxel remain the critical issues. According to a subanalysis of the various studies discussed in this review, there is a patient profile that will probably benefit from use of cabazitaxel after docetaxel failure. Cabazitaxel represents a new treatment option for patients with prostate cancer.

[766]

**TÍTULO / TITLE:** - Activity of Outpatient Intravenous Interleukin-2 and Famotidine in Metastatic Clear Cell Kidney Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Biother Radiopharm. 2013 Nov 19.

●● [Enlace al texto completo \(gratis o de pago\)](#) [1089/cbr.2013.1555](#)

**AUTORES / AUTHORS:** - Quan WD Jr; Quan FM

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Medical Oncology, Western Regional Medical Center, Goodyear, Arizona.

**RESUMEN / SUMMARY:** - Abstract Outpatient daily intravenous infusions of interleukin-2 (IL-2) have been developed to maintain anticancer activity and decrease toxicity of this agent against kidney cancer. Lymphokine activated killer cell (LAK) numbers are increased with these IL-2 schedules. Famotidine may enhance the LAK activity by increasing IL-2 internalization by the IL-2 receptor on lymphocytes. Fifteen patients with metastatic clear cell kidney cancer received IL-2 18 million IU/M2 intravenously over 15-30 minutes preceded by famotidine 20 mg IV daily for 3 days for 6 consecutive weeks as outpatients. Cycles were repeated every 8 weeks. Patient characteristics were seven males/eight females, median age 59 (range: 28-70), median Eastern Cooperative Oncology Group (ECOG) performance status-1; common metastatic sites were lungs (14), lymph nodes (9), liver (4), bone (4), and pancreas (4). Prior systemic therapies were oral tyrosine kinase inhibitor (8), IL-2 (6), and mTor inhibitor (2). Most common toxicities were rigors, arthralgia/myalgia, nausea/emesis, fever, and hypotension. All episodes of hypotension were reversible with intravenous fluid. No patients required hospitalization due to toxicity. One complete response (7%) and four partial responses (26%) were seen (total response rate=33%; 95% confidence interval: 15%-59%). Responses occurred in the lungs, liver, lymph nodes, and bone. Outpatient intravenous IL-2 with famotidine has activity in metastatic clear cell kidney cancer.

[767]

**TÍTULO / TITLE:** - Pure Retroperitoneal Laparoscopic Radical Nephrectomy for Left Renal Cell Carcinoma with Differential Extensions of Level I Renal Vein Tumor Thrombus.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Nov 20.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013.0544](#)

**AUTORES / AUTHORS:** - Wang W; Xu J; Adams TS; Tian Y; Lv W

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Urology, Beijing Friendship Hospital, Capital Medical University , Beijing, China .

**RESUMEN / SUMMARY:** - Abstract Objectives: To describe a large clinical series of pure laparoscopic radical nephrectomy (LRN) for left renal cell carcinoma (RCC) with differential extensions of level I renal vein (RV) tumor thrombus using a retroperitoneal approach. Methods: Ten left RCC patients with RV tumor thrombus underwent pure retroperitoneal LRN. Operation procedures were different for patients with varying length of the RV tumor thrombus. Based on our experience, four grades were defined based on the distal limit of the thrombus. Grade 1: tip of the thrombus was located between the renal sinus and the left gonadal vein (or adrenal vein); Grade 2: tip of the thrombus was located between the left gonadal vein and the abdominal aorta; Grade 3: tip of the thrombus was riding on the abdominal aorta; Grade 4: tip of the thrombus was located in the interaortocaval region. According to this classification, grade 1 in 3 patients, grade 2 in 2, grade 3 in 3, and grade 4 in 2. Results: Pure retroperitoneal LRN and thrombectomy were successfully performed for all the patients without requiring open surgery. The mean tumor size for each of the four grades was 5.9, 6.4, 5.8, and 7.6 cm, respectively; the mean thrombus length was 2.1, 3.5, 5.2, and 7.1 cm, respectively; the mean operative time was 85, 103, 137, and 190 minutes, respectively;

the average surgical bleeding volume was 67, 110, 143, and 225 mL, respectively. Better procedures are needed to increase the working space for patients with higher grades of thrombus. Surgical margins were negative for all patients. With a mean follow-up of 29 months, two patients developed metastatic disease. Conclusions: Despite the technical challenges, pure retroperitoneal LRN for left RCC patients with differential extensions of RV tumor thrombus is safe and feasible in selected patients. However, it is important to note that surgery will be more difficult for patients with higher grades of thrombus.

[768]

**TÍTULO / TITLE:** - Renal Cell Recurrence for T1 Tumors After Laparoscopic Partial Nephrectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0197](#)

**AUTORES / AUTHORS:** - Kreshover JE; Richstone L; Kavoussi LR

**INSTITUCIÓN / INSTITUTION:** - Arthur Smith Institute for Urology, North Shore-Long Island Jewish Medical Center, New Hyde Park, New York.

**RESUMEN / SUMMARY:** - Abstract Objectives: There is lack of consensus in the Urology community regarding surveillance after laparoscopic partial nephrectomy (LPN), particularly for patients with stage I tumors. The purpose of this article is to characterize the rate of recurrence after partial nephrectomy in a low risk cohort. Methods: Data were collected on all laparoscopic partial nephrectomies performed at a single institution from January 2006 through May 2011. Patients without at least 1 year of follow-up information were excluded from examination. Patients were stratified based on the pathologic tumor stage at the time of partial nephrectomy. Patients with stage I (a and b) tumors were then examined for recurrence. Results: A total of 639 patients underwent LPN during the time period. Of this, 360 patients had stage T1 renal cell carcinoma (RCC) (302 with pT1a and 58 with pT1b) and met research criteria. There were 8 recurrences (2.2%) within this cohort ( Table 1 ). All of the tumors were of clear cell histology and none had Furhman grade 1 histology. Only one of these patients had a positive margin at the time of partial nephrectomy and all patients had negative biopsy of the tumor resection bed. A majority of the recurrences occurred locally in the ipsilateral kidney or retroperitoneum. Most of the recurrences occurred within 1-2 years postoperatively. Conclusions: Approximately 2% of patients who underwent LPN for RCC with resultant low risk, stage I tumor pathology developed metastasis. There were no recurrences in nonclear cell pathologies and no recurrences with Furhman grade 1 or tumors smaller than 3 cm.

[769]

**TÍTULO / TITLE:** - Initial validation of a virtual-reality learning environment for prostate biopsies: realism matters!

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago) [1089/end.2013.0454](#)

**AUTORES / AUTHORS:** - Fiard G; Selmi SY; Promayon E; Vadcard L; Descotes JL; Troccaz J

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**RESUMEN / SUMMARY:** - Introduction-objectives: A virtual-reality learning environment dedicated to prostate biopsies was designed to overcome the limitations of current classical teaching methods. The aim of this study was to validate reliability, face, content and construct of the simulator. Materials and methods: The simulator is composed of a) a laptop computer, b) a haptic device with a stylus that mimics the ultrasound probe, c) a clinical case database including three dimensional (3D) ultrasound volumes and patient data and d) a learning environment with a set of progressive exercises including a randomized 12-core biopsy procedure. Both visual (3D biopsy mapping) and numerical (score) feedback are given to the user. The simulator evaluation was conducted in an academic urology department on 7 experts and 14 novices who each performed a virtual biopsy procedure and completed a face and content validity questionnaire. Results: The overall realism of the biopsy procedure was rated at a median of 9/10 by non-experts (7.1-9.8). Experts rated the usefulness of the simulator for the initial training of urologists at 8.2/10 (7.9-8.3), but reported the range of motion and force feedback as significantly less realistic than novices ( $p=0.01$  and  $0.03$  respectively). Pearson's  $r$  correlation coefficient between correctly placed biopsies on the right and left side of the prostate for each user was 0.79 ( $p<0.001$ ). The 7 experts had a median score of 64% (59-73), and the 14 novices a median score of 52% (43-67), without reaching statistical significance ( $p=0.19$ ). Conclusion: The newly designed virtual reality learning environment proved its versatility and its reliability, face and content were validated. Demonstrating the construct validity will require improvements to the realism and scoring system used.

[770]

**TÍTULO / TITLE:** - PSA evolution after prostate photoselective vaporization.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Endourol. 2013 Oct 24.

●● [Enlace al texto completo \(gratis o de pago\) 1089/end.2013.0522](#)

**AUTORES / AUTHORS:** - Lebdai S; Prezelin Y; Pereira H; Bruyere F

**INSTITUCIÓN / INSTITUTION:** - Angers University Hospital, Urology, Urology department, CHU Angers, 4 rue Larrey, Angers, France, 49933 ; [souhil.lebdai@gmail.com](mailto:souhil.lebdai@gmail.com).

**RESUMEN / SUMMARY:** - Introduction: Prostate-specific antigen (PSA) variations after photoselective vaporization of the prostate are an unsolved question. Method: We included prospectively 308 patients who underwent GreenLight® prostate vaporization for prostatic hyperplasia between 2005 and 2013. We excluded patients with prostate cancer and those with concomitant prostate biopsies. Serum PSA levels were measured before and after procedure at 1, 6, 12, 24, 36 and 48 months. Results: The median preoperative PSA was 4.50 ng/ml, it decreased to 2.41 ng/ml at 1 month (47% reduction), 2.17 ng/ml at 6 months (52% reduction), 2.30 ng/ml at 1 year (49% reduction), 2.40 ng/ml at 2 years (47% reduction), 2.31 ng/ml at 3 years (49% reduction), and 2.54 ng/ml at 4 years (44% reduction) ( $p$  values were all  $<0.0001$ ).

Median PSA nadir at 6 months was significantly different from the median PSA at 1, 2, 3 and 4 years (respectively  $p=0.0046$ ,  $p=0.0017$ ,  $p=0.0006$ , and  $p=0.01$ ). Patients who received  $\leq 3000$  J/cc had a significant trend to a PSA re-ascension after 6 months. Patients who received  $\geq 4000$  J/cc did not show any significant PSA re-ascension during the 4 years after procedure. Energy was correlated with the PSA re-ascension in univariate and multivariate analysis. Conclusions: PSA significantly decreased by half 1 month after procedure, reached its nadir at 6 months and showed a slight progressive re-ascension during the 4 following years. Applying an energy rate  $\geq 4000$  J/cc of prostate induced PSA stability over time whereas energy  $\leq 3000$  J/cc induced a re-ascension of the PSA after 6 months.

[771]

**TÍTULO / TITLE:** - Conjugated linoleate reduces prostate cancer viability whereas the effects of oleate and stearate are cell line-dependent.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Oct;33(10):4395-400.

**AUTORES / AUTHORS:** - Hagen RM; Rhodes A; Ladomery MR

**INSTITUCIÓN / INSTITUTION:** - University of the West of England, Bristol, U.K. Tel: +44 1173282102, [Rachel.Hagen@uwe.ac.uk](mailto:Rachel.Hagen@uwe.ac.uk).

**RESUMEN / SUMMARY:** - BACKGROUND: In this study, responses to fatty acid treatments in commonly used prostate cancer cell culture models and variability of gene expression between them were determined. MATERIALS AND METHODS: PC3, DU145, LNCaP, VCaP and PNT2 cells were treated with 100  $\mu$ M of either oleate, stearate or conjugated linoleate. Cell proliferation and viability were assessed using trypan blue and 3-(4, 5-dimethylthiazol-2-yl)-2, 5-diphenyltetrazolium bromide (MTT) assay respectively. Gene expression was measured using real-time polymerase chain reaction (PCR). RESULTS: Conjugated linoleic acid reduced cell proliferation and viability in all prostate cancer cell lines, whilst the effects of oleic and stearic acid on proliferation were found to be cell line-dependent. A reduction in gene expression of fatty acid desaturases was observed in prostate cancer cell lines compared to normal prostate cells. CONCLUSION: Differential responses of the cell lines investigated here to fatty acid treatment suggest that multiple prostate cancer cell line models should be used when designing experiments aimed at examining lipid metabolism in prostate cancer.

[772]

**TÍTULO / TITLE:** - Co-existence of Epithelioid and Fibroblastoid Subsets in a Sarcomatoid Renal Carcinoma Cell Line Revealed by Clonal Studies.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):4875-89.

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**RESUMEN / SUMMARY:** - BACKGROUND: The biology of sarcomatoid renal cell carcinoma (RCC) and its conversion from and to the clear cell RCC are not fully understood. We aimed to analyze the sarcomatoid RCC cell line, RCC52, derived from a lymph node metastatic lesion consisting mostly of sarcomatoid RCC cells with occasional clear cell areas. MATERIALS AND METHODS: Representative clonal epithelioid and fibroblastoid sublines isolated from the RCC52 cell line were analyzed alongside the parental line. Cytofluorometric and western blot analyses were used for phenotypic study. Xenotransplantation and in vitro invasive assays were used to determine tumorigenicity and invasiveness. Immunohistology in conjunction with antibodies to paired box gene-2 (PAX2) were used to determine if xenografts or tumor biopsies had the clear cell component. RESULTS: RCC52 cells grown as monolayers in vitro were all PAX2-negative, and consisted mostly of epithelioid cells and partly of fibroblastoid cells as noted in a previous study, confirming the co-existence of these two cell types in the in vitro growth of exclusive sarcomatoid RCC cells. Immunohistology revealed that the parental line and all epithelioid sublines tested were able to develop into solid tumors consisting mostly of sarcomatoid cells with PAX2-positive clear cells in some areas. The RCC stem cell marker CD105 was selectively expressed by a small proportion of the epithelioid, but not fibroblastoid, sublines, which was in line with the tumorigenic property of the epithelioid sublines containing cancer stem cells (CSCs). In contrast, only fibroblastoid sublines exhibited migratory/invasive properties, as determined by in vitro assays. CONCLUSION: Our findings confirm the presence of two distinct subsets in the RCC52 line, and suggest the epithelioid subset being able to de-differentiate to clear cells, albeit partially, and harboring CSCs as an emerging therapeutic target in order to achieve effective treatment of this malignancy.

[773]

**TÍTULO / TITLE:** - Significant Association of Caveolin-1 (CAV1) Genotypes with Upper Urothelial Tract Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anticancer Res. 2013 Nov;33(11):4907-4912.

**AUTORES / AUTHORS:** - Chang WS; Lin SS; Li FJ; Tsai CW; Li LY; Lien CS; Liao WL; Wu HC; Tsai CH; Shih TC; Bau DT

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**RESUMEN / SUMMARY:** - Aim: Upper urothelial tract cancer is unusually of high incidence in Taiwan and it is valuable to study the specificity of this disease in Taiwan and compare the corresponding findings with those of Western countries. In the literature, it has been reported that single nucleotide variation of caveolin-1 gene (CAV1) plays an important role in risk of several types of cancer, such as hepatoma, leukemia, nasopharyngeal carcinoma, oral, breast, bladder and prostate cancer, but we are not aware of any reports on upper urothelial tract cancer. The aim of this study was to evaluate the association of six polymorphic genotypes of CAV1 with upper urothelial tract cancer within a Taiwanese population. MATERIALS AND METHODS: A total of 218 patients with upper urothelial tract cancer and 580 healthy controls in central Taiwan were genotyped by polymerase chain reaction and restriction fragment length polymorphism (PCR-RFLP) for six CAV1 polymorphic genotypes, C521A

(rs1997623), G14713A (rs3807987), G21985A (rs12672038), T28608A (rs3757733), T29107A (rs7804372), and G32124A (rs3807992), and their association with upper urothelial tract cancer susceptibility was examined. RESULTS: The distribution of genotypes of CAV1 rs3807987 and rs7804372 were significantly different between cancer patient and control groups ( $p=0.0188$  and  $0.0090$ , respectively), while those for CAV1 rs1997623, rs12672038, rs3757733 and rs3807992 were not significant ( $p>0.05$ ). The haplotype analysis of the two polymorphic genotypes showed that compared with the GG/AT, and GG/AA haplotypes of CAV1 rs3807987/rs7804372, those carrying GG/TT, AG/TT and AA/TT variants have a significantly increased risk of upper urothelial tract cancer (odds ratio=1.61, 1.50 and 2.67, 95% confidence interval=1.05-2.47, 1.18-1.90, and 1.37-5.18, respectively). On the contrary, other haplotype variants conferred non-significant elevated risk. CONCLUSION: Our results suggest that individual and combined CAV1 rs3807987/rs7804372 genotypes are involved in predisposition to upper urothelial tract cancer in the Taiwanese population.

[774]

**TÍTULO / TITLE:** - Challenges in the pathological reporting of urothelial carcinoma involving prostatic transurethral resection specimens within a single institution.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathology. 2013 Dec;45(7):664-9. doi: 10.1097/PAT.0000000000000009.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1097/PAT.0000000000000009](#)

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**RESUMEN / SUMMARY:** - AIM: : Primary bladder urothelial carcinoma (UC) may involve the prostate with differing management depending on whether tumour is in situ or invades the prostatic subepithelium or fibromuscular stroma. We aim to understand challenges in reporting UC within prostate transurethral resection (TUR). METHODS: A retrospective review from 2007 to 2010 identified prostate TUR performed for primary bladder UC. RESULTS: 25.1% of cystoprostatectomy patients (60/239) had a prior prostate TUR; 129 patients had a prostate TUR for UC and 50.4% (65/129) were given a neoplastic diagnosis. Prostatic fibromuscular stroma was present in 84.6% of cases, with a comparable rate among surgeons. Diagnostic concordance of UC versus a non-neoplastic diagnosis was 96.7%, with rare cases initially diagnosed as non-neoplastic having in situ UC on review. Of reports with invasive tumour, 19.4% did not specify extent of invasion (e.g., bladder muscularis propria, prostate fibromuscular stroma) and 13.9% had discordant extent of invasion on review. Terminology typically used for bladder (lamina propria/muscularis propria) was found in 23.1% of reports without explicit reference to the bladder or prostate. CONCLUSION: This study reveals difficulties in reporting UC within prostatic TUR specimens. We recommend documenting tumour extent and referencing the organ of origin if ambiguous anatomical terms are used.

[775]

**TÍTULO / TITLE:** - Prognostic Factors of 'High-Grade' Ta Bladder Cancers according to the WHO 2004 Classification: Are These Equivalent to 'High-Risk' Non-Muscle-Invasive Bladder Cancer?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Sep 25.

●● Enlace al texto completo (gratis o de pago) [1159/000351961](#)

**AUTORES / AUTHORS:** - Gontero P; Gillo A; Fiorito C; Oderda M; Pacchioni D; Casetta G; Peraldo F; Zitella A; Tizzani A; Ricceri F

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**RESUMEN / SUMMARY:** - Objective: To determine the impact of prognostic factors of a series of high-grade Ta non-muscle-invasive bladder cancers (NMIBCs) according to the new International Society of Urological Pathology (ISUP) 1998/WHO 2004 grading system (previously classified as either TaG2 or TaG3). Methods: One hundred and thirty-one high-grade Ta (105 G2 and 26 G3) cases were identified after independent review by two pathologists. Univariable and multivariable Cox regression models addressed recurrence and progression-free survival. Progression was defined as appearance of any T  $\geq$ 1 recurrence after complete TUR (type 1) or occurrence of T  $\geq$ 2 (type 2). Results: Ten-year recurrence, type-1 and type-2 progression-free survival were 60, 75 and 95%, respectively. The previous grading system (G3 vs. G2) significantly predicted type 1 progression in the univariate model only. In the multivariate model, Ki67 was the only independent predictor of progression according to both definitions (HR = 5.25, p = 0.002 and HR = 6.16, p = 0.03, respectively). Conclusions: High-grade Ta NMIBC as defined by the WHO 2004 grading system cannot be equated with high-risk NMIBC. The risk of progression to muscle-invasive disease (type 2) is low, more in keeping with an intermediate-risk category of NMIBC. The previous WHO 1973 subcategorization into G2 and G3 is of little help in the prediction of outcome. Ki67 is a strong independent predictor of progression worthy of consideration for a clinical setting. © 2013 S. Karger AG, Basel.

[776]

**TÍTULO / TITLE:** - DNA Methylation profiles as predictors of recurrence in non muscle invasive bladder cancer: an MS-MLPA approach.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Exp Clin Cancer Res. 2013 Nov 19;32(1):94.

●● Enlace al texto completo (gratis o de pago) [1186/1756-9966-32-94](#)

**AUTORES / AUTHORS:** - Casadio V; Molinari C; Calistri D; Tebaldi M; Gunelli R; Serra L; Falcini F; Zingaretti C; Silvestrini R; Amadori D; Zoli W

**RESUMEN / SUMMARY:** - BACKGROUND: Although non muscle invasive bladder cancer (NMIBC) generally has a good long-term prognosis, up to 80% of patients will nevertheless experience local recurrence after the primary tumor resection. The search for markers capable of accurately identifying patients at high risk of recurrence is ongoing. We retrospectively evaluated the methylation status of a panel of 23 tumor suppressor genes (TIMP3, APC, CDKN2A, MLH1, ATM, RARB, CDKN2B, HIC1, CHFR, BRCA1, CASP8, CDKN1B, PTEN, BRCA2, CD44, RASSF1, DAPK1, VHL, ESR1, TP73, IGSF4, GSTP1 and CDH13) in primary lesions to obtain information

about their role in predicting local recurrence in NMIBC. METHODS: Formaldehyde-fixed paraffin-embedded (FFPE) samples from 74 patients operated on for bladder cancer were analyzed by methylation-specific multiplex ligation-dependent probe amplification (MS-MLPA): 36 patients had relapsed and 38 were disease-free at the 5-year follow up. Methylation status was considered as a dichotomous variable and genes showing methylation  $\geq 20\%$  were defined as "positive". RESULTS: Methylation frequencies were higher in non recurring than recurring tumors. A statistically significant difference was observed for HIC1 (P = 0.03), GSTP1 (P = 0.02) and RASSF1 (P = 0.03). The combination of the three genes showed 78% sensitivity and 66% specificity in identifying recurrent patients, with an overall accuracy of 72%. CONCLUSIONS: Our preliminary data suggest a potential role of HIC1, GSTP1 and RASSF1 in predicting local recurrence in NMIBC. Such information could help clinicians to identify patients at high risk of recurrence who require close monitoring during follow up.

[777]

**TÍTULO / TITLE:** - Contrast enhancement in bladder tumors examined with CT urography using traditional scan phases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Radiol. 2013 Nov 25.

●● Enlace al texto completo (gratis o de pago) [1177/0284185113513762](#)

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**RESUMEN / SUMMARY:** - BACKGROUND: Bladder assessment in an early contrast-enhancing computed tomography urography (CTU) phase requires that bladder tumors be enhanced using contrast material. PURPOSE: To investigate the enhancement pattern in bladder tumors using a CTU protocol where the scan is enhancement triggered. MATERIAL AND METHODS: Fifty patients diagnosed with bladder cancer were examined during the unenhanced (UP), corticomedullary (CMP), and excretory phases (EP). Twenty-one patients, all aged 50 years or older, were also examined during the nephrographic phase (NP). A ROI placed in the aorta was used to start the scan during the CMP when the attenuation reached 200 Hounsfield units (HU). The NP and EP were started with a 40 s and 300 s delay, respectively, after the CMP was finished. Attenuation and size measurements were made in the axial plane. RESULTS: Mean contrast enhancement of bladder tumors was 37, 25, and 17 HU in the CMP, NP, and EP, respectively. The differences in contrast enhancement were significant across all three phases. Eighty-eight percent of patients showed the highest contrast enhancement in the CMP. In 96% of the cases, contrast enhancement  $>20$  HU was seen. The mean value of the shortest dimension of the bladder tumors was  $22 \pm 12$  mm. CONCLUSION: The contrast enhancement is significantly higher in the CMP than in the NP and EP, suggesting that the CMP is preferable when assessing the bladder in the early contrast enhancing phase.

[778]

**TÍTULO / TITLE:** - Perforation during TUR of bladder tumours influences the natural history of superficial bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1197-x](#)

**AUTORES / AUTHORS:** - Comploj E; Dechet CB; Mian M; Trenti E; Palermo S; Lodde M; Mian C; Ambrosini-Spaltro A; Horninger W; Pycha A

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**RESUMEN / SUMMARY:** - OBJECTIVES: Bladder perforation is the second most common complication during transurethral resection of bladder tumours. It is unknown whether perforation affects the natural history of the tumour through cell seeding. The aim of this study was to study the impact of perforation on the oncologic outcomes of bladder carcinoma. MATERIALS AND METHODS: Between 2003 and 2007, 926 consecutive patients underwent transurethral resection of bladder tumours at our institution; 327 cases were staged  $\geq$ pT2 and were treated immediately with cystectomy and/or multimodal therapy and therefore excluded from the study. An additional 34 cases without urothelial carcinoma were excluded. Of the remaining 565 patients with non-muscle invasive bladder cancer, 457 (80.8 %) were male and 108 (19.2 %) were female with a mean age of 69.5 years in men and 67.3 years in women. Thirty-seven patients (6.5 %) experienced bladder perforation at the time of tumour resection. This group of patients (Group 1) was compared to the remaining 528 patients (Group 2) who did not experience a bladder perforation. RESULTS: Patients with bladder wall perforation experienced a shorter disease-free survival in both univariate ( $p = 0.003$ ) and multivariate analyses ( $p = 0.006$ ). In addition, subsequent recurrences revealed stage progression of recurrent disease ( $p = 0.05$ ) and trended to a higher number of cystectomies in the perforated group of patients ( $p = 0.06$ ). Nevertheless, perforation did not appear to influence overall survival ( $p = 0.127$ ) or cancer-specific survival ( $p = 0.141$ ). CONCLUSION: The results indicate that bladder perforation during resection of superficial bladder tumours is burdened by a shortened disease-free survival and T-stage progression.

[779]

**TÍTULO / TITLE:** - The Management Of A Concomitant Renal Oncocytoma, Giant Coronary And Bilateral Common Iliac Artery Aneurysms.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Vasc Surg. 2013 Nov 4. pii: S0890-5096(13)00582-7. doi: 10.1016/j.avsg.2013.07.027.

●● Enlace al texto completo (gratis o de pago) [1016/j.avsg.2013.07.027](#)

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**RESUMEN / SUMMARY:** - We present the rare case of a 66-year-old Caucasian male patient presenting with intermittent left sided abdominal pain. He underwent a CT KUB where an incidental 45mm giant aneurysm of the left anterior descending coronary

artery was discovered along with 55mm right-sided and 62 mm left-sided common iliac artery aneurysms and a 100mm benign renal oncocytoma. He underwent on-pump coronary artery bypass grafting of the left anterior descending, left circumflex and right coronary arteries using internal mammary artery and saphenous vein grafts. He subsequently underwent simultaneous open left nephrectomy and bilateral common iliac aneurysm repair using a bifurcated tube graft. He made a full recovery post-operatively. Giant coronary artery aneurysms are rare. In the paediatric population, they are predominantly secondary to Kawasaki Disease. In adults, atheromatous disease is the leading cause. The co-existence of giant coronary artery aneurysms with extra-coronary artery aneurysms is extremely unusual. We propose that the identification of giant coronary artery aneurysms necessitates further imaging investigations to identify the presence of extra-coronary aneurysms. To our knowledge, this is the first description of such a case in the literature.

[780]

**TÍTULO / TITLE:** - PCA3 score of 20 could improve prostate cancer detection: Results obtained on 734 Italian individuals.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Chim Acta. 2013 Nov 20. pii: S0009-8981(13)00431-2. doi: 10.1016/j.cca.2013.10.022.

●● Enlace al texto completo (gratis o de pago) [1016/j.cca.2013.10.022](#)

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**RESUMEN / SUMMARY:** - BACKGROUND: The role of PCa3 score in the diagnostics of prostate cancer (PCa) is still under debate, mainly due to the lack of a univocal cut-off useful alone or within nomograms proposed by Urologists. Aim of present study is to compare different PCA3 score cut-off values (20, 25, 35 and 50) observed in 734 patients with suspected PCa who were monitored for about three years with single or multiple biopsies. METHODS: 734 patients who underwent first prostate biopsy for suspected PCa were enrolled. One month later the first biopsy result was obtained, both negative and positive PCa patients were investigated by means of PCA3 score, in order to establish risk of PCa presence on repeated biopsies. RESULTS: PCA3 score was significantly higher ( $p < 0.001$ ) in PCa patients to the PCa negative ones, while tPSA did not significantly vary. The best negative predictive value (NPV 97.5%) and sensitivity (95.4%) result were obtained when a PCA3 score of 20 was used. At cut-off value of 50, the 75% of patients resulted as false positive. CONCLUSIONS: PCA3 score of 20 could be safely introduced in the prostate cancer screening diagnostic flow chart, since it provides important information regarding the outcome of re-biopsy.

[781]

**TÍTULO / TITLE:** - Stimulatory effect of volatile urinary components from intact mice on the proliferative activity of splenic lymphoid tissue in irradiated animals.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Bull Exp Biol Med. 2013 Aug;155(5):689-91.

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**RESUMEN / SUMMARY:** - Immunohistochemical and morphometric analyses have demonstrated long-distance stimulatory effects of the natural volatile components of the urine of intact mice on the proliferation of splenic lymphocytes in mice exposed to a single total gamma-irradiation in a dose of 1 Gy. These results are in line with the data on stimulation of the humoral immune response to thymus-dependent antigen in irradiated mice exposed to urine specimens of intact animals.

[782]

**TÍTULO / TITLE:** - Chest X-ray in the follow-up of renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 6.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1176-2](http://1007/s00345-013-1176-2)

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**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the value of chest X-ray in the follow-up of surgically treated T1-3N0M0 renal cell carcinoma. METHODS: We performed retrospective analysis of patients that underwent surgical treatment of a localized renal cell carcinoma (T1-3N0M0) between January 1993 and July 2010. Data on frequency and results of performed chest X-rays were collected from patients' records. RESULTS: In 17.5 years, 249 patients with a T1-3N0M0 renal cell carcinoma underwent a radical or partial nephrectomy. In 221 patients, 823 chest X-rays were performed during a median follow-up of 3.3 years (range 0.5-17 years). In 19 patients, a pulmonary recurrence occurred, of which 10 were not detected by the regular follow-up. Of the 9 patients that were diagnosed with a pulmonary recurrence with a chest X-ray during follow-up, 7 were asymptomatic at the time of diagnosis, and the chest X-ray has led to the detection; 0.85 % of the performed chest X-rays (7/823) have led to the detection of asymptomatic lung metastases. CONCLUSIONS: Due to the low yield of chest X-ray for detection of asymptomatic pulmonary recurrences, it has very low clinical value in the follow-up after nephrectomy for T1-3N0M0 renal cell carcinoma.

[783]

**TÍTULO / TITLE:** - Comparison of prostate cancer volume measured by HistoScanning and final histopathological results.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Nov 24.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1211-3](http://1007/s00345-013-1211-3)

**AUTORES / AUTHORS:** - Schiffmann J; Fischer J; Tennstedt P; Beyer B; Bohm K; Michl U; Graefen M; Salomon G

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**RESUMEN / SUMMARY:** - PURPOSE: HistoScanning (HS) is an ultrasound-based tissue characterization technique with encouraging results in the detection of prostate cancer (PCa). The aim of this study was to evaluate the accuracy of total tumor volume measured by HS (TVHS) in patients with PCa. METHODS: In 148 patients with proven PCa, TVHS was measured prior to radical prostatectomy and compared with the total tumor volume in the final pathological report (TVP) using the rank-based spearman correlation test. Correlation was performed after stratification of the results by d'Amico risk categories, prostate volume, experience of HS examiner, distance of the ultrasound probe to the prostate ( $\leq 3.5$  and  $> 3.5$  mm) and quality of initial HS. In addition, a re-analysis of HS data was performed by a single examiner and the TVHS from the unmodified HS data was acquired. RESULTS: TVP was approximately twofold higher compared to TVHS. Overall, there was no significant correlation ( $r_s = -0.0083$ ,  $p = 0.9$ ) for the TVP and the TVHS. After adjusting for d'Amico risk categories, prostate volume, experience of examiner, distance of the ultrasound probe to the prostate and quality of initial HS, no significant correlation was found. After re-analyzing of all HS data by 1 examiner, the correlation remained not significant ( $r_s = 0.039$ ,  $p = 0.6$ ). CONCLUSIONS: TVHS and TVP did not correlate in this cohort of patients. We cannot recommend the use of HS at least for imaging of the total tumor volume at this time. The controversial findings for prostate HS should initiate more studies to clarify these discrepancies.

[784]

**TÍTULO / TITLE:** - Characteristics of modern Gleason 9/10 prostate adenocarcinoma: a single tertiary centre experience within the Republic of Ireland.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 16.

●● Enlace al texto completo (gratis o de pago) [1007/s00345-013-1184-2](#)

**AUTORES / AUTHORS:** - O'Kelly F; Elamin S; Cahill A; Aherne P; White J; Buckley J; O'Regan KN; Brady A; Power DG; O'Brien MF; Sweeney P; Mayer N; Kelly PJ

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**RESUMEN / SUMMARY:** - INTRODUCTION: The 2005 international society of urological pathology consensus statement on Gleason grading in prostate cancer revised Gleason scoring in clinical practice. The potential for grade migration with this refinement poses difficulties in interpreting historical series. We report the characteristics of a recent cohort of consecutive Gleason score 9 or 10 prostate cancers in our institution. The purpose of this study was to define the clinicopathologic variables and staging information for this high-risk population, and to identify whether traditional prostate staging techniques are adequate for this subcohort of men. MATERIALS AND METHODS: A computational review of our pathology database was performed. Between May 2010 and September 2012, 1,295 consecutive biopsies were undertaken, 168 of which were high-grade tumours (12.97 %). This group were divided into two cohorts of which 84 (12.05 %) had a highest reported Gleason score of 9 (N = 79) or 10 (N = 5) and 84 were reported as Gleason 8. All biopsies were double-reported by pathologists with a special interest in uropathology. RESULTS: Men

diagnosed with a Gleason pattern 5 tumour were statistically far more likely to have advanced disease on direct rectal examination of the prostate compared with Gleason sum 8 tumours ( $p < 0.001$ ) and a positive first-degree family history of prostate cancer ( $p < 0.001$ ). Overall, Gleason sum 9/10 prostate cancers were also found to be statistically more aggressive than Gleason sum 8 tumours on TRUS core biopsy analysis with significantly higher levels of perineural invasion ( $p < 0.0001$ ) and extracapsular extension ( $p = 0.001$ ) as well as a higher levels of tumour found within the core biopsy sample. Those men diagnosed with Gleason pattern 5 prostate cancer also had radiological indicators of increased tumour aggressiveness compared with Gleason sum 8 cancer with respect to bone ( $p = 0.0002$ ) and visceral ( $p = 0.044$ ) metastases at presentation. CONCLUSIONS: This series of Gleason score 9/10 prostate cancers serves to highlight the large disease burden, adverse pathologic features, and locally advanced nature of this aggressive subtype, which has previously been under-described in the literature, and differs from historical series in having a large high-grade cohort demonstrating high rates of metastatic disease. A history of prostate cancer amongst first-degree relatives was particularly prevalent in this population raising the issue of screening in a high-risk population. The high incidence of visceral metastatic disease at presentation supports upfront staging with CT thorax, abdomen, and pelvis in patients with Gleason 9 or 10 prostate cancers.

[785]

**TÍTULO / TITLE:** - Capsular incision in normal prostatic tissue during robot-assisted radical prostatectomy: a new concept or a waste of time?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - World J Urol. 2013 Oct 29.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00345-013-1199-8](#)

**AUTORES / AUTHORS:** - Koutlidis N; Duperron C; de la Vega MF; Mourey E; Michel F; Cormier L

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Hospital of Dijon, University Medical Center, 2 Bd Marechal de Lattre de Tassigny, 21000, Dijon, France, [nicolaskoutlidis@hotmail.com](mailto:nicolaskoutlidis@hotmail.com).

**RESUMEN / SUMMARY:** - PURPOSE: Because radical prostatectomy with robot-assisted surgery can lead to unwanted prostatic capsular incisions, capsular incision in normal prostatic tissue (CINPT) is not rare. To study the relationship between positive surgical margins (PSM) and CINPT after robot-assisted radical prostatectomy. METHODS: From September 2009 to January 2013, 203 consecutive robot-assisted prostatectomies were carried out by the same surgeon. A transperitoneal Montsouris technique was used for all cases, but modified to suit the use of the four-arm DaVinci device. The data were recorded prospectively in our database. Preoperative data were patient's age, body mass index, prostate-specific antigen level, prostate weight, percentage of positive biopsy, clinical stage, and Gleason score. Postoperative data were preservation of the bladder neck and neurovascular bundles (NVB), the presence of extended pelvic lymph-node dissection (ePLND), pathological stage, Gleason score, margin status, blood loss, and operative room times. The CINPT and no-CINPT groups were analysed and compared retrospectively. RESULTS: The CINPT rates were 23.2 versus 18.2 % for PSM. CINPT contrary to PSM seemed to be more frequent in low-risk prostate cancer. NVB preservation led to more CINPT ( $p = 0.01$ ). At the

multivariate analysis, only the absence of ePLND significantly affected the CINPT status ( $p = 0.03$ ) and the absence of CINPT positively affected the PSM rate ( $p = 0.03$ ). CONCLUSIONS: Capsular incision in normal prostatic tissue is not a predictive factor of PSM but reflected risk-taking during surgery especially when NVB preservation is indicated in low-risk prostate cancer. It can therefore only be considered a means to evaluate a surgical technique, but not a real predictor of PSM.

[786]

**TÍTULO / TITLE:** - Angiomyolipoma with minimal fat and non-clear cell renal cell carcinoma: differentiation on MDCT using classification and regression tree analysis-based algorithm.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Acta Radiol. 2013 Nov 20.

●● Enlace al texto completo (gratis o de pago) [1177/0284185113513887](https://doi.org/10.1177/0284185113513887)

**AUTORES / AUTHORS:** - Woo S; Cho JY; Kim SH; Kim SY

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Seoul National University College of Medicine, Seoul, Republic of Korea.

**RESUMEN / SUMMARY:** - BACKGROUND: Differentiation between angiomyolipoma with minimal fat (AMLmf) and non-clear cell renal cell carcinoma (nccRCC) may be difficult owing to lack of macroscopic fat in AMLmf. However, the differential points between AMLmf and nccRCC has not been well established in the literature. PURPOSE: To evaluate quantitative triphasic multidetector computed tomography (MDCT) features that differentiate between small AMLmf and nccRCC, and to integrate them to develop a simple and easy diagnostic algorithm. MATERIAL AND METHODS: This study was approved by the Institutional Review Board; informed consent was waived. Triphasic MDCT images of pathologically-proven AMLmfs ( $n = 24$ ) and nccRCCs ( $n = 55$ ) of 79 patients were retrospectively evaluated. Age, sex, size, long-to-short axis ratio (LSR), attenuation and enhancement degree in all phases, unenhanced tumor-kidney attenuation difference (UTKAD) in Hounsfield units (HU) were compared with Chi-square analysis, independent-samples t-test, and receiver-operating characteristic (ROC) curves. A criterion was formulated with classification and regression tree analysis (CART). Thereafter, CART-based algorithm was tested with additional interpretations from two radiologists. Intra- and inter-observer variability was analyzed with Bland-Altman analysis. RESULTS: LSR was greater in AMLmf than nccRCC ( $P < 0.001$ ). AMLmf showed higher attenuation (all phases), CMP enhancement, and wash-out than nccRCC ( $P \leq 0.001$ ). UTKAD was greater in AMLmf than nccRCC ( $P < 0.001$ ). ROC curve analysis yielded area under the curves of 0.936, 0.888, and 0.853 using UTKAD, unenhanced attenuation, and LSR. CART-based algorithm (UTKAD  $> 7.5$  HU, LSR  $> 1.23$ ) predicted AMLmf with sensitivity, specificity, PPV, and NPV of 87.5%, 96.4%, 91.3%, and 94.6%. Mean intra- and inter-observer difference was  $-0.1/0.03$  HU and  $-1.0/0.09$  HU for UTKAD/LSR, respectively. These interpretations changed the final diagnosis in 1.3% (1/79) and 5.1% (4/79) patients for radiologists 1 and 2. CONCLUSION: Triphasic MDCT was useful for differentiating AMLmf and nccRCC. CART-based algorithm using UTKAD  $> 7.5$  and LSR  $> 1.23$  was simple and accurate in predicting AMLmf.

[787]

**TÍTULO / TITLE:** - Evaluation of Split Renal Function Before and After Renal Arterial Embolization for Angiomyolipoma Using Absolute Ethanol.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cardiovasc Intervent Radiol. 2013 Nov 15.

●● Enlace al texto completo (gratis o de pago) [1007/s00270-013-0780-2](#)

**AUTORES / AUTHORS:** - Baba Y; Hayashi S; Ikeda S; Jinguji M; Nakajo M; Nakajo M

**INSTITUCIÓN / INSTITUTION:** - Department of Radiology, Graduate School of Medical and Dental Sciences, Kagoshima University, 8-35-1 Sakuragaoka, Kagoshima-shi, Kagoshima, 890-8520, Japan, [yasutaka@m3.kufm.kagoshima-u.ac.jp](mailto:yasutaka@m3.kufm.kagoshima-u.ac.jp).

**RESUMEN / SUMMARY:** - PURPOSE: Transcatheter arterial embolization (TAE) with absolute ethanol is widely accepted as a therapeutic procedure for renal angiomyolipoma (AML). We aim to evaluate the split renal function before and after AE for renal AML by using 99m-technetium (99mTc)-mercaptoacetyltriglycine 3 (MAG3) renography. METHODS: This study was approved by the Institutional Review Board. The study population comprised 11 renal AML patients (three males, eight females, age 55.1 +/- 13.8 years, AML in eight right and three left kidneys) who received unilateral renal TAE with absolute ethanol from April 2002 to January 2013. Blood renal function (i.e. serum creatinine and estimated glomerular filtration rate [eGFR] and split effective renal plasma flow [ERPF]) calculated on 99mTc-MAG3 renography was compared before and within 1 week after renal AE. Statistical analysis was calculated using Wilcoxon signed-ranked test. RESULTS: TAE for renal AML was technically successful in all patients. Serum creatinine and eGFR did not change before and after TAE. ERPF on the embolized kidney did not change before (127.3 +/- 60.8 ml/min) and after (127.6 +/- 47.4 ml/min) TAE ( $p = 0.9726$ ). ERPF on the nonembolized kidney showed a statistically significant increase before (152.5 +/- 46.8 ml/min) and within 1 week after (169.1 +/- 41.5 ml/min) TAE ( $p = 0.0093$  and  $p < 0.05$ , respectively). CONCLUSION: TAE for renal AML may not induce renal dysfunction on the embolized kidney and may immediately increase the renal blood flow of the nonembolized kidney.

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[788]

**TÍTULO / TITLE:** - Contrast enhanced ultrasonography prediction of cystic renal mass in comparison to histopathology.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Hemorheol Microcirc. 2013 Oct 28.

●● Enlace al texto completo (gratis o de pago) [3233/CH-131799](#)

**AUTORES / AUTHORS:** - Xu Y; Zhang S; Wei X; Pan Y; Hao J

**INSTITUCIÓN / INSTITUTION:** - Department of Diagnostic and Therapeutic Ultrasonography, Tianjin Medical University Cancer Institute and Hospital, National Clinical Research Center of Cancer, Key Laboratory of Cancer Prevention and Therapy, Tianjin, China.

**RESUMEN / SUMMARY:** - OBJECTIVES: To investigate the value of contrast-enhanced ultrasonography (CEUS) in histologic subtype prediction of cystic renal mass. METHODS: Eighty-seven cystic renal masses were scanned by CEUS, and the CEUS findings and pathological results were recorded. The CEUS features of different histologic subtype cystic renal masses were analyzed and compared. RESULTS: Among 87 renal cystic masses, 63 masses were malignant and 24 were benign. CEUS

characteristics of benign and malignant cystic renal masses were significantly different. Different subtype cystic renal cell carcinoma had different CEUS imaging appearances. Multilocular cystic renal cell carcinomas (MCRCC) were more likely to be of Bosniak classification III. Clear cell renal cell carcinomas (CCRCC) were significantly more likely to appear as a multilocular cystic pattern combined with Bosniak classification IV. Cystic papillary renal cell carcinomas (PRCC) were more likely to appear as an unilocular cystic pattern combined with Bosniak classification IV. MCRCC combined with benign cystic masses were more likely to be classified as Bosniak classification III, which was significantly different from CCRCCs and PRCCs. CONCLUSIONS: CEUS can be helpful in differentiating MCRCCs and benign cystic masses from CCRCCs and PRCCs. CEUS might be useful in histologic subtype prediction and clinical management of cystic renal mass.

[789]

**TÍTULO / TITLE:** - The osteoprotegerin/tumor necrosis factor related apoptosis-inducing ligand axis in the kidney.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Opin Nephrol Hypertens. 2013 Nov 16.

●● Enlace al texto completo (gratis o de pago)

[1097/01.mnh.0000437611.42417.7a](http://1097/01.mnh.0000437611.42417.7a)

**AUTORES / AUTHORS:** - Candido R

**INSTITUCIÓN / INSTITUTION:** - Diabetes Centre, A.S.S. 1 Triestina, Trieste, Italy.

**RESUMEN / SUMMARY:** - PURPOSE OF REVIEW: Tumor necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) is a cytokine belonging to the TNF superfamily. TRAIL may modulate cell survival and proliferation through interaction with two different receptors, TRAIL-R1 and TRAIL-R2. The actions of TRAIL are regulated by three decoy receptors, TRAIL-R3, TRAIL-R4 and osteoprotegerin (OPG). There is evidence that both TRAIL and OPG are expressed by renal cells. The OPG/TRAIL axis has been recently linked to the pathogenesis of renal damage and, in particular, diabetic nephropathy. RECENT FINDINGS: In patients with kidney diseases, serum TRAIL and OPG levels are increased in parallel and are significantly associated with each other. In diabetic nephropathy, the renal expression of TRAIL and OPG is elevated, and in tubular cells proinflammatory cytokines enhance TRAIL expression. Additionally, a high-glucose microenvironment sensitizes tubular cells to apoptosis induced by TRAIL, whereas OPG counteracts the actions of TRAIL in cultured cells. SUMMARY: It seems that the expression and levels of TRAIL and OPG at serum and kidney levels are crucial for the pathogenesis of kidney diseases, and in particular diabetic nephropathy. Although further studies are necessary to clarify the exact role of the OPG/TRAIL axis in the kidney, this system seems to hold promise to provide therapeutic approaches for the management of renal damage. VIDEO ABSTRACT AVAILABLE: See the Video Supplementary Digital Content 1 (<http://links.lww.com/CONH/A5>).

[790]

**TÍTULO / TITLE:** - Can we improve the definition of high-risk, hormone naive, non-metastatic prostate cancer?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Sep 20. doi: 10.1111/bju.12469.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12469](#)

**AUTORES / AUTHORS:** - Tombal B; Alcaraz A; James N; Valdagni R; Irani J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Cliniques universitaires Saint-Luc, Brussels, Belgium.

**RESUMEN / SUMMARY:** - OBJECTIVE: To identify criteria beyond TMN, PSA and Gleason score-based standard classifications to enhance the stratification of non-metastatic high-risk prostate cancer. METHODS: Detailed searches of the literature were performed using PubMed. The authors reviewed the literature and used a modified Delphi approach to identify relevant approaches to enhance standard classifications. RESULTS: Specific criteria for high-risk prostate cancer vary across guidelines and clinical trials, reflecting the differing perspectives concerning the definition of risk between different specialties within the urology/radiation oncology community. In addition to the present classifications, evidence exists that the measure of cancer volume can provide additional prognostic value. More accurate imaging, especially multiparametric magnetic resonance imaging can also provide information concerning staging and cancer volume, and thus may assist in the identification of patients with high-risk prostate cancer. CONCLUSION: A refined definition of non-metastatic high-risk prostate cancer is proposed. Within this high-risk cohort, patients with multiple high-risk criteria are especially at risk of prostate cancer-specific mortality.

[791]

**TÍTULO / TITLE:** - Efficacy of Robot-assisted Radical Cystectomy in Advanced Bladder Cancer: Results from the International Radical Cystectomy Consortium (IRCC).

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Nov 13. doi: 10.1111/bju.12569.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12569](#)

**AUTORES / AUTHORS:** - Al-Daghmin A; Kauffman EC; Shi Y; Badani K; Balbay MD; Canda E; Dasgupta P; Ghavamian R; Grubb R 3rd; Hemal A; Kaouk J; Kibel AS; Maatman T; Menon M; Mottrie A; Nepple K; Pattaras JG; Peabody JO; Poulakis V; Pruthi R; Redorta JP; Rha KH; Richstone L; Schanne F; Scherr DS; Siemer S; Stockle M; Wallen EM; Weizer A; Wiklund P; Wilson T; Wilding G; Woods M; Guru KA

**INSTITUCIÓN / INSTITUTION:** - Roswell Park Cancer Institute, Buffalo, NY.

**RESUMEN / SUMMARY:** - OBJECTIVES: To characterize the surgical feasibility and outcomes of robot-assisted radical cystectomy (RARC) for pathologic T4 bladder cancer. SUBJECTS/PATIENTS: Retrospective evaluation of a prospectively maintained IRCC database was conducted for 1118 patients who underwent RARC between 2003 and 2012. We dichotomized patients based on pathologic stage ( $\leq$ pT3 versus pT4) and evaluated demographic, operative and pathologic variables in relation to morbidity and mortality. RESULTS: Total of 1000  $\leq$ pT3 and 118 pT4 patients were evaluated. pT4 patients were on average older than  $\leq$ pT3 patients ( $p=0.001$ ). Median operative time and blood loss were 386 min, and 350 cc vs. 396 min and 350 cc for p T4 and  $\leq$  p T3, respectively. Complication rate was similar (54% vs. 58%;  $P = 0.64$ ) among  $\leq$ pT3 and pT4 patients, respectively. The overall 30 and 90-day mortality rate was 0.4% and 1.8% versus 4.2% and 8.5% for  $\leq$ pT3 versus pT4 patients ( $P = <0.001$ ), respectively. Body mass index (BMI), American Society of

Anesthesiology score (ASA), length of hospital stay (LOS) >10 days, and 90-day readmission were significantly associated with complications in pT4 patients. Meanwhile, BMI, LOS >10 days, grade 3-5 complications, 90-day readmission, smoking, previous abdominal surgery and neoadjuvant chemotherapy were significantly associated with mortality in pT4 patients. On multivariate analysis, BMI was an independent predictor of complications in pT4 patients, but not for mortality. CONCLUSIONS: RARC for pT4 bladder cancer is surgically feasible but entails significant morbidity and mortality. BMI was independent predictor of complications in pT4 patients.

[792]

**TÍTULO / TITLE:** - Effect of miR-29b-1\* and miR-29c knockdown on cell growth of the bladder cancer cell line T24.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Int Med Res. 2013 Dec;41(6):1803-10. doi: 10.1177/0300060513505266.

●● Enlace al texto completo (gratis o de pago) [1177/0300060513505266](#)

**AUTORES / AUTHORS:** - Xu F; Zhang Q; Cheng W; Zhang Z; Wang J; Ge J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Jinling Hospital, School of Medicine, Nanjing University, Nanjing, Jiangsu, China.

**RESUMEN / SUMMARY:** - OBJECTIVE: To investigate the role of the microRNAs miR-29b-1-5p (miR-29b-1\*) and miR-29c in bladder urothelial cancer (BUC). METHODS: Levels of miR-29b-1\* and miR-29c in normal urothelial cells (HU609) and BUC cells (T24) were determined via quantitative real-time reverse transcription-polymerase chain reaction. T24 cells were transfected with small interfering RNA targeting miR-29b-1\* or miR-29c, and cell growth was assessed using 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) assay. The predicted targets and oncogenic pathways of these microRNAs were determined using bioinformatics analysis. RESULTS: MiR29b-1\* and miR-29c levels were higher in T24 cells than normal urothelial cells. Knockdown of miR-29b-1\* or miR-29c suppressed T24 cell growth. Bioinformatic analysis showed that miR-29b-1\* and miR-29c co-regulated a subset of putative target genes, about 10% of which have been experimentally validated. CONCLUSION: Both miR-29b-1\* and miR-29c regulate cell growth in BUC. The targets of miR-29b-1\* and miR-29c may be functionally associated with proliferation, cell cycle and apoptosis.

[793]

**TÍTULO / TITLE:** - Recent insights into NF-kappaB signalling pathways and the link between inflammation and prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - BJU Int. 2013 Oct 8. doi: 10.1111/bju.12488.

●● Enlace al texto completo (gratis o de pago) [1111/bju.12488](#)

**AUTORES / AUTHORS:** - Nguyen DP; Li J; Yadav SS; Tewari AK

**INSTITUCIÓN / INSTITUTION:** - Center for Prostate Cancer Research and Clinical Care and LeFrak Center of Robotic Surgery, Department of Urology, Weill Cornell Medical College-New York Presbyterian Hospital, New York, NY, USA; Laboratory of Urological

Oncology, Department of Urology, Weill Cornell Medical College-New York Presbyterian Hospital, New York, NY, USA; Department of Urology, University of Berne, Inselspital, Berne, Switzerland.

**RESUMEN / SUMMARY:** - Inflammation is involved in regulation of cellular events in prostate carcinogenesis through control of the tumour microenvironment. A variety of bone marrow-derived cells, including CD4+ lymphocytes, macrophages and myeloid-derived suppressor cells, are integral components of the tumour microenvironment. Upon activation by inflammatory cytokines, NF-kappaB complexes are capable of promoting tumour cell survival through anti-apoptotic signalling in prostate cancer. Positive feedback loops are able to maintain NF-kappaB activation. NF-kappaB activation is also associated with the metastatic phenotype and prostate cancer progression to castration-resistant prostate cancer (CRPC). A novel role for inhibitor of NF-kappaB (IkappaB) kinase (IKK)-alpha in NF-kappaB-independent prostate cancer progression to metastasis and CRPC has recently been uncovered, providing a new mechanistic link between inflammation and prostate cancer. Expansion of prostate cancer progenitors by IKK-alpha may be involved in this process. In this review, we offer the latest evidence regarding the role of the NF-kappaB pathway in prostate cancer and discuss therapeutic attempts to target the NF-kappaB pathways. We point out the need to further dissect inflammatory pathways in prostate cancer in order to develop appropriate preventive measures and design novel therapeutic strategies.

[794]

**TÍTULO / TITLE:** - Prostate cancer and the increasing role of active surveillance.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Postgrad Med. 2013 Sep;125(5):109-16. doi: 10.3810/pgm.2013.09.2705.

●● [Enlace al texto completo \(gratis o de pago\) 3810/pgm.2013.09.2705](#)

**AUTORES / AUTHORS:** - Alonzo DG; Mure AL; Soloway MS

**INSTITUCIÓN / INSTITUTION:** - The University of Miami Miller School of Medicine, Department of Urology, Miami, FL.

**RESUMEN / SUMMARY:** - Prostate cancer (PC) is the most often diagnosed non-skin cancer and the second leading cause of cancer-related death among men in the United States. As a result, for many years the American Urological Association (AUA) and the American Cancer Society have issued statements recommending screening for PC, resulting in its widespread implementation in the United States. Recently, the United States Preventative Services Task Force gave PC screening a recommendation of D, that is, against PC screening for all men. The AUA countered this recommendation, stating that since the development of PC screening using prostate-specific antigen, a reduction in PC-specific mortality has been seen, and that the risk reduction occurred in a setting in which many of the patients were not aggressively treated for prostate cancer. Active surveillance may be described as a method to potentially delay or obviate the need for treatment in men with clinically insignificant PC or PC thought to be at low risk for progression. Studies have shown no significant difference in outcome or pathology between men with low risk PC who receive treatment at the point of progression and those undergoing immediate treatment. Ongoing studies are evaluating the efficacy and utility of active surveillance for low-risk PC. Interim results of these studies have shown that approximately 30% of patients progress on active

surveillance. However, “progression” does not necessarily mean treatment failure; rarely do patients develop locally advanced or metastatic disease. Active surveillance has also been shown to be cost-effective when compared with immediate treatment for PC. Longer follow-up may continue to show an increased benefit of active surveillance as a reasonable initial approach to the management of men with low-risk, clinically localized PC.

[795]

**TÍTULO / TITLE:** - Factors Associated with Time-to-Treatment of Prostate Cancer in Florida.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Health Care Poor Underserved. 2013 Nov;24(4 Suppl):132-46. doi: 10.1353/hpu.2014.0005.

●● Enlace al texto completo (gratis o de pago) [1353/hpu.2014.0005](#)

**AUTORES / AUTHORS:** - Xiao H; Tan F; Goovaerts P; Adunlin G; Ali A; Huang Y; Gwede CK

[796]

**TÍTULO / TITLE:** - Late multiple pleural metastases of renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Intern Med. 2013;52(21):2475.

**AUTORES / AUTHORS:** - Takaiwa T; Kunimasa K; Hotta M; Ishida T

**INSTITUCIÓN / INSTITUTION:** - Department of Respiratory Medicine, Kurashiki Central Hospital, Japan.

[797]

**TÍTULO / TITLE:** - Left atrial metastasis of renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Intern Med. 2013;52(22):2591-2.

**AUTORES / AUTHORS:** - Tabakci MM; Acar G; Kalkan ME; Ozkok A

**INSTITUCIÓN / INSTITUTION:** - Department of Cardiology, Kartal Kosuyolu High Specialty Education and Research Hospital, Turkey.

[798]

**TÍTULO / TITLE:** - Associations of obesity, physical activity and diet with benign prostatic hyperplasia and lower urinary tract symptoms.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Opin Urol. 2014 Jan;24(1):10-4. doi: 10.1097/MOU.0000000000000004.

●● Enlace al texto completo (gratis o de pago)

[1097/MOU.0000000000000004](#)

**AUTORES / AUTHORS:** - Raheem OA; Parsons JK

**INSTITUCIÓN / INSTITUTION:** - aDepartment of Urology, UC San Diego Health System, San Diego bDivision of Urologic Oncology, UC San Diego Moores Cancer Center, La

Jolla cSection of Surgery, VA San Diego Healthcare System, San Diego, California, USA.

**RESUMEN / SUMMARY:** - PURPOSE OF REVIEW: Epidemiological and clinical data indicate that modifiable lifestyle factors - including obesity, physical activity, and diet - significantly influence the risks of symptomatic benign prostatic hyperplasia (BPH) and lower urinary tract symptoms (LUTS). RECENT FINDINGS: Modifiable factors associated with significantly increased risks of symptomatic BPH and LUTS include obesity and consumption of meat and fat. Factors associated with decreased risks include increased physical activity, vegetable consumption, and moderate alcohol intake. Obesity potentially attenuates the clinical efficacy of 5alpha-reductase inhibitors (5-ARI). Randomized clinical trials of lifestyle alterations - such as weight loss, exercise, and diet - for the prevention or treatment of BPH and LUTS have yet to be performed. SUMMARY: Obesity, physical activity, and diet substantially alter the risks of symptomatic BPH and LUTS. 5-ARIs exhibit diminished efficacy in obese patients. Although clinical trials of lifestyle modifications have yet to be undertaken, it is reasonable to promote weight loss, exercise, and healthy diet within the context of standard treatments for symptomatic BPH and LUTS.

[799]

**TÍTULO / TITLE:** - Neonatal urethral polyps associated with Beckwith-Wiedemann syndrome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Pediatr Int.* 2013 Oct;55(5):658-61. doi: 10.1111/ped.12096.

●● Enlace al texto completo (gratis o de pago) [1111/ped.12096](#)

**AUTORES / AUTHORS:** - Anzai Y; Koshida S; Yanagi T; Johnin K; Takeuchi Y

**INSTITUCIÓN / INSTITUTION:** - Department of Pediatrics, Shiga University of Medical Science, Shiga, Japan.

**RESUMEN / SUMMARY:** - We report the first case of Beckwith-Wiedemann syndrome without urinary obstruction, but with a congenital urethral polyp as a tumor protruding from the external urinary meatus. The present case suggests a possible relation between Beckwith-Wiedemann and the onset of fibroepithelial polyps in the reno-urinary system during the neonatal period.

[800]

**TÍTULO / TITLE:** - Chemoprevention of Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Annu Rev Med.* 2013 Nov 4.

●● Enlace al texto completo (gratis o de pago) [1146/annurev-med-121211-091759](#)

**AUTORES / AUTHORS:** - Vemana G; Hamilton RJ; Andriole GL; Freedland SJ

**INSTITUCIÓN / INSTITUTION:** - Division of Urologic Surgery, Washington University School of Medicine in St. Louis, Siteman Cancer Center, St. Louis, Missouri; email: [vemanag@wudosis.wustl.edu](mailto:vemanag@wudosis.wustl.edu).

**RESUMEN / SUMMARY:** - Large prospective randomized trials, such as the Prostate Cancer Prevention Trial (PCPT), Reduction by Dutasteride of Prostate Cancer Events (REDUCE) trial, and the Selenium and Vitamin E Cancer Prevention Trial (SELECT),

have provided practitioners with considerable data regarding methods of treatment and prevention of prostate cancer. The best-studied medications for prevention are 5 alpha-reductase inhibitors. Their efficacy and side effects are well characterized. Other medications, dietary nutrients, and supplements have not been as well studied and generally do not demonstrate efficacy for disease prevention with an acceptable level of evidence. Expected final online publication date for the Annual Review of Medicine Volume 65 is January 14, 2014. Please see <http://www.annualreviews.org/catalog/pubdates.aspx> for revised estimates.

[801]

**TÍTULO / TITLE:** - Cancer Talk on Twitter: Community Structure and Information Sources in Breast and Prostate Cancer Social Networks.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Health Commun. 2013 Oct 10.

●● Enlace al texto completo (gratis o de pago) [1080/10810730.2013.811321](https://doi.org/10.1080/10810730.2013.811321)

**AUTORES / AUTHORS:** - Himelboim I; Han JY

**INSTITUCIÓN / INSTITUTION:** - a Department of Telecommunications, Henry W. Grady College of Journalism and Mass Communication , University of Georgia , Athens , Georgia , USA.

**RESUMEN / SUMMARY:** - This study suggests taking a social networks theoretical approach to predict and explain patterns of information exchange among Twitter prostate and breast cancer communities. The authors collected profiles and following relationship data about users who posted messages about either cancer over 1 composite week. Using social network analysis, the authors identified the main clusters of interconnected users and their most followed hubs (i.e., information sources sought). Findings suggest that users who populated the persistent-across-time core cancer communities created dense clusters, an indication of taking advantage of the technology to form relationships with one another in ways that traditional one-to-many communication technologies cannot support. The major information sources sought were very specific to the community health interest and were grassroots oriented (e.g., a blog about prostate cancer treatments). Accounts associated with health organizations and news media, despite their focus on health, did not play a role in these core health communities. Methodological and practical implications for researchers and health campaigners are discussed.

[802]

**TÍTULO / TITLE:** - Supine lithotomy versus prone position in minimally invasive percutaneous nephrolithotomy for upper urinary tract calculi.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013;91(3):320-5. doi: 10.1159/000351337. Epub 2013 Jul 9.

●● Enlace al texto completo (gratis o de pago) [1159/000351337](https://doi.org/10.1159/000351337)

**AUTORES / AUTHORS:** - Zhan HL; Li ZC; Zhou XF; Yang F; Huang JF; Lu MH

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Third Affiliated Hospital of Sun Yat-Sen University, Guangzhou, PR China.

**RESUMEN / SUMMARY:** - OBJECTIVE: To compare operative time, safety and effectiveness of minimally invasive percutaneous nephrolithotomy (MPCNL) in the supine lithotomy versus prone position. METHODS: Between January 2008 and December 2010, a total of 109 consecutive patients with upper urinary tract calculi were enrolled and randomly divided into group A (53 patients, supine lithotomy position) and group B (56 patients, prone position). The MPCNL procedures were performed under the guidance of real-time grayscale ultrasound system. The preoperative characteristics, intraoperative and postoperative parameters were analyzed and compared. RESULTS: All patients were successfully operated. There was no significant difference between the two groups in stone-free rate (group A 90.1 vs. group B 87.5%,  $p = 0.45$ ), mean blood loss, number of access tracts, calyx puncture, mean hospital stay (group A 6 +/- 1.1 vs. group B 6 +/- 1.5 days,  $p = 0.38$ ) and complications. But the operative time was significantly shortened in supine lithotomy position (group A 56 +/- 15 vs. group B 86 +/- 23 min,  $p < 0.001$ ). CONCLUSIONS: The effectiveness and safety of the supine lithotomy position for MPCNL were similar to the prone position. However, the supine lithotomy position has an important advantage of reducing the operative time. The supine lithotomy position could be a good choice to perform MPCNL.

[803]

**TÍTULO / TITLE:** - Con A conjugated to Europium(III) cryptate as a new histological tool for prostate cancer investigation using confocal microscopy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biotech Histochem. 2013 Oct 28.

●● [Enlace al texto completo \(gratis o de pago\) 3109/10520295.2013.846479](#)

**AUTORES / AUTHORS:** - Rego M; Silva L; Medeiros J; Figueiredo R; Alves-Junior S; Beltrao E

**INSTITUCIÓN / INSTITUTION:** - Keizo Asami Immunopathology Laboratory, University Federal of Pernambuco.

**RESUMEN / SUMMARY:** - Lectins are carbohydrate recognition proteins that can be used as probes to reveal the glycosylation state of cells. They frequently have been used for diagnostic and prognostic cancer studies. For fluorescence based analysis, lectins commonly are conjugated to fluorescein isothiocyanate (Con A-FITC); however, this molecule loses its fluorescence quickly. We conjugated Europium cryptate to Con A (Con A-cryp-Eu) for use as a histochemical luminescent probe to recognize glucose/mannose residues in benign prostatic hyperplasia and prostatic carcinoma tissues, and used confocal microscopy instead of commercial Con A-FITC. Tissues were treated with Evans blue to suppress intrinsic tissue fluorescence before incubation with Con A-cryp-Eu or Con A-FITC. Con A-cryp-Eu exhibited hemagglutinating activity. Con A-cryp-Eu showed the same binding pattern as Con A-FITC in prostate stroma and gland cells. Staining was strong in benign prostate hyperplasia and prostate carcinoma tissues. Con A-cryp-Eu probe stained glucose/mannose residues in prostatic carcinoma more intensely than Con A-FITC. Furthermore, staining with Con A-cryp-Eu showed greater fluorescence intensity than Con A-FITC and the emission of Con A-cryp-Eu was more stable than the Con A-FITC for seven days under the same storage conditions. Maintenance of the luminescent

properties and the binding pattern of Con A-cryp-Eu favor its use as an auxiliary histochemistry probe for prostatic tissue studies.

[804]

**TÍTULO / TITLE:** - Metastases to the thyroid gland from renal cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tumori. 2013 May-Jun;99(3):107e-10e. doi: 10.1700/1334.14816.

●● Enlace al texto completo (gratis o de pago) [1700/1334.14816](#)

**AUTORES / AUTHORS:** - Cesaretti M; Trotta M; Varaldo E; Ansaldo G; Leale I; Borgonovo G

**RESUMEN / SUMMARY:** - Aims and background. Metastases to the thyroid gland from renal cancer pose a challenge to physicians, due in part to the rarity of the phenomenon, the prolonged time interval between removal of the primary renal cancer and the appearance of metastases, the difficulty in diagnosis, and the uncertainty regarding long-term prognosis. We report our experience with diagnosis and management of patients affected by thyroid metastases from renal clear cell carcinoma. Study design. We report herein three clinical cases of thyroid metastases from renal clear cell carcinoma. We also present a review of the literature and examine common features of clinical presentation and management recommendations. Results. Over the past 17 years, 918 patients underwent surgery for thyroid cancer in our institution. Histological examination demonstrated a thyroid secondary malignancy from kidney cancer in 3 cases. Two patients underwent total thyroidectomy, whereas in the third patient a palliative right lobectomy with homolateral latero-cervical lymphadenectomy was performed. At a 5-year follow-up, only one patient survived and was disease-free. Conclusions. Thyroid metastases from renal clear cell carcinoma are a rare occurrence but should be taken into consideration in the differential diagnosis of a thyroid nodule. Preoperative diagnosis is often difficult. Nevertheless, an extensive diagnostic workup is recommended because the subsequent therapy must be tailored on the basis of the local extension of metastases. Surgical treatment of solitary thyroid metastases is recommended. However, patients with disseminated disease have a poor prognosis, and palliative care is the indicated recommendation. In these patients and in surgically untreatable patients, prolonged survival may be achieved by adjuvant medical therapy.

[805]

**TÍTULO / TITLE:** - Renal cell carcinoma metastases to gallbladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann R Coll Surg Engl. 2013 Nov;95(8):136-8. doi: 10.1308/003588413X13629960046679.

●● Enlace al texto completo (gratis o de pago)

[1308/003588413X13629960046679](#)

**AUTORES / AUTHORS:** - McWhirter D; den Dulk M; Terlizzo M; Malik HZ; Fenwick SW; Poston GJ

**INSTITUCIÓN / INSTITUTION:** - Department of Liver Surgery, University Hospital Aintree, Longmoor Lane, Liverpool L9 7AL, UK. [derek.mcwhirter@liverpool.ac.uk](mailto:derek.mcwhirter@liverpool.ac.uk).

**RESUMEN / SUMMARY:** - A 74-year old man underwent a radical cholecystectomy for presumed gallbladder cancer. The histology of the resected specimen in fact revealed the lesion to be metastatic renal cell carcinoma from his resected right nephrectomy performed 14 years previously.

[806]

**TÍTULO / TITLE:** - Ubiquitin-proteasome pathway and prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Onkologie. 2013;36(10):592-6. doi: 10.1159/000355166. Epub 2013 Sep 16.

●● Enlace al texto completo (gratis o de pago) [1159/000355166](#)

**AUTORES / AUTHORS:** - Chen FZ; Zhao XK

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The Second Xiangya Hospital of Central South University, Changsha, Hunan, PR China.

**RESUMEN / SUMMARY:** - Prostate cancer is one of the most common cancers in men. Various signaling pathways and proteins are involved in prostate carcinogenesis. Ubiquitination and deubiquitination of the related proteins contribute to the development of prostate cancer in various ways. The ubiquitin-proteasome (UPS) system is a common cellular process for protein degradation in eukaryotes. In this article we review recent advances related to the involvement of the UPS pathway in prostate cancer. The UPS pathway plays an important role in the regulation of cellular proteins with respect to cell cycle control, transcription, apoptosis, cell adhesion, angiogenesis, and tumor growth. It is involved in prostate cancer in various ways by modulating prostate cancer-related genes/proteins such as androgen receptor, cyclin-dependent kinase inhibitor P27, cyclin D1, and PTEN. Some ubiquitin-like modifier proteins have also been found to be associated with prostate cancer. The UPS pathway represents a potential therapeutic target for prostate cancer, and proteasome inhibitors represent a class of chemotherapeutic agents that inhibit tumor growth. The UPS pathway is related to prostate cancer in different ways. More research on that link is needed, as targeting the UPS pathway has led to some success in prostate cancer treatment.

[807]

**TÍTULO / TITLE:** - What's truly minimally invasive in benign prostatic hyperplasia surgery?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Opin Urol. 2014 Jan;24(1):36-41. doi: 10.1097/MOU.0000000000000006.

●● Enlace al texto completo (gratis o de pago)

[1097/MOU.0000000000000006](#)

**AUTORES / AUTHORS:** - Chung A; Woo HH

**INSTITUCIÓN / INSTITUTION:** - Sydney Adventist Hospital Clinical School, University of Sydney, Sydney, New South Wales, Australia.

**RESUMEN / SUMMARY:** - PURPOSE OF REVIEW: There continues to be a strong interest in the novel minimally invasive therapies for lower urinary tract symptoms due to benign prostatic hyperplasia (BPH). There has been an emergence of new

approaches, particularly with mechanical approaches such as the Urolift and new agents suitable for intraprostatic injection. Our purpose is to review the recent literature regarding the safety and efficacy of these therapies, and introduce a number of promising experimental therapies. RECENT FINDINGS: The Urolift device has shown safety and efficacy for BPH treatment in phase III clinical trials, with the advantage of a local anaesthetic outpatient procedure, no catheter, and no sexual dysfunction. Intraprostatic injection of botulinum toxin or ethanol has provided mixed results and need further well designed studies. NX-1207 and PRX302 are newer injectable agents under clinical trial. Several novel therapies such as Rezum, Histotripsy, and Aquablation have no published efficacy and safety data available. SUMMARY: Urolift appears to be a well tolerated and effective minimally invasive treatment for lower urinary tract symptoms due to BPH in men who wish to preserve sexual function or who are not suitable for invasive surgery. Further studies will confirm the currently mixed results regarding intraprostatic botulinum toxin or ethanol injections. Rezum, Histotripsy, and Aquablation are experimental treatments under investigation.

[808]

**TÍTULO / TITLE:** - Potential False-Positive Meckel Scan Due to Displaced Kidney Caused by Recurrent Retroperitoneal Teratoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago)

[1097/RLU.0000000000000264](https://doi.org/10.1097/RLU.0000000000000264)

**AUTORES / AUTHORS:** - Su TP; Cheng NM; Chuang HC; Chen CC; Lin C

**INSTITUCIÓN / INSTITUTION:** - From the Departments of \*Nuclear Medicine and Molecular Imaging Center; daggerAnatomic Pathology; and double daggerMedical Imaging and Intervention, Chang Gung Memorial Hospital, Chang Gung University, College of Medicine, Taoyuan, Taiwan.

**RESUMEN / SUMMARY:** - We report the findings of a Meckel scan in a 19-year-old patient treated for retroperitoneal teratoma with intermittent tarry stool for 1 month. Two focal stases of radioactivity in the right upper quadrant of the abdomen were noted. SPECT/CT for localization revealed that these 2 foci were within the displaced right kidney along with an adjacent bulky retroperitoneal mass. The patient subsequently underwent surgery, and histopathological studies confirmed recurrent teratoma. Two foci of increased radioactivity instead of 1 may have provided hints for the physiological characteristics of such lesions.

[809]

**TÍTULO / TITLE:** - Osteomalacia-inducing renal clear cell carcinoma uncovered by 99mTc-Hydrazinonicotinyl-Tyr3-octreotide (99mTc-HYNIC-TOC) scintigraphy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Nov;38(11):922-4. doi: 10.1097/RLU.0b013e3182a20ded.

●● Enlace al texto completo (gratis o de pago)

[1097/RLU.0b013e3182a20ded](https://doi.org/10.1097/RLU.0b013e3182a20ded)

**AUTORES / AUTHORS:** - Jin X; Jing H; Li F; Zhuang H

**INSTITUCIÓN / INSTITUTION:** - From the \*Department of Nuclear Medicine, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China; and daggerDepartment of Radiology, The Children's Hospital of Philadelphia, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA.

**RESUMEN / SUMMARY:** - Most osteomalacia-causing tumors are small, benign mesenchymal neoplasms, which are commonly located in the extremities or craniofacial regions. An 18-year-old male patient with suspicion of tumor-induced osteomalacia underwent (99m)Tc-HYNIC-TOC scintigraphy to search potential culprit tumor. The images showed a large activity in the region of the left kidney. The lesion was resected and a clear cell renal cell carcinoma was found. One year after the left nephrectomy, the patient was tumor-free without symptoms of osteomalacia.

[810]

**TÍTULO / TITLE:** - Organized Urachal Abscess Mimicking Urachal Carcinoma on FDG PET/CT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Nucl Med. 2013 Nov 7.

- Enlace al texto completo (gratis o de pago)

[1097/RLU.0b013e31827a263e](#)

**AUTORES / AUTHORS:** - Dong A; Zuo C; Wang Y; Lu J; Zhu H

**INSTITUCIÓN / INSTITUTION:** - From the Departments of \*Nuclear Medicine, daggerPathology, and double daggerRadiology, Changhai Hospital; and section signDepartment of Radiology, 85 Hospital, Shanghai, China.

**RESUMEN / SUMMARY:** - Urachal inflammation is rarely seen in adults. Two patients with suspected abdominal tumor underwent FDG PET/CT. One patient showed an irregular hypermetabolic mass anterosuperior to the bladder. The other patient showed a thick-walled cystic mass with strong FDG uptake extending from the bladder dome to the anterior abdominal wall. Urachal carcinomas were suspected based on imaging findings. Both patients underwent complete resection of the masses. However, both masses were organized urachal abscesses confirmed by pathological examination. These two cases highlight that differentiation between organized urachal abscess and carcinoma is difficult on the basis of imaging.

[811]

**TÍTULO / TITLE:** - Complete Response of Primary Bladder Adenocarcinoma with the FOLFOX4 Regimen.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 21.

- Enlace al texto completo (gratis o de pago) [1159/000354332](#)

**AUTORES / AUTHORS:** - Tatli AM; Uysal M; Goksu SS; Gunduz S; Arslan D; Ozdogan M

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology, Faculty of Medicine, Akdeniz University, Antalya, Turkey.

**RESUMEN / SUMMARY:** - Introduction: Primary adenocarcinoma of the bladder is a very rare disease that is difficult to treat. In this paper, we report the second case in the

literature with primary mucinous adenocarcinoma of the bladder which showed complete response to FOLFOX4 (fluorouracil, leucovorin, oxaliplatin) chemotherapy regimen. Case Report: A 41-year-old man was admitted to our hospital with a diagnosis of primary adenocarcinoma of the bladder. Due to the similarity in histology with colon carcinoma, a FOLFOX4 regimen was started. Complete response was achieved at the end of this treatment. Today the patient is free of local or systemic disease. Conclusion: FOLFOX4 regimen may be a treatment option for primary adenocarcinoma of the bladder. © 2013 S. Karger AG, Basel.

[812]

**TÍTULO / TITLE:** - Castration-resistant prostate cancer: Adaptive responses in the androgen axis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Treat Rev. 2013 Sep 14. pii: S0305-7372(13)00200-4. doi: 10.1016/j.ctrv.2013.09.011.

●● Enlace al texto completo (gratis o de pago) [1016/j.ctrv.2013.09.011](#)

**AUTORES / AUTHORS:** - Egan A; Dong Y; Zhang H; Qi Y; Balk SP; Sartor O

**INSTITUCIÓN / INSTITUTION:** - Department of Medicine, Tulane University School of Medicine, New Orleans, LA 70112, USA.

**RESUMEN / SUMMARY:** - The androgen signaling axis in prostate cancer is associated with multiple adaptive mechanisms in response to castration. Herein we review these adaptations with an emphasis on recent molecular insights into the growth and development of castration resistant prostate cancer (CRPC). Alterations include both conventional and novel intracrine androgen synthesis pathways and androgen transport as well as androgen receptor (AR) overexpression, mutation, and splice variation. Each of these underlying mechanisms are potentially linked to post-castration growth, especially after treatment with newer hormonal agents such as abiraterone and enzalutamide. Post-translational AR modifications are well documented and these can affect receptor activity, stability, localization, and interaction with other proteins. Changes in recruitment of androgen receptor associated co-activators/repressors and a distinct AR-induced transcriptional program can dramatically alter proliferation, invasion, and metastasis in a ligand and context-dependent manner. Numerous previously uncharacterized non-coding RNAs, some of which are androgen regulated, may also have important biological function in this disease. Taken together, the view of CRPC has changed dramatically in the last several years. This has occurred not only within the setting of multiple treatment paradigm changes, but also as a multiplicity of potential molecular mechanisms underlying this disease state have been explored and discovered.

[813]

**TÍTULO / TITLE:** - Predictive Factors for Impaired Renal Function following Nephroureterectomy in Upper Urinary Tract Urothelial Cell Carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Int. 2013 Nov 23.

●● Enlace al texto completo (gratis o de pago) [1159/000353652](#)

**AUTORES / AUTHORS:** - Rodriguez Faba O; Palou J; Breda A; Maroto P; Fernandez Gomez JM; Wong A; Villavicencio H

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Universitat Autònoma de Barcelona, Fundació Puigvert, Barcelona, España.

**RESUMEN / SUMMARY:** - Objectives: Despite the uncertain value of adjuvant chemotherapy after radical nephroureterectomy (RNU) it is clear that impaired renal function represents a contraindication to its administration. The objective of this study was to identify possible predictive clinical factors for impaired renal function following RNU in patients with upper urinary tract urothelial cell carcinoma (UUT-UCC). Patients and Methods: A retrospective analysis was conducted of 546 patients who underwent RNU between 1992 and 2008 at our institution. Data of interest for this study included estimated glomerular filtration rate (eGFR), age, pathological stage and preoperative hydronephrosis (HN). The predictive value of HN, age and pathological stage for impaired renal function after RNU was calculated by multivariate linear regression analysis. Results: In total, 138 patients met the criteria for inclusion, including 108 men (78%). Mean age at surgery was 67 +/- 10 years. There was a significant correlation ( $p < 0.001$ ) between pre- and postoperative eGFR (decrease of 21% after NU). Preoperative HN was present in 51 patients (37%). On linear regression analysis, preoperative eGFR  $\leq 60$  ml/min ( $p = 0.012$ ; OR = 4.60) and HN ( $p = 0.027$ ; OR = 10.34) were confirmed to be predictive factors for a postoperative eGFR  $\leq 60$  ml/min. When postoperative eGFR  $\leq 45$  ml/min was used as the criterion for impaired renal function, predictive factors proved to be preoperative eGFR  $\leq 45$  ml/min ( $p < 0.0001$ ; OR = 18.53), HN ( $p = 0.038$ ; OR = 0.380) and age  $\geq 70$  years ( $p < 0.0001$ ; OR = 0.169). Conclusions: Preoperative HN, older age and preoperative eGFR  $< 60$  ml/min were proven to be predictive factors for impaired renal function after RNU. In these settings, neoadjuvant chemotherapy may be considered. © 2013 S. Karger AG, Basel.

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[814]

**TÍTULO / TITLE:** - A New Type of Renal Cancer—Tubulocystic Carcinoma of the Kidney: A Review of the Literature.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Surg Pathol. 2013 Nov 14.

●● Enlace al texto completo (gratis o de pago) [1177/1066896913509007](https://doi.org/10.1177/1066896913509007)

**AUTORES / AUTHORS:** - Bhullar JS; Varshney N; Bhullar AK; Mittal VK

**RESUMEN / SUMMARY:** - In 2004, A new peculiar subtype of renal cell carcinoma, which later received the name of tubulocystic carcinoma (TCC-RC), was recognized. Though the tumor has distinct macroscopic, microscopic and immunohistochemical features, the tumor was previously considered to have some similarities to various other renal cancers. We did an extensive review of literature using PubMed and CrossRef, which yielded more than 80 cases reported from various parts of the world. We evaluated the epidemiology, tumor presentations, pathological characteristics, treatment, and outcome of TCC-RC.

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[815]

**TÍTULO / TITLE:** - Update in management of male urinary incontinence: injectables, balloons, minimally invasive approaches.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Opin Urol. 2013 Nov;23(6):536-9. doi: 10.1097/01.mou.0000434592.79951.44.

●● Enlace al texto completo (gratis o de pago)

[1097/01.mou.0000434592.79951.44](#)

**AUTORES / AUTHORS:** - Cornu JN; Peyrat L; Haab F

**INSTITUCIÓN / INSTITUTION:** - Department of urology, Groupe hospitalo-universitaire EST, Tenon hospital, Assistance Publique-Hopitaux de Paris (AP-HP), Faculte de medecine Pierre et Marie Curie, University Paris VI, Paris, France.

**RESUMEN / SUMMARY:** - PURPOSE OF REVIEW: The surgical armamentarium for stress urinary incontinence in men ranges from minimally invasive endoscopic procedures to artificial urinary sphincter implantation. In this rapidly moving field, respective indications of surgical options are also evolving, as evidence for the use of innovative devices is growing. This review is focused on recent data about injectables, stem cells and periurethral balloons implantation. RECENT FINDINGS: Periurethral injections are probably the most minimally invasive options, but are considered of low efficacy, with a high recurrence rate in the short term. Reinjections are often needed. However, the market share of periurethral bulking is decreasing relatively slowly. Innovative, so-called regenerative therapies, including injection of biological material, stem cells, myoblasts and muscle strings implantation have shown promising results but did not yet reach maturity for daily use in the clinic. Periurethral balloons implantation shows an acceptable success rate at mid-term follow-up, but are associated with a high rate of complications and reoperations. SUMMARY: Indications of periurethral bulking are decreasing. Regenerative therapies are still under investigation in men, and long-term studies are still required. Comparative studies against male slings and other compression devices are still awaited to accurately determine the role of periurethral balloons implantation.

[816]

**TÍTULO / TITLE:** - Robotic ultrasound and needle guidance for prostate cancer management: review of the contemporary literature.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Opin Urol. 2014 Jan;24(1):75-80. doi: 10.1097/MOU.0000000000000011.

●● Enlace al texto completo (gratis o de pago)

[1097/MOU.0000000000000011](#)

**AUTORES / AUTHORS:** - Kaye DR; Stoianovici D; Han M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The James Buchanan Brady Urological Institute, The Johns Hopkins School of Medicine, Baltimore, Maryland, USA.

**RESUMEN / SUMMARY:** - PURPOSE OF REVIEW: To present the recent advances in needle guidance and robotic ultrasound technology which are used for prostate cancer (PCa) diagnosis and management. RECENT FINDINGS: Prostate biopsy technology has remained relatively unchanged. Improved needle localization and precision would allow for better management of this common disease. Robotic ultrasound and needle guidance is one strategy to improve needle localization and diagnostic accuracy of PCa. This review focuses on the recent advances in robotic ultrasound and needle guidance technologies, and their potential impact on PCa diagnosis and management.

SUMMARY: The use of robotic ultrasound and robotic-assisted needle guidance has the potential to improve PCa diagnosis and management.

[817]

**TÍTULO / TITLE:** - The importance of anatomical region of local anesthesia for prostate biopsy; a randomized clinical trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Rev Med Pharmacol Sci. 2013 Nov;17(21):2890-5.

**AUTORES / AUTHORS:** - Akdere H; Burgazli KM; Aktoz T; Acikgoz A; Mericililer M; Gozen AS

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Faculty of Medicine, Trakya University, Edirne, Turkey. [hakdere@yahoo.com](mailto:hakdere@yahoo.com)

**RESUMEN / SUMMARY:** - INTRODUCTION: In our study, the efficiency and reliability of lidocaine (1 cc/1%) application during transrectal ultrasound-guided (TRUS) prostate biopsy to levatores prostate was studied. Levatores prostate was visualized on a cadaver dissection previously. PATIENTS AND METHODS: Eighty outpatients with lower urinary tract complaints or were suspected clinically to have prostate cancer were submitted to TRUS-guided prostate biopsy. The ages of outpatients were ranging from 45 to 81. Patients were randomized in 2 groups: Group-I, with 40 patients submitted to local anesthesia by periprostatic injection of 1 cc 1% lidocaine before biopsy; and group-II, with 40 controls the biopsy was performed without local anesthesia. The anatomical region for anesthesia was determined via dissection. The name of this anatomical region is levatores prostatae and it has got high nerve density. The process was explained to the patients and their approvals were obtained. Levatores prostatae was detected with TRUS before biopsy. Pain; related to digital rectal examination (DRE), probe insertion or biopsy, was scored via visual analog scale (VAS). The patients were evaluated about side effects of lidocaine and early and late complications of biopsy as well. RESULTS: Both groups were similar in terms of mean age, PSA levels, prostate volume and VAS scores ( $p > 0.05$ ). As for VAS score, on the group submitted to anesthesia was determined 2.34 +/- 1.08, while for VAS score on the group submitted conventional biopsy was determined 5.8 +/- 1.6. Between two groups, there was a statistical difference in terms of VSA score ( $p < 0.05$ ); but there was no statistical difference about early and late complications of biopsy. CONCLUSIONS: The periprostatic blockage use is clearly associated with more tolerance and patient comfort during TRUS-guided biopsy. Owing to the local anesthesia introduced to the periprostatic nerve bundle localization in levatores prostate area, the patients could tolerate the pain better.

[818]

**TÍTULO / TITLE:** - Prognostic impact of Wilms tumor gene mutations in Egyptian patients with acute myeloid leukemia with normal karyotype.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hematology. 2013 Sep 26.

●● Enlace al texto completo (gratis o de pago)

[1179/1607845413Y.0000000129](https://doi.org/10.1179/1607845413Y.0000000129)

**AUTORES / AUTHORS:** - Zidan MA; Shaaban HM; Elghannam DM

**RESUMEN / SUMMARY:** - The Wilms' tumor (WT1) gene mutations were detected in patients with most forms of acute leukemia. However, the biological significance and the prognostic impact of WT1 mutation in Egyptian patients with acute myeloid leukemia with normal karyotype (AML-NK) are still uncertain. We aimed to evaluate the incidence and clinical relevance of WT1 gene mutations in acute myeloid leukemia with normal karyotype (AML-NK). Exons 7 and 9 of WT1 were screened in samples from 216 adult NK-AML using polymerase chain reaction single-strand conformation polymorphism techniques. Twenty-three patients (10.6%) harbored WT1 mutations. Younger ages and higher marrow blasts were significantly associated with WT1 mutations ( $P = 0.006$  and  $0.003$  respectively). Complete remission rates were significantly lower in patients with WT1 mutations than those with WT1 wild-type ( $P = 0.015$ ). Resistance, relapse, and mortality rates were significantly higher in patients with WT1 mutations than those without ( $P = 0.041$ ,  $0.016$ , and  $0.008$  respectively). WT1 mutations were inversely associated with NPM1 mutations ( $P = 0.007$ ). Patients with WT1 mutations had worse disease-free survival ( $P < 0.001$ ) and overall survival ( $P < 0.001$ ) than patients with WT1 wild-type. In multivariable analyses, WT1 mutations independently predicted worse DFS ( $P < 0.001$ ; hazard ratio [HR] 0.036) and overall survival ( $P = 0.001$ ; HR = 0.376) when controlling for age, total leukocytic count (TLC), and NPM1 mutational status. In conclusion, WT1 mutations are a negative prognostic indicator in intensively treated patients with AML-NK, may be a part of molecularly based risk assessment and risk-adapted treatment stratification of patients with AML-NK.

[819]

**TÍTULO / TITLE:** - Hexaminolevulinate-guided transurethral resection of non-muscle-invasive bladder cancer does not reduce the recurrence rates after a 2-year follow-up: a prospective randomized trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Nov 19.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s11255-013-0603-z](#)

**AUTORES / AUTHORS:** - Gkritisios P; Hatzimouratidis K; Kazantzidis S; Dimitriadis G; Ioannidis E; Katsikas V

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**RESUMEN / SUMMARY:** - **PURPOSE:** To assess the impact of hexaminolevulinate (HAL) on the long-term recurrence rate of NMIBC. **METHODS:** A total of 130 patients with bladder tumour were randomized into two groups. The patients in one group had a HAL instillation before surgery, and they first had a white-light and after that a blue-light cystoscopy (BL group) and resection. The second group had only white-light cystoscopy (WL group) and resection. They have been followed up with cystoscopy every 3 months for a period of up to 40 months. **RESULTS:** The recurrence-free period was not significantly different between the two groups (BL and WL groups) (long-rank test  $p = 0.202$ ). The use of HAL helped detect four flat lesions and 28 papillary lesions with cancer that would have been missed under WL only, on 16 out of the 54 patients (29.6 % CI 95 % 11.1-33.3). The use of HAL changed the proposed postoperative treatment and follow-up for one out of the five patients. **CONCLUSIONS:** Although the

use of HAL cystoscopy identified at least one cancer lesion more than WL cystoscopy on one out of the three patients, the recurrence-free period was not significantly different.

[820]

**TÍTULO / TITLE:** - Randomized trial of print messaging: the role of the partner and monitoring style in promoting provider discussions about prostate cancer screening among African American men.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Psychooncology. 2013 Oct 15. doi: 10.1002/pon.3437.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pon.3437](#)

**AUTORES / AUTHORS:** - Miller SM; Roussi P; Scarpato J; Wen KY; Zhu F; Roy G

**INSTITUCIÓN / INSTITUTION:** - Department of Psychosocial and Behavioral Medicine, Fox Chase Cancer Center, Philadelphia, PA, USA.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** Although African American (AA) men are at elevated risk for prostate cancer, medical guidelines do not present consistent screening recommendations for this group. However, all guidelines stress the need for screening decision making with a provider. This study evaluated the effectiveness of a brochure for the female partners of AA men, designed to help promote such discussion on the part of their mates. We also explored the effect of the partner's monitoring style (i.e., the extent to which the partner typically attends to health threats) on promoting discussion. **METHODS:** Female partners of AA men (N = 231) were randomized to receive either a prostate cancer screening Centers for Disease Control brochure for AA men, combined with a 'partner' brochure containing strategies to promote men's initiation of a provider visit to discuss screening, or the Centers for Disease Control brochure only and completed preintervention and post-intervention surveys online. **RESULTS:** The message groups did not differ on taking active steps to engage in provider discussion: relative risk ratio (RRR) = 0.99, p = .98; thinking about it: RRR = 1.13, p = .74. However, among partners who received the partner brochure, monitoring style was associated with 'thinking about initiating a provider visit' on the part of the mate (RRR = 1.74, p < .01). Across conditions, monitoring style was also associated with 'taking active steps to initiate a provider visit' on the part of the mate (RRR = 1.38, p < .05). **CONCLUSIONS:** High monitoring partners may be effective in influencing their AA mates to initiate provider discussion, particularly when tailored messaging is provided. Copyright © 2013 John Wiley & Sons, Ltd.

[821]

**TÍTULO / TITLE:** - Effect of diabetes mellitus and metformin use on oncologic outcomes of patients treated with radical cystectomy for urothelial carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct 17. pii: S1078-1439(13)00293-7. doi: 10.1016/j.urolonc.2013.07.006.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urolonc.2013.07.006](#)

**AUTORES / AUTHORS:** - Rieken M; Xylinas E; Kluth L; Crivelli JJ; Chrystal J; Faison T; Lotan Y; Karakiewicz PI; Sun M; Fajkovic H; Babjuk M; Bachmann A; Scherr DS; Shariat SF

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Weill Cornell Medical College, New York-Presbyterian Hospital, New York, NY; Department of Urology, University Hospital Basel, Basel, Switzerland.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** Evidence suggests a positive effect of metformin on cancer incidence and outcome. To date, the effect of metformin use on prognosis in urothelial carcinoma of the bladder (UCB) remains uninvestigated. We tested the hypothesis that metformin use affects oncologic outcomes of patients treated with radical cystectomy for UCB. **METHODS AND MATERIALS:** We retrospectively evaluated 1,502 patients treated at 4 institutions with radical cystectomy and pelvic lymphadenectomy without neoadjuvant therapy. Cox regression models addressed the association of diabetes mellitus (DM) and metformin use with disease recurrence, cancer-specific mortality, and any-cause mortality. **RESULTS:** A total of 200 patients (13.3%) had DM, 80 patients (5.3%) used metformin. Within a median follow-up of 34 months, 509 patients (33.9%) experienced disease recurrence, 402 patients (26.8%) died of UCB, and 551 patients (36.7%) died from any cause. In univariable Cox regression analyses, DM without metformin use was associated with increased risk of disease recurrence (hazard ratio [HR]: 1.40, 95% confidence interval [CI] 1.05-1.87, P = 0.02), cancer-specific mortality (HR: 1.60, 95% CI 1.17-2.17, P = 0.003), and any-cause mortality (HR: 1.55, 95% CI 1.18-2.03, P = 0.002), whereas metformin use was associated with decreased risk of disease recurrence (HR: 0.61, 95% CI 0.37-0.98, P = 0.04), cancer-specific mortality (HR: 0.56, 95% CI 0.33-0.97, P = 0.04), and any-cause mortality (HR: 0.54, 95% CI 0.33-0.88, P = 0.01). In multivariable Cox regression analyses, DM treated without metformin use remained associated with worse cancer-specific mortality (HR: 1.53, 95% CI 1.12-2.09, P = 0.007) and any-cause mortality (HR: 1.52, 95% CI 1.16-2.00, P = 0.003) but not disease recurrence. **CONCLUSIONS:** Diabetic patients who do not use metformin appear to be at higher risk of cancer-specific and any-cause mortality than patients without DM. It remains unclear, whether the severity of DM in this group of patients or the use of metformin itself affects outcomes of UCB. The mechanisms behind the effect of DM on patients with UCB and the potential protective effect of metformin need further elucidation.

[822]

**TÍTULO / TITLE:** - The diagnostic efficacy of urinary survivin and hyaluronidase mRNA as urine markers in patients with bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Lab. 2013;59(7-8):893-900.

**AUTORES / AUTHORS:** - Eissa S; Badr S; Barakat M; Zaghloul AS; Mohanad M

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**RESUMEN / SUMMARY:** - **BACKGROUND:** A new, sensitive, noninvasive method for the detection of urothelial carcinomas of the bladder would open new possibilities in both the diagnosis and follow up of patients. **METHODS:** Voided urine specimens were collected from patients with histologically confirmed bladder urothelial carcinoma (Group 1: n = 60), urological patients without urothelial carcinoma (Group 2: n = 20), and healthy volunteers (Group 3: n = 20). All underwent serological assessment of schistosomiasis antibody, quantitative measurement of survivin by ELISA in urine

supernatant, urine cytology, and detection of hyaluronidase (HYAL-1) by RT-PCR in urothelial cells of voided urine samples. RESULTS: Urinary survivin mean rank was higher in malignant and benign groups than in the healthy group ( $p < 0.001$ ). Urinary survivin best-cutoff was determined using receiver operating characteristic curve to discriminate between malignant and nonmalignant groups (2537.25 pg/mg protein) at 78.33% sensitivity and 82.5% specificity. HAase mRNA showed superior sensitivity (86.67%) over cytology (38.33%) and urinary survivin (78.33%) with specificity of 97.5%, 100%, and 82.5%, respectively. The sensitivity of urine cytology was increased on combination with either survivin (83.33%) or HAase (90%). Also, the combination of both markers increased overall sensitivity (95%). CONCLUSIONS: Survivin can be reliably and quantitatively measured in urine of bladder cancer patients, improving the sensitivity and specificity of urine cytology for the diagnosis of bladder cancer. Combined use of cytology with survivin and HAase was the best recommended combination for bladder cancer detection.

[823]

**TÍTULO / TITLE:** - Topical diltiazem before transrectal ultrasonography-guided biopsy of the prostate: a randomized controlled trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - ANZ J Surg. 2013 Nov 18. doi: 10.1111/ans.12438.

●● Enlace al texto completo (gratis o de pago) [1111/ans.12438](#)

**AUTORES / AUTHORS:** - Zargar H; Marshall D; Siva G; King Q

**INSTITUCIÓN / INSTITUTION:** - Urology, Midcentral Health, Palmerston North, New Zealand.

**RESUMEN / SUMMARY:** - BACKGROUND: Injection of local anaesthetic agents around the prostatic nerve bundles during transrectal ultrasonography (TRUS) biopsy of the prostate has shown to reduce the pain associated with the procedure. It has been shown that some of the discomfort associated with the procedure is secondary to spasm of the anal sphincter. Topical diltiazem can relax the anal sphincter. Our aim was to evaluate the use of topical diltiazem cream as an adjunct to periprostatic nerve block in reducing pain associated with TRUS-guided prostatic biopsy. METHOD: Between September 2009 and September 2010, 114 patients were enrolled in the trial (from two centres). Patients undergoing TRUS biopsy of prostate were randomized into diltiazem and placebo groups. Patients were asked to fill out a questionnaire at the end of the procedure. The questionnaire enquired about discomfort associated with various parts of the procedure using a 10-cm visual analogue scale (VAS). RESULTS: For discomfort due to the presence of the probe, pain during the biopsy and overall pain prior to leaving the department, mean VAS was higher for the placebo group, but the difference was not statistically significant. CONCLUSION: Diltiazem cream has a better side effect profile than glyceryl trinitrate cream and is better tolerated. Although we have demonstrated trends favouring diltiazem use as an adjunct to local anaesthetic in TRUS biopsy of the prostate, this did not reach a statistically significant level. The pain scores associated with TRUS biopsy in our cohort were lower than those in the published literature. This phenomenon might have contributed to the results observed in this trial.

[824]

**TÍTULO / TITLE:** - Incidence and risk factors of chronic kidney disease in Korean patients with T1a renal cell carcinoma before and after radical or partial nephrectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Jpn J Clin Oncol. 2013 Dec;43(12):1243-8. doi: 10.1093/jjco/hyt149. Epub 2013 Nov 5.

●● [Enlace al texto completo \(gratis o de pago\) 1093/jjco/hyt149](#)

**AUTORES / AUTHORS:** - Kim SH; Lee SE; Hong SK; Jeong CW; Park YH; Kim YJ; Kang SH; Hong SH; Choi WS; Byun SS

**INSTITUCIÓN / INSTITUTION:** - \*Department of Urology, Seoul National University Bundang Hospital, 82 Gumi-ro 173 Beon-gil, Bundang-gu, Seongnam 463-707, Korea. [ssbyun@snuh.org](mailto:ssbyun@snuh.org).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** The aim of the study was to investigate the incidence of chronic kidney disease in patients with T1a renal cell carcinoma both before and after partial or radical nephrectomy, and to assess risk factors for chronic kidney disease. **METHODS:** From January 2001 to December 2011, 1928 patients with a single renal mass  $\leq 4$  cm undergoing partial nephrectomy or radical nephrectomy with the existence of a normal contralateral kidney were retrospectively reviewed for the evaluation of preoperative chronic kidney disease, and reviewed only 1676 patients for the postoperative chronic kidney disease. The estimated glomerular filtration rates were used to define chronic kidney disease  $< 60$  ml/min/1.73 m<sup>2</sup> by the Modification of Diet in Renal Disease equation. Demographics and clinicopathological parameters were evaluated to determine the risk factors with the development of chronic kidney disease both before and after surgery. **RESULTS:** Chronic kidney disease was found preoperatively in 10.0% (n = 192) of patients; 16.1% (n = 269) of patients developed chronic kidney disease postoperatively, including 102 (6.1%) chronic kidney disease patients  $> 65$  years of age. Between the non-chronic kidney disease and chronic kidney disease patients, male gender (odds ratio 3.55 vs. 3.78, respectively) and diagnostic age (odds ratio 1.04 vs. 1.05) were significantly distinctive common risk factors for chronic kidney disease both before and after surgery (P < 0.002). In addition, hypertension (odds ratio 0.46), serum albumin (odds ratio 0.23) and calcium (odds ratio 2.06) were significant as preoperative risk factors (P < 0.015), and preoperative serum creatinine (odds ratio 1.90) and surgical type (partial nephrectomy or radical nephrectomy; odds ratio 11.89) were significant as postoperative risk factors (P < 0.030). **CONCLUSIONS:** Old, male hypertensive patients with a small renal mass would be better candidates for partial nephrectomy to prevent postoperative chronic kidney disease.

[825]

**TÍTULO / TITLE:** - Primary spermatic cord tumors: Disease characteristics, prognostic factors, and treatment outcomes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00319-0. doi: 10.1016/j.urolonc.2013.08.009.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urolonc.2013.08.009](#)

**AUTORES / AUTHORS:** - Rodriguez D; Barrisford GW; Sanchez A; Preston MA; Kreydin EI; Olumi AF

**INSTITUCIÓN / INSTITUTION:** - Harvard Medical School, Massachusetts General Hospital, Department of Urology, Boston, MA.

**RESUMEN / SUMMARY:** - INTRODUCTION: Experience with management of spermatocord tumors (SCTs) is uncommon. We utilized a large population-based cancer registry to characterize the demographic, pathological, treatment characteristics, and outcomes of SCTs. MATERIAL AND METHODS: The Surveillance, Epidemiology, and End Results database (1973-2007) was queried. RESULTS: From the database, 362 patients were identified with SCT. The annual incidence of SCT was 0.3 cases per million and did not change over time. The most common histologic types were liposarcoma (46%), leiomyosarcoma (20%), histiocytoma (13%), and rhabdomyosarcoma (9%). The median age of diagnosis for rhabdomyosarcomas was (26.3y), whereas for other SCTs, it was (64.7y) ( $P < 0.001$ ). On multivariate analysis, a worse outcome was observed with undifferentiated tumor grade, distant disease, positive lymph nodes, and leiomyosarcoma or histiocytoma cell histology. CONCLUSION: We describe the largest cohort of SCT studied to date. Liposarcoma was most common, while leiomyosarcoma and histiocytoma histologic subtypes were observed to be the most aggressive. Multivariate analysis revealed that tumor grade, stage, histologic type, and lymph node involvement were independently predictive of prognosis.

[826]

**TÍTULO / TITLE:** - Caveolin-1 in renal cell carcinoma promotes tumour cell invasion, and in co-operation with pERK predicts metastases in patients with clinically confined disease.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Transl Med. 2013 Oct 11;11(1):255. doi: 10.1186/1479-5876-11-255.

●● [Enlace al texto completo \(gratis o de pago\) 1186/1479-5876-11-255](#)

**AUTORES / AUTHORS:** - Campbell L; Al-Jayoussi G; Gutteridge R; Gumbleton N; Griffiths R; Gumbleton S; Smith MW; Griffiths DF; Gumbleton M

**INSTITUCIÓN / INSTITUTION:** - Cardiff School of Pharmacy and Pharmaceutical Sciences, Cardiff University, Cardiff CF10 3XF, UK. [gumbleton@cf.ac.uk](mailto:gumbleton@cf.ac.uk).

**RESUMEN / SUMMARY:** - BACKGROUND: Up to 40% of patients initially diagnosed with clinically-confined renal cell carcinoma (RCC) and who undergo curative surgery will nevertheless relapse with metastatic disease (mRCC) associated with poor long term survival. The discovery of novel prognostic/predictive biomarkers and drug targets is needed and in this context the aim of the current study was to investigate a putative caveolin-1/ERK signalling axis in clinically confined RCC, and to examine in a panel of RCC cell lines the effects of caveolin-1 (Cav-1) on pathological processes (invasion and growth) and select signalling pathways. METHODS: Using immunohistochemistry we assessed the expression of both Cav-1 and phosphorylated-ERK (pERK) in 176 patients with clinically confined RCC, their correlation with histological parameters and their impact upon disease-free survival. Using a panel of RCC cell lines we explored the functional effects of Cav-1 knockdown upon cell growth, cell invasion and VEGF-A secretion, as well Cav-1 regulation by cognate cell signalling pathways. RESULTS: We found a significant correlation ( $P = 0.03$ ) between Cav-1 and pERK in a cohort of patients with clinically confined disease which represented a prognostic biomarker

combination (HR = 4.2) that effectively stratified patients into low, intermediate and high risk groups with respect to relapse, even if the patients' tumours displayed low grade and/or low stage disease. In RCC cell lines Cav-1 knockdown unequivocally reduced cell invasive capacity while also displaying both pro-and anti-proliferative effects; targeted knockdown of Cav-1 also partially suppressed VEGF-A secretion in VHL-negative RCC cells. The actions of Cav-1 in the RCC cell lines appeared independent of both ERK and AKT/mTOR signalling pathways. CONCLUSION: The combined expression of Cav-1 and pERK serves as an independent biomarker signature with potential merit in RCC surveillance strategies able to predict those patients with clinically confined disease who will eventually relapse. In a panel of in-vitro RCC cells Cav-1 promotes cell invasion with variable effects on cell growth and VEGF-A secretion. Cav-1 has potential as a therapeutic target for the prevention and treatment of mRCC.

[827]

**TÍTULO / TITLE:** - Risk of prostate and bladder cancers in patients with spinal cord injury: A population-based cohort study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00310-4. doi: 10.1016/j.urolonc.2013.07.019.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.07.019](#)

**AUTORES / AUTHORS:** - Lee WY; Sun LM; Lin CL; Liang JA; Chang YJ; Sung FC; Kao CH

**INSTITUCIÓN / INSTITUTION:** - China Medical University Hospital Taipei Branch, Taipei, Taiwan; Graduate Institute of Clinical Medical Science, College of Medicine, China Medical University, Taichung, Taiwan; School of Medicine, College of Medicine, China Medical University, Taichung, Taiwan.

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate the risk of prostate and bladder cancers in patients with spinal cord injury (SCI). MATERIALS AND METHODS: We used data obtained from the National Health Insurance system of Taiwan for this study. The SCI cohort contained 54,401 patients with SCI, and each patient was randomly frequency matched with 4 people from the general population (without SCI) based on age, sex, and index date. Incidence rates, SCI cohort to non-SCI cohort rate ratios, and hazard ratios were measured to evaluate the cancer risks. RESULTS: Patients with SCI showed a significantly lower risk of developing prostate cancer compared with subjects without SCI (adjusted hazard ratio = 0.73; 95% confidence interval = 0.59, 0.90), after accounting for the competing risk of death. No significant difference in the risk of bladder cancer emerged between the SCI and control groups. Further analyses found a higher spinal level of SCI tended to predict a lower risk for prostate cancer. CONCLUSIONS: Patients with SCI incurred a lower risk for prostate cancer compared with people without SCI. The risk for bladder cancer did not differ between people with or without SCI.

[828]

**TÍTULO / TITLE:** - Patient-Centered Perspectives on the Access to Educational Opportunities Specific to Lifestyle Modification in Men at Risk for Primary or Secondary Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cancer Educ. 2013 Nov 10.

●● Enlace al texto completo (gratis o de pago) [1007/s13187-013-0583-9](#)

**AUTORES / AUTHORS:** - Diggett B; Holzbeierlein J; Klemp J; Glennon C; Hamilton-Reeves JM

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**RESUMEN / SUMMARY:** - Educating men at risk for primary or secondary prostate cancer on lifestyle modification may help prevent the development of the disease, reduce the risk of recurrence in those treated for cancer, and slow the progression of active disease. To date, substantial literature on male patient attitudes towards risk modification does not exist. In this project, we evaluate the attitudes and educational needs of men at high-risk for primary or secondary prostate cancer to assess the need for a dedicated clinic focused on education and prevention. Two clinic nurses administered surveys to 76 male patients seen at the University Kansas Cancer Center (KUCC) and Urology clinics. Survey responses showed the patients' perspectives and desire for more support and education regarding late effects of treatment, management of risk, and lifestyle modification. Findings from this survey inspired the establishment of the Burns & McDonnell High-Risk Prostate Cancer Prevention Program at KUCC.

[829]

**TÍTULO / TITLE:** - Time management in radiation oncology: evaluation of time, attendance of medical staff, and resources during radiotherapy for prostate cancer : The DEGRO-QUIRO trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Strahlenther Onkol. 2013 Oct 16.

●● Enlace al texto completo (gratis o de pago) [1007/s00066-013-0440-0](#)

**AUTORES / AUTHORS:** - Keilholz L; Willner J; Thiel HJ; Zamboglou N; Sack H; Popp W

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**RESUMEN / SUMMARY:** - PURPOSE: In order to evaluate resource requirements, the German Society of Radiation Oncology (DEGRO) recorded the times needed for core procedures in the radio-oncological treatment of various cancer types within the scope of its QUIRO trial. The present study investigated the personnel and infrastructural resources required in radiotherapy of prostate cancer. METHODS: The investigation was carried out in the setting of definitive radiotherapy of prostate cancer patients between July and October 2008 at two radiotherapy centers, both with well-trained staff and modern technical facilities at their disposal. Personnel attendance times and room occupancy times required for core procedures (modules) were each measured prospectively by two independently trained observers using time measurements differentiated on the basis of professional group (physician, physicist, and technician), 3D conformal (3D-cRT), and intensity-modulated radiotherapy (IMRT). RESULTS:

Total time requirements of 983 min for 3D-cRT and 1485 min for step-and-shoot IMRT were measured for the technician (in terms of professional group) in all modules recorded and over the entire course of radiotherapy for prostate cancer (72-76 Gy). Times needed for the medical specialist/physician were 255 min (3D-cRT) and 271 min (IMRT), times of the physicist were 181 min (3D-cRT) and 213 min (IMRT). The difference in time was significant, although variations in time spans occurred primarily as a result of various problems during patient treatment. CONCLUSION: This investigation has permitted, for the first time, a realistic estimation of average personnel and infrastructural requirements for core procedures in quality-assured definitive radiotherapy of prostate cancer. The increased time needed for IMRT applies to the step-and-shoot procedure with verification measurements for each irradiation planning.

[830]

**TÍTULO / TITLE:** - Irinotecan and temozolomide for treatment of neuroblastoma in a patient with renal failure on hemodialysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Pediatr Blood Cancer*. 2013 Nov 23. doi: 10.1002/pbc.24869.

●● [Enlace al texto completo \(gratis o de pago\) 1002/pbc.24869](#)

**AUTORES / AUTHORS:** - Armstrong AE; Dargart J; Reichel J; Walterhouse DO; Matossian D; Cohn RA; Gosiengfiao Y

**INSTITUCIÓN / INSTITUTION:** - Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, Illinois.

**RESUMEN / SUMMARY:** - Renal failure is a rare complication of neuroblastoma or its therapy. To our knowledge, no reports describe treatment of children with neuroblastoma with chemotherapy in the setting of renal failure and maintenance hemodialysis. We report a 6-year-old child with high-risk neuroblastoma who developed renal failure requiring long-term hemodialysis. She was subsequently treated with 13 cycles of intravenous irinotecan 20 mg/m<sup>2</sup> /day and oral temozolomide 100 mg/m<sup>2</sup> /day for 5 days before disease progression without any dose adjustments, transfusions, febrile neutropenia or diarrhea. This case demonstrates that irinotecan and temozolomide can be safely administered in children with renal failure requiring hemodialysis. *Pediatr Blood Cancer* © 2013 Wiley Periodicals, Inc.

[831]

**TÍTULO / TITLE:** - Six-month survival and quality of life of intensive care patients with acute kidney injury.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Crit Care*. 2013 Oct 22;17(5):R250.

●● [Enlace al texto completo \(gratis o de pago\) 1186/cc13076](#)

**AUTORES / AUTHORS:** - Nisula S; Vaara ST; Kaukonen KM; Reinikainen M; Koivisto SP; Inkinen O; Poukkanen M; Tiainen P; Pettila V; Korhonen AM

**RESUMEN / SUMMARY:** - INTRODUCTION: Acute kidney injury (AKI) has high incidence among the critically ill and associates with dismal outcome. Not only the long-term survival, but also the quality of life (QOL) of patients with AKI is relevant due to substantial burden of care regarding these patients. We aimed to study the long-term outcome and QOL of patients with AKI treated in intensive care units. METHODS: We

conducted a predefined six-month follow-up of adult intensive care unit (ICU) patients from the prospective, observational, multi-centre FINNAKI study. We evaluated the QOL of survivors with the EuroQol (EQ-5D) questionnaire. We included all participating sites with at least 70% rate of QOL measurements in the analysis. RESULTS: Of the 1568 study patients, 635 [40.5%, 95% confidence interval (CI) 38.0-43.0%] had AKI according to the Kidney Disease Improving Global Outcomes (KDIGO) criteria. Of the 635 AKI patients, 224 (35.3%), as compared to 154/933 (16.5%) patients without AKI, died within six months. Of the 1190 survivors, 959 (80.6%) answered the EQ-5D questionnaire at six months. The QOL (median with IQR) measured with the EQ-5D index and compared to age- and sex-matched general population was: 0.676 (0.520-1.00) vs. 0.826 (0.812-0.859) for AKI patients, and 0.690 (0.533-1.00) vs. 0.845 (0.812-0.882) for patients without AKI (P < 0.001 in both). The EQ-5D at the time of ICU admission was available for 774 (80.7%) of the six-month respondents. We detected a mean increase of 0.017 for non-AKI and of 0.024 for AKI patients in the EQ-5D index (P = 0.728). The EQ-5D visual analogue scores (median with IQR) of patients with AKI [70 (50--83)] and patients without AKI [75 (60--87)] were not different from the age- and sex-matched general population [69 (68--73) and 70 (68--77)]. CONCLUSIONS: The health-related quality of life of patients with and without AKI was already lower on ICU admission than that of the age- and sex-matched general population, and did not change significantly during critical illness. Patients with and without AKI rate their subjective health to be as good as age and sex-matched general population despite statistically significantly lower QOL indexes measured by EQ-5D.

[832]

**TÍTULO / TITLE:** - Effects of initial combined tamsulosin and solifenacin therapy for overactive bladder and bladder outlet obstruction secondary to benign prostatic hyperplasia: a prospective, randomized, multicenter study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Oct 5.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s11255-013-0551-7](#)

**AUTORES / AUTHORS:** - Lee SH; Byun SS; Lee SJ; Kim KH; Lee JY

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Gangnam Severance Hospital, Yonsei University Health System, Seoul, Korea.

**RESUMEN / SUMMARY:** - PURPOSE: The purpose of the study is to evaluate the clinical efficacy of initial combined therapy of an alpha-blocker and anticholinergic agent compared with the alpha-blocker alone in patients with benign prostatic hyperplasia (BPH) with overactive bladder (OAB). METHODS: Hundred and fifty-six BPH patients with International Prostate Symptom Score (IPSS) of over 14 (voiding sub-score  $\geq 8$  and storage sub-score  $\geq 6$ ) were prospectively included in Korea. Group 1 (n = 69) was the patients who were treated with Tamsulosin 0.2 mg daily alone for 4 weeks and after 8 weeks they were treated with tamsulosin 0.2 mg and solifenacin 5.0 mg daily combination. Group 2 (n = 70) was the patients who were treated initially with tamsulosin 0.2 mg and solifenacin 5.0 mg combination for 12 weeks. Detailed questionnaires were used to assess treatment satisfaction at 4<sup>th</sup> week and at 12<sup>th</sup> week of treatment in 2 groups. RESULTS: Baseline characteristics were not different between the 2 groups. In the 4<sup>th</sup> week, there was no difference between the 2 groups with regard to IPSS total score and voiding symptom score, although the IPSS

storage symptom score was significantly lower in the Group 2 [-2.0 (0.2) big up tri, open23.8 vs. -3.0 (0.2) big up tri, open35.7] ( $P < 0.001$ ). In the 12<sup>th</sup> week, there was improvement in storage indices such as IPSS storage symptom score, OABSS, and urgency symptoms compared with baseline in each group ( $P < 0.001$ ). No statistical differences in storage indices observed between the two groups at 12 week.

CONCLUSIONS: Earlier treatment with alpha-blocker and anticholinergic agent helped to improve storage symptoms and quality-of-life scores earlier for patients with lower urinary tract symptoms related to BPH and OAB symptoms.

[833]

**TÍTULO / TITLE:** - RTOG 0518: randomized phase III trial to evaluate zoledronic acid for prevention of osteoporosis and associated fractures in prostate cancer patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate Cancer Prostatic Dis. 2013 Dec;16(4):382-6. doi: 10.1038/pcan.2013.35. Epub 2013 Oct 1.

●● Enlace al texto completo (gratis o de pago) [1038/pcan.2013.35](#)

**AUTORES / AUTHORS:** - Kachnic LA; Pugh SL; Tai P; Smith M; Gore E; Shah AB; Martin AG; Kim HE; Nabid A; Lawton CA

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, Boston University Medical Center, Boston, MA, USA.

**RESUMEN / SUMMARY:** - Background:RTOG 0518 evaluated the potential benefit of zoledronic acid therapy in preventing bone fractures for patients with high grade and/or locally advanced, non-metastatic prostate adenocarcinoma receiving luteinizing hormone-releasing hormone (LHRH) agonist and radiotherapy (RT).Methods:Eligible patients with T-scores of the hip ( $< -1.0$ , but  $> -2.5$  vs  $> -1.0$ ) and negative bone scans were prospectively randomized to either zoledronic acid, 4 mg, concurrently with the start of RT and then every six months for a total of 6 infusions (Arm 1) or observation (Arm 2). Vitamin D and calcium supplements were given to all patients. Secondary objectives included quality of life (QOL) and bone mineral density (BMD) changes over a period of three years.Results:Of 109 patients accrued before early closure, 96 were eligible. Median follow-up was 36.3 months for Arm 1 and 34.8 months for Arm 2. Only two patients experienced a bone fracture (one in each arm) resulting in no difference in freedom from any bone fracture ( $P=0.95$ ), nor in QOL. BMD percent changes from baseline to 36 months were statistically improved with the use of zoledronic acid compared to observation for the lumbar spine (6% vs -5%,  $P<0.0001$ ), left total hip (1% vs -8%,  $P=0.0002$ ), and left femoral neck (3% vs -8%,  $P=0.0007$ ).Conclusions:For patients with advanced, non-metastatic prostate cancer receiving LHRH agonist and RT, the use of zoledronic acid was associated with statistically improved BMD percent changes. The small number of accrued patients resulted in decreased statistical power to detect any differences in the incidence of bone fractures or QOL.

[834]

**TÍTULO / TITLE:** - Resistance to tyrosine kinase inhibitors in clear cell renal cell carcinoma: From the patient's bed to molecular mechanisms.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochim Biophys Acta. 2013 Oct 14. pii: S0304-419X(13)00043-7. doi: 10.1016/j.bbcan.2013.10.001.

- Enlace al texto completo (gratis o de pago) [1016/j.bbcan.2013.10.001](http://1016/j.bbcan.2013.10.001)

**AUTORES / AUTHORS:** - Buczek M; Escudier B; Bartnik E; Szczylik C; Czarnecka A

**INSTITUCIÓN / INSTITUTION:** - Military Institute of Medicine, Warsaw, Poland.

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**RESUMEN / SUMMARY:** - The introduction of anti-angiogenic drugs especially tyrosine kinase inhibitors (TKIs) was a breakthrough in the treatment of renal cell carcinoma (RCC). Although TKIs have significantly improved outcome in patients with metastatic disease, the majority still develop resistance over time. Because different combinations and sequences of TKIs are tested in clinical trials, resistance patterns and mechanisms underlying this phenomenon should be thoroughly investigated. From a clinical point of view, resistance occurs either as a primary phenomenon (intrinsic) or as a secondary phenomenon related to various escape/evasive mechanisms that the tumor develops in response to vascular endothelial growth factor (VEGF) inhibition. Intrinsic resistance is less common, and related to the primary redundancy of available angiogenic signals from the tumor, causing unresponsiveness to VEGF-targeted therapies. Acquired resistance in tumors is associated with activation of an angiogenic switch which leads to either upregulation of the existing VEGF pathway or recruitment of alternative factors responsible for tumor revascularization. Multiple mechanisms can be involved in different tumor settings that contribute both to evasive and intrinsic resistance, and current endeavor aims to identify these processes and assess their importance in clinical settings and design of pharmacological strategies that lead to enduring anti-angiogenic therapies.

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[835]

**TÍTULO / TITLE:** - Expression of prostate stem cell antigen (PSCA) in prostate cancer: A tissue microarray study of Iranian patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathol Res Pract. 2013 Oct 11. pii: S0344-0338(13)00307-5. doi: 10.1016/j.prp.2013.09.012.

- Enlace al texto completo (gratis o de pago) [1016/j.prp.2013.09.012](http://1016/j.prp.2013.09.012)

**AUTORES / AUTHORS:** - Taeb J; Asgari M; Abolhasani M; Farajollahi MM; Madjd Z

**INSTITUCIÓN / INSTITUTION:** - Department of Molecular Medicine, School of Advanced Medical Technologies, Iran University of Medical Sciences, Tehran, Iran.

**RESUMEN / SUMMARY:** - Proteins expressed in prostate cancer, including prostate stem cell antigen (PSCA), have been investigated as biomarkers for diagnosis and therapy of prostate cancer. Immunohistochemical analysis of PSCA expression was performed on tissue microarrays of 185 paraffin-embedded tissues of Iranian patients, including 114 prostate cancers (PCa), 21 High Grade Prostatic Intraepithelial Neoplasias (HGPIN) and 50 samples of benign prostate tissue. The level of PSCA expression was compared between benign tissues, HGPIN and PCa. Then the correlations of PSCA expression with clinicopathologic parameters were assessed in PCa. The PSCA expression was detected in the membrane and cytoplasm of epithelial secretory cells in normal prostate tissues, HGPIN and PCa with a variety of intensities. The intensity of PSCA staining was significantly increased in the PCa group as compared with HGPIN and benign prostate tissues (P-value<0.05). Moreover, the level of PSCA expression was increased with higher Gleason score of PCa (P-value=0.036). The data presented here revealed that expression of PSCA as a cell

surface marker increased from benign prostate tissues (BPH) and HGPIN to PCa, and its expression in PCa was positively associated with poor cell differentiation, suggesting that PSCA could be considered as a valuable target for diagnosis and therapy of PCa.

[836]

**TÍTULO / TITLE:** - First imaging results of an intraindividual comparison of (11)C-acetate and (18)F-fluorocholine PET/CT in patients with prostate cancer at early biochemical first or second relapse after prostatectomy or radiotherapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nucl Med Mol Imaging. 2014 Jan;41(1):68-78. doi: 10.1007/s00259-013-2540-6. Epub 2013 Oct 9.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s00259-013-2540-6](#)

**AUTORES / AUTHORS:** - Buchegger F; Garibotto V; Zilli T; Allainmat L; Jorcano S; Veas H; Rager O; Steiner C; Zaidi H; Seimbille Y; Ratib O; Miralbell R

**INSTITUCIÓN / INSTITUTION:** - Nuclear Medicine Division, University Hospital of Geneva, 1211, Geneva 14, Switzerland, [franz.buchegger@chuv.ch](mailto:franz.buchegger@chuv.ch).

**RESUMEN / SUMMARY:** - PURPOSE: (18)F-Fluorocholine (FCH) and (11)C-acetate (ACE) PET are widely used for detection of recurrent prostate cancer (PC). We present the first results of a comparative, prospective PET/CT study of both tracers evaluated in the same patients presenting with recurrence and low PSA to compare the diagnostic information provided by the two tracers. METHODS: The study group comprised 23 patients studied for a rising PSA level after radical prostatectomy (RP, 7 patients, PSA  $\leq$ 3 ng/ml), curative radiotherapy (RT, 7 patients, PSA  $\leq$ 5 ng/ml) or RP and salvage RT (9 patients, PSA  $\leq$ 5 ng/ml). Both FCH and ACE PET/CT scans were performed in a random sequence a median of 4 days (range 0 to 11 days) apart. FCH PET/CT was started at injection (307 +/- 16 MBq) with a 10-min dynamic acquisition of the prostate bed, followed by a whole-body PET scan and late (45 min) imaging of the pelvis. ACE PET/CT was performed as a double whole-body PET scan starting 5 and 22 min after injection (994 +/- 72 MBq), and a late view (45 min) of the prostate bed. PET/CT scans were blindly reviewed by two independent pairs of two experienced nuclear medicine physicians, discordant subgroup results being discussed to reach a consensus for positive, negative end equivocal results. RESULTS: PET results were concordant in 88 out of 92 local, regional and distant findings (Cohen's kappa 0.929). In particular, results were concordant in all patients concerning local status, bone metastases and distant findings. Lymph-node results were concordant in 19 patients and different in 4 patients. On a per-patient basis results were concordant in 22 of 23 patients (14 positive, 5 negative and 3 equivocal). In only one patient was ACE PET/CT positive for nodal metastases while FCH PET/CT was overall negative; interestingly, the ACE-positive and FCH-negative lymph nodes became positive in a second FCH PET/CT scan performed a few months later. CONCLUSION: Overall, ACE and FCH PET/CT showed excellent concordance, on both a per-lesion and a per-patient basis, suggesting that both tracers perform equally for recurrent prostate cancer staging.

[837]

**TÍTULO / TITLE:** - Effect of gender on outcomes following radical cystectomy for urothelial carcinoma of the bladder: A critical analysis of 1,994 patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00317-7. doi: 10.1016/j.urolonc.2013.08.007.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.08.007](#)

**AUTORES / AUTHORS:** - Mitra AP; Skinner EC; Schuckman AK; Quinn DI; Dorff TB; Daneshmand S

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, University of Southern California, Norris Comprehensive Cancer Center, Los Angeles, CA; Center for Personalized Medicine, University of Southern California, Los Angeles, CA.

**RESUMEN / SUMMARY:** - **OBJECTIVE:** The oncological basis behind the observation that females experience worse outcomes following radical cystectomy for urothelial carcinoma of the bladder (UCB) is unclear. This study was aimed at examining the sole effect of gender on postcystectomy UCB outcomes and identifying potential factors that may explain the poor prognosis in females using a balanced case-control approach. **MATERIALS AND METHODS:** A review of 2,567 patients with UCB who underwent radical cystectomy identified 414 females (“cases”) who were matched 1:1 for demographic, tumor, and treatment characteristics with 414 male counterparts (“controls”). Cases were also compared with an independent male UCB cohort (n = 1,166). Differences between females vs. matched control and independent male patients with UCB were analyzed. Recurrence-free survival, cancer-specific survival, and overall survival were compared by univariable and multivariable Cox regression models. **RESULTS:** Median follow-up for cases, controls, and independent control cohort was 12.2, 8.6, and 13.5 years, respectively. Females were matched to male controls for tumor and nodal stages (P = 1.00), lymphovascular invasion and surgical margin status, age, prior intravesical treatment, and neoadjuvant and adjuvant chemotherapy administration (P = 0.61-1.00). Cases were also balanced with controls for grade, p53 status, nodal yield, American Society of Anesthesiologists score, presence of hydronephrosis, and times to diagnosis and cystectomy (P $\geq$ 0.14). When thus matched, outcomes between females and males were not different (P $\geq$ 0.34). However, when compared with an independent unmatched male control cohort, females had significantly poorer outcomes (P $\leq$ 0.006). In this comparison, females presented with higher tumor (P<0.001) and nodal (P = 0.049) stages and a lesser proportion received precystectomy intravesical therapy (P = 0.032). **CONCLUSIONS:** Females have similar UCB outcomes to males when matched for demographic, clinicopathologic, and management characteristics. However, they present with more advanced tumors, thus explaining the observation of poor outcomes.

[838]

**TÍTULO / TITLE:** - Renal cell carcinoma in acquired renal cystic disease following renal transplantation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - ANZ J Surg. 2013 Oct 28. doi: 10.1111/ans.12255.

●● Enlace al texto completo (gratis o de pago) [1111/ans.12255](#)

**AUTORES / AUTHORS:** - Banerji JS; Singh SK; Kekre NS

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Christian Medical College, Vellore, India.

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[839]

**TÍTULO / TITLE:** - The efficacy and safety of simultaneous transurethral GreenLight photoselective vaporization of bladder tumor and prostate in patients with bladder tumor and lower urinary tract symptoms.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Oct 5.

●● Enlace al texto completo (gratis o de pago) [1007/s11255-013-0572-2](#)

**AUTORES / AUTHORS:** - Li Z; Hou R; Li J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The Union Medical Center of Tianjin, Tianjin, 300121, China.

**RESUMEN / SUMMARY:** - PURPOSE: We compared the safety and efficacy of simultaneous transurethral GreenLight photoselective vaporization of bladder tumor and prostate (PVBT/PVP) in patients with bladder tumor and bladder outlet obstruction caused by benign prostate hyperplasia (BPH). METHODS: Sixty-two patients with bladder tumor were enrolled in our prospective and randomized trial. A total of 37 men underwent simultaneous transurethral PVBT/PVP, and 25 patients underwent PVBT alone. The clinicopathological parameters and the recurrence of bladder tumor on the bladder neck/prostatic fossa were evaluated in all patients. RESULTS: Clinicopathological parameters of both groups were similar. The rates of recurrence, progression and tumor recurrence of bladder neck/prostatic fossa were 16.0, 4.0 and 4.0 % in the simultaneous resection group, and 18.9, 5.4 and 8.1 % in the group PVBT, respectively. No statistically significant differences were found between the two groups ( $P > 0.05$ ). CONCLUSIONS: Simultaneous PVBT/PVP may help decrease the overall recurrence rate and tumor recurrence in bladder neck/prostatic fossa. PVBT/PVP can be performed effectively and safely in patients with bladder tumor and BPH.

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[840]

**TÍTULO / TITLE:** - Impact of Chronic Kidney Disease in Early Invasive versus Early Conservative Revascularization Strategies in Non-ST-Segment Elevation Acute Coronary Syndromes: A Population-Based Study from NHIRD of Taiwan.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Nephron Clin Pract. 2013 Sep 26;124(1-2):38-46.

●● Enlace al texto completo (gratis o de pago) [1159/000355008](#)

**AUTORES / AUTHORS:** - Chu CY; Su HM; Hsu PC; Lee WH; Lin TH; Voon WC; Lai WT; Sheu SH

**INSTITUCIÓN / INSTITUTION:** - Division of Cardiology, Department of Internal Medicine, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, ROC.

**RESUMEN / SUMMARY:** - Background: Patients with chronic kidney disease (CKD) sustaining a non-ST-segment elevation acute coronary syndrome (NSTE-ACS) are considered high risk and an early invasive strategy (EIS) is often recommended. However, the impact of CKD on patients receiving an EIS or an early conservative strategy (ECS) is unclear in real-world practice. Methods: Data were analyzed from the

2005-2008 National Health Insurance Research Database (NHIRD) in Taiwan. The diagnosis of CKD was based on the International Classification of Disease-9 codes recorded by physicians. EIS was defined as coronary angiography with intent to revascularization performed within 72 h of symptom onset. The primary endpoint was time to first major adverse cardiac event (MACE) comprising cardiovascular death, myocardial infarction (MI) and stroke. The secondary endpoints included major bleeding (MB), heart failure (HF) and dialysis during admission (DDA). Results: 834 patients (466 EIS and 368 ECS) were enrolled and age was 64.3 +/- 12.6 years. Mean follow-up time was 1,163.96 +/- 19.99 days. In the whole population an EIS was associated with a reduction in MACE (HR 0.69; 95% CI 0.50-0.95, p = 0.024) but not in the CKD population (HR 1.08; 95% CI 0.66-1.78, p = 0.76). Kaplan-Meier curves showed CKD subjects receiving an EIS had the highest MACE, HF and DDA rate (all p < 0.019) and CKD subjects receiving an ECS had the highest MB rate (p = 0.018). Cox regression analysis showed CKD predicted higher HF and DDA in those receiving an EIS and higher DDA and MB in those receiving an ECS. Conclusion: An EIS reduced MACE in the overall population, and CKD was a poor outcome predictor for both revascularization strategies in NSTEMI-ACS. © 2013 S. Karger AG, Basel.

[841]

**TÍTULO / TITLE:** - Percentage of cancer involvement in positive cores can predict unfavorable disease in men with low-risk prostate cancer but eligible for the prostate cancer international: Active surveillance criteria.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct 31. pii: S1078-1439(13)00291-3. doi: 10.1016/j.urolonc.2013.07.004.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urolonc.2013.07.004](#)

**AUTORES / AUTHORS:** - Russo GI; Cimino S; Castelli T; Favilla V; Urzi D; Veroux M; Madonia M; Morgia G

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**RESUMEN / SUMMARY:** - OBJECTIVES: To identify predictive factors of unfavorable disease and of biochemical failure in patients treated with radical prostatectomy but eligible for active surveillance (AS) according to Prostate Cancer Research International: Active Surveillance (PRIAS) criteria. We aimed to introduce and validate the percentage of cancer involvement in positive cores (CIPC) as potential worse predictive factor. METHODS: From January 2002 to December 2007, 750 consecutive subjects underwent radical prostatectomy at a single institution. We identified 147 (19.05%) patients who were eligible for AS based on PRIAS criteria: clinical stage T1c or T2 disease, prostate-specific antigen level of  $\leq 10$  ng/ml, Gleason score  $\leq 6$ , prostate-specific antigen-D of  $< 0.2$  ng/ml<sup>2</sup>, and fewer than 3 positive biopsy cores. CIPC was included in the analysis. RESULTS: Of the 147 patients, 95 (66.43%) patients had favorable disease, whereas 48 (33.57%) had unfavorable disease. In multivariate logistic regression, maximum cancer length (odds ratio 12.52, P<0.01) and CIPC (odds ratio 1.70, P<0.01) represented independent predictors of unfavorable prostate cancer. The area under the receiver operating characteristics curve analysis revealed significantly higher performance after including CIPC to the PRIAS criteria (0.61 vs. 0.94, P<0.01). A cutoff of 0.4mm of CIPC was set to predict unfavorable disease with

93% specificity, 76% sensibility, and 87% accuracy based on the receiver operating characteristics curve analysis. Finally, the 3- and 5-years biochemical recurrence (BCR)-free survival were significantly lower in subjects with CIPC $\geq$ 0.4mm, 88.4 % and 81.0% vs. 97.8% and 95.7%, respectively (P< 0.01). CONCLUSIONS: Our findings suggest that the inclusion of CIPC to the prostate biopsy features could be helpful to avoid misclassification in patients eligible for AS according to the PRIAS criteria.

[842]

**TÍTULO / TITLE:** - In-hospital death and hospital-acquired complications among patients undergoing partial cystectomy for bladder cancer in the United States.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00335-9. doi: 10.1016/j.urolonc.2013.08.024.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.08.024](#)

**AUTORES / AUTHORS:** - Kates M; Gorin MA; Deibert CM; Pierorazio PM; Schoenberg MP; McKiernan JM; Bivalacqua TJ

**INSTITUCIÓN / INSTITUTION:** - James Buchanan Brady Urological Institute, The Johns Hopkins Medical Institutions, Baltimore, MD. Electronic address: [mkates@jhmi.edu](mailto:mkates@jhmi.edu).

**RESUMEN / SUMMARY:** - BACKGROUND: Partial cystectomy (PC) is a therapeutic option for select patients with bladder cancer, but its associated perioperative risks and costs are unknown. We estimated annual rates of PC in a nationally representative sample of hospitals, and analyzed whether hospital volume affects postoperative outcomes and costs in patients undergoing PC. METHODS: From the Nationwide Inpatient Sample, we selected a weighted cohort of patients with bladder cancer who underwent PC between 2002 and 2008. Differences in length of stay, charges, and clinical outcomes were calculated based on operative volume, and univariate and multivariate regression models were fitted to predict in-hospital mortality (IHM) and hospital-acquired conditions. RESULTS: A total of 10,780 patients with bladder cancer who underwent PC were identified with an annual rate between 1457 and 1628 cases. IHM rates were 1.8%, constituting 195 patients (between 9 and 46 annually). A total of 417 patients (3.9%) experienced a "never event" complication, which Medicare no longer reimburses. The mean annual hospital volume of patients who died was 1.7 cases/y compared with 2.4 cases/y among those without fatal complications. No cases of IHM were identified among hospitals performing at least 5 partial cystectomies/y. In a multivariate regression model increased hospital volume was independently associated with decreased mortality (odds ratio = 0.70, 95% confidence interval; 0.60-0.80). CONCLUSIONS: Approximately 1 in 25 patients undergoing PC experience a hospital-acquired complication, and nearly 1 in 50 die as a result of the operation. For each additional case a hospital performs annually, the risk of IHM decreases by 30%.

[843]

**TÍTULO / TITLE:** - High rates of advanced disease, complications, and decline of renal function after radical nephroureterectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct 17. pii: S1078-1439(13)00285-8. doi: 10.1016/j.urolonc.2013.06.015.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.06.015](https://doi.org/10.1016/j.urolonc.2013.06.015)

**AUTORES / AUTHORS:** - Raman JD; Lin YK; Kaag M; Atkinson T; Crispen P; Wille M; Smith N; Hockenberry M; Guzzo T; Peyronnet B; Bensalah K; Simhan J; Kutikov A; Cha E; Herman M; Scherr D; Shariat SF; Boorjian SA

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Penn State Milton S. Hershey Medical Center, Hershey, PA. Electronic address: [jraman@hmc.psu.edu](mailto:jraman@hmc.psu.edu).

**RESUMEN / SUMMARY:** - **OBJECTIVES:** Recurrences remain common following radical nephroureterectomy (RNU) for locally advanced upper-tract urothelial carcinoma (UTUC). We review a cohort of RNU patients to identify the incidence of locally advanced disease, decline in renal function, complications, and utilization of adjuvant chemotherapy (AC). **METHODS:** Institutional databases from 7 academic medical centers identified 414 RNU patients treated between 2003 and 2012 who had not received neoadjuvant chemotherapy. Glomerular filtration rate was estimated using the Modification of Diet in Renal Disease equation. Complications were classified according to the modified Clavien system. Cox proportional hazard modeling and Kaplan-Meier analysis determined factors associated with cancer-specific survival. **RESULTS:** Of 414 patients, 177 (43%) had locally advanced disease, including 118 pT3N0/Nx, 13 pT4N0/Nx, and 46 pTanyN+. Estimated 3- and 5-year cancer-specific survival was 47% and 34%, respectively. Only 31% of patients with locally advanced UTUC received AC. Mean estimated glomerular filtration rate declined from 59 to 51ml/min/1.73m<sup>2</sup> following RNU, including a new-onset decline below 60 and 45ml/min/1.73m<sup>2</sup> in 25% and 15% of patients, respectively (P<0.001 for both). Complications occurred in 46 of 177 (26%) patients, of which one-quarter were grade III or IV. Increasing age (Hazard Ratio (HR) 1.4, P = 0.03), positive surgical margins (HR 2.1, P = 0.01), and positive lymph nodes (HR 4.3, P<0.001) were associated with an increased risk of death from UTUC, whereas receipt of AC (HR 0.85, P = 0.05) was associated with a decrease in UTUC mortality. **CONCLUSIONS:** Under one-third of RNU patients with locally advanced UTUC cancers received AC. Perioperative complications and decline in renal function may have contributed to this low rate. Such data further underscore the need for continued discussion regarding the use of chemotherapy in a neoadjuvant setting for appropriately selected patients with UTUC.

[844]

**TÍTULO / TITLE:** - GC7 Sensitizes Bladder Cancer Cells to Doxorubicin by Preventing EMT via Inhibiting eIF5A2 Activation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Sci. 2013 Nov 22. doi: 10.1111/cas.12328.

●● Enlace al texto completo (gratis o de pago) [1111/cas.12328](https://doi.org/10.1111/cas.12328)

**AUTORES / AUTHORS:** - Yang J; Yu H; Shen M; Wei W; Xia L; Zhao P

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, the First Affiliated Hospital, School of Medicine, Zhejiang University, 310003, Hangzhou, Zhejiang, China.

**RESUMEN / SUMMARY:** - Drug resistance greatly reduces the efficacy of doxorubicin-based chemotherapy in bladder cancer treatment; however, the underlying mechanisms are poorly understood. We aimed to investigate whether N1-guanyl-1,7-diaminoheptane (GC7), which inhibits eukaryotic translation initiation factor 5A2 (eIF5A2) activation, exerts synergistic cytotoxicity with doxorubicin in bladder cancer, and whether eIF5A2 is involved in chemoresistance to doxorubicin-based bladder

cancer treatment. BIU-87, J82, and UM-UC-3 bladder cancer cells were transfected with eIF5A2 short interfering RNA (siRNA) or negative control siRNA before incubation with doxorubicin alone or doxorubicin plus GC7 for 48 h. GC7 enhanced doxorubicin cytotoxicity in BIU-87, J82, and UM-UC-3 cells. GC7 significantly inhibited activity of eIF5A2, suppressed the doxorubicin-induced epithelial-mesenchymal transition (EMT) in BIU-87 cells and promoted the mesenchymal-epithelial transition (MET) in J82 and UM-UC-3 cells. Knockdown of eIF5A2 sensitized bladder cancer cells to doxorubicin, prevented doxorubicin-induced EMT in BIU-87 cells and encouraged MET in J82, and UM-UC-3 cells. GC7 combination therapy may enhance the therapeutic efficacy of doxorubicin in bladder cancer by inhibiting eIF5A2 activation and preventing the EMT. This article is protected by copyright. All rights reserved.

[845]

**TÍTULO / TITLE:** - High mitochondria content is associated with prostate cancer disease progression.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer. 2013 Nov 21;12(1):145.

●● [Enlace al texto completo \(gratis o de pago\) 1186/1476-4598-12-145](#)

**AUTORES / AUTHORS:** - Grupp K; Jedrzejewska K; Tsourlakis MC; Koop C; Wilczak W; Adam M; Quaas A; Sauter G; Simon R; Izbicki JR; Graefen M; Huland H; Schlomm T; Minner S; Steurer S

**RESUMEN / SUMMARY:** - BACKGROUND: Mitochondria are suggested to be important organelles for cancer initiation and promotion. This study was designed to evaluate the prognostic value of MTC02, a marker for mitochondrial content, in prostate cancer. METHODS: Immunohistochemistry of using an antibody against MTC02 was performed on a tissue microarray (TMA) containing 11,152 prostate cancer specimens. Results were compared to histological phenotype, biochemical recurrence, ERG status and other genomic deletions by using our TMA attached molecular information. RESULTS: Tumor cells showed stronger MTC02 expression than normal prostate epithelium. MTC02 immunostaining was found in 96.5% of 8,412 analyzable prostate cancers, including 15.4% tumors with weak, 34.6% with moderate, and 46.5% with strong expression. MTC02 expression was associated with advanced pathological tumor stage, high Gleason score, nodal metastases ( $p < 0.0001$  each), positive surgical margins ( $p = 0.0005$ ), and early PSA recurrence ( $p < 0.0001$ ) if all cancers were jointly analyzed. Tumors harboring ERG fusion showed higher expression levels than those without ( $p < 0.0001$ ). In ERG negative prostate cancers, strong MTC02 immunostaining was linked to deletions of PTEN, 6q15, 5q21, and early biochemical recurrence ( $p < 0.0001$  each). Moreover, multiple scenarios of multivariate analyses suggested an independent association of MTC02 with prognosis in preoperative settings. CONCLUSIONS: Our study demonstrates high-level MTC02 expression in ERG negative prostate cancers harboring deletions of PTEN, 6q15, and 5q21. Additionally, increased MTC02 expression is a strong predictor of poor clinical outcome in ERG negative cancers, highlighting a potentially important role of elevated mitochondrial content for prostate cancer cell biology.

[846]

**TÍTULO / TITLE:** - A Naturally-Derived Small Molecule Disrupts Ligand-Dependent and Ligand-Independent Androgen Receptor Signaling in Human Prostate Cancer Cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer Ther. 2013 Nov 20.

- [Enlace al texto completo \(gratis o de pago\) 1158/1535-7163.MCT-13-0478](#)

**AUTORES / AUTHORS:** - Amin KS; Jagadeesh S; Baishya G; Rao PG; Barua NC; Bhattacharya S; Banerjee PP

**INSTITUCIÓN / INSTITUTION:** - 1Biochemistry, Georgetown University Medical Center.

**RESUMEN / SUMMARY:** - Continued reliance on androgen receptor (AR) signaling is a hallmark of prostate cancer, including the development of castration-resistant prostate cancer (CRPC), making it an attractive therapeutic target for prostate cancer treatment. Mahanine is a novel carbazole alkaloid derived from the leaves of *Murraya koenigii*, commonly known as the curry leaf plant, which grows widely across East Asia. We show here that mahanine possesses the ability to inhibit ligand-dependent and ligand-independent AR transactivation, leading to a prominent decline in AR target gene expression. Mahanine treatment causes a time- and dose- dependent decline in AR protein levels, including truncated AR splice variants, in a panel of androgen-responsive and androgen-independent prostate cancer cells. The decrease in AR levels induced by mahanine occurs post-translationally by proteasomal degradation, without any change in AR gene expression. Mahanine treatment induces an outward movement of the AR from the nucleus to the cytoplasm, leading to an initial rise in cytoplasmic AR levels, followed by a gradual decline in the AR levels in both cellular compartments. Ligand-induced AR phosphorylation at Ser-81, a phospho-site associated with prostate cancer cell growth and AR transactivity, is greatly diminished in the presence of mahanine. The decline in AR phosphorylation at Ser-81 by mahanine occurs via the inactivation of mitotic kinase, CDK1. Collectively, our data demonstrate that mahanine strongly disrupts androgen receptor signaling and inhibits the growth of androgen-dependent and -independent prostate cancer cells, thereby implicating a therapeutic role for mahanine in prostate cancer treatment.

[847]

**TÍTULO / TITLE:** - Prostate cancer risk after anti-androgen treatment for priapism.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Oct 18.

- [Enlace al texto completo \(gratis o de pago\) 1007/s11255-013-0583-z](#)

**AUTORES / AUTHORS:** - Goetz T; Burnett AL

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, The James Buchanan Brady Urological Institute, The Johns Hopkins Hospital, The Johns Hopkins Medical Institutions, 600 N. Wolfe St/Marburg 407, Baltimore, MD, 21287-2411, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Patients with recurrent ischemic priapism have historically been treated with anti-androgen therapy due to the limited available evidence for more targeted therapies to treat the underlying pathophysiologic mechanisms of this condition. We report a case in which anti-androgen therapy caused significant adverse side effects and likely masked this patient's elevated prostate-specific antigen (PSA) levels, which adversely impacted the timely diagnosis and treatment of his prostate cancer. CASE REPORT: A 69-year-old man treated with anti-

androgens for priapism initially developed unwanted anti-androgenic side effects such as gynecomastia, erectile dysfunction, and decreased libido. After decreasing his anti-androgen dosage and starting a specified regimen of phosphodiesterase type 5 inhibitor therapy, his serum PSA levels were found to be elevated. He was subsequently diagnosed with adenocarcinoma of the prostate and underwent a radical prostatectomy with the pathologic finding of high-grade, locally progressive disease. CONCLUSION: Anti-androgen therapy carries significant complication risks, including the potential to alter the diagnosis and treatment of prostate cancer. Clinicians administering this therapy for priapism management should be aware of these possible risks.

[848]

**TÍTULO / TITLE:** - Surface modified nanoparticles enhance transurothelial penetration and delivery of survivin siRNA in treating bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer Ther. 2013 Nov 12.

- [Enlace al texto completo \(gratis o de pago\) 1158/1535-7163.MCT-13-](#)

[0502](#)

**AUTORES / AUTHORS:** - Martin DT; Steinbach JM; Liu J; Shimizu S; Kaimakliotis HZ; Wheeler MA; Hittelman AB; Saltzman WM; Weiss RM

**INSTITUCIÓN / INSTITUTION:** - 1Urology, Yale University.

**RESUMEN / SUMMARY:** - Penetration of the bladder permeability barrier (BPB) is a major challenge when treating bladder diseases via intravesical delivery. To increase transurothelial migration and tissue and tumor cell uptake, poly(lactic-co-glycolic acid) (PLGA) nanoparticles (NPs) were modified by addition of a low molecular weight (2.5 kDa or 20 kDa) positively charged mucoadhesive polysaccharide, chitosan, to the NP surface. In designing these NPs, we balanced the adhesive properties of chitosan with the release and bioactivity of the siRNA. Chitosan functionalized NPs demonstrated increased binding to and uptake in intravesically instilled mouse bladders and human ureter at 10 times the level of unmodified NPs. Furthermore, we extended the bioactivity of survivin siRNA in vitro for up to 9 days and demonstrated a decrease in proliferation when using chitosan modified NPs relative to unmodified NPs. In addition, treatment of xenograft tumors with chitosan modified NPs that encapsulate survivin siRNA (NP-siSUR-CH2.5) resulted in a 65% reduction in tumor volume and a 75% decrease in survivin expression relative to tumors treated with blank chitosan NPs (NP-Bk-CH2.5). Our low molecular weight chitosan delivery system has the capacity to transport large amounts of siRNA across the urothelium and/or to the tumor site thus increasing therapeutic response.

[849]

**TÍTULO / TITLE:** - Non-activated protein C rescue treatment in Wilms tumour associated hepatic sinusoidal obstructive syndrome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pediatr Blood Cancer. 2013 Nov 26. doi: 10.1002/pbc.24859.

- [Enlace al texto completo \(gratis o de pago\) 1002/pbc.24859](#)

**AUTORES / AUTHORS:** - De Leonardis F; Koronica R; Bruno SD; Santoro N

**INSTITUCIÓN / INSTITUTION:** - Division of Paediatric Haematology-Oncology, Department of Pediatrics, Bari, Italy.

**RESUMEN / SUMMARY:** - Hepatic sinusoidal obstructive syndrome (HSOS) is a frequent complication in patients undergoing haematopoietic stem cell transplant (HSCT), and more rarely, in paediatric patients receiving conventional chemotherapy for solid tumours. Its diagnosis relies on a combination of clinical signs and symptoms such as hepatomegaly, jaundice, weight gain and fluid retention. HSOS treatment is primarily based on supportive care and anti-fibrinolytic agents. Here we report two patients affected by Wilms tumour who developed life-threatening HSOS that failed to respond to conventional treatment. Both patients recovered after receiving aggressive supportive treatment that included administration of non-activated protein C (Ceprotrin®-Baxter). *Pediatr Blood Cancer* © 2013 Wiley Periodicals, Inc.

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[850]

**TÍTULO / TITLE:** - Efficacy and safety of advanced renal cell carcinoma patients treated with sorafenib: roles of cytokine pretreatment.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Int J Clin Oncol*. 2013 Oct 3.

- [Enlace al texto completo \(gratis o de pago\) 1007/s10147-013-0618-6](#)

**AUTORES / AUTHORS:** - Suzuki H; Suzuki T; Ishizuka O; Nishizawa O; Ueno M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Shinshu University School of Medicine, 3-1-1 Asahi, Matsumoto, 390-8621, Japan.

**RESUMEN / SUMMARY:** - **BACKGROUND:** We conducted a retrospective, questionnaire-based analysis to assess the outcomes of advanced renal cell carcinoma (RCC) in Japanese patients treated with sorafenib in the daily clinical setting. **PATIENTS AND METHODS:** Patients (n = 110) were treated with sorafenib 400 mg twice daily at 12 centers. Overall survival (OS), progression-free survival (PFS), safety, and prognostic factors associated with PFS were assessed. **RESULTS:** The median OS was not reached within the study period, while the median PFS was 11.0 mo [95 % confidence interval (CI), 6.6 to 14.4 mo]. Univariate analysis showed that higher C-reactive protein (CRP) level, lower Na<sup>+</sup> level, and presence of liver metastasis were significant predictors of poorer PFS (p < 0.05, respectively). Among these variables, multivariate analysis identified higher CRP level (p = 0.004) and the presence of liver metastasis (p < 0.001) as being significantly associated with poorer PFS. The most common adverse event was skin toxicity (67 %), followed by gastrointestinal symptoms (26 %), hypertension (22 %), fatigue (19 %), hematological toxicity (10 %), and hemorrhage (6 %). The incidence of adverse events was comparable to that of previously reported clinical trials. **CONCLUSIONS:** Multivariate analysis indicated that CRP and liver metastasis were negatively associated with prognosis. Sorafenib therapy for Japanese patients with advanced RCC was effective and well tolerated.

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[851]

**TÍTULO / TITLE:** - Progression of Intracranial Meningioma during Luteinizing Hormone-Releasing Hormone Agonist Treatment for Prostate Cancer: Case Report.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Neurol Med Chir (Tokyo). 2013 Nov 8.

**AUTORES / AUTHORS:** - Anda T; Honda M; Ishihara T; Kamei T

**INSTITUCIÓN / INSTITUTION:** - Department of Neurosurgery, Shunan Memorial Hospital.

**RESUMEN / SUMMARY:** - The authors describe a male patient who developed a large intracranial meningioma during the hormone therapy for pre-existing prostate cancer. A 70-year-old man received a brain check-up, and no intracranial abnormality was detected. Five months later, prostate cancer was diagnosed, and he underwent prostatectomy. Leuprorelin acetate, a luteinizing hormone-releasing hormone (LH-RH) agonist, was subsequently administered to the patient once a month for 3 years. After that he presented with a large parasagittal mass, which was excised. The tumor was histologically diagnosed as meningothelial meningioma, and LH-RH receptors were verified immunohistochemically in the cytoplasm of the tumor cells. Leuprorelin acetate may accelerate the rapid growth of meningioma in this patient.

[852]

**TÍTULO / TITLE:** - Liaise with pathologists to refine understanding of the prostate-specific antigen test.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 18;199(10):656-8.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10883](#) [pii]

**AUTORES / AUTHORS:** - Sikaris KA; Ross BA; Khong TY

**INSTITUCIÓN / INSTITUTION:** - Melbourne Pathology, Melbourne, VIC, Australia.  
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[853]

**TÍTULO / TITLE:** - Carbonic anhydrase expression in kidney and renal cancer: implications for diagnosis and treatment.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Subcell Biochem. 2014;75:181-98. doi: 10.1007/978-94-007-7359-2\_10.

●● Enlace al texto completo (gratis o de pago) [1007/978-94-007-7359-2\\_10](#)

**AUTORES / AUTHORS:** - Oosterwijk E

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University Medical Center St Radboud, Nijmegen, The Netherlands, [e.oosterwijk@uro.umcn.nl](mailto:e.oosterwijk@uro.umcn.nl).

**RESUMEN / SUMMARY:** - Four different carbonic anhydrases are expressed in the human nephron, the functional unit of the kidney. These are specifically expressed in different nephron segments, emphasizing the critical role carbonic anhydrases play in maintaining the homeostasis of this crucial organ. Whereas the localization of carbonic anhydrases in the kidney has been long established, interest in carbonic anhydrases has increased dramatically for renal cancer, in particular for the clear cell variant of renal cell carcinoma (ccRCC) because carbonic anhydrase IX is specifically expressed in ccRCC. Therefore carbonic anhydrase IX is being studied as potential diagnostic and therapeutic target, despite carbonic anhydrase IX expression in non-renal tissues.

[854]

**TÍTULO / TITLE:** - Actual medical management of lower urinary tract symptoms related to benign prostatic hyperplasia: temporal trends of prescription and hospitalization rates over 5 years in a large population of Italian men.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago) [1007/s11255-013-0587-8](#)

**AUTORES / AUTHORS:** - Cindolo L; Pirozzi L; Fanizza C; Romero M; Sountoulides P; Roehrborn CG; Mirone V; Schips L

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, "S.Pio da Pietrelcina" Hospital, Vasto, Italy, [lucacindolo@virgilio.it](mailto:lucacindolo@virgilio.it).

**RESUMEN / SUMMARY:** - PURPOSE: The purpose of the study is to estimate the trends in drug prescriptions and the hospitalization rates for lower urinary tract symptoms/benign prostatic hyperplasia (LUTS/BPH) in real-life clinical practice, using information deriving from administrative databases of the Italian health care system. METHODS: Prescription data on approximately 1,500,000 men over 40 were examined, and prescribed boxes of alpha-blockers (ABs) and/or 5 alpha reductase inhibitors (5ARI) were calculated for 5 consecutive years, from 2004 to 2008. Annual use prevalence and incidence rates for each drug class and for the combination therapy (CT) were calculated according to age for the entire study period. Hospitalization rates for reasons related to LUTS/BPH were also evaluated for the same time period. RESULTS: The overall distribution of drugs for LUTS/BPH, in terms of number of boxes prescribed, increased by 43 %. This increase was accounted for by both classes of drugs although it was greater for 5ARI than for AB (+49 vs +41 %). The prevalence of CT showed a substantial increase to almost 25 % in patients aged  $\geq 75$ . Hospitalization rate for BPH/LUTS-related reasons decreased during the study period (8 and 3 % per year for non-surgical and surgical reasons, respectively). CONCLUSIONS: The prevalence of the use of drugs prescribed for LUTS/BPH has steadily increased. An increase in terms of prescribed boxes was observed for both classes of drugs, even though the increase was greater for 5ARIs. The reduction in the hospitalization rates needs additional researches.

[855]

**TÍTULO / TITLE:** - The dilemmas of prostate cancer screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 4;199(9):582-3.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10833](#) [pii]

**AUTORES / AUTHORS:** - Haines IE

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[856]

**TÍTULO / TITLE:** - The dilemmas of prostate cancer screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 4;199(9):582.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10866](#) [pii]

**AUTORES / AUTHORS:** - McKenzie PR; Delahunt B; Kench JG  
**INSTITUCIÓN / INSTITUTION:** - Tissue Pathology and Diagnostic Oncology, Royal Prince Alfred Hospital, Sydney, NSW, Australia. [paul.mckenzie@sswahs.nsw.gov.au](mailto:paul.mckenzie@sswahs.nsw.gov.au).

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[857]

**TÍTULO / TITLE:** - The dilemmas of prostate cancer screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 4;199(9):582.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10851](#) [pii]

**AUTORES / AUTHORS:** - Miklos GG

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[858]

**TÍTULO / TITLE:** - Prostate cancer screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 4;199(9):585.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10827](#) [pii]

**AUTORES / AUTHORS:** - Faigen M

**INSTITUCIÓN / INSTITUTION:** - Monash University, Melbourne, VIC, Australia.

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[859]

**TÍTULO / TITLE:** - The dilemmas of prostate cancer screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 4;199(9):584.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10923](#) [pii]

**AUTORES / AUTHORS:** - Del Mar CB

**INSTITUCIÓN / INSTITUTION:** - Centre for Research in Evidence-Based Practice, Bond University, Gold Coast, QLD, Australia. [cdelmar@bond.edu.au](mailto:cdelmar@bond.edu.au).

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[860]

**TÍTULO / TITLE:** - The dilemmas of prostate cancer screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 4;199(9):583-4.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10905](#) [pii]

**AUTORES / AUTHORS:** - Hugosson J; Carlsson SV

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Gothenburg, Gothenburg, Sweden. [jonas@urol.se](mailto:jonas@urol.se).

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[861]

**TÍTULO / TITLE:** - The dilemmas of prostate cancer screening.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Med J Aust. 2013 Nov 4;199(9):583.

●● Enlace al texto completo (gratis o de pago) [5694/mja13.10779](#) [pii]

**AUTORES / AUTHORS:** - Lawrentschuk N; Murphy DG; Costello AJ

**INSTITUCIÓN / INSTITUTION:** - Austin Hospital, Melbourne, VIC, Australia.  
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[862]

**TÍTULO / TITLE:** - Expression of molecular markers associated with the mammalian target of rapamycin pathway in nonmetastatic renal cell carcinoma: Effect on prognostic outcomes following radical nephrectomy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00305-0. doi: 10.1016/j.urolonc.2013.07.014.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.07.014](#)

**AUTORES / AUTHORS:** - Nishikawa M; Miyake H; Harada KI; Fujisawa M

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Kobe University Graduate School of Medicine, Kobe, Japan.

**RESUMEN / SUMMARY:** - OBJECTIVES: To evaluate the expression of multiple molecular markers involved in mammalian target of rapamycin (mTOR) signaling pathway in renal cell carcinoma (RCC) to determine the prognostic significance of these markers following radical nephrectomy. MATERIAL AND METHODS: The expression levels of 5 markers, including PTEN, phosphorylated (p)-Akt, p-mTOR, p-p70 ribosomal S6 kinase, and p-4E-binding protein 1 (4E-BP1), were measured in radical nephrectomy specimens from 137 patients with nonmetastatic RCC by immunohistochemical staining. RESULTS: During the follow-up period of this series (median, 63.5 mo), disease recurrence occurred in 59 of the 137 patients (43.0%), with a 5-year recurrence-free survival rate of 58.3%. On Univariate analysis, expression levels of p-mTOR and p-4E-BP1, in addition to the C-reactive protein level, pathological stage, and microvascular invasion, were identified as significant predictors for disease recurrence. Of these factors, the expression of p-4E-BP1, C-reactive protein level, and pathological T stage appeared to be independently related to recurrence-free survival on multivariate analysis. Moreover, significant differences were observed in recurrence-free survival according to the positive numbers of these 3 independent factors; that is, disease recurrence developed in 5 of 42 patients with negative results for any risk factor (11.9%), 23 of 50 patients with positive results for a single risk factor (46.0%), and 31 of 45 patients with positive results for 2 or 3 risk factors (68.8%). CONCLUSIONS: The combined evaluation of the expression levels of potential markers in the mTOR signaling pathway, particularly p-4E-BP1, in RCC specimens with conventional prognostic parameters would contribute to the accurate prediction of disease recurrence following radical nephrectomy for nonmetastatic RCC.

[863]

**TÍTULO / TITLE:** - Differential response of DU145 and PC3 prostate cancer cells to ionizing radiation: Role of reactive oxygen species, GSH and Nrf2 in radiosensitivity.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochim Biophys Acta. 2013 Oct 9;1840(1):485-494. doi: 10.1016/j.bbagen.2013.10.006.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbagen.2013.10.006](https://doi.org/10.1016/j.bbagen.2013.10.006)

**AUTORES / AUTHORS:** - Jayakumar S; Kunwar A; Sandur SK; Pandey BN; Chaubey RC

**INSTITUCIÓN / INSTITUTION:** - Radiation Biology and Health Sciences Division, Bhabha Atomic Research Centre, Mumbai 400 085, India.

**RESUMEN / SUMMARY:** - **BACKGROUND:** Radioresistance is the major impediment in radiotherapy of many cancers including prostate cancer, necessitating the need to understand the factors contributing to radioresistance in tumor cells. In the present study, the role of cellular redox and redox sensitive transcription factor, Nrf2 in the radiosensitivity of prostate cancer cell lines PC3 and DU145, has been investigated. **MATERIALS AND METHODS:** Differential radiosensitivity of PC3 and DU145 cells was assessed using clonogenic assay, flow cytometry, and comet assay. Their redox status was measured using DCFDA and DHR probes. Expression of Nrf2 and its dependent genes was measured by EMSA and real time PCR. Knockdown studies were done using shRNA transfection. **RESULTS:** PC3 and DU145 cells differed significantly in their radiosensitivity as observed by clonogenic survival, apoptosis and neutral comet assays. Both basal and inducible levels of ROS were higher in PC3 cells than that of DU145 cells. DU145 cells showed higher level of basal GSH content and GSH/GSSG ratio than that of PC3 cells. Further, significant increase in both basal and induced levels of Nrf2 and its dependent genes was observed in DU145 cells. Knock-down experiments and pharmacological intervention studies revealed the involvement of Nrf2 in differential radio-resistance of these cells. **CONCLUSION:** Cellular redox status and Nrf2 levels play a causal role in radio-resistance of prostate cancer cells. **GENERAL SIGNIFICANCE:** The pivotal role Nrf2 has been shown in the radioresistance of tumor cells and this study will further help in exploiting this factor in radiosensitization of other tumor cell types.

[864]

**TÍTULO / TITLE:** - Chemotherapeutic inhibitors in the treatment of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Opin Pharmacother. 2013 Oct 25.

●● Enlace al texto completo (gratis o de pago) [1517/14656566.2014.852184](https://doi.org/10.1517/14656566.2014.852184)

**AUTORES / AUTHORS:** - Deshmukh RR; Schmitt SM; Hwang C; Dou QP

**INSTITUCIÓN / INSTITUTION:** - Wayne state University, Karmanos Cancer Institute, School of Medicine, Department of Pathology, 540.1 HWCRC, 4100 John R Road, Detroit, MI 48201, USA.

**RESUMEN / SUMMARY:** - Introduction: Prostate cancer being the second leading cause of death in men in Western countries remains a major challenge in healthcare. Several novel agents targeting signaling pathways in prostate cancer have recently been approved by the US Food and Drug Administration (FDA) but there is still an unmet need for new treatment strategies for castration-resistant prostate cancer (CRPC). Areas covered: This review provides a broad overview of prostate cancer therapeutics and highlights key players in the biology of prostate cancer as well as first- and second-line treatments for CRPC. Keywords 'chemotherapeutic agents', 'prostate cancer', 'Phase III clinical trials' and 'US FDA approval' were used for search in PubMed and

clinicalTrials.gov databases and the obtained literature was reviewed and summarized. Expert opinion: Owing to the advances in screening and diagnostic techniques, the majority of prostate cancer cases are diagnosed at an early stage resulting in an almost 100% 5-year survival rate. Recently FDA-approved novel agents (e.g., abiraterone acetate and enzalutamide) have provided new hope in the fight against prostate cancer. However, CRPC remains an incurable disease. Identification of mechanisms of resistance, new biomarkers, appropriate clinical trial end points and novel treatments holds the key for the future of prostate cancer therapy.

[865]

**TÍTULO / TITLE:** - Comparative in vitro evaluation of transportability and toxicity of capecitabine and its metabolites in cells derived from normal human kidney and renal cancers.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Cell Biol. 2013 Dec;91(6):419-27. doi: 10.1139/bcb-2013-0041. Epub 2013 Jun 17.

●● Enlace al texto completo (gratis o de pago) [1139/bcb-2013-0041](#)

**AUTORES / AUTHORS:** - Damaraju VL; Mowles D; Wilson M; Kuzma M; Cass CE; Sawyer MB

**INSTITUCIÓN / INSTITUTION:** - a Department of Oncology, University of Alberta, Edmonton, Alta., Canada.

**RESUMEN / SUMMARY:** - The goal of this study was to understand roles of nucleoside and nucleobase transport processes in capecitabine pharmacology in cells derived from human renal proximal tubule cells (hRPTCs) and three human renal cell carcinoma (RCC) cell lines, A498, A704, and Caki-1. Human equilibrative nucleoside transporters 1 and 2 (hENT1 and hENT2) mediated activities and a sodium-independent nucleobase activity were present in hRPTCs. In hRPTCs, uptake of 5'-deoxy-5-fluorouridine (DFUR), a nucleoside metabolite of capecitabine, was pH dependent with highest uptake seen at pH 6.0. In RCC cell lines, hENT1 was the major nucleoside transporter. Nucleobase transport activity was variable among the three RCC cell lines, with Caki-1 showing the highest and A498 showing the lowest activities. Treatment of RCC cell lines with interferon alpha (IFN-alpha) increased thymidine phosphorylase levels and prior treatment of RCC cell lines with IFN-alpha followed by 5-FU or DFUR resulted in enhanced sensitivity of all cell lines to 5-FU and two of three cell lines to DFUR. We report for the first time a nucleobase transport activity in hRPTCs and RCC cell lines. In addition, our in vitro cytotoxicity results showed that RCC cell lines differed in their response to 5-FU and DFUR and prior treatment with IFN-alpha potentiated cytotoxic response to metabolites of capecitabine.

[866]

**TÍTULO / TITLE:** - Bone-stromal cells up-regulate tumourigenic markers in a tumour-stromal 3D model of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer. 2013 Sep 30;12(1):112. doi: 10.1186/1476-4598-12-112.

●● Enlace al texto completo (gratis o de pago) [1186/1476-4598-12-112](#)

**AUTORES / AUTHORS:** - Windus LC; Glover TT; Avery VM

**INSTITUCIÓN / INSTITUTION:** - Discovery Biology, Eskitis Institute for Drug Discovery, Griffith University, Nathan, 4111 Brisbane, QLD, Canada. [v.avery@griffith.edu.au](mailto:v.avery@griffith.edu.au).

**RESUMEN / SUMMARY:** - BACKGROUND: The cellular and molecular mechanisms that mediate interactions between tumour cells and the surrounding bone stroma are to date largely undetermined in prostate cancer (PCa) progression. The purpose of this study was to evaluate the role of alpha 6 and beta 1 integrin subunits in mediating tumour-stromal interactions. METHODS: Utilising 3D in vitro assays we evaluated and compared 1. Monocultures of prostate metastatic PC3, bone stromal derived HS5 and prostate epithelial RWPE-1 cells and 2. Tumour-stromal co-cultures (PC3 + HS5) to ascertain changes in cellular phenotype, function and expression of metastatic markers. RESULTS: In comparison to 3D monocultures of PC3 or HS5 cells, when cultured together, these cells displayed up-regulated invasive and proliferative qualities, along with altered expression of epithelial-to-mesenchymal and chemokine protein constituents implicated in metastatic dissemination. When co-cultured, HS5 cells were found to re-express N-Cadherin and chemokine receptor CXCR7. Alterations in N-Cadherin expression were found to be mediated by soluble factors secreted by PC3 tumour cells, while chemokine receptor re-expression was dependent on direct cell-cell interactions. We have also shown that integrins beta 1 and alpha 6 play an integral role in maintaining cell homeostasis and mediating expression of E-Cadherin, N-Cadherin and vimentin, in addition to chemokine receptor CXCR7. CONCLUSIONS: Collectively our results suggest that both PC3 and HS5 cells provide a “protective” and reciprocal milieu that promotes tumour growth. As such 3D co-cultures may serve as a more complex and valid biological model in the drug discovery pipeline.

[867]

**TÍTULO / TITLE:** - Perceived barriers and facilitators to physical activity in men with prostate cancer: possible influence of androgen deprivation therapy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Cancer Care (Engl). 2013 Oct 18. doi: 10.1111/ecc.12141.

●● Enlace al texto completo (gratis o de pago) [1111/ecc.12141](http://1111/ecc.12141)

**AUTORES / AUTHORS:** - Keogh JW; Patel A; Macleod RD; Masters J

**INSTITUCIÓN / INSTITUTION:** - Exercise and Sports Sciences, Faculty of Health Sciences and Medicine, Bond University, Robina, Qld, Australia; Human Potential Centre, AUT University, Auckland, New Zealand; Cluster for Health Improvement, Faculty of Science, Health, Education and Engineering, University of the Sunshine Coast, Sippy Downs, Qld, Australia.

**RESUMEN / SUMMARY:** - While physical activity is beneficial for men with prostate cancer, too few perform sufficient activity for such benefit. This study examined perceptions of men with prostate cancer of their barriers and facilitators to physical activity, and how androgen deprivation therapy (ADT) may influence these perceptions. Two focus groups were conducted, involving six ADT and eight non-ADT patients respectively. Data were transcribed verbatim and themes developed using a general inductive thematic approach. Facilitators to physical activity common to both groups of cancer survivors included clinician and spousal involvement, with pre-existing co-

morbidities and increased age cited as barriers by both groups. The ADT subgroup cited personal involvement as a facilitator to physical activity, with fatigue, reduced motivation and a relative lack of specific advice from their clinician as additional barriers. The non-ADT subgroup had no additional facilitators to physical activity but cited time constraints as a barrier. These results highlight the important role that cancer clinicians and spouses play in promoting physical activity for men with prostate cancer and how ADT may influence their other facilitators and barriers. As physical activity is beneficial for prostate cancer survivors, especially those on ADT, cancer clinicians should regularly discuss physical activity with their patients.

[868]

**TÍTULO / TITLE:** - Redox-Mediated and Ionizing Radiation-Induced Inflammatory Mediators in Prostate Cancer Development and Treatment.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Antioxid Redox Signal. 2013 Oct 5.

•• Enlace al texto completo (gratis o de pago) [1089/ars.2013.5637](#)

**AUTORES / AUTHORS:** - Miao L; Holley AK; Zhao Y; St Clair WH; St Clair DK

**INSTITUCIÓN / INSTITUTION:** - University of Kentucky, Graduate center for Toxicology, 1095 V.A.Dr., Lexington, Kentucky, United States, 40536 ;  
[lu.miao@utsouthwestern.edu](mailto:lu.miao@utsouthwestern.edu).

**RESUMEN / SUMMARY:** - Significance: Radiation therapy is widely used for treatment of prostate cancer. Radiation can directly damage biologically important molecules; however, most effects of radiation-mediated cell killing are derived from the generated free radicals that alter cellular redox status. Multiple proinflammatory mediators can also influence redox status in irradiated cells and the surrounding microenvironment, thereby affecting prostate cancer progression and radiotherapy efficiency. Recent Advances: Ionizing radiation (IR)-generated oxidative stress can regulate and be regulated by the production of proinflammatory mediators. Depending on the type and stage of the prostate cancer cells, these proinflammatory mediators may lead to different biological consequences ranging from cell death to development of radioresistance. Critical Issues: Tumors are heterogeneous and dynamic communication occurs between stromal and prostate cancer cells, and complicated redox-regulated mechanisms exist in the tumor microenvironment. Thus, antioxidant and anti-inflammatory strategies should be carefully evaluated for each patient at different stages of the disease to maximize therapeutic benefits while minimizing unintended side effects. Future Directions: Compared with normal cells, tumor cells are usually under higher oxidative stress and secrete more proinflammatory mediators. Thus, redox status is often less adaptive in tumor cells than in their normal counterparts. This difference can be exploited in a search for new cancer therapeutics and treatment regimens that selectively activate cell death pathways in tumor cells with minimal unintended consequences in terms of chemo- and radio-resistance in tumor cells and toxicity in normal tissues.

[869]

**TÍTULO / TITLE:** - Hypoxia inducible factor-1alpha and microvessel density as angiogenic factors in bilharzial and non-bilharzial bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Lab. 2013;59(7-8):805-12.

**AUTORES / AUTHORS:** - Badr S; Salem A; Yuosif AH; Awadallah H; Awed N; Bakr A

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**RESUMEN / SUMMARY:** - BACKGROUND: Hypoxia inducible factor (HIF)-1alpha is a critical regulatory protein of cellular response to hypoxia and is closely related to angiogenic processes. Microvessel density (MVD), a measure of tumor angiogenesis has been shown to be predictive of progression and poor prognosis in bladder urothelial carcinoma. Most research has relied on measuring HIF-1alpha by immunohistochemistry on tissue sections and studying its prognostic value. However, no study has investigated HIF-1alpha expression by ELISA technique in association with angiogenesis in bilharzial and nonbilharzial bladder carcinoma. The primary objective of this pilot case control study was to measure HIF-1alpha level by ELISA technique in voided urine samples in a trial to find a diagnostic applicability in patients with bilharzial and nonbilharzial bladder carcinoma. Secondary objectives were assessment of MVD in relation to HIF-1alpha positivity as well as correlating them with clinicopathological variables to get insight in their potential prognostic and predictive value in bladder cancer. METHODS: Voided urine specimens were collected from patients with histologically confirmed bladder urothelial carcinoma (Group 1: n = 39), urological patients without urothelial carcinoma (Group 2: n = 15), and healthy volunteers (Group 3: n = 15). All underwent serological assessment of bilharzial antibody, quantitative measurement of HIF-1alpha by ELISA in urothelial cells of voided urine samples and urine cytology. MVD was calculated by immunohistochemical staining of endothelial cells with CD34 on tumor tissue paraffin sections. RESULTS: There was a statistically significant difference between benign and malignant groups regarding HIF-1alpha positivity rate ( $p < 0.001$ ). Urinary HIF-1alpha best cut-off was determined using receiver operating characteristic curves to discriminate between malignant and nonmalignant groups (21.7 ng/mg protein) at 82.1% sensitivity and 63.3% specificity. The sensitivity of urine cytology was increased on combination with HIF-1alpha from 53.8% to 92.8%. In the malignant group, MVD revealed a high score in 70% and a low score in 30% of cases compared to 0% and 100%, respectively, in the benign group. The difference was highly significant ( $p < 0.001$ ). There was no significant relationship between HIF-1alpha positivity rate or MVD and stage, as well as histologic grade of the tumor ( $p > 0.05$ ) denoting no prognostic significance. CONCLUSIONS: HIF-1alpha can be reliably and quantitatively measured in urine of bladder cancer patients, improving the sensitivity and specificity of urine cytology for the diagnosis of bladder cancer. Independent studies, however, will be required on larger cohorts to validate these findings.

[870]

**TÍTULO / TITLE:** - The tumor suppressing effects of QKI-5 in prostate cancer: A novel diagnostic and prognostic protein.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Biol Ther. 2013 Oct 23;15(1).

**AUTORES / AUTHORS:** - Zhao Y; Zhang G; Wei M; Lu X; Fu H; Feng F; Wang S; Lu W; Wu N; Lu Z; Yuan J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology; Xijing Hospital; Fourth Military Medical University; Xi'an, PR China; Department of Biochemistry and Molecular Biology; State Key Laboratory of Cancer Biology; Fourth Military Medical University; Xi'an, PR China.

**RESUMEN / SUMMARY:** - In recent years, the RNA-binding protein quaking 5 (QKI-5) has been recognized as a novel tumor suppressor in many cancers. To date, no studies have examined the role of QKI-5 in prostate cancer. The present study was designed to elucidate the correlation of QKI-5 expression with the clinical pathological features and prognosis of prostate cancer. In an overwhelming majority of the 184 cases of prostate cancer samples analyzed, the QKI-5 expression was significantly decreased, which was largely due to the high promoter methylation levels. Using lentiviral vectors, we established two stable prostate cancer cell lines with altered QKI-5 expression, including a QKI-5 overexpressing PC3 cell line and a DU145 cell line with knocked-down QKI-5 expression. The effects of the lentiviral-mediated QKI-5 knockdown on the PC3 cells and DU145 cells were assessed by cell growth curves, flow cytometry (FCM), and an invasion assay. The PC3 cells were transplanted into nude mice, and then, the tumor growth curves and TUNEL staining were determined. These results demonstrated that QKI-5 was highly expressed in benign prostatic hyperplasia (BPH) tissues but not in carcinomatous tissues and that QKI-5 effectively inhibited prostate cancer cell proliferation in vitro and in vivo. In addition, the decrease in QKI-5 expression was closely correlated with the prostate cancer Gleason score, poor differentiation, degree of invasion, lymph node metastasis, distant metastasis, TNM grading, and poor survival. These results indicate that the QKI-5 expression may be a novel, independent factor in the prognosis of prostate cancer patients.

[871]

**TÍTULO / TITLE:** - Chemokine (C-X-C motif) ligand 1 (CXCL1) protein expression is increased in high-grade prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathol Res Pract. 2013 Oct 28. pii: S0344-0338(13)00335-X. doi: 10.1016/j.prp.2013.08.013.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.prp.2013.08.013](#)

**AUTORES / AUTHORS:** - Miyake M; Lawton A; Goodison S; Urquidi V; Rosser CJ  
**INSTITUCIÓN / INSTITUTION:** - Cancer Research Institute, MD Anderson Cancer Center Orlando, Orlando, FL 32827, United States.

**RESUMEN / SUMMARY:** - Chemokines, including chemokine (C-X-C motif) ligand 1 (CXCL1), may enhance tumor epithelial-stromal interactions facilitating tumor growth and invasion. Studies have linked CXCL1 expression to gastric, colon and skin cancers, however, no study to date has been reported describing CXCL1 in human prostate tumors. Herein, we set out to describe the expression pattern of CXCL1 in human prostate tumors. Utilizing a commercial tissue microarray, immunohistochemical staining was used to monitor CXCL1 protein expression in 90 primary prostate tumors and 20 benign prostate tissues. CXCL1 protein expression was noted to be predominantly in the cytoplasm of both the benign epithelia glands and cancerous epithelia glands) with >75% of benign or cancerous glands demonstrating

immunoreactivity. However, staining intensity was noted to be significantly different between benign and cancerous tissue with 84% of cancerous tissue staining moderate (++) to strong (+++) compared to only 30% of benign prostate samples staining moderate (++) to strong (+++) ( $p < 0.0001$ ). Increased CXCL1 protein levels were associated with higher-grade tumors (Gleason  $\leq 6$  vs. Gleason score 7-10,  $p = 0.038$ ). An increase in CXCL1 protein was present in of high-grade malignancy. Further studies are warranted to clearly define the role of CXCL1 in prostate cancer.

[872]

**TÍTULO / TITLE:** - Licochalcone A inhibiting proliferation of bladder cancer T24 cells by inducing reactive oxygen species production.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biomed Mater Eng. 2014;24(1):1019-25. doi: 10.3233/BME-130899.

●● Enlace al texto completo (gratis o de pago) [3233/BME-130899](#)

**AUTORES / AUTHORS:** - Jiang J; Yuan X; Zhao H; Yan X; Sun X; Zheng Q

**INSTITUCIÓN / INSTITUTION:** - School of Pharmacy, Shihezi University, Shihezi, 832002, Xinjiang, China.

**RESUMEN / SUMMARY:** - The aim of this study was to determine the relationship between proliferation inhibition and the production of reactive oxygen species (ROS) induced by Licochalcone A (LCA). Cell viability was evaluated using sulforhodamine B (SRB) assay. Intracellular ROS level was assessed using the 2, 7-dichlorofluorescein diacetate (H2DCFDA) probe and dihydroethidium (DHE) probe assay. The results indicate that LCA inhibits human bladder cancer T24 proliferation in a concentration-dependent manner, with an IC50 value of approximately 55  $\mu$ M. The LCA-induced ROS production is inhibited by the co-treatment of LCA and free radical scavenger N-acetyl-cysteine (NAC), on the contrary, the proliferation rate and ROS production increase when treated by the combination of LCA and L-buthionine-(S,R)-sulfoximine (BSO). The ratio of reduced glutathione (GSH) to oxidized glutathione (GSSG) decreases in a concentration-dependent manner. The results suggest that LCA inhibits proliferation by increasing intracellular ROS levels resulted in an oxidative stress status in T24 cells.

[873]

**TÍTULO / TITLE:** - Surgery for treatment of metastatic testicular cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - ANZ J Surg. 2013 Oct 31. doi: 10.1111/ans.12392.

●● Enlace al texto completo (gratis o de pago) [1111/ans.12392](#)

**AUTORES / AUTHORS:** - Zargar H; Aning JJ; So AI

**INSTITUCIÓN / INSTITUTION:** - Vancouver Prostate Centre and Department of Urologic Sciences, University of British Columbia, Vancouver, British Columbia, Canada.

[874]

**TÍTULO / TITLE:** - Design, syntheses, and characterization of pharmacophore based chemokine receptor CCR5 antagonists as anti prostate cancer agents.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Med Chem. 2013 Nov;69:647-58. doi: 10.1016/j.ejmech.2013.09.004. Epub 2013 Sep 20.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejmech.2013.09.004](#)

**AUTORES / AUTHORS:** - Arnatt CK; Zaidi SA; Zhang Z; Li G; Richardson AC; Ware JL; Zhang Y

**INSTITUCIÓN / INSTITUTION:** - Department of Medicinal Chemistry, School of Pharmacy, Virginia Commonwealth University, 800 East Leigh Street, Richmond, VA 23298, USA.

**RESUMEN / SUMMARY:** - Accumulating evidence has shown multiple roles that chemokine receptor CCR5 may play to promote the progression of several types of cancer. The mechanism of such promotion is believed to involve chronic inflammation that creates a microenvironment which enhances tumor survival. Therefore, blocking CCR5 function with an antagonist may provide a novel treatment of cancers such as prostate cancer. Currently, several CCR5 antagonists are available, but all have been optimized for their inhibitory activity on HIV-1 cellular membrane invasion process rather than inhibition on cytoplasmic signaling pathways. Thus, there is need to develop CCR5 antagonists focusing on blockage of CCR5 downstream signaling and inhibition of CCR5 related prostate cancer proliferation and progression. In this report, a pharmacophore analysis was conducted based on docking studies of several known CCR5 antagonists in a CCR5 homology model. A unique structural skeleton for CCR5 antagonist was constructed and functionalized, resulting in a new series of small molecules to be synthesized and characterized. A combination of CCR5 calcium flux inhibition, anti prostate cancer cell proliferation, basal cytotoxicity, and in vivo animal model studies were applied to screen the newly synthesized compounds. Results from this study provided a potential lead compound for future CCR5 antagonist development focusing on prostate cancer therapy.

[875]

**TÍTULO / TITLE:** - Kidney stones in survivors of childhood cancer: What do we know?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pediatr Blood Cancer. 2013 Nov 19. doi: 10.1002/pbc.24823.

●● Enlace al texto completo (gratis o de pago) [1002/pbc.24823](#)

**AUTORES / AUTHORS:** - Kaste SC

**INSTITUCIÓN / INSTITUTION:** - Department of Diagnostic Imaging, St. Jude Children's Research Hospital, Memphis, Tennessee; Oncology, St. Jude Children's Research Hospital, Memphis, Tennessee; Department of Radiology, College of Medicine, University of Tennessee Health Sciences Center, Memphis, Tennessee.

[876]

**TÍTULO / TITLE:** - The use of PDE-5 Inhibitors in the Treatment of Lower Urinary Tract Symptoms Due to Benign Prostatic Hyperplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Urol Rep. 2013 Dec;14(6):585-94. doi: 10.1007/s11934-013-0373-2.

●● Enlace al texto completo (gratis o de pago) [1007/s11934-013-0373-2](#)

**AUTORES / AUTHORS:** - Lythgoe C; McVary KT

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Southern Illinois University School of Medicine, Springfield, IL, USA.

**RESUMEN / SUMMARY:** - The relationship between lower urinary tract symptoms secondary to BPH and ED has recently been the subject of significant research due to the prevalence of both conditions concomitantly existing in older men. Many large-scale studies have demonstrated an association between erectile dysfunction and lower urinary tract symptoms. Although the mechanisms underlying the relationship between LUTS and ED are not fully elucidated, several theories are currently proposed in literature: the nitric oxide/cGMP pathway, RhoA/Rho-kinase signaling, pelvic atherosclerosis associated with chronic hypoxia, and autonomic adrenergic hyperactivity. The mechanisms by which these pathways affect the bladder, prostate, pelvic vasculature and spinal cord are also the subject of current research. In this chapter, we examine the randomized, placebo-controlled trials that have evaluated the use of PDE-5Is in LUTS, as well as randomized, controlled trials (RCTs) researching combination PDE-5Is and alpha blockers.

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[877]

**TÍTULO / TITLE:** - First line treatment of metastatic renal cell carcinoma: Two standards with different toxicity profile.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Biol Ther. 2013 Nov 19;15(1).

**AUTORES / AUTHORS:** - Iacovelli R; Verzoni E; De Braud F; Procopio G

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology; Fondazione IRCCS Istituto Nazionale Tumori; Milano, Italy; Department of Radiology, Oncology and Human Pathology PhD program; Sapienza University of Rome; Rome, Italy.

**RESUMEN / SUMMARY:** - Tyrosine kinase inhibitors are de facto the more used targeted therapies for upfront treatment of metastatic renal cell carcinoma (mRCC). Among these, sunitinib and pazopanib have reported greater activity in term of progression-free survival and overall survival compared with interferon-alpha or placebo in two independent large phase III studies. Despite a large use in clinical practice these molecules had never been compared. The COMPARZ study recently published in the New England Journal of Medicine reports the results of a non-inferiority trial that comparing pazopanib to sunitinib as first line of therapy in mRCC patients. Here we report the activity and safety data of the study and we discuss several critical aspects related to the study design and possible confounding factors that may alter the results' interpretation.

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[878]

**TÍTULO / TITLE:** - Advanced kidney cancer: treating the elderly.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Dec;13(12):1389-98. doi: 10.1586/14737140.2013.846095. Epub 2013 Nov 14.

●● [Enlace al texto completo \(gratis o de pago\) 1586/14737140.2013.846095](#)

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**INSTITUCIÓN / INSTITUTION:** - IRCCS Istituto Oncologico Veneto, Medical Oncology, Via Gattamelata, 64-35128 Padua, Italy.

**RESUMEN / SUMMARY:** - Advancing age represents the primary risk factor for renal tumors. Despite findings on the inhibition of angiogenesis that have led to six new drugs to treat metastatic renal cell carcinoma, elderly patients have not been fully represented in clinical trials. In addition, current opinions regarding nephrectomy in elderly patients are conflicting. Available data refer to the efficacy and safety of sorafenib, sunitinib, everolimus, bevacizumab and temsirolimus in patients aged 65 years and older; safety and efficacy data are available only for sunitinib, sorafenib, and everolimus in patients aged 70 years and older and only sorafenib has safety data for patients aged 75 years and older. A different approach based on evaluating comorbidities at baseline, risk of drug interactions and the impact of antitumor treatment in patients with polytherapy regimen is discussed. A decision-making algorithm is proposed to facilitate the selection of the best therapy for kidney tumors for a specific elderly patient profile.

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[879]

**TÍTULO / TITLE:** - Immunosuppressive effect of renal cell carcinoma on phenotype and function of dendritic cells.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Nov 8.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s11255-013-0595-8](#)

**AUTORES / AUTHORS:** - Teng L; Chen Y; Ding D; Dai H; Liu G; Li C

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Cancer Hospital, Harbin Medical University, No.150 Haping Road, Harbin City, 150086, Heilongjiang Province, China, [tenglchen@2008.sina.com](mailto:tenglchen@2008.sina.com).

**RESUMEN / SUMMARY:** - Dendritic cells (DCs) play an important role in anti-renal cell carcinoma (RCC) immunity. The aim of the study was to investigate effect of mimic RCC microenvironment on phenotype and function of DCs. We isolated conditioned media (CM) from supernatants of culturing RCC cells and adjacent non-RCC cells in patients. CD14+ monocytes were obtained from healthy donors. The monocytes derived DCs were treated by RCC CM and non-RCC CM. Maturation markers CD80, CD83, CD86, and HLA-DR on DCs were analyzed using flow cytometry, while the levels of IL-10, TGF-beta, and IL12p70 in supernatants were examined by ELISA. The DCs migration treated with RCC CM and non-RCC CM was investigated using transwell assay. The DCs treated and allogenic T cells were co-cultured for detecting T-cell proliferation and change of phenotype on the T cells. Our results indicated that RCC CM inhibited the up-regulation of CD80, CD83, CD86, and HLA-DR in response to LPS in treated DCs and increased IL-10 and TGF-beta secretion but reduced IL12p70 production. Moreover, the migration ability of DCs treated with RCC CM was also inhibited, compared to DCs treated with adjacent non-RCC CM. In addition, T-cell proliferation was suppressed in co-culture assay with DCs treated with RCC CM; proportion CD25+Foxp3+ regulatory T cells were induced to increase. This study suggests that RCC CM can inhibit maturation of DCs and impair its function; moreover, DCs treated with RCC CM induce regulatory T cells increase, thus could contribute RCC escape from antitumor immunity.

[880]

**TÍTULO / TITLE:** - Comprehensive gene expression analysis reveals multiple signal pathways associated with prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Appl Genet. 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1007/s13353-013-0174-9](#)

**AUTORES / AUTHORS:** - Liu Y; Song H; Pan J; Zhao J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, General Hospital of Jinan Military Command, 25 Shifan Road, Jinan, 250031, China.

**RESUMEN / SUMMARY:** - Prostate cancer (PC) depends on androgenic signaling for growth and survival. To date, the exact molecular mechanism of hormone controlling proliferation and tumorigenesis in the PC remains unclear. Therefore, in this study, we explored the differentially expressed genes (DEGs) and identified featured genes related to hormone stimulus from PC. Two sets of gene expression data, including PC and normal control sample, were downloaded from Gene Expression Omnibus (GEO) database. The t-test was used to identify DEGs between PC and controls. Gene ontology (GO) functional annotation was applied to analyze the function of DEGs and screen hormone-related DEGs. Then these hormone-related DEGs were further analyzed in constructed cancer network and Human Protein Reference Database to screen important signaling pathways they participated in. A total of 912 DEGs were obtained which included 326 up-regulated genes and 586 down-regulated genes. GO functional enrichment analysis identified 50 hormone-related DEGs associated with PC. After pathway and PPI network analysis, we found these hormone-related DEGs participated in several important signaling pathways including TGF-beta (TGFB2, TGFB3 and TGFBR2), MAPK (TGFB2, TGFB3 and TGFBR2), insulin (PIK3R3, SHC1 and EIF4EBP1), and p53 signaling pathways (CCND2 and CDKN1A). In addition, a total of five hormone-related DEGs (SHC1, CAV1, RXRA, CDKN1A and SRF) were located in the center of PPI network and 12 hormone-related DEGs formed six protein modules. These important signal pathways and hormone-related DEGs may provide potential therapeutic targets for PC.

[881]

**TÍTULO / TITLE:** - The effect of photochemical internalization of bleomycin in the treatment of urothelial carcinoma of the bladder: An in vitro study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct 17. pii: S1078-1439(13)00292-5. doi: 10.1016/j.urolonc.2013.07.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.07.005](#)

**AUTORES / AUTHORS:** - Arentsen HC; Falke J; Hogset A; Oosterwijk E; Alfred Witjes J

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**RESUMEN / SUMMARY:** - **OBJECTIVES:** In this in vitro study, we determined whether meso-tetraphenyl chlorin disulphonate (TPCS2a)-based photochemical delivery of bleomycin was able to potentiate the cytotoxicity of bleomycin on bladder cancer cells. **MATERIALS AND METHODS:** The human RT4, RT112, 253J, T24, and rat AY-27

urothelial carcinoma cell lines were used. Cells were seeded in 96-well plates. TPCS2a was added to the growth medium and the plates were incubated overnight. Cells were then resuspended in TPCS2a-free culture medium and incubated for 3 hours. Subsequently, cells were treated for 60 minutes with increasing doses of epirubicin, gemcitabine, mitomycin C, or bleomycin followed by illumination for different periods. Cell viability was measured with a colorimetric assay after 72 hours. RESULTS: For the single treatments, in all 5 cell lines a dose-dependent inhibition of cell proliferation was observed. This was seen both after treatment with TPCS2a-based photodynamic therapy (PDT), as well as after treatment with either bleomycin or one of the control chemotherapeutic agents. After treatment with PDT (240-s illumination), bleomycin 9.0µM, and the combination of these treatments, relative survival percentages were 89.2±13.0, 70.2±8.9, and 30.5±6.1, respectively, in the T24 cell line. After treatment with PDT (120-s illumination), bleomycin 27µM and the combination of these treatments, relative survival percentages were 93.6±15.7, 74.7±9.6, and 30.0±11.1, respectively, in the AY-27 cell line. In both cell lines, PDT combined with bleomycin showed significantly ( $P < 0.001$ ) higher cell kill than the sum of the single treatments, suggesting a photochemical internalization effect. CONCLUSIONS: TPCS2a-based photochemical internalization of bleomycin showed a significant, at least, additive antiproliferative activity against human and rat urothelial carcinoma cells in vitro. Thus, photochemical internalization may have therapeutic potential as an intravesical strategy against bladder cancer. As the effect is heterogeneous, biomarker studies are warranted to be able to predict the effects of a photochemical internalization-based treatment.

[882]

**TÍTULO / TITLE:** - Synthetic cannabinoid quinones: Preparation, in vitro antiproliferative effects and in vivo prostate antitumor activity.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Med Chem. 2013 Oct 2;70C:111-119. doi: 10.1016/j.ejmech.2013.09.043.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejmech.2013.09.043](#)

**AUTORES / AUTHORS:** - Morales P; Vara D; Gomez-Canas M; Zuniga MC; Olea-Azar C; Goya P; Fernandez-Ruiz J; Diaz-Laviada I; Jagerovic N

**INSTITUCIÓN / INSTITUTION:** - Instituto de Quimica Medica, CSIC, Calle Juan de la Cierva, 3, 28006 Madrid, España.

**RESUMEN / SUMMARY:** - Chromenopyrazolediones have been designed and synthesized as anticancer agents using the multi-biological target concept that involves quinone cytotoxicity and cannabinoid antitumor properties. In cell cytotoxicity assays, these chromenopyrazolediones have antiproliferative activity against human prostate cancer and hepatocellular carcinoma. It has been shown that the most potent, derivative 4 (PM49), inhibits prostate LNCaP cell viability ( $IC_{50} = 15 \mu M$ ) through a mechanism involving oxidative stress, PPAR $\gamma$  receptor and partially CB1 receptor. It acts on prostate cell growth by causing G0/G1 phase arrest and triggering apoptosis as assessed by flow cytometry measurements. In the in vivo treatment, compound 4 at 2 mg/kg, blocks the growth of LNCaP tumors and reduces the growth of PC-3 tumors generated in mice. These studies suggest that 4 is a good potential anticancer agent against hormone-sensitive prostate cancer.

[883]

**TÍTULO / TITLE:** - Second malignancies in long-term testicular cancer survivors.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Oct 6.

●● Enlace al texto completo (gratis o de pago) [1007/s11255-013-0554-4](#)

**AUTORES / AUTHORS:** - Ondrus D; Ondrusova M; Friedova L

**INSTITUCIÓN / INSTITUTION:** - 1<sup>st</sup> Department of Oncology, Faculty of Medicine, St. Elisabeth Cancer Institute, Comenius University, Heydukova 10, 812 50, Bratislava, Slovak Republic, [dalibor.ondrus@ousa.sk](mailto:dalibor.ondrus@ousa.sk).

**RESUMEN / SUMMARY:** - PURPOSE: The objective of the present study is to analyze long-term testicular cancer (TC) survivors focusing on the correlation of therapeutic modalities used, the age of patients and second malignancy (SM) occurrence. PATIENTS AND METHODS: A total of 1,367 patients with TC and different subsequent therapeutic procedures were followed up between 1970 and 2012. The occurrence of SM was analyzed by standard incidence ratios (SIR). SM occurred in 96 (7.0 %) patients with primary TC. RESULTS: The most frequent SM was TC (SIR 27.4, n = 64); a significantly higher occurrence was observed after primary testicular seminoma. Prostate cancer appeared in 10 patients (SIR 5.2), with a mean age 54.9 years, while the typical age of patients in Slovakia was 71.4 years. Kidney cancer developed in 6 patients, a significant higher SIR was registered only after primary non-seminomas. The mean patient's age was 48.5 years, while the typical age of all male patients in Slovakia was 62.4 years. Other SM had no significantly higher SIR. Colorectal cancer appeared in 8 patients with primary TC, with a mean age 56.0 years, while the typical age of male patients with primary colorectal cancer in Slovakia was 67.1 years. Other non-testicular tumors appeared in 8 patients. SM occurs in 1.5 % of patients following orchiectomy alone, in 4.3 % following radiotherapy, 5.0 % following chemotherapy and in 4.4 % following combined chemo-radiotherapy. CONCLUSIONS: Preliminary analyses indicate increased SM occurrence in patients with primary TC in comparison with the general population, and it also occurs in younger age at the time of SM diagnosis.

[884]

**TÍTULO / TITLE:** - Prospective longitudinal comparative study of health-related quality of life and treatment satisfaction in patients treated with hormone therapy, radical retropubic prostatectomy, and high or low dose rate brachytherapy for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prostate Int. 2013;1(3):117-24. doi: 10.12954/PI.13021. Epub 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [12954/PI.13021](#)

**AUTORES / AUTHORS:** - Miwa S; Mizokami A; Konaka H; Ueno S; Kitagawa Y; Koh E; Namiki M

**INSTITUCIÓN / INSTITUTION:** - Department of Integrative Cancer Therapy and Urology, Kanazawa University Graduate School of Medical Science, Kanazawa, Japan.

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the effects of four different prostate cancer treatments on quality of life (QoL) and patient satisfaction. METHODS: Ninety-

six prostate cancer patients were treated with hormone therapy, radical retropubic prostatectomy, high dose rate brachytherapy, or low dose rate brachytherapy. We assessed general, cancer-specific, and prostate disease-specific QoL. More than one year since commencement of treatment, the patients were asked the following questions: 1) How do you feel about your treatment? 2) Would you undergo the same treatment again? RESULTS: The comparison of baseline and 12-month results showed that general and cancer-specific QoL had changed little in all groups. At baseline, the general and cancer-specific QoL tended to be lower in the hormone therapy patients. In the radical the retropubic prostatectomy patients, all scores on the Medical Outcomes Study 36-Item Short Form were worse than the baseline scores at three months. Scores for the International Index of Erectile Function-5 had also worsened, with no recovery. In the low-dose rate brachytherapy patients, the prostate disease-specific QoL at baseline tended to improve. However, the satisfaction levels for each treatment were reasonably good, and most patients would choose the same treatment again. CONCLUSIONS: The results of each of the four treatments differed in assessments of QoL. In the radical retropubic prostatectomy patients, the decrease in the International Index of Erectile Function-5 scores was especially remarkable and did not show recovery. In contrast, both brachy therapy groups had attained superior sexual function. However, regardless of the quality of life evaluations, most patients surveyed were satisfied with their treatments and would choose the same treatment again.

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[885]

**TÍTULO / TITLE:** - Small cell carcinoma of the urinary bladder: a contemporary review with a special focus on bladder-sparing treatments.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Oct 29.

●● Enlace al texto completo (gratis o de pago) [1586/14737140.2013.851605](#)

**AUTORES / AUTHORS:** - Koga F; Yokoyama M; Fukushima H

**INSTITUCIÓN / INSTITUTION:** - Tokyo Metropolitan Cancer and Infectious diseases Center Komagome Hospital, Urology, 3-18-22 Honkomagome, Bunkyo-ku, Tokyo, 113-8677 Japan.

**RESUMEN / SUMMARY:** - Small cell carcinoma of the urinary bladder (SCCUB) is a rare and aggressive disease. To date, no standard treatment has been proposed due to the lack of prospective studies resulting from the rarity of this disease. Recently published studies of relatively large patient cohorts, however, have shed some light on the management of SCCUB patients. In this article, the authors review the epidemiology, pathogenesis, diagnosis and treatment (based on disease stage), and they then discuss the optimal therapeutic strategy for SCCUB patients, particularly for those with limited, locoregional disease. The authors conclude that multidisciplinary approaches are needed for the optimal management of this aggressive disease. The authors also discuss bladder-sparing approaches for SCCUB patients, compared to those for conventional bladder urothelial carcinoma patients.

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[886]

**TÍTULO / TITLE:** - Angiogenesis inhibitors in the treatment of prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Chem Immunol Allergy. 2014;99:197-215. doi: 10.1159/000353255. Epub 2013 Oct 17.

●● Enlace al texto completo (gratis o de pago) [1159/000353255](https://doi.org/10.1159/000353255)

**AUTORES / AUTHORS:** - Adesunloye BA; Karzai FH; Dahut WL

**INSTITUCIÓN / INSTITUTION:** - Medical Oncology Branch, National Cancer Institute, Bethesda, Md., USA.

**RESUMEN / SUMMARY:** - Prostate cancer is the most common cancer in men in the United States and is the second most common cause of death. While treatment options in early stage disease are curative in intent, treatment of metastatic prostate cancer remains challenging. Although, several new and promising treatment options exploiting novel targets have permeated the therapeutic landscape in recent years, another viable target for therapy is tumor angiogenesis. Many antiangiogenic agents are under development and some are currently under investigation in clinical trials.

[887]

**TÍTULO / TITLE:** - Pelvic Exenteration for the Treatment of Locally Advanced Colorectal and Bladder Malignancies in the Modern Era.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Gastrointest Surg. 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [1007/s11605-013-2400-5](https://doi.org/10.1007/s11605-013-2400-5)

**AUTORES / AUTHORS:** - Speicher PJ; Turley RS; Sloane JL; Mantyh CR; Migaly J

**INSTITUCIÓN / INSTITUTION:** - Department of Surgery, Duke University, Durham, NC, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Although pelvic exenteration (PE) remains an important treatment for advanced pelvic malignancies, it has historically been associated with high morbidity and mortality with unclear long-term benefits. The objectives of this study were (1) estimate complication and mortality rates, (2) determine predictors of complications, and (3) estimate overall survival after PE for patients with locally advanced colorectal and bladder tumors. METHODS: A total of 377 patients were retrospectively identified from the 2005-2010 NSQIP PUF and an additional 1,111 from the 2004-2010 Surveillance Epidemiology and End Results database with T4M0 colorectal or bladder cancers. A logistic regression model was fitted to estimate early morbidity and mortality. The Kaplan-Meier method was used to estimate survival after PE compared to nonoperative management. RESULTS: Fifty-seven percent of patients had a complication, but 30-day mortality was only 2 %. Patients with preoperative dyspnea and higher ASA class had the highest risk of morbidity. PE for the treatment of T4M0 rectal and bladder cancer was associated with significantly improved long-term survival compared to nonoperative therapy. CONCLUSIONS: PE is associated with a high complication rate but low 30-day mortality. The results of this study provide strong evidence to support PE as a viable treatment option for locally advanced rectal and bladder malignancies in appropriately selected patients.

[888]

**TÍTULO / TITLE:** - Sunitinib malate in the treatment of urothelial cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Opin Investig Drugs. 2013 Nov 4.

●● Enlace al texto completo (gratis o de pago) [1517/13543784.2014.853740](https://doi.org/10.1517/13543784.2014.853740)

**AUTORES / AUTHORS:** - Pons F; Bellmunt J

**INSTITUCIÓN / INSTITUTION:** - University Hospital del Mar, Medical Oncology Department, Barcelona, España.

**RESUMEN / SUMMARY:** - Introduction: Urothelial cancer (UC) is the fourth most common cancer in men, worldwide. After cystectomy, muscle invasive disease progresses up to 50%, either regionally or as distant metastases, and treatment of metastatic disease remains a challenge, with a median survival that not exceeded 14 months with current chemotherapy regimens. Angiogenesis has been shown to play a role in UC progression and targeting this pathway may improve treatment outcomes. Sunitinib, an anti-angiogenic tyrosine kinase inhibitor, has been tested in preclinical models and Phase II trials in UC. Areas covered: In this review, the authors discuss the rationale for targeting angiogenesis pathway in UC with sunitinib. They also discuss its mechanisms of action, and the data from its preclinical and clinical data studies. Expert opinion: Sunitinib monotherapy has clinical activity in UC, identifying the potential role of the angiogenic pathway as a target for therapy in this tumor type. However, overlapping toxicity with chemotherapy has limited further development. Future research should be focused on improving patient selection which is based on the identification of validated predictive markers for sunitinib treated patients.

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[889]

**TÍTULO / TITLE:** - Treatment of multiply relapsed wilms tumor with vincristine, irinotecan, temozolomide and bevacizumab.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pediatr Blood Cancer. 2013 Sep 21. doi: 10.1002/pbc.24785.

●● Enlace al texto completo (gratis o de pago) [1002/pbc.24785](https://doi.org/10.1002/pbc.24785)

**AUTORES / AUTHORS:** - Venkatramani R; Malogolowkin MH; Mascarenhas L

**INSTITUCIÓN / INSTITUTION:** - Division of Hematology/Oncology, Children's Hospital Los Angeles, Los Angeles, California; Department of Pediatrics, Keck School of Medicine, University of Southern California, Los Angeles, California.

**RESUMEN / SUMMARY:** - As most active chemotherapy agents against Wilms tumor are incorporated into upfront therapy, particularly for those patients with high risk for recurrence, novel regimens are needed to treat children with relapsed Wilms tumor. We describe four consecutive patients with multiply relapsed Wilms tumor who were treated with a combination of vincristine, irinotecan, temozolomide, and bevacizumab. Two had a complete response, and two had a partial response to treatment. Hematological toxicity and diarrhea were the main side effects. This regimen has activity in patients with multiply relapsed Wilms tumor without excessive toxicity, and should be evaluated further in this setting. Pediatr Blood Cancer 2013;9999:XX-XX. © 2013 Wiley Periodicals, Inc.

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[890]

**TÍTULO / TITLE:** - Is Wilms Tumor a Candidate Neoplasia for Treatment with WNT/beta-Catenin Pathway Modulators?--A Report from the Renal Tumors Biology-Driven Drug Development Workshop.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer Ther. 2013 Nov 20.

●● Enlace al texto completo (gratis o de pago) [1158/1535-7163.MCT-13-0335](#)

**AUTORES / AUTHORS:** - Perotti D; Hohenstein P; Bongarzone I; Maschietto M; Weeks M; Radice P; Pritchard-Jones K

**INSTITUCIÓN / INSTITUTION:** - Authors' Affiliations: 1Molecular Bases of Genetic Risk and Genetic Testing Unit, Department of Preventive and Predictive Medicine; 2Proteomics Laboratory, Department of Experimental Oncology and Molecular Medicine, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy; 3The Roslin Institute, University of Edinburgh, Easter Bush Campus, Midlothian, United Kingdom; 4Institute of Child Health, University College London, London, United Kingdom.

**RESUMEN / SUMMARY:** - The European Network for Cancer Research in Children and Adolescents consortium organized a workshop in Rome, in June 2012, on "Biology-Driven Drug Development Renal Tumors Workshop" to discuss the current knowledge in pediatric renal cancers and to recommend directions for further research. Wilms tumor is the most common renal tumor of childhood and represents a success of pediatric oncology, with cure rates of more than 85% of cases. However, a substantial minority (approximately 25%) responds poorly to current therapies and requires "high-risk" treatment or relapse. Moreover, the successfully treated majority are vulnerable to the late effects of treatment, with nearly one quarter reporting severe chronic health conditions by 25 years of follow-up. Main purposes of this meeting were to advance our understanding on the molecular drivers in Wilms tumor, their heterogeneity and interdependencies; to provide updates on the clinical-pathologic associations with biomarkers; to identify eligible populations for targeted drugs; and to model opportunities to use preclinical model systems and prioritize targeted agents for early phase clinical trials. At least three different pathways are involved in Wilms tumor; this review represents the outcome of the workshop discussion on the WNT/beta-catenin pathway in Wilms tumorigenesis. Mol Cancer Ther; 12(12); 1-9. ©2013 AACR.

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[891]

**TÍTULO / TITLE:** - Immunotherapeutic strategies for the treatment of renal cell carcinoma: where are we now?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Dec;13(12):1399-408. doi: 10.1586/14737140.2013.856761. Epub 2013 Nov 11.

●● Enlace al texto completo (gratis o de pago) [1586/14737140.2013.856761](#)

**AUTORES / AUTHORS:** - Bedke J; Stenzl A

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Eberhard Karls University Tübingen, Hoppe-Seyler-Str. 3, 72076 Tübingen, Germany.

**RESUMEN / SUMMARY:** - Immunotherapy with cytokines was the first effective treatment in metastatic renal cell carcinoma (mRCC). Long-term responders and complete remissions were observed, but efficacy in the overall population was limited with the consequence that targeted agents replaced cytokines. The discovery of tumor associated antigens as direct targets paved the way from these rather unspecific to specific immunotherapeutic strategies, which are discussed in this review. Autologous or dendritic cell (DC) based tumor vaccination with vitespen or AGS-003, adoptive T-

cell transfer and synthetic peptide vaccination with IMA901 are new and promising approaches. Besides that the more passive strategies of antibody dependent cytotoxicity with the VEGF antibody bevacizumab or the carbonic anhydrase IX antibody girentuximab are discussed. Immunomodulation by cyclophosphamide, tyrosine kinase inhibitors or nivolumab, which targets the PD-1 axis, further promote T-cell activation and combinatory strategies with these agents are outlined.

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[892]

**TÍTULO / TITLE:** - Solid tumors following kidney transplantation in children.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Pediatr Transplant.* 2013 Dec;17(8):726-30. doi: 10.1111/ptr.12166.

●● Enlace al texto completo (gratis o de pago) [1111/ptr.12166](#)

**AUTORES / AUTHORS:** - Smith JM; Martz K; McDonald RA; Harmon WE

**INSTITUCIÓN / INSTITUTION:** - Seattle Children's Hospital, University of Washington, Seattle, WA, USA.

**RESUMEN / SUMMARY:** - Kidney transplant recipients have an increased risk of cancer. Data on non-LPD malignancies (solid tumors) in pediatric renal transplant recipients are limited. We performed a cohort study using the NAPRTCS transplant registry to describe the incidence of non-LPD malignancy compared with the general pediatric population. The observed incidence rate of non-LPD malignancy in the NAPRTCS transplant registry was 72.1 per 100 000 person-years (SIR 6.7; 95% CI, 5.3, 8.5); a 6.7-fold increased risk compared with the general pediatric population (10.7 cases per 100 000 person-years). Non-LPD malignancy was diagnosed in 35 subjects at a median of 726 days post-transplant. The most common type of malignancy was renal cell carcinoma. The increased risk of non-LPD malignancy was seen in all patients regardless of age, gender, race, etiology of end-stage kidney disease, and transplant era. The specific type of immunosuppression was not identified as a risk factor. In this first large-scale study of North American pediatric renal transplant recipients, we observed a 6.7-fold increased risk of non-LPD malignancy compared with the general pediatric population. Further examination of this unique patient population may provide greater insight into the impact of transplant and immunosuppression on malignancy risk.

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[893]

**TÍTULO / TITLE:** - Combination of hemoglobin, alkaline phosphatase, and age predicts optimal docetaxel regimen for patients with castration-resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Int J Clin Oncol.* 2013 Nov 23.

●● Enlace al texto completo (gratis o de pago) [1007/s10147-013-0638-2](#)

**AUTORES / AUTHORS:** - Matsuyama H; Shimabukuro T; Hara I; Kohjimoto Y; Suzuki K; Koike H; Uemura H; Hayashi T; Ueno M; Kodaira K; Tomita Y; Sakurai T; Shimizu N

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Yamaguchi University Graduate School of Medicine, 1-1-1 Minami-kogushi, Ube, Yamaguchi, 755-8505, Japan, [hidde@yamaguchi-u.ac.jp](mailto:hidde@yamaguchi-u.ac.jp).

**RESUMEN / SUMMARY:** - BACKGROUND: We aimed to find the prognostic factors predicting overall survival (OS) in patients with castration-resistant prostate cancer (CRPC) who had docetaxel (DTX) chemotherapy, and to construct a model predicting the optimum number of cycles of DTX. METHODS: A total of 279 CRPC patients who received DTX ( $\geq 50$  mg/m<sup>2</sup>) every 3-4 weeks were studied retrospectively. Prognostic factors predicting treatment cycles as well as OS were analyzed, and a risk table for predicting treatment cycles was constructed. RESULTS: The longer treatment group ( $>10$  cycles) had a significantly longer OS than the standard treatment group ( $p < 0.0001$ ). Multivariate analysis demonstrated that a decrease of  $\geq 50$  % in prostate-specific antigen (PSA), serum markers at the start of DTX therapy [PSA, alkaline phosphatase (ALP), and C-reactive protein (CRP)], and the number of DTX courses were independent predictors of OS. The risk table employing the combination of three factors [ALP (cut-off 189 IU/L), hemoglobin (11.3 g/dL), and age (65 years) at the start of DTX therapy], and scoring based on the hazard ratio of each risk factor (ALP 4, hemoglobin 2, age 3) could effectively predict the probability of the length of DTX therapy, with lower score (0-6) predicting  $>10$  cycles, and higher score (7-9) predicting  $\leq 5$  cycles ( $p < 0.0001$ ). No significant difference was found regarding grade  $\geq 3$  adverse events between the two groups. CONCLUSION: A model using three factors prior to chemotherapy may be beneficial for deciding the duration of DTX therapy in patients with CRPC.

[894]

**TÍTULO / TITLE:** - Congenital urethral polyps in the pediatric population.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can J Urol. 2013 Oct;20(5):6974-7.

**AUTORES / AUTHORS:** - Liu XS; Kreiger PA; Gould SW; Hagerty JA

**INSTITUCIÓN / INSTITUTION:** - Nemours/Alfred I. duPont Hospital for Children, Wilmington, Delaware, USA.

**RESUMEN / SUMMARY:** - Congenital urethral polyps are a rare entity. Most commonly, they present as benign posterior urethral growths in the pediatric male patient. However, reports of urethral polyps in female patients or even those with an anterior urethral location can also be found in the literature. Patients can present with a spectrum of symptoms including dysuria, hematuria, and obstructive type urinary complaints. Diagnosis in these cases includes a combination of medical imaging (e.g. ultrasound, fluoroscopic, CT or MRI), direct endoscopic visualization, and final surgical pathology. Treatment involves surgical removal either via an endoscopic or open approach.

[895]

**TÍTULO / TITLE:** - Potent antitumor activity of the combination of HSV-TK and endostatin by adeno-associated virus vector for bladder cancer in vivo.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Lab. 2013;59(9-10):1147-58.

**AUTORES / AUTHORS:** - Pan JG; Luo RQ; Zhou X; Han RF; Zeng GW

**INSTITUCIÓN / INSTITUTION:** - The Second Affiliated Hospital of Guangzhou Medical University, Guangzhou 510260, China.

**RESUMEN / SUMMARY:** - BACKGROUND: Gene therapy may offer a new tool for the treatment of bladder cancer. Previously, we have shown a significant antitumor effect in bladder cancer xenografts in a nude mouse model using intratumoral herpes simplex virus thymidine (HSV-TK) and endostatin gene monotherapy. METHODS: Given the high vascularity of human bladder cancer and the ability of HSV-TK or endostatin monotherapy to eradicate the tumors, we decided to test a novel combination of cytotoxic and antiangiogenic gene therapy using intratumorally delivered HSV-TK and endostatin adeno-associated viruses (AAV). We constructed plasmid AAV-TK-IRES-Endostatin (pAAV-TIE) and packaged the AAV particles containing gene fragments of HSV-TK and endostatin. The combined anticancer effect of recombinant AAV-TIE (rAAV-TIE) was measured in vivo with rAAV-HSV-TK and rAAV-Endostatin as the control groups. RESULTS: The inverted terminal repeat sequence was amplified using only one primer and the fragment between two ITRs of pAAV-TIE measuring about 4 kb, which indicated a stable sequence of pAAV-TIE. Three clear bands representing the AAV capsid proteins VP1, VP2, and VP3 could be seen on both lanes against a very low background, which demonstrated that chloroform extraction could effectively extract contaminants from rAAV stock without significant loss of the rAAV. In vivo, our results showed that the tumors in mice injected with the rAAV-TIE not only took significantly longer to emerge but also that their growth, once established, was significant slower than that of tumors grown with single HSV-TK or endostatin treated animals. CONCLUSIONS: We concluded that the inhibition of angiogenesis using endostatin gene transfer, together with the cytotoxic HSV-TK gene therapy, resulted in a significant antitumor effect compared to the single gene based therapy in BTCC.

[896]

**TÍTULO / TITLE:** - Expert review: an update in current and developing intravesical therapies for non-muscle-invasive bladder cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Nov;13(11):1257-68. doi: 10.1586/14737140.2013.852474.

●● Enlace al texto completo (gratis o de pago) [1586/14737140.2013.852474](#)

**AUTORES / AUTHORS:** - van Lingen AV; Arends TJ; Witjes JA

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Radboud University Medical Center, Geert Grooteplein zuid 10, 6525GA Nijmegen, The Netherlands.

**RESUMEN / SUMMARY:** - Non-muscle-invasive bladder cancer is a highly prevalent disease and recurrences, after initial therapy, are common. Consequently, the healthcare costs for non-muscle-invasive bladder cancer are high. Despite a primary adequate response to adjuvant intravesical treatment, many patients suffer from recurrences, and some even from progression. To date, cystectomy remains the only option for those non-responding patients with high risk of recurrence and progression. Mainly because outcome after progression, in this group, is poor. Therefore, new intravesical therapies are needed. Moreover, new accurate and individual parameters, to distinguish responder from non-responders, will provide additional benefit in clinical decision-making. In this review, current diagnostics and therapies will be discussed. In addition, we will elucidate developing therapies in non-muscle-invasive bladder cancer.

[897]

**TÍTULO / TITLE:** - Sequencing therapy in advanced prostate cancer: focus on sipuleucel-T.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Nov 13.

●● Enlace al texto completo (gratis o de pago) [1586/14737140.2014.848065](#)

**AUTORES / AUTHORS:** - Quinn DJ; Vaishampayan U; Higano CS; Lin DW; Shore ND; Beer TM

**INSTITUCIÓN / INSTITUTION:** - Norris Comprehensive Cancer Center, University of Southern California, Los Angeles, CA, USA.

**RESUMEN / SUMMARY:** - Immunotherapies such as sipuleucel-T present new and unique challenges for the optimal timing and sequencing of therapies for metastatic castration-resistant prostate cancer (mCRPC). Key considerations for the sequencing of sipuleucel-T are its unique proposed mechanism of action, the time required to generate a clinically relevant immune response, and the observed efficacy in Phase III trials in 'early' or asymptomatic or minimally symptomatic mCRPC. There are three broad timing and sequencing options for sipuleucel-T in patients with rising prostate-specific antigen and radiologic evidence of disease: immediately after androgen-deprivation therapy failure, after failure of secondary hormonal maneuvers, or after chemotherapy. There are several other agents in Phase III development in mCRPC and any future approvals will impact on the current treatment algorithm, and raise further questions regarding how to optimize sequencing and timing of therapies for better clinical outcomes.

[898]

**TÍTULO / TITLE:** - F-FDG PET/CT impact on testicular tumours clinical management.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nucl Med Mol Imaging. 2013 Nov 22.

●● Enlace al texto completo (gratis o de pago) [1007/s00259-013-2624-3](#)

**AUTORES / AUTHORS:** - Ambrosini V; Zucchini G; Nicolini S; Berselli A; Nanni C; Allegri V; Martoni A; Domenico R; Cricca A; Fanti S

**INSTITUCIÓN / INSTITUTION:** - Nuclear Medicine, S.Orsola-Malpighi University Hospital, Via Massarenti 9, 40138, Bologna, Italy, [valentina.ambrosini@aosp.bo.it](mailto:valentina.ambrosini@aosp.bo.it).

**RESUMEN / SUMMARY:** - PURPOSE: Testicular tumour is the most common malignancy in young men. The diagnostic work-up is mainly based on morphological imaging. The aim of our study was to evaluate the clinical impact of 18F-FDG PET/CT in patients with testicular tumour. METHODS: We retrospectively evaluated all patients studied by 18F-FDG PET/CT at our centre. Inclusion criteria were: pathological confirmation of testicular tumour, contrast-enhanced CT scan performed within a month of the PET/CT scan, and clinical/imaging follow-up performed at the Oncology Unit of our hospital. Overall, 56 patients were enrolled and 121 PET/CT scans were evaluated. 18F-FDG PET/CT was performed following standard procedures and the results were compared with clinical, imaging and follow-up data. Clinicians were contacted to enquire whether the PET/CT scan influenced the patient's management. Answers were scored as follows: start/continue chemotherapy or radiotherapy, indication for surgery of secondary lesions, and clinical surveillance. RESULTS: On a scan basis, 51

seminoma and 70 nonseminoma (NS) cases were reviewed. Of the 121 cases. 32 were found to be true-positive, 74 true-negative, 8 false-positive and 6 false-negative by PET/CT. PET/CT showed good sensitivity and specificity for seminoma lesion detection (92 % and 84 %, respectively), but its sensitivity was lower for NS forms (sensitivity and specificity 77 % and 95 %, respectively). The PET/CT scan influenced the clinical management of 47 of 51 seminomas (in 6 chemotherapy was started/continued, in 3 radiotherapy was started/continued, in 2 surgery of secondary lesions was performed, and in 36 clinical surveillance was considered appropriate), and 59 of 70 NS (in 18 therapy/surgery was started/continued, and in 41 clinical surveillance was considered appropriate). CONCLUSION: Our preliminary data demonstrate the potential usefulness of PET/CT for the assessment of patients with testicular tumour. It provides valuable information for the clinical management, particularly for clinical surveillance, post-therapy assessment and when relapse is suspected.

[899]

**TÍTULO / TITLE:** - Mid-term outcome of permanent prostate iodine-125 brachytherapy in Japanese patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Urol. 2013 Nov 20. doi: 10.1111/iju.12347.

●● Enlace al texto completo (gratis o de pago) [1111/iju.12347](#)

**AUTORES / AUTHORS:** - Kimura T; Kido M; Miki K; Yamamoto T; Sasaki H; Kuruma H; Hayashi N; Takahashi H; Aoki M; Egawa S

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Jikei University School of Medicine, Tokyo, Japan.

**RESUMEN / SUMMARY:** - OBJECTIVES: To analyze mid-term oncological outcomes of low-dose rate brachytherapy in Japanese patients. METHODS: Between 2003 and 2010, 604 consecutive patients with clinically localized prostate cancer were treated with low-dose rate brachytherapy at Jikei University Hospital in Tokyo, Japan. Median follow up was 48 months. Of these patients, 260 (43%) were treated with neoadjuvant therapy, 45 (7.5%) with adjuvant hormonal therapy and 75 (12.4%) with supplemental external beam radiation therapy. Biochemical recurrence was defined as the prostate-specific antigen nadir plus 2 ng/mL. RESULTS: Of the 604 patients, 219 (36.2%) were low risk, 361 (59.8%) were intermediate risk and 24 (4.0%) had high-risk disease. The median biologically effective dose was 174.4 Gy2. At 8 years, biochemical recurrence-free survival, cancer-specific survival, and overall survival were 82.2%, 100% and 95.6%, respectively. Biochemical recurrence-free survival at 8 years was 89.9%, 79.4% and 52.5%, for the low-, intermediate-, and high-risk groups, respectively. Biochemical recurrence-free survival for the high-risk group was significantly lower than the low- and intermediate-risk groups (P < 0.001). Biochemical recurrence-free survival did not differ significantly by biologically effective dose stratification. In multivariate analysis, younger age (P = 0.045), higher prostate-specific antigen (P = 0.004), higher Gleason score (P = 0.006) and higher clinical T stage (P = 0.008) were significant covariates associated with biochemical recurrence. The addition of hormonal therapy or external beam radiation therapy was associated with significantly better outcomes than low-dose rate brachytherapy monotherapy (P = 0.0021 and 0.010). Just four patients experienced G3 genitourinary or gastrointestinal toxicity. CONCLUSIONS: Low-dose rate

brachytherapy results in excellent mid-term oncological outcomes and acceptable toxicity in Japanese patients. In our experience, biologically effective dose does not represent a significant predictor for biochemical recurrence.

[900]

**TÍTULO / TITLE:** - First 100 cases at a low volume prostate brachytherapy institution: learning curve and the importance of continuous quality improvement.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can J Urol. 2013 Oct;20(5):6907-12.

**AUTORES / AUTHORS:** - Bockholt NA; DeRoo EM; Nepple KG; Modrick JM; Smith MC; Fallon B; Hass AC; Tracy CR; Brown JA

**INSTITUCIÓN / INSTITUTION:** - University of Iowa, Iowa City, Iowa, USA.

**RESUMEN / SUMMARY:** - INTRODUCTION: We report the first 100 patients who underwent prostate brachytherapy as monotherapy with 125I at an institution with moderate volume radical prostatectomy but low volume brachytherapy (<2 cases per month). Learning curve and quality improvement was assessed by way of achieving prescription dose targets. MATERIALS AND METHODS: From May 2002 to August 2006, 100 patients underwent prostate 125I brachytherapy monotherapy via preplanned approach. Preoperative planned dose to 100% of prostate gland (D100) was 145 Gy and postoperative confirmed dose was assessed by computed tomography. The cohort was divided into quartiles and recurrence was assessed using Kaplan-Meier analysis. RESULTS: Patient quartiles were of similar age and Gleason grade, while PSA was slightly higher in the first group. Postoperative D90 increased after the first quartile ( $p = < 0.0001$ ) reaching targeted values. Kaplan-Meier survival analysis revealed that 5 year recurrence-free survivals by Phoenix definition was 96%-100% in all groups while by ASTRO definition there was a decrease in recurrence for later cases. CONCLUSIONS: At our low volume institution during the first 100 brachytherapy cases, a learning curve for radiation dosimetry was evident, which improved after 25 patients. Preplanned dose-volume parameters were adjusted, enabling the achievement of post-implant goals emphasizing the importance of continuous quality improvement. Although recurrence data is limited by sample size and moderate follow up, there was a discrepancy between the Phoenix and ASTRO definition when evaluating recurrence.

[901]

**TÍTULO / TITLE:** - A Phase II Trial of Sunitinib in Patients With Renal Cell Cancer and Untreated Brain Metastases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Genitourin Cancer. 2013 Sep 28. pii: S1558-7673(13)00219-X. doi: 10.1016/j.clgc.2013.09.008.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.clgc.2013.09.008](#)

**AUTORES / AUTHORS:** - Chevreau C; Ravaud A; Escudier B; Amela E; Delva R; Rolland F; Tosi D; Oudard S; Blanc E; Ferlay C; Negrier S

**INSTITUCIÓN / INSTITUTION:** - Institut Claudius Regaud, Toulouse, France. Electronic address: [chevreau.christine@claudiusregaud.fr](mailto:chevreau.christine@claudiusregaud.fr).

**RESUMEN / SUMMARY:** - BACKGROUND: The expanded access program and anecdotal cases suggested sunitinib is safe in RCC patients with BM and might have worthwhile activity. PATIENTS AND METHODS: In a phase II trial, patients with untreated BM received the standard regimen of sunitinib. The primary end point was objective response (OR) rate in BM after 2 cycles. An OR rate of 35% was prospectively defined as the minimum needed to warrant further investigation. According to Simon's optimal 2-stage design, at least 3 of the initial 15 patients had to have an OR for accrual to continue. RESULTS: Among 16 evaluable patients, 1 had a complete response outside the central nervous system (CNS). CNS disease was stabilized in 5 (31%). However, no BM showed an OR. Therefore, no further accrual took place. Median time to progression was 2.3 months and overall survival was 6.3 months. There was 1 toxic death, from peritonitis with gastric perforation. Three patients experienced at least 1 treatment-related grade 3 or greater toxicity but no neurological adverse events were attributable to sunitinib. CONCLUSION: Although tolerability was acceptable in RCC patients with previously untreated BM, sunitinib has limited efficacy in this setting.

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[902]

**TÍTULO / TITLE:** - Radiation dosimetry of F-fluorocholine PET/CT studies in prostate cancer patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Phys Med. 2013 Nov 13. pii: S1120-1797(13)00428-6. doi: 10.1016/j.ejmp.2013.10.007.

●● Enlace al texto completo (gratis o de pago) [1016/j.ejmp.2013.10.007](#)

**AUTORES / AUTHORS:** - Fabbri C; Galassi R; Moretti A; Sintuzzi E; Mautone V; Sarti G; Strigari L; Benassi M; Matteucci F

**INSTITUCIÓN / INSTITUTION:** - Medical Physics Unit, IRCCS Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori (IRST), Meldola, FC, Italy. Electronic address: [cinziafabbri@hotmail.com](mailto:cinziafabbri@hotmail.com).

**RESUMEN / SUMMARY:** - PURPOSE: We aimed to evaluate the Equivalent Doses (HTs) to highly exposed organs as well as the Effective Dose (ED) for 18F-fluorocholine PET/CT scan in the follow-up of prostate cancer patients. METHODS: Fifty patients were administered with 18F-fluorocholine. The activities in organs with the highest uptake were derived by region-of-interest (ROI) analysis. OLINDA/EXM1.0 and Impact software were used to assess ED for the administered 18F-fluorocholine and CT scan, respectively, and the 18F-fluorocholine and CT-scan EDs summed to yield the total ED for the PET/CT procedure. RESULTS: The calculated 18F-fluorocholine and CT scans EDs based on ICRP Publication 103 were 5.2 mSv/300 MBq and 6.7 mSv, respectively. The 18F-fluorocholine HTs to the liver, kidneys, spleen and pancreas were about threefold higher than those from the CT, which contributed a greater proportion of the total ED than the 18F-fluorocholine did. CONCLUSIONS: For 18F-fluorocholine PET/CT procedures, about 40% of the ED is contributed by administered 18F-fluorocholine and 60% by the CT scan. The kidneys and liver were the highly exposed organs. Considering the large number of diagnostic procedures oncology patients undergo, radiation dosimetry is important in relation to the stochastic risk of such procedures.

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[903]

**TÍTULO / TITLE:** - Aberrant activation, nuclear localization, and phosphorylation of yes-associated protein-1 in the embryonic kidney and Wilms tumor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Pediatr Blood Cancer*. 2013 Sep 20. doi: 10.1002/pbc.24788.

●● Enlace al texto completo (gratis o de pago) [1002/pbc.24788](#)

**AUTORES / AUTHORS:** - Murphy AJ; Pierce J; de Caestecker C; Libes J; Neblett D; de Caestecker M; Perantoni AO; Tanigawa S; Anderson JR; Dome JS; Das A; Carroll TJ; Lovvorn HN 3rd

**INSTITUCIÓN / INSTITUTION:** - Department of Pediatric Surgery, Vanderbilt University School of Medicine, Nashville, Tennessee.

**RESUMEN / SUMMARY:** - BACKGROUND: The Yes-associated-protein-1 (YAP1) is a novel, direct regulator of stem cell genes both in development and cancer. FAT4 is an upstream regulator that induces YAP1 cytosolic sequestering by phosphorylation (p-Ser 127) and therefore inhibits YAP1-dependent cellular proliferation. We hypothesized that loss of FAT4 signaling would result in expansion of the nephron progenitor population in kidney development and that YAP1 subcellular localization would be dysregulated in Wilms tumor (WT), an embryonal malignancy that retains gene expression profiles and histologic features reminiscent of the embryonic kidney. METHODS: Fetal kidneys from Fat4<sup>-/-</sup> mice were harvested at e18.5 and markers of nephron progenitors were investigated using immunohistochemical analysis. To examine YAP1 subcellular localization in WT, a primary WT cell line (VUWT30) was analyzed by immunofluorescence. Forty WT specimens evenly distributed between favorable and unfavorable histology (n = 20 each), and treatment failure or success (n = 20 each) was analyzed for total and phosphorylated YAP1 using immunohistochemistry and Western blot. RESULTS: Fat4<sup>-/-</sup> mouse fetal kidneys exhibit nuclear YAP1 with increased proliferation and expansion of nephron progenitor cells. In contrast to kidney development, subcellular localization of YAP1 is dysregulated in WT, with a preponderance of nuclear p-YAP1. By Western blot, median p-YAP1 quantity was 5.2-fold greater in unfavorable histology WT (P = 0.05). CONCLUSIONS: Fetal kidneys in Fat4<sup>-/-</sup> mice exhibit a phenotype reminiscent of nephrogenic rests, a WT precursor lesion. In WT, YAP1 subcellular localization is dysregulated and p-YAP1 accumulation is a novel biomarker of unfavorable histology. *Pediatr Blood Cancer* © 2013 Wiley Periodicals, Inc.

[904]

**TÍTULO / TITLE:** - Anterior tumors of the prostate: diagnosis and significance.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Can J Urol*. 2013 Oct;20(5):6897-906.

**AUTORES / AUTHORS:** - Werahera PN; Crawford ED; La Rosa FG; Torkko KC; Schulte B; Sullivan HT; van Bokhoven A; Lucia MS; Kim FJ

**INSTITUCIÓN / INSTITUTION:** - University of Colorado Denver Anschutz Medical Campus, Aurora, Colorado, USA.

**RESUMEN / SUMMARY:** - INTRODUCTION: Prostate biopsies are usually taken from the peripheral rather than anterior region of the prostate. Consequently, tumors originating from the anterior apical region and transition zones may be under-sampled. We examined whether addition of transrectal anterior biopsy (TAB) would improve

efficacy of prostate biopsies. MATERIALS AND METHODS: Simulations of TAB and sextant biopsy (SB) were performed using computer models of 86 autopsy prostates (AP) and 40 radical prostatectomy (RP) specimens. TAB was obtained bilaterally from apex, mid, and base regions by advancing the biopsy needle 5 mm-35 mm beyond the prostatic capsule. A phase I clinical trial with 114 patients was conducted to determine the performance of an extended biopsy protocol consisting of TAB, SB, and laterally-directed biopsy (LDB). RESULTS: The overall cancer detection rates of SB and TAB were 33% and 55% for AP series ( $p = 0.00003$ ); 60% and 88% for RP series ( $p = 0.006$ ). Alternatively, SB + bilateral apical TAB and SB + bilateral mid TAB had cancer detection rates of 45% and 42% for AP series; 80% and 78% for RP series. The extended biopsy protocol detected cancer in 33% (38/114) of patients with 29, 25, and 15 diagnosed by SB, LDB, and bilateral apical TAB, respectively. Patients diagnosed by bilateral apical TAB versus SB ( $p = 0.01$ ) and LDB ( $p = 0.02$ ) were statistically significant. Without bilateral apical TAB, the overall cancer detection rate decreased to 30% (34/114). CONCLUSIONS: Inclusion of bilateral TAB from apical region for first time and repeat prostate biopsies may increase diagnosis of prostate cancer. The clinical significance of these findings needs further investigations and clinical follow up.

[905]

**TÍTULO / TITLE:** - The Prostate Health Index in predicting initial prostate biopsy outcomes in Asian men with prostate-specific antigen levels of 4-10 ng/mL.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Oct 18.

●● [Enlace al texto completo \(gratis o de pago\) 1007/s11255-013-0582-0](#)

**AUTORES / AUTHORS:** - Ng CF; Chiu PK; Lam NY; Lam HC; Lee KW; Hou SS

**INSTITUCIÓN / INSTITUTION:** - Division of Urology, Department of Surgery, The Chinese University of Hong Kong, Shatin, Hong Kong SAR, China, [ngcf@surgery.cuhk.edu.hk](mailto:ngcf@surgery.cuhk.edu.hk).

**RESUMEN / SUMMARY:** - PURPOSE: To investigate the role of the Prostate Health Index ( $\phi$ ) in prostate cancer (PCa) detection in patients with a prostate-specific antigen (PSA) level of 4-10 ng/mL receiving their first prostatic biopsy in an Asian population. METHODS: This was a retrospective study of archived serum samples from patients enlisted in our tissue bank. Patients over 50 years old, with PSA level of 4-10 ng/mL, a negative digital rectal examination, and received their first prostatic biopsy between April 2008 and April 2013, were recruited. The serum sample collected before biopsy was retrieved for the measurement of various PSA derivatives and the  $\phi$  value was calculated for each patient. The performance of these parameters in predicting the prostatic biopsy results was assessed. RESULTS: Two hundred and thirty consecutive patients, with 21 (9.13 %) diagnosed with PCa, were recruited for this study. Statistically significant differences between PCa patients and non-PCa patients were found for total PSA, PSA density, [-2]proPSA (p2PSA), free-to-total PSA ratio (%fPSA), p2PSA-to-free PSA ratio (%p2PSA), and  $\phi$ . The areas under the curve of the receiver operating characteristic curve for total PSA, PSA density, %fPSA, %p2PSA, and  $\phi$  were 0.547, 0.634, 0.654, 0.768, and 0.781, respectively. The  $\phi$  was the best predictor of the prostatic biopsies results. At a sensitivity of 90 %, the use of the  $\phi$  could have avoided unnecessary biopsies in 104 (45.2 %) patients.

CONCLUSIONS: Use of the phi could improve the accuracy of PCa detection in patients with an elevated PSA level and thus avoid unnecessary prostatic biopsies.

[906]

**TÍTULO / TITLE:** - GSTA1, GSTM1, GSTP1, and GSTT1 polymorphisms and susceptibility to smoking-related bladder cancer: a case-control study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct;31(7):1184-92. doi: 10.1016/j.urolonc.2011.08.005.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urolonc.2011.08.005](#)

**AUTORES / AUTHORS:** - Matic M; Pekmezovic T; Djukic T; Mimic-Oka J; Dragicevic D; Krivic B; Suvakov S; Savic-Radojevic A; Pljesa-Ercegovac M; Tulic C; Coric V; Simic T

**INSTITUCIÓN / INSTITUTION:** - Faculty of Medicine, University of Belgrade, Belgrade, Serbia; Institute of Medical and Clinical Biochemistry, Belgrade, Serbia.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** Glutathione S-transferases (GSTs) are a family of enzymes involved in detoxification. Genes encoding for GSTA1, GSTM1, GSTP1, and GSTT1 proteins are polymorphic, which can result in complete or partial loss of enzyme activity. Previous studies have associated polymorphisms of GSTA1, GSTM1, and GSTP1 genes with a higher risk of bladder cancer, but this is still controversial. Potential role of GSTA1 polymorphism in susceptibility to bladder cancer in Whites is lacking. We examined association between GSTA1, GSTM1, GSTP1, and GSTT1 gene variants and bladder cancer risk and evaluated whether they were modified by smoking. **MATERIALS AND METHODS:** A hospital-based case-control study recruited 201 incidence cases and 122 age-matched controls. Deletion polymorphism of GSTM1 and GSTT1 was identified by polymerase chain reaction method. Single nucleotide polymorphism of GSTA1 and GSTP1 was identified by restriction fragment length polymorphism method. Unconditional multivariate logistic regression was applied to model association between genetic polymorphisms and bladder cancer risk, as well as effect modification by smoking. **RESULTS:** No significant difference was observed in the distributions of GSTM1, GSTT1, GSTA1, and GSTP1 gene variants between patients and controls. None of the examined polymorphisms was significantly associated with bladder cancer risk independently. The results of gene-smoking interaction analyses indicated a significant combined effect of smoking and all common GST polymorphisms tested ( $P$  for trend = 0.001). However, the most significant effect on bladder cancer risk was observed in smokers carrying lower activity GSTA1-AB/BB and GSTM1-null genotype (OR = 3.5,  $P < 0.05$ ) compared with GSTA1-AA and GSTM1-active non-smokers. Overall, the risk observed did not significantly differ with respect to quantity of cigarettes smoked. However, heavy smokers with GSTM1-null genotype had 2 times higher risk of bladder cancer than GSTM1-null light smokers (OR = 4.8 vs. OR = 2.0) when GSTM1-active non-smokers served as reference group. Smokers carrying both GSTM1-null and GSTA1-AB + BB genotypes exhibited the highest risk of bladder cancer (OR = 2.00,  $P = 0.123$ ). **CONCLUSIONS:** Null or low-activity genotypes of the GSTA1, GSTM1, GSTT1, and GSTP1 did not contribute independently towards the risk of bladder cancer in our patients. However, in association with smoking, both low activity GSTA1 and GSTM1-null genotype increase individual susceptibility to bladder cancer.

[907]

**TÍTULO / TITLE:** - Percutaneous cryoablation for recurrent low grade renal cell carcinoma after failed nephron-sparing surgery.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can J Urol. 2013 Oct;20(5):6933-7.

**AUTORES / AUTHORS:** - Morgan MA; Roberts NR; Pino LA; Trabulsi EJ; Brown DB; Gomella LG; Lallas CD

**INSTITUCIÓN / INSTITUTION:** - Thomas Jefferson University, Philadelphia, Pennsylvania, USA.

**RESUMEN / SUMMARY:** - INTRODUCTION: Partial nephrectomy has a 3%-4% incidence of local treatment failure. This study is to present a series of percutaneous cryoablation for locally recurrent renal cell carcinoma after partial nephrectomy. MATERIALS AND METHODS: Five consecutive patients were referred to our quaternary center's multidisciplinary Small Renal Mass (SRM) Center for assessment after failure of partial nephrectomy. Tumor size and location was noted. CT-guided cryoablation was performed using an argon/helium-based system (Healthtronics, Austin, Texas, USA). Patients were admitted overnight for observation. Patients were followed with serial imaging, laboratory tests and examination at our SRM Center. Tumor size, location, and nephrometry scores were documented for each patient. RESULTS: Four tumors were endophytic and one was exophytic. The median tumor size was 2.2 cm (1.8 cm-4.0 cm). Nephrometry scores were 8a, 7x, 4p, 6x, 7p, and 6p prior to cryoablation. Median follow up after cryoablation was 32 months (20-39 months). One patient with a 4.0 cm endophytic tumor developed a second recurrence measuring 2.9 cm 13 months following ablation, which was managed successfully with repeat cryoablation with no evidence of disease after an additional 19 months of follow up. Two patients developed self-limited hematuria which was conservatively managed. There were no other complications, and all patients remained at their pretreatment performance status. CONCLUSIONS: Percutaneous cryoablation appears to be a safe and effective nephron-sparing modality for control of locally recurrent disease following partial nephrectomy. Most recurrent tumors are endophytic. One patient suffered a second local recurrence, which was managed successfully with repeat cryoablation.

[908]

**TÍTULO / TITLE:** - alpha-santalol inhibits the angiogenesis and growth of human prostate tumor growth by targeting vascular endothelial growth factor receptor 2-mediated AKT/mTOR/P70S6K signaling pathway.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer. 2013 Nov 22;12(1):147.

●● Enlace al texto completo (gratis o de pago) [1186/1476-4598-12-147](#)

**AUTORES / AUTHORS:** - Saraswati S; Kumar S; Alhaiderc AA

**RESUMEN / SUMMARY:** - BACKGROUND: VEGF receptor 2 (VEGFR2) inhibitors, as efficient antiangiogenesis agents, have been applied in the cancer treatment. However, recently, most of these anticancer drugs have some adverse effects. Discovery of novel VEGFR2 inhibitors as anticancer drug candidates is still needed. METHODS: We used alpha-santalol and analyzed its inhibitory effects on human umbilical vein endothelial cells (HUVEC) and Prostate tumor cells (PC-3 or LNCaP) in vitro. Tumor

xenografts in nude mice were used to examine the in vivo activity of alpha-santalol. RESULTS: alpha-santalol significantly inhibits HUVEC proliferation, migration, invasion, and tube formation. Western blot analysis indicated that alpha-santalol inhibited VEGF-induced phosphorylation of VEGFR2 kinase and the downstream protein kinases including AKT, ERK, FAK and Src, mTOR, and pS6K in HUVEC, PC-3 and LNCaP cells. alpha-santalol treatment inhibited ex vivo and in vivo angiogenesis as evident by rat aortic and sponge implant angiogenesis assay. alpha-santalol significantly reduced the volume and the weight of solid tumors in prostate xenograft mouse model. The antiangiogenic effect by CD31 immunohistochemical staining indicated that alpha-santalol inhibited tumorigenesis by targeting angiogenesis. Furthermore, alpha-santalol reduced the cell viability and induced apoptosis in PC-3 cells, which were correlated with the downregulation of AKT, mTOR and P70S6K expressions. Molecular docking simulation indicated that alpha-santalol form hydrogen bonds and aromatic interactions within the ATP-binding region of the VEGFR2 kinase unit. CONCLUSION: alpha-santalol inhibits angiogenesis by targeting VEGFR2 regulated AKT/mTOR/P70S6K signaling pathway, and could be used as a potential drug candidate for cancer therapy.

[909]

**TÍTULO / TITLE:** - The androgen receptor transcriptional program in castration-resistant prostate cancer: Cell lines vs. tissue samples.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Biol Ther. 2013 Nov 19;15(1).

**AUTORES / AUTHORS:** - Roth JE; Peer CJ; Price DK; Figg WD

**INSTITUCIÓN / INSTITUTION:** - Clinical Pharmacology Program; Office of the Clinical Director; National Cancer Institute; Bethesda, MD USA.

**RESUMEN / SUMMARY:** - The androgen receptor (AR) is central to the initiation and progression of prostate cancer, even after castration. Its transcriptional activity has previously been studied in cell lines. A group at the University of Cambridge recently outlined the AR transcriptional program in tissue samples, with an emphasis on castration-resistant tumors. AR binding sites, gene-expression changes (in xenografts), and potential transcription factor interactions were notably different from those observed in cultured cells. These discrepancies suggest a distinct signaling network for the AR in vivo and serve as a reminder that results from in vitro models should be checked against clinical realities.

[910]

**TÍTULO / TITLE:** - Gene-based urinary biomarkers for bladder cancer: An unfulfilled promise?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct 17. pii: S1078-1439(13)00289-5. doi: 10.1016/j.urolonc.2013.07.002.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urolonc.2013.07.002](#)

**AUTORES / AUTHORS:** - Sapre N; Anderson PD; Costello AJ; Hovens CM; Corcoran NM

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Royal Melbourne Hospital, Parkville, Victoria, Australia; Department of Surgery, University of Melbourne, Parkville, Victoria, Australia. Electronic address: [sapni973@gmail.com](mailto:sapni973@gmail.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: Noninvasive biomarkers are used routinely in the clinical management of several cancers but bladder cancer detection and surveillance remains dependent on invasive procedures such as cystoscopy. No validated biomarker currently exists in routine clinical practice other than cytology. Gene-based testing has shown great promise for biomarker profiling and this review addresses the current state of biomarker research in bladder cancer. MATERIALS AND METHODS: A comprehensive review of all published literature on urinary biomarkers from 1970 - 2012 was conducted in PubMed. Keywords used alone or in combination were bladder cancer, diagnosis, surveillance, urinary biomarker, molecular biomarkers, methylation, gene expression, single nucleotide polymorphism and microRNA. The cited references of the manuscripts included in the review were also screened. RESULTS: We have reviewed various strategies currently used for gene-based biomarker profiling of bladder cancer. We have comprehensively summarized the performance of several biomarkers in the diagnosis and surveillance of bladder cancer. Finally we have identified biomarkers that have shown potential and now deserve the opportunity to be validated in the clinical setting. CONCLUSION: Several gene-based urinary biomarkers have demonstrated promise in initial studies, which now need to be rigorously validated in the clinical setting for them to be translated into clinically useful tests in diagnosis, surveillance or risk-stratification of bladder cancer.

[911]

**TÍTULO / TITLE:** - TBLR1 as an AR coactivator selectively activates AR target genes to inhibit prostate cancer growth.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Relat Cancer. 2013 Nov 15.

●● [Enlace al texto completo \(gratis o de pago\) 1530/ERC-13-0293](#)

**AUTORES / AUTHORS:** - Daniels G; Li Y; Gellert LL; Zhou A; Melamed J; Wu X; Zhang X; Zhang DY; Meruelo D; Logan SK; Basch R; Lee P

**INSTITUCIÓN / INSTITUTION:** - G Daniels, Pathology, New York University, New York, 10010, United States.

**RESUMEN / SUMMARY:** - Androgen receptor (AR), a steroid hormone receptor, is critical for prostate cancer growth. However, activation of AR by androgens can also lead to growth suppression and differentiation. Transcriptional cofactors play an important role in this switch between proliferative and anti-proliferative AR target gene programs. TBLR1, a core component of the nuclear receptor corepressor (NCoR) complex, shows both co-repressor and co-activator activities on nuclear receptors, but little is known about its effects on AR and prostate cancer. We characterized TBLR1 as a coactivator of AR in prostate cancer cells and the activation is both phosphorylation and 19S proteasome dependent. We showed that TBLR1 physically interacts with AR and directly occupies the androgen response elements of affected AR target genes in an androgen-dependent manner. TBLR1 is primarily localized in the nucleus in benign prostate cells and nuclear expression is significantly reduced in prostate cancer cells in culture. Similarly, in human tumor samples, the expression of TBLR1 in the nucleus is significantly reduced in the malignant glands compared to the surrounding benign

prostatic glands ( $p < 0.005$ ). Stable ectopic expression of nuclear TBLR1 leads to androgen-dependent growth suppression of prostate cancer cells in vitro and in vivo by selective activation of androgen regulated genes associated with differentiation (e.g. KRT18) and growth suppression (e.g. NKX3.1), but not cell proliferation of the prostate. Understanding the molecular switches involved in the transition from AR dependent growth promotion to AR dependent growth suppression will lead to more successful prostate cancer treatments.

[912]

**TÍTULO / TITLE:** - Ancillary Diagnostic Techniques in the Evaluation of Adult Epithelial Renal Neoplasms: Indications, Caveats, and Pitfalls.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Appl Immunohistochem Mol Morphol. 2013 Oct 24.

●● Enlace al texto completo (gratis o de pago) [1097/PAI.0b013e318297d569](#)

**AUTORES / AUTHORS:** - Herrera GA; Turbat-Herrera EA

**INSTITUCIÓN / INSTITUTION:** - Louisiana State University, Shreveport, LA.

**RESUMEN / SUMMARY:** - The role played currently by the different ancillary diagnostic techniques in the diagnosis of adult epithelial renal tumors continues to be debated. It has also become clear that in some instances light microscopic appearance alone cannot be used to classify these neoplasms into specific categories with the degree of precision required for therapeutic purposes. Renal cell carcinoma (RCC) subtypes may share common histologic characteristics but exhibit different biological behavior and response to therapy which clearly indicates the crucial role that advanced pathologic speciation plays in the current assessment of these neoplasms. Although immunohistochemistry is widely used for the purpose of categorizing renal tumors because of its widespread availability, the immunoprofiles of the various types of renal neoplasms overlap significantly, making definitive diagnostic determinations difficult and challenging at times. This manuscript will address how ancillary diagnostic techniques can be incorporated into the routine evaluation of neoplastic renal masses to improve classification. Both cytology and surgical specimens will be addressed, as fine needle aspiration (FNA) is being used with preference in many cases in the diagnosis of renal masses. Surgical and cytopathologists must intelligently select the ancillary diagnostic technique/s that will provide the information needed to solve the differential diagnosis under consideration in a given case. However, in some cases >1 of these techniques should be used to make an accurate diagnosis with the aim of arriving at an unequivocal diagnosis. The identification of specific signaling pathways that are defective in certain types of renal neoplasms has made possible the design of target-specific therapies that are directed towards the aberrant pathways associated with the defective proteins found in these tumors. This makes the exact classification of these neoplasms and the detection of these aberrant proteins targeted for treatment an absolute requirement for the application of these molecular-based therapeutic interventions. The role that the pathologic assessment plays in the classification of renal tumors becomes more important than ever to take advantage of this and similar new molecular-oriented therapies.

[913]

**TÍTULO / TITLE:** - Tissue kidney injury molecule-1 expression in the prediction of renal function for several years after kidney biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Dis Markers. 2013;35(5):567-72. doi: 10.1155/2013/183246. Epub 2013 Oct 27.

●● Enlace al texto completo (gratis o de pago) [1155/2013/183246](#)

**AUTORES / AUTHORS:** - Simic Ogrizovic S; Bojic S; Basta-Jovanovic G; Radojevic S; Pavlovic J; Kotur Stevuljevic J; Dopsaj V; Naumovic R

**INSTITUCIÓN / INSTITUTION:** - Clinic of Nephrology, Clinical Center of Serbia, Pasterova 2, 11 000 Belgrade, Serbia ; School of Medicine, University of Belgrade, Serbia.

**RESUMEN / SUMMARY:** - Objectives. Retrospective study was designed to examine the importance of tissue kidney injury molecule-1 (KIM-1) expression in predicting kidney function in sixty patients (27 males) aged 34.15 +/- 12.23 years with different kidney diseases over three years after kidney biopsy. Materials and Methods. Tissue KIM-1 expression was determined immunohistochemically and KIM-1 staining was scored semiquantitatively, as well as tubulointerstitialis (TIN), inflammation, atrophy, and fibrosis. Kidney function (MDRD formula) and proteinuria/day were evaluated at the time of biopsy (GFR0) and 6, 12, 24, and 36 months later. Results. Significantly positive correlations between tissue KIM-1 expression and age ( $r = 0.313$ ), TIN inflammation ( $r = 0.456$ ), fibrosis ( $r = 0.317$ ), and proteinuria at 6 months ( $r = 0.394$ ) as well as negative correlations with GFR0 ( $r = -0.572$ ), GFR6 ( $r = -0.442$ ), GFR24 ( $r = -0.398$ ), and GFR36 ( $r = -0.412$ ) were found. Meanwhile, TIN inflammation was the best predictor of all measured kidney functions during three years, while tissue KIM-1 expression ( $P = 0.016$ ) was a predictor only at 6 months after biopsy. Conclusion. Tissue KIM-1 expression significantly predicts kidney function solely at 6 months after biopsy, when the effects of immune and nonimmune treatments are the strongest.

[914]

**TÍTULO / TITLE:** - Precision medicine for metastatic renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00301-3. doi: 10.1016/j.urolonc.2013.07.010.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.07.010](#)

**AUTORES / AUTHORS:** - Sonpavde G; Choueiri TK

**INSTITUCIÓN / INSTITUTION:** - Urologic Medical Oncology, UAB Comprehensive Cancer Center, Birmingham, AL.

**RESUMEN / SUMMARY:** - OBJECTIVES: This review provides a broad overview of emerging data that provide hope that rational precision medicine for metastatic renal cell carcinoma (RCC) may be possible. METHODS: PubMed and major conferences were searched for studies reporting potential predictive biomarkers for the therapy of metastatic RCC. RESULTS: The availability of multiple new agents for the therapy of advanced RCC poses new challenges in terms of optimal selection of patients for the appropriate drug. Prognostic stratification based on routine histopathologic, clinical and laboratory factors have been utilized to broadly select individuals based, i.e. high-dose interleukin (IL)-2 or vascular endothelial growth factor (VEGF) inhibitors for good and intermediate risk patients and temsirolimus for poor risk patients. While multiple

candidate predictive molecular biomarkers suggest that rational selection of patients for high-dose interleukin (IL)-2, and VEGF and mammalian target of rapamycin (mTOR) inhibitors may be possible, none have been validated for use in the clinic. Tumor heterogeneity and standardization of tissue collection and analysis are massive challenges that need to be addressed. Predictive molecules derived from tumor tissue, plasma and host tissue may all be predictive for therapeutic benefit. Moreover, gene expression may be modulated by multiple factors including epigenetics, transcription factors and post-transcriptional and post-translational modifications. Indeed, study of the interaction of molecular factors from all of these sources with environmental and clinical factors may be necessary to develop a unified profile composed of a panel of factors predictive of benefit from specific agents (i.e. sustained response, limited toxicity and overall a positive benefit/risk ratio). CONCLUSIONS: Conducting clinical trials with 1) prospective incorporation of promising candidate predictive molecular biomarkers, 2) novel biomarkers endpoints, and 3) mandatory biopsies of metastatic sites at different time points on therapy, are potential important steps in developing the concept of “the right medication for the right patient”.

[915]

**TÍTULO / TITLE:** - Prostate cancer survivors as community health educators: implications for informed decision making and cancer communication.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cancer Educ. 2013 Dec;28(4):623-8. doi: 10.1007/s13187-013-0559-9.

●● Enlace al texto completo (gratis o de pago) [1007/s13187-013-0559-9](#)

**AUTORES / AUTHORS:** - Vijaykumar S; Wray RJ; Jupka K; Clarke R; Shahid M

**INSTITUCIÓN / INSTITUTION:** - Nanyang Technological University, Center of Social Media Innovations for Communities (COSMIC), 14 Nanyang Drive, HSS-06-15, Singapore, 637332, Singapore, [santoshv@ntu.edu.sg](mailto:santoshv@ntu.edu.sg).

**RESUMEN / SUMMARY:** - Recent evidence questioning the effectiveness of prostate-specific antigen testing leave community-based prostate cancer (CaP) outreach programs with a dilemma between promoting screening and highlighting screening risks. CaP survivors are uniquely positioned to address this problem by drawing upon real-life experiences to share nuanced information and perspectives. While CaP survivors have historically been incorporated into outreach programs, little is known about their impact on psychosocial outcomes and their effectiveness compared to professional health educators. This study addressed these gaps through a quasi-experimental design where African American men attended a CaP screening session conducted by a health educator (HE) or survivor educator (SV). The presentation included prostate cancer statistics, CaP information, and descriptions of CaP screening tests. SV were encouraged to bolster their presentations with personal stories whereas HE maintained fidelity to the curriculum content. All participants completed pre- and post-test questionnaires. Our sample comprised a total of 63 participants (HE group = 32; SV group = 31) with an age range of 40-70 years. Decision self-efficacy increased significantly in the SV group ( $p = 0.01$ ) whereas perceived screening risks reduced significantly in the HE group ( $p < 0.001$ ). No significant changes were found in knowledge, subjective norms, outcome expectancies, and screening benefits. Survivor educators were found to have significantly greater appeal ( $p = 0.03$ ), identification with

audience ( $p = 0.01$ ), and liking ( $p = 0.03$ ). Training CaP survivors as health educators might be a viable strategy for community-based cancer communication efforts confronted by the CaP screening controversy. We discuss conceptual and programmatic implications of our findings and present directions for future research.

[916]

**TÍTULO / TITLE:** - Is human papillomavirus associated with prostate cancer survival?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Dis Markers. 2013;35(6):607-13. doi: 10.1155/2013/735843. Epub 2013 Oct 30.

●● Enlace al texto completo (gratis o de pago) [1155/2013/735843](#)

**AUTORES / AUTHORS:** - Pascale M; Pracella D; Barbazza R; Marongiu B; Roggero E; Bonin S; Stanta G

**INSTITUCIÓN / INSTITUTION:** - Oncology Institute of Southern Switzerland (IOSI), Ospedale San Giovanni, 6500 Bellinzona, Switzerland.

**RESUMEN / SUMMARY:** - THE ROLE OF HUMAN PAPILLOMAVIRUS (HPV) IN PROSTATE CARCINOGENESIS IS HIGHLY CONTROVERSIAL: some studies suggest a positive association between HPV infection and an increased risk of prostate cancer (PCa), whereas others do not reveal any correlation. In this study, we investigated the prognostic impact of HPV infection on survival in 150 primary PCa patients. One hundred twelve (74.67%) patients had positive expression of HPV E7 protein, which was evaluated in tumour tissue by immunohistochemistry. DNA analysis on a subset of cases confirmed HPV infection and revealed the presence of genotype 16. In Kaplan-Meier analysis, HPV-positive cancer patients showed worse overall survival (OS) (median 4.59 years) compared to HPV-negative (median 8.24 years,  $P = 0.0381$ ). In multivariate analysis age ( $P < 0.001$ ), Gleason score ( $P < 0.001$ ), nuclear grading ( $P = 0.002$ ), and HPV status ( $P = 0.034$ ) were independent prognostic factors for OS. In our cohort, we observed high prevalence of HPV nuclear E7 oncoprotein and an association between HPV infection and PCa survival. In the debate about the oncogenic activity of HPV in PCa, our results further confirm the need for additional studies to clarify the possible role of HPV in prostate carcinogenesis.

[917]

**TÍTULO / TITLE:** - Strontium-89 for prostate cancer with bone metastases: the potential of cancer control and improvement of overall survival.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Nucl Med. 2013 Oct 15.

●● Enlace al texto completo (gratis o de pago) [1007/s12149-013-0775-8](#)

**AUTORES / AUTHORS:** - Kuroda I

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Ibaraki Medical Centre, Tokyo Medical University, 3-20-1 Chuou, Ami, Inashiki, Ibaraki, 300-0395, Japan, [VEQ01625@nifty.ne.jp](mailto:VEQ01625@nifty.ne.jp).

**RESUMEN / SUMMARY:** - OBJECTIVE: Strontium-89 (Sr-89) has been considered to have a tumoricidal effect with minimal adverse events. However, few reports have investigated these effects in detail. In this study, we examined the tumoricidal and pain-relief effects of Sr-89 on prostate cancer with bone metastasis as well as survival.

**METHODS:** A retrospective study was performed involving 31 prostate cancer patients with bone metastasis treated with Sr-89. Using PSA as an evaluation criterion of cancer control, patients were divided into PSA responder and non-responder groups, and the survival rates of these groups were compared. In addition, using the total amount of painkillers administered as an evaluation criterion of pain relief, patients were divided into pain responder and non-responder groups, and the survival rates of these groups were also compared. As secondary investigation items, age, PSA (ng/ml), pain site, extent of the disease, the presence or absence of castration-resistant prostatic cancer (CRPC), the presence or absence of a past medical history of treatment with docetaxel in CRPC cases, Gleason Score, hemoglobin (g/dl), platelet (Plt) (/mul), serum carboxyterminal telopeptide of type I collagen (ng/ml), and bone-alkaline phosphatase (BAP) (U/l) were investigated. **RESULTS:** Longer survival was expected for the PSA responder group than for the PSA non-responder group, and whether the spine was the pain site and the presence or absence of CRPC were useful as predictors of this. Plt was suggested to be a useful indicator. Furthermore, the survival time was significantly longer in the pain responder group than in the pain non-responder group, and whether the pain site was present in the spine was considered to be a predictor; however, no significant difference was noted in any of the items assumed to be biomarkers. **CONCLUSIONS:** Sr-89 has the potential to control PSA and prolong survival. A large-scale prospective study of the therapeutic effect of Sr-89 is expected.

[918]

**TÍTULO / TITLE:** - The soluble Decoy Receptor 3 is regulated by a PI3K-dependent mechanism and promotes migration and invasion in renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer. 2013 Oct 10;12(1):120. doi: 10.1186/1476-4598-12-120.

●● Enlace al texto completo (gratis o de pago) [1186/1476-4598-12-120](#)

**AUTORES / AUTHORS:** - Weissinger D; Tagscherer KE; Macher-Goppinger S; Haferkamp A; Wagener N; Roth W

**INSTITUCIÓN / INSTITUTION:** - Molecular Tumor-Pathology, German Cancer Research Center (DKFZ), Heidelberg 69120, Germany. [Wilfried.Roth@med.uni-heidelberg.de](mailto:Wilfried.Roth@med.uni-heidelberg.de).

**RESUMEN / SUMMARY:** - **BACKGROUND:** Overexpression of Decoy Receptor 3 (DcR3), a soluble member of the tumor necrosis factor receptor superfamily, is a common event in several types of cancer. In renal cell carcinoma (RCC), DcR3 overexpression is associated with lymph node and distant metastasis as well as a poor prognosis. However, the functional role and regulation of DcR3 expression in RCC is so far unknown. **METHODS:** Modulation of DcR3 expression by siRNA and ectopic gene expression, respectively, was performed in ACHN and 769-P RCC cell lines. Functional effects of a modulated DcR3 expression were analyzed with regard to migration, invasion, adhesion, clonogenicity, and proliferation. Furthermore, quantitative RT-PCR and immunoblot analyses were performed to evaluate the expression of downstream mediators of DcR3. In further experiments, luciferase assays, quantitative RT-PCR and immunoblot analyses were applied to study the regulation of DcR3 expression in RCC. Additionally, an ex vivo tissue slice culture technique combined with immunohistochemistry was used to study the regulation of

DcR3 expression in human RCC specimens. RESULTS: Here, we show that DcR3 promotes adhesion, migration and invasiveness of RCC cells. The DcR3-dependent increase in cellular invasiveness is accompanied with an up-regulation of integrin alpha 4, matrix metalloproteinase 7 and urokinase plasminogen activator (uPA). Further, we identified a signaling pathway regulating DcR3 expression in RCC. Using in vitro experiments as well as an ex vivo RCC tissue slice culture model, we demonstrate that expression of DcR3 is regulated in a PI3K/AKT-dependent manner involving the transcription factor nuclear factor of activated T-cells (NFAT). CONCLUSIONS: Taken together, our results identify DcR3 as a key driver of tumor cell dissemination and suggest DcR3 as a promising target for rational therapy of RCC.

[919]

**TÍTULO / TITLE:** - Long-term cancer control after radical prostatectomy and bilateral pelvic lymph node dissection for pT3bN0M0 prostate cancer in the prostate-specific antigen era

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct 29. pii: S1078-1439(13)00137-3. doi: 10.1016/j.urolonc.2013.03.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.03.005](#)

**AUTORES / AUTHORS:** - Fairey AS; Daneshmand S; Skinner EC; Schuckman A; Cai J; Lieskovsky G

**INSTITUCIÓN / INSTITUTION:** - USC Institute of Urology, Keck Medical Center of USC, University of Southern California, Los Angeles, CA.

**RESUMEN / SUMMARY:** - OBJECTIVES: We evaluated long-term cancer control outcomes of radical prostatectomy and bilateral pelvic lymph node dissection (RP) for pT3bN0M0 prostate cancer in the era of prostate-specific antigen (PSA) screening. MATERIALS AND METHODS: A retrospective analysis of prospectively collected data from the University of Southern California Prostate Cancer Database was performed. Between 1987 and 2008, 229 men underwent open RP for pT3bN0M0 prostate cancer. The cohort was divided into early (1987-1997) and contemporary (1998-2008) PSA eras. The Kaplan-Meier method and Cox proportional regression models were used to analyze clinical recurrence (CR) and biochemical recurrence (BCR). RESULTS: The median follow-up duration was 14.5 years (range, 0.2-21.1y). The predicted 10-year freedom from CR and BCR rates for men treated in the early and contemporary PSA eras were 73% and 95% (Log-rank P = 0.001) and 65% and 73% (Log-rank P = 0.055), respectively. Multivariable analysis showed that pathologic Gleason grade 8-10 (CR: hazard ratio [HR] = 5.11; 95% confidence interval [CI] = 1.72-15.20; P = 0.003; BCR: HR = 3.47; 95% CI = 1.60-7.48; P = 0.002) and contemporary PSA era (CR: HR = 0.15; 95% CI = 0.06-0.41; P < 0.001; BCR: HR = 0.49; 95% CI = 0.28-0.86; P = 0.013) were independently associated with cancer control. Adjuvant radiation therapy and positive surgical margins were not independently associated with outcomes. CONCLUSIONS: RP conferred long-term cancer control in men with pT3bN0M0 prostate cancer treated in the PSA era. Pathologic Gleason grade 8-10 and treatment in the early PSA era were independently associated with poorer cancer control outcomes.

[920]

**TÍTULO / TITLE:** - A comparison of pediatric, adolescent, and adult testicular germ cell malignancy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Pediatr Blood Cancer*. 2013 Sep 17. doi: 10.1002/pbc.24773.

●● Enlace al texto completo (gratis o de pago) [1002/pbc.24773](#)

**AUTORES / AUTHORS:** - Cost NG; Lubahn JD; Adibi M; Romman A; Wickiser JE; Raj GV; Sagalowsky AI; Margulis V

**INSTITUCIÓN / INSTITUTION:** - Division of Urologic Oncology, University of Texas Southwestern Medical Center, Dallas, Texas; Division of Urology, University of Colorado School of Medicine, Aurora, Colorado.

**RESUMEN / SUMMARY:** - BACKGROUND: Testicular germ cell tumors (T-GCTs) occur from infancy to adulthood, and are the most common solid tumor in adolescent and young adult males. Traditionally, pediatric T-GCTs were perceived as more indolent than adult T-GCTs. However, there are few studies comparing these groups and none that specifically evaluate adolescents. METHODS: An institutional database of T-GCT patients was reviewed and patients were categorized into Pediatric, aged 0-12 years, Adolescent, aged 13-19 years, and Adult, older than 20 years, cohorts. Demographics, tumor characteristics, disease stage, treatment, event-free survival (EFS), and overall survival (OS) were compared between groups. RESULTS: Overall, 413 patients (20 pediatric, 39 adolescent, 354 adult) met study criteria and were followed for a median of 2.0 years (0.1-23.6). Adolescents presented with more advanced stage than children ( $P = 0.018$ ) or adults ( $P = 0.008$ ). There was a higher rate of events in Adolescents (13, 33.3%) than in Adults (61, 17.2%) or Children (2, 10.0%). Three-year EFS was 87.2% in the Pediatric group, 59.9% in Adolescents and 80.0% in Adults ( $P = 0.011$ ). In a multivariate analysis, controlling for stage, IGCCCG risk, and histology, the hazard ratio (HR) for an event was: 1 (Reference) for Adults, HR = 0.82 (95% CI 0.19-3.46;  $P = 0.33$ ) for the Pediatric group, and HR = 2.22 (95% CI 1.21-4.07;  $P = 0.01$ ) for Adolescents. Five-year OS was 100% in the Pediatric group, 84.8% in Adolescents, and 92.8% in Adults ( $P = 0.388$ ). CONCLUSION: Lower EFS in adolescent T-GCT patients was observed than in either children or adults. Elucidating factors associated with inferior outcomes in adolescents is an important focus of future research. *Pediatr Blood Cancer* © 2013 Wiley Periodicals, Inc.

[921]

**TÍTULO / TITLE:** - Prostate-specific antigen growth rate constant after first-line cytotoxic chemotherapy in metastatic castration-resistant prostate cancer: A monoinstitutional experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - *Urol Oncol*. 2013 Nov 13. pii: S1078-1439(13)00202-0. doi: 10.1016/j.urolonc.2013.05.002.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.05.002](#)

**AUTORES / AUTHORS:** - Colloca G; Venturino A; Addamo G; Ratti R; Coccorullo Z; Caltabiano G; Viale G; Guarneri D

**INSTITUCIÓN / INSTITUTION:** - Division of Medical Oncology, "G. Borea" Hospital, Sanremo, Italy. Electronic address: [g.colloca@katamail.com](mailto:g.colloca@katamail.com).

**RESUMEN / SUMMARY:** - OBJECTIVE: Validation in clinical practice, after first-line chemotherapy (CT) of metastatic castration-resistant prostate cancer (PC), of prostate-specific antigen growth rate constant logarithm (PSA-G), calculated by a formula developed by Stein et al. in comparison with PSA decrease (PSA-D), calculated as recommended by PCWG2. PATIENTS AND METHODS: This study is a retrospective monoinstitutional assessment of PSA-G and PSA-D after 12 weeks from the beginning of first-line cytotoxic CT in 49 patients with metastatic castration-resistant PC treated from 2006 to 2011, and whose pre-CT PSA and post-CT PSA determinations have been measured at specific time points. The 12-week PSA was measured at 80 to 91 days from the beginning of CT. RESULTS: PSA-G exhibited a significant correlation with overall survival by Mann-Whitney U test and by linear regression, whereas PSA-D did only at the first test. After multivariate analysis, PSA-G was the only posttreatment measure to predict overall survival. CONCLUSION: PSA-G appears a reliable surrogate end point after first-line cytotoxic CT outside of clinical trials. A cutoff value of PSA-G post-CT higher than 2.4 could be considered suggestive for moving to another treatment.

[922]

**TÍTULO / TITLE:** - Renal cell carcinoma presenting with brain metastasis from a 1.6 cm primary tumor.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can J Urol. 2013 Oct;20(5):6965-7.

**AUTORES / AUTHORS:** - Chalfin HJ; Gurda GT; Hammers HJ; Netto GJ; Bivalacqua TJ

**INSTITUCIÓN / INSTITUTION:** - The Johns Hopkins Medical Institutions, Baltimore, Maryland, USA.

**RESUMEN / SUMMARY:** - Small renal cell carcinoma (RCC) tumors are believed to have a negligible risk of metastasis. We report on a 77-year-old man presenting with extremity weakness who was found to have a 2.5 cm brain metastasis from a subsequently discovered 1.6 cm clear cell RCC primary tumor. We review what is known about synchronous and metachronous metastasis from small renal tumors and prognostic features informing treatment for such lesions.

[923]

**TÍTULO / TITLE:** - Erectile function after repeat saturation prostate biopsy: our experience in 100 patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Arch Ital Urol Androl. 2013 Sep 26;85(3):130-2. doi: 10.4081/aiua.2013.3.130.

•• Enlace al texto completo (gratis o de pago) [4081/aiua.2013.3.130](#)

**AUTORES / AUTHORS:** - Pepe P; Pietropaolo F; Dibenedetto G; Aragona F

**INSTITUCIÓN / INSTITUTION:** - Urology Unit, Cannizzaro Hospital, Catania.  
[piepepe@hotmail.com](mailto:piepepe@hotmail.com).

**RESUMEN / SUMMARY:** - INTRODUCTION: Erectile dysfunction (ED) incidence following repeat saturation prostate biopsy (SPBx) was evaluated. MATERIALS AND METHODS: From January 2011 to June 2012 295 patients underwent repeat transperineal SPBx (median 28 cores) under sedation. The indications for biopsy were:

abnormal DRE, PSA > 10 ng/mL or included between 4.1-10 with free/total PSA < 25%. All patients were prospectively evaluated with the 5-item version of the International Index of Erectile Function (IIEF-5) at baseline and 1, 3 and 6 months from SPBx. RESULTS: 100/200 men with benign histology and normal sexual activity completed the study; median IIEF-5 score before and after SPBx was equal to 18.3 (baseline) vs 17.8 (1 month later) vs 18 (3 months later) vs 18.1 (6 months later) (p > 0.05); in detail, 1 month from biopsy 5 (5%) men referred a mild ED that disappeared at 3 and 6 months evaluation. CONCLUSIONS: Repeat transperineal SPBx under sedation did not significantly worsened erectile function; the minimal risk of temporary post-biopsy ED could be previously discussed (not emphasised) with potent patients.

[924]

**TÍTULO / TITLE:** - Lymph node-positive bladder cancer: surgical, pathologic, molecular and prognostic aspects.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Nov;13(11):1281-95. doi: 10.1586/14737140.2013.850847. Epub 2013 Oct 18.

●● Enlace al texto completo (gratis o de pago) [1586/14737140.2013.850847](#)

**AUTORES / AUTHORS:** - Pedrosa JA; Koch MO; Cheng L

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Indiana University School of Medicine, Indianapolis, IN 46202, USA.

**RESUMEN / SUMMARY:** - The presence of lymphatic metastasis is associated with markedly worse prognosis in patients with bladder cancer, although surgical resection and chemotherapy can still provide long-term survival for selected patients. The prognostic stratification of patients with positive lymph nodes has been broadly discussed in the current literature and a more extensive pelvic lymph node dissection and thorough pathologic assessment has been advocated. It is clear that stratification using the tumor node metastasis staging system is insufficient to adequately discriminate prognosis between patients with different lymph node involvement. Lymph node density and extranodal extension have been extensively investigated and appear to influence the prognosis of these patients. Molecular markers have been developed to improve the diagnosis of micrometastatic disease, and new targeted therapies have shown promising preclinical results and are now being tested in different clinical scenarios.

[925]

**TÍTULO / TITLE:** - CyberKnife for inoperable renal tumors: Canadian pioneering experience.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can J Urol. 2013 Oct;20(5):6944-9.

**AUTORES / AUTHORS:** - Nair VJ; Szanto J; Vandervoort E; Cagiannos I; Breau R; Malone C; Avruch L; Pantarotto J; Malone S

**INSTITUCIÓN / INSTITUTION:** - University of Ottawa and The Ottawa Hospital, Ottawa, Ontario, Canada.

**RESUMEN / SUMMARY:** - INTRODUCTION: Stereotactic ablative body radiotherapy (SABR) is currently under study regarding its clinical application in management of

patients with kidney tumors. CyberKnife can accurately deliver ablative tumor radiation doses while preserving kidney function. We report Canada's first use of CyberKnife SABR system in treating primary kidney tumors. MATERIALS AND METHODS: Between January 2011 and February 2012, we treated three patients with renal tumors using CyberKnife SABR. Two patients had tumors in solitary kidney. The third patient had a recurrent tumor after two previous radiofrequency ablation treatments. Platinum seed fiducials were used for real time tumor tracking. Magnetic resonance imaging registration was used for tumor delineation in all cases. The patients were followed with regular renal scans and renal function tests. RESULTS: The mean age was 79 years. Mean tumor size was 21.3 cm<sup>3</sup>. A dose of 39 Gy in 3 fractions was delivered. The post treatment follow up times were 15 months, 13 months and 12 months. Local control was obtained in all three patients. No acute or chronic toxicity was reported. Kidney functions remained unaffected after treatment. CONCLUSION: CyberKnife is technically feasible for treatment of medically inoperable renal tumors or tumors in a solitary kidney.

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[926]

**TÍTULO / TITLE:** - A magnetic mass within the bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Can J Urol. 2013 Oct;20(5):6962-3.

**AUTORES / AUTHORS:** - Alyami F; Himmelman J; Whelan T

**INSTITUCIÓN / INSTITUTION:** - Saint John Regional Hospital, Dalhousie University, Saint John, New Brunswick, Canada.

**RESUMEN / SUMMARY:** - A search of the literature finds that there have been many case reports documenting a wide array of objects found within the bladder, ranging from magnets and paper clips to telephone and aluminum wire. The goal of treatment is to remove the object quickly, using the least invasive method possible. Therefore, the ideal treatment is removal through endoscopic means; however, in some cases, the size, mobility and shape of the foreign body can prevent its removal endoscopically and more invasive means must be employed. We present a case of a patient who inserted 150 magnetic spherical beads into his bladder.

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[927]

**TÍTULO / TITLE:** - Editorial Comment to Renal function after radical nephrectomy: Development and validation of predictive models in Japanese patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Urol. 2013 Oct 3. doi: 10.1111/iju.12279.

●● [Enlace al texto completo \(gratis o de pago\) 1111/iju.12279](#)

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[928]

**TÍTULO / TITLE:** - Renal function after radical nephrectomy: Development and validation of predictive models in Japanese patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int J Urol. 2013 Oct 3. doi: 10.1111/iju.12277.

●● Enlace al texto completo (gratis o de pago) [1111/iju.12277](#)

**AUTORES / AUTHORS:** - Yokoyama M; Fujii Y; Takeshita H; Kawamura N; Nakayama T; Imura Y; Sakura M; Ishioka J; Saito K; Koga F; Masuda H; Noro A; Arisawa C; Kitahara S; Kihara K

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Tokyo Medical and Dental University Graduate School, Tokyo, Japan.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** To develop and validate predictive models for postoperative estimated glomerular filtration rate and risk of chronic kidney disease after radical nephrectomy in Japanese patients. **METHODS:** The present retrospective study included a development cohort of 209 patients without preoperative chronic kidney disease who underwent radical nephrectomy between 1994 and 2008, and were followed up for longer than 3 years, and a validation cohort of 144 similar such patients. Univariate and multivariate linear regression or logistic regression analyses were carried out to identify the independent predictors of estimated glomerular filtration rate or chronic kidney disease 3 years after radical nephrectomy. Incorporating all independent predictors, predictive models for postoperative renal function were developed and externally validated. **RESULTS:** Age, the presence of diabetes mellitus, and preoperative estimated glomerular filtration rate were independent predictors of both postoperative estimated glomerular filtration rate and chronic kidney disease. A formula for predicting the postoperative estimated glomerular filtration rate and a nomogram for predicting the risk of postoperative chronic kidney disease were developed. The adjusted R<sup>2</sup> of the formula and area under the receiver operating characteristic curves of the nomogram were 0.446 and 0.865 in the development cohort, and 0.396 and 0.787 in the validation cohort, respectively. **CONCLUSIONS:** We developed and validated novel predictive models for the postoperative renal function 3 years after radical nephrectomy in Japanese patients.

[929]

**TÍTULO / TITLE:** - Longitudinal prostate-specific antigen reference ranges: Choosing the underlying model of age-related changes.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Stat Methods Med Res. 2013 Oct 9.

●● Enlace al texto completo (gratis o de pago) [1177/0962280213503928](#)

**AUTORES / AUTHORS:** - Simpkin AJ; Metcalfe C; Martin RM; Lane JA; Donovan JL; Hamdy FC; Neal DE; Tilling K

**INSTITUCIÓN / INSTITUTION:** - 1School of Social and Community Medicine, University of Bristol, Bristol, UK.

**RESUMEN / SUMMARY:** - Serial measurements of prostate-specific antigen (PSA) are used as a biomarker for men diagnosed with prostate cancer following an active monitoring programme. Distinguishing pathological changes from natural age-related changes is not straightforward. Here, we compare four approaches to modelling age-related change in PSA with the aim of developing reference ranges for repeated measures of PSA. A suitable model for PSA reference ranges must satisfy two criteria. First, it must offer an accurate description of the trend of PSA on average and in

individuals. Second, it must be able to make accurate predictions about new PSA observations for an individual and about the entire PSA trajectory for a new individual.

[930]

**TÍTULO / TITLE:** - Febrile Infection in Post-Prostate Biopsy: Results of a 10-Year Single-Institution Study in South Taiwan.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Surg Infect (Larchmt). 2013 Nov 27.

●● Enlace al texto completo (gratis o de pago) [1089/sur.2012.216](#)

**AUTORES / AUTHORS:** - Tsai YS; Chen CH; Jou YC; Yang WH; Chang CC; Tzai TS

**INSTITUCIÓN / INSTITUTION:** - 1 Department of Urology, National Cheng Kung University Hospital, College of Medicine, Tainan, Taiwan .

**RESUMEN / SUMMARY:** - Abstract Background: Post-biopsy infection is one of the major concerns of urologists and patients for prostate biopsy. Many efforts have been made to reduce the infection rate. We conducted a study at a single institution with the goal of describing the bacteriology and incidence trends of febrile infections following trans-rectal ultrasound (TRUS)-guided biopsy of the prostate. Materials and Methods: From January 1998 to December 2002 (Period 1 of the study), January 2003 to August 2005 (Period 2), September 2005 to October 2007 (Period 3), and November 2007 to December 2009 (Period 4), 1,406 patients underwent prostate biopsy at our hospital. All biopsies were conducted under TRUS guidance without preparation by enemas. Several steps were taken to reduce infectious complications following biopsy, including a shift to levofloxacin prophylaxis starting from Period 3 of our study and thorough instructions in post-biopsy self-care starting from the beginning of Period 4. The incidence and bacteriology of urinary tract infection (UTI) following the prostate biopsies were reviewed from chart records. Results: Twenty-eight of 514 (5.4%), 13 of 276 (4.7%) nine of 274 (3.2%), and three of 342 (0.9%) patients had post-biopsy febrile infections during the four periods of the study, respectively. Fifteen of 28 (53.5%), four of 13 (30.8%), five of nine (55.6%), and zero of three patients, respectively, had positive cultures of blood, urine, or both during the four study periods. Escherichia coli was the pathogen isolated most commonly and ampicillin- and fluoroquinolone-resistant strains of this organism were identified at a high frequency. The times to onset of fever after biopsy in the four study periods were 1.5+/-1.3 d, 3.7+/-2.7 d, 2.2+/-1.6 d, and 2.5+/-0.9 d, respectively. Conclusions: Ampicillin- and fluoroquinolone-resistant strains of E. coli were the uropathogenic bacteria identified most commonly after prostate biopsy at our hospital. The incidence of UTI following prostate biopsy can be reduced by explaining instructions for medication and self-care thoroughly to patients undergoing such biopsy.

[931]

**TÍTULO / TITLE:** - PSA home tests: ban in France is welcome.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Prescrire Int. 2013 Sep;22(141):218.

**RESUMEN / SUMMARY:** - Prostate cancer screening based on PSA assay has an unfavourable harm-benefit balance. The decision to ban the marketing of PSA home tests in France is fully justified.

[932]

**TÍTULO / TITLE:** - Magnetic resonance imaging of the pediatric kidney: benign and malignant masses.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Magn Reson Imaging Clin N Am. 2013 Nov;21(4):697-715. doi: 10.1016/j.mric.2013.06.001. Epub 2013 Aug 13.

●● Enlace al texto completo (gratis o de pago) [1016/j.mric.2013.06.001](#)

**AUTORES / AUTHORS:** - Gee MS; Bittman M; Epelman M; Vargas SO; Lee EY

**INSTITUCIÓN / INSTITUTION:** - Pediatric Imaging and Abdominal Imaging & Intervention, Department of Radiology, Massachusetts General Hospital, Harvard Medical School, 55 Fruit Street, Ellison 237, Boston, MA 02114, USA.

**RESUMEN / SUMMARY:** - The differential diagnosis of renal masses in pediatric patients includes benign and malignant tumors, as well as nonneoplastic mass-like lesions mimicking tumors. Although the spectrum of renal masses in children has some overlap with that of adults, it is important to understand the renal pathologic processes specific to the pediatric population, as well as their characteristic imaging appearances and clinical presentations. This article reviews benign and malignant renal masses in children, with an emphasis on magnetic resonance imaging and clinical features that are specific to each lesion type.

[933]

**TÍTULO / TITLE:** - Prevalence of low testosterone and its relationship to body mass index in older men with lower urinary tract symptoms associated with benign prostatic hyperplasia.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Aging Male. 2013 Dec;16(4):169-72. doi: 10.3109/13685538.2013.844786. Epub 2013 Oct 17.

●● Enlace al texto completo (gratis o de pago) [3109/13685538.2013.844786](#)

**AUTORES / AUTHORS:** - Kaplan SA; Lee JY; O'Neill EA; Meehan AG; Kusek JW

**INSTITUCIÓN / INSTITUTION:** - Weill Cornell Medical College, New York, NY, USA.

**RESUMEN / SUMMARY:** - Abstract Purpose: We examined the prevalence of low testosterone (LT) and its relationship with body mass index (BMI) in men with lower urinary tract symptoms (LUTS) associated with benign prostatic hyperplasia (BPH), who were enrolled in a clinical trial of drug therapy, the Medical Therapy of Prostatic Symptoms (MTOPS) Study. Materials and methods: MTOPS enrolled 3047 men, and of these, 1896 had total testosterone (TT) measured at baseline. LT was defined as a single measurement of TT of <300 ng/dL. Results: The overall prevalence of LT was 25.7%. Prevalence increased with increasing BMI; 14.7% among men who were normal weight (BMI <25 kg/m<sup>2</sup>) and 24.2% and 39.3% among overweight (BMI 25 to <30 kg/m<sup>2</sup>), and obese (baseline BMI ≥30 kg/m<sup>2</sup>) men, respectively. Conclusions: LT was observed in about one in four MTOPS study participants with baseline TT measurements. The prevalence of LT increased markedly with increasing BMI. Our findings suggest a high prevalence of LT in obese men with LUTS/BPH. Physicians should be alert to the possibility of symptoms of hypogonadism in this population.

[934]

**TÍTULO / TITLE:** - Segmental ureterectomy does not compromise the oncologic outcome compared with nephroureterectomy for pure ureter cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Nov 8.

●● Enlace al texto completo (gratis o de pago) [1007/s11255-013-0514-z](#)

**AUTORES / AUTHORS:** - Hung SY; Yang WC; Luo HL; Hsu CC; Chen YT; Chuang YC  
**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Kaohsiung Chang Gung Memorial Hospital, 123, Ta-Pei Road, Niasung, Kaohsiung, Taiwan.

**RESUMEN / SUMMARY:** - **PURPOSE:** Pure ureter cancers are rare and account for only 1-3 % of urothelial carcinomas with limited data. Nowadays, nephron-sparing methods are reserved mainly for imperative cases. This study intends to assess the oncologic outcome between segmental ureterectomy (SU) and radical nephroureterectomy (RNU) for pure ureteral urothelial carcinoma. **METHODS:** From July 2004 to August 2010, 112 patients at a single tertiary referral center were included. Perioperative data were obtained from our institutional database. Postoperative CT scan, cystoscopy, and contralateral renal echo were performed regularly for survey of disease recurrence. **RESULTS:** The mean length of follow-up was 43.8 and 48.3 months for the RNU and SU group, respectively. The bladder recurrences, local recurrences, distant metastasis, and cancer-specific survival rates showed no significant differences between RNU and SU (36.4 vs. 34.2 %,  $p = 0.83$ ; 23.4 vs. 14.3 %,  $p = 0.27$ ; and 16.9 vs. 8.6 %,  $p = 0.244$ , and 13.0 vs. 5.7 %,  $p = 0.249$ , respectively). **CONCLUSION:** The study suggested that SU is not inferior to RNU for ureter cancer in oncologic outcomes and is less invasive and better nephron preservation.

[935]

**TÍTULO / TITLE:** - Expression analysis and in silico characterization of intronic long noncoding RNAs in renal cell carcinoma: emerging functional associations.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer. 2013 Nov 15;12(1):140.

●● Enlace al texto completo (gratis o de pago) [1186/1476-4598-12-140](#)

**AUTORES / AUTHORS:** - Fachel AA; Tahira AC; Vilella-Arias SA; Maracaja-Coutinho V; Gimba ER; Vignal GM; Campos FS; Reis EM; Verjovski-Almeida S

**RESUMEN / SUMMARY:** - **BACKGROUND:** Intronic and intergenic long noncoding RNAs (lncRNAs) are emerging gene expression regulators. The molecular pathogenesis of renal cell carcinoma (RCC) is still poorly understood, and in particular, limited studies are available for intronic lncRNAs expressed in RCC. **METHODS:** Microarray experiments were performed with custom-designed arrays enriched with probes for lncRNAs mapping to intronic genomic regions. Samples from 18 primary RCC tumors and 11 nontumor adjacent matched tissues were analyzed. Meta-analyses were performed with microarray expression data from three additional human tissues (normal liver, prostate tumor and kidney nontumor samples), and with large-scale public data for epigenetic regulatory marks and for evolutionarily conserved sequences. **RESULTS:** A signature of 29 intronic lncRNAs differentially expressed between RCC and nontumor samples was obtained (false discovery rate (FDR) <5%).

A signature of 26 intronic lncRNAs significantly correlated with the RCC five-year patient survival outcome was identified (FDR <5%, p-value <=0.01). We identified 4303 intronic antisense lncRNAs expressed in RCC, of which 22% were significantly (p <0.05) cis correlated with the expression of the mRNA in the same locus across RCC and three other human tissues. Gene Ontology (GO) analysis of those loci pointed to 'regulation of biological processes' as the main enriched category. A module map analysis of the protein-coding genes significantly (p <0.05) trans correlated with the 20% most abundant lncRNAs, identified 51 enriched GO terms (p <0.05). We determined that 60% of the expressed lncRNAs are evolutionarily conserved. At the genomic loci containing the intronic RCC-expressed lncRNAs, a strong association (p <0.001) was found between their transcription start sites and genomic marks such as CpG islands, RNA Pol II binding and histones methylation and acetylation.

CONCLUSION: Intronic antisense lncRNAs are widely expressed in RCC tumors. Some of them are significantly altered in RCC in comparison with nontumor samples. The majority of these lncRNAs is evolutionarily conserved and possibly modulated by epigenetic modifications. Our data suggest that these RCC lncRNAs may contribute to the complex network of regulatory RNAs playing a role in renal cell malignant transformation.

[936]

**TÍTULO / TITLE:** - A urologic oncology roundtable discussion: the role of disease monitoring in treatment decision-making for patients with metastatic castration-resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Hosp Pract (1995). 2013 Oct;41(4):78-80. doi: 10.3810/hp.2013.10.1083.

●● Enlace al texto completo (gratis o de pago) [3810/hp.2013.10.1083](#)

**AUTORES / AUTHORS:** - Shore ND; Concepcion R; Barocas DA

**INSTITUCIÓN / INSTITUTION:** - Carolina Urologic Research Center, Myrtle Beach, SC. [nshore@gsuro.com](mailto:nshore@gsuro.com).

**RESUMEN / SUMMARY:** - A recent Elsevier survey of 200 urologists and oncologists who treat patients with castration-resistant prostate cancer (CRPC) identified a lack of physician confidence in understanding and using current clinical practices regarding the identification, treatment, and management of patients with CRPC. In response to this knowledge gap, a urologic oncology physician roundtable discussion was convened and a companion summary article created to provide a knowledge-based perspective for optimizing the identification, monitoring, and treatment of patients with metastatic CRPC (<http://prostatecancer.urologiconcology.org/>). Leading urology experts were selected to discuss how CRPC is defined and monitored, and to elaborate (through the presentation of 2 different cases) on considerations of how the currently approved chemotherapeutics, immunotherapy, and oral androgen inhibition agents can be used in the treatment of metastatic CRPC.

[937]

**TÍTULO / TITLE:** - Androgen receptor co-regulatory networks in castration resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Relat Cancer. 2013 Oct 23.

●● Enlace al texto completo (gratis o de pago) [1530/ERC-13-0326](#)

**AUTORES / AUTHORS:** - Cheung E; Sung YY

**INSTITUCIÓN / INSTITUTION:** - E Cheung, Cancer Biology and Pharmacology, Genome Institute of Singapore, Singapore, Singapore.

**RESUMEN / SUMMARY:** - Androgen and the androgen receptor are critical effectors of prostate cancer. Consequently, androgen deprivation therapy is typically employed as a first line treatment for prostate cancer patients. While initial responses are generally positive, prostate tumors frequently recur and progress to a lethal form known as castration resistant prostate cancer. Recently, considerable effort has been directed towards elucidating the molecular mechanisms of castration resistant prostate cancer. Results from both pre-clinical and clinical studies suggest that androgen receptor-mediated signaling persists and remains functionally important in castration resistant prostate cancer despite the elimination of androgens. Understanding the role of this pathway in the development of resistance will therefore be critical to identifying alternative diagnostic markers as well as more effective therapies for the treatment of castration resistant prostate cancer. Using next-generation sequencing and other high throughput approaches, numerous groups are beginning to identify the key differences in the transcription regulatory and gene expression programs between androgen-dependent and castration resistant prostate cancer. A number of mechanisms have been proposed for the differences and these mostly involve alterations to components of the androgen receptor co-regulatory network. In this review, we summarize current knowledge on co-regulators of the androgen receptor and discuss their potential roles in castrate resistant prostate cancer. It is anticipated that a deeper understanding of these factors will uncover new targets that can assist in the diagnosis and treatment of castrate resistant prostate cancer.

[938]

**TÍTULO / TITLE:** - Association of RNASEL and 8q24 variants with the presence and aggressiveness of hereditary and sporadic prostate cancer in a hispanic population.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Cell Mol Med. 2013 Nov 14. doi: 10.1111/jcmm.12171.

●● Enlace al texto completo (gratis o de pago) [1111/jcmm.12171](#)

**AUTORES / AUTHORS:** - San Francisco IF; Rojas PA; Torres-Estay V; Smalley S; Cerda-Infante J; Montecinos VP; Hurtado C; Godoy AS

**INSTITUCIÓN / INSTITUTION:** - Departamento de Urología, Facultad de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile.

**RESUMEN / SUMMARY:** - To study the association between the polymorphisms Arg462Gln and Asp541Glu from the RNASEL gene (1q25), and the polymorphisms rs620861, rs1447295, rs6983267, rs7837328 from the chromosome 8q24 with the risk of presenting prostate cancer (PCa) and its clinical characteristics in a Hispanic (Chilean) population. The study was performed on 21 control patients and 83 patients diagnosed with PCa. Polymorphisms were analysed from blood samples through real-time PCR by using TaqMan probes, and the genetic analysis was performed with the SNPStats program. Also, a comparison was performed between clinical characteristics of PCa and the presence of the different polymorphism genotypes by using the Minitab software. There was a significant association between the genotype G/G from the

polymorphism rs6983267 with an overall increased risk of PCa, in patients both with or without family history of PCa (OR = 4.47, 95% CI = 1.05-18.94, P = 0.034 and OR = 3.57, 95% CI = 0.96-13.35, P = 0.037, respectively). Regarding clinical parameters, patients carrying the genotype C/C from the polymorphism Asp541Glu had significantly higher prostate-specific antigen (PSA) levels than patients carrying the other genotypes (P = 0.034). Moreover, patients with the genotype G/G of rs6983267 had higher PSA levels (P = 0.024). The polymorphism rs6983267 from region 3 of the chromosome 8q24 appears to be a prominent risk factor for PCa and a biomarker for cancer aggressiveness in the group of patients who presented higher levels of PSA at the time of diagnosis.

[939]

**TÍTULO / TITLE:** - Target detection: Magnetic resonance imaging-ultrasound fusion-guided prostate biopsy.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00316-5. doi: 10.1016/j.urolonc.2013.08.006.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.08.006](#)

**AUTORES / AUTHORS:** - Sonn GA; Margolis DJ; Marks LS

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Stanford University, Stanford, CA.

**RESUMEN / SUMMARY:** - Recent advances in multiparametric magnetic resonance imaging (MRI) have enabled image-guided detection of prostate cancer. Fusion of MRI with real-time ultrasound (US) allows the information from MRI to be used to direct biopsy needles under US guidance in an office-based procedure. Fusion can be performed either cognitively or electronically, using a fusion device. Fusion devices allow superimposition (coregistration) of stored MRI images on real-time US images; areas of suspicion found on MRI can then serve as targets during US-guided biopsy. Currently available fusion devices use a variety of technologies to perform coregistration: robotic tracking via a mechanical arm with built-in encoders (Artemis/Eigen, BioJet/Geoscan); electromagnetic tracking (UroNav/Philips-Invivo, Hi-RVS/Hitachi); or tracking with a 3D US probe (Urostation/Koelis). Targeted fusion biopsy has been shown to identify more clinically significant cancers and fewer insignificant cancers than conventional biopsy. Fusion biopsy appears to be a major advancement over conventional biopsy because it allows (1) direct targeting of suspicious areas not seen on US and (2) follow-up biopsy of specific cancerous sites in men undergoing active surveillance.

[940]

**TÍTULO / TITLE:** - Denosumab as a promising novel bone-targeted agent in castration resistant prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Opin Biol Ther. 2013 Sep 27.

●● Enlace al texto completo (gratis o de pago) [1517/14712598.2013.840582](#)

**AUTORES / AUTHORS:** - Dellis A; Papatsoris AG

**INSTITUCIÓN / INSTITUTION:** - University of Athens, Sismanoglio General Hospital, School of Medicine, 2<sup>nd</sup> Department of Urology , Athens 15126 , Greece  
[agpapatsoris@yahoo.gr](mailto:agpapatsoris@yahoo.gr).

**RESUMEN / SUMMARY:** - Fortunately, more therapeutic progress has been achieved during the last 3 years for patients with castration resistant prostate cancer (CRPC) than during the previous 30 years. During this limited time frame, six compounds (sipuleucel-T, cabazitaxel, denosumab, abiraterone, radium-223 and enzalutamide, listed in chronologic order) yielded positive results in Phase III trials (Fizazi K. Nonhormone therapy for metastatic castration-resistant prostate cancer. Soc Clin Oncol Educ Book 2013;2013:161-5; Papatsoris AG, Karamouzis MV, Papavassiliou AG. Novel biological agents for the treatment of hormone-refractory prostate cancer (HRPC). Curr Med Chem 2005;12(3):277-96). Regarding skeletal related event (SREs) in patients with CRPC the last 20 years bisphosphonates (i.e., zoledronic acid) were the standard of care until the development of denosumab, which is a novel receptor-activated nuclear factor kappa-beta ligand inhibitor. Recent studies demonstrated that denosumab (subcutaneous use) was better than zoledronic acid (intravenous use) for the prevention of SREs and the increase of the bone-metastasis-free survival, while the rate and grade of adverse effects was similar, except for osteonecrosis of the jaw and hypocalcemia. Cost-effectiveness of denosumab is under review in ongoing comparative studies.

[941]

**TÍTULO / TITLE:** - Improving surgical outcomes in renal cell carcinoma involving the inferior vena cava.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Dec;13(12):1373-87. doi: 10.1586/14737140.2013.858603.

●● Enlace al texto completo (gratis o de pago) [1586/14737140.2013.858603](#)

**AUTORES / AUTHORS:** - Gonzalez J; Andres G; Martinez-Salamanca JI; Ciancio G  
**INSTITUCIÓN / INSTITUTION:** - Servicio de Urología, Hospital Central de la Cruz Roja San Josey Santa Adela, Madrid, España.

**RESUMEN / SUMMARY:** - Radical nephrectomy with tumor thrombectomy remains the mainstay of treatment in renal cell carcinoma with inferior vena cava extension. Despite the rapid improvements experienced in perioperative care in recent years, this intervention still often results in significant morbidity and mortality. A deeper understanding of salient features of this complex operation provides a valuable insight into the clinical mechanisms underlying the variations observed in surgical outcomes. The 'operation profile' serves not only as a basis for making an adequate prognostic assessment, but also creates a platform from which 'innovative' strategies for improving quality and safety can be made. The present review aims to set a 'profile' for radical nephrectomy and tumor thrombectomy, and to propose a number of strategies that may reduce the complication rates of this intervention.

[942]

**TÍTULO / TITLE:** - Down-regulation of ROBO2 Expression in Prostate Cancers.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathol Oncol Res. 2013 Nov 24.

●● Enlace al texto completo (gratis o de pago) [1007/s12253-013-9722-1](http://1007/s12253-013-9722-1)

**AUTORES / AUTHORS:** - Choi YJ; Yoo NJ; Lee SH

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, College of Medicine, The Catholic University of Korea, 505 Banpo-dong, Socho-gu, Seoul, 137-701, South Korea.

**RESUMEN / SUMMARY:** - Several lines of evidence exist that axon guidance genes are involved in cancer pathogenesis. Axon guidance genes ROBO1 and ROBO2 are candidate tumor suppressor genes (TSG). The aim of our study was to address whether ROBO1 and ROBO2 expressions are altered in prostate cancers (PCA). In this study, we analyzed ROBO1 and ROBO2 expressions in 107 PCAs. In the immunohistochemistry, loss of ROBO2 expression was identified in 66 % of PCAs and was significantly higher than that in normal cells ( $p < 0.001$ ). By contrast, there was no significant difference of ROBO1 expression between normal and PCAs. Our results indicate that axon guidance protein ROBO2 is frequently lost in PCA and that ROBO2 might be involved in PCA pathogenesis as a candidate TSG.

[943]

**TÍTULO / TITLE:** - Deregulated expression of selected histone methylases and demethylases in prostate carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Relat Cancer. 2013 Nov 7.

●● Enlace al texto completo (gratis o de pago) [1530/ERC-13-0375](http://1530/ERC-13-0375)

**AUTORES / AUTHORS:** - Vieira FQ; Costa-Pinheiro P; Ramalho-Carvalho J; Pereira A; Menezes FD; Antunes L; Carneiro I; Oliveira J; Henrique R; Jeronimo C

**INSTITUCIÓN / INSTITUTION:** - F Vieira, Cancer Epigenetics Group - Research Center, Portuguese Oncology Institute-Porto, Porto, 4200-072, Portugal.

**RESUMEN / SUMMARY:** - Prostate cancer (PCa), a leading cause of cancer-related morbidity and mortality, arises through the acquisition of genetic and epigenetic alterations. Deregulation of histone methyltransferases (HMTs) or demethylases (HDMs) has been associated with PCa development and progression. However, the precise influence of altered HMTs or HDMs expression and respective histone marks in PCa onset and progression remains largely unknown. To clarify the role of HMTs and HDMs in prostate carcinogenesis, expression levels of 37 HMTs and 20 HDMs were assessed in normal prostate and PCa tissue samples by RT-qPCR. SMYD3, SUV39H2, PRMT6, KDM5A and KDM6A were up-regulated, whereas MLL1-5 and KDM4B were downregulated in PCa, compared to normal prostate tissues. Remarkably, PRMT6 was the histone modifier that best discriminated normal from tumorous tissue samples. Interestingly, EZH2 and SMYD3 expression levels significantly correlated with less differentiated and more aggressive tumors. Remarkably, SMYD3 expression levels were of independent prognostic value for prediction of disease-specific survival of PCa patients with clinically localized disease submitted to radical prostatectomy. We concluded that expression profiling of HMTs and HDMs, especially SMYD3, might be of clinical usefulness for assessment of PCa patients and assist in pre-therapeutic decision-making.

[944]

**TÍTULO / TITLE:** - Resection of Isolated Renal Cell Carcinoma Metastases of the Pancreas: Outcomes from the Johns Hopkins Hospital.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Gastrointest Surg. 2013 Oct 26.

●● Enlace al texto completo (gratis o de pago) [1007/s11605-013-2278-2](#)

**AUTORES / AUTHORS:** - Tosoian JJ; Cameron JL; Allaf ME; Hruban RH; Nahime CB; Pawlik TM; Pierorazio PM; Reddy S; Wolfgang CL

**INSTITUCIÓN / INSTITUTION:** - The Department of Surgery, Johns Hopkins Medical Institutions Sol Goldman Pancreatic Research Center, 604 Blalock Building, 600 N. Wolfe Street, Baltimore, MD, 21287, USA.

**RESUMEN / SUMMARY:** - PURPOSE: This study aims to assess outcomes and characteristics associated with resection of metastatic renal cell carcinoma (mRCC) to the pancreas. MATERIALS AND METHODS: From April 1989 to July 2012, a total of 42 patients underwent resection of pancreatic mRCC at our institution. We retrospectively reviewed records from a prospectively managed database and analyzed patient demographics, comorbidities, perioperative outcomes, and overall survival. Cox proportional hazards models were used to evaluate the association between patient-specific factors and overall survival. RESULTS: The mean time from resection of the primary tumor to reoperation for pancreatic mRCC was 11.2 years (range, 0-28.0 years). In total, 17 patients underwent pancreaticoduodenectomy, 16 underwent distal pancreatectomy, and 9 underwent total pancreatectomy. Perioperative complications occurred in 18 (42.9 %) patients; there were two (4.8 %) perioperative mortalities. After pancreatic resection, the median follow-up was 7.0 years (0.1-23.2 years), and median survival was 5.5 years (range, 0.4-21.9). The overall 5-year survival was 51.8 %. On univariate analysis, vascular invasion (hazard ratio, 5.15; p = 0.005) was significantly associated with increased risk of death. CONCLUSIONS: Pancreatic resection of mRCC can be safely achieved in the majority of cases and is associated with long-term survival. Specific pathological factors may predict which patients will benefit most from resection.

[945]

**TÍTULO / TITLE:** - Second-line chemotherapy for advanced bladder cancer: A survey of current UK practice.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00318-9. doi: 10.1016/j.urolonc.2013.08.008.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.08.008](#)

**AUTORES / AUTHORS:** - Lamb BW; Vasdev N; Jalil RT; McMenemin R; Hughes S; Payne H; Green JS

**INSTITUCIÓN / INSTITUTION:** - Hertfordshire and South Bedfordshire Urological Cancer Centre, Department of Urology, Lister Hospital, Stevenage, UK; Department of Surgery and Cancer, Imperial College London, London, UK. Electronic address: [benjamin.lamb@imperial.ac.uk](mailto:benjamin.lamb@imperial.ac.uk).

**RESUMEN / SUMMARY:** - OBJECTIVES: MATERIALS AND METHODS: RESULTS: CONCLUSION:

[946]

**TÍTULO / TITLE:** - Chromophobe renal cell carcinoma: a morphologic and immunohistochemical study of 45 cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Ann Diagn Pathol. 2013 Dec;17(6):508-13. doi: 10.1016/j.anndiagpath.2013.06.005. Epub 2013 Oct 2.

●● [Enlace al texto completo \(gratis o de pago\)](#)

[1016/j.anndiagpath.2013.06.005](#)

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**INSTITUCIÓN / INSTITUTION:** - Histopathology, Department of Pathology and Microbiology, Aga Khan University Hospital, Karachi, Pakistan. Electronic address: [nd176@yahoo.com](mailto:nd176@yahoo.com).

**RESUMEN / SUMMARY:** - The aim of this study was to evaluate the morphological spectrum of chromophobe renal cell carcinoma (CRCC) and diagnostic utility of a panel of three immunohistochemical stains. All cases of CRCC reported between 2002 and 2012 in the Section of Histopathology, Aga Khan University Hospital, were retrieved. A total of 45 cases were identified. Slides were reviewed and immunohistochemical stains (CK7, CD117, and vimentin) were performed. Ages ranged from 18 to 90 years (mean, 48.5 years). Male-to-female ratio was 0.8:1. The tumor was located in the left kidney in 24 patients and the right kidney in 20 patients. The tumor size ranged from 3.5 to 22 cm (mean 10 cm). Histologically, 4 were classic, 22 were eosinophilic, 16 were mixed, and 3 were sarcomatoid type. Morphologic patterns included broad alveolar, solid, nested, tubular, tubulocystic, trabecular, papillary, and microglandular. Binucleation and perinuclear halos were seen in all cases. Nuclear grooves and pseudoinclusions were seen in 17 and 6 cases, respectively. Multinucleated cells were seen in 19 cases. Mitoses ranged from 1 to 11/10 HPFs (mean 3/10 HPFs). Hyalinized stroma was seen in 38 cases and calcification in 26 cases. Necrosis was seen in 18 cases. Palisading of smaller cells around the broad alveolar pattern was noted in 5 cases. The Furhman's nuclear grade was I (11), II (26), III (5), and IV (3). Hale's colloidal iron was positive in all cases. Immunohistochemical stain CK7 and CD117 were positive in 100% and 95.5% of cases respectively. Vimentin was negative in all cases, except in the sarcomatoid areas of 3 cases. In conclusion, chromophobe renal cell carcinoma has certain unique morphological features and immunohistochemical profile which help to distinguish it from conventional renal cell carcinoma and oncocytoma. We identified nuclear pseudoinclusions, microglandular pattern and palisading of smaller cells, which have not been reported earlier.

[947]

**TÍTULO / TITLE:** - Rare locations of metastatic renal cell carcinoma: a presentation of three cases.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Vojnosanit Pregl. 2013 Sep;70(9):881-6.

**AUTORES / AUTHORS:** - Milovic N; Lazic M; Aleksic P; Radovanovic D; Bancevic V; Savic S; Stamenkovic D; Spasic D; Kosevic B; Perovic D; Jovanovic M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Military Medical Academy, Belgrade, Serbia.

**RESUMEN / SUMMARY:** - INTRODUCTION: Metastatic renal cell carcinoma (RCC) frequently spreads not only to neighboring lymph nodes, but also to distant organs, including the lungs, liver, bones and brain. CASE REPORT: We presented three cases of RCC with colon metastasis. In the first, 63-year-old patient, after left nephrectomy followed with lymphadenectomy in paraaortic lymph node, left hemicolectomy was done due to RCC metastasis in rectosigmoid colon. In the second, 35-year-old patient, left radical nephrectomy was followed two years later with partial right nephrectomy, lung metastasectomy, small bowel and coecum resection and right orchiectomy all as separate procedures in different time intervals. The patient died from brain and bone metastases two years after the first surgery. The third, 35-year-old patient, had right nephrectomy followed by repeated lymphadenectomies after 6, 12 and 24 months. Four years later RCC spreaded to coecum and right hemicolectomy was performed. CONCLUSION: RCC treated with nephrectomy should be carefully followed up with imaging methods as a proper treatment of RCC metastases to distant organs could be important for a patient survival.

[948]

**TÍTULO / TITLE:** - A case of peritoneal mesothelioma masquerading as a urachal mass.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - ANZ J Surg. 2013 Oct 28. doi: 10.1111/ans.12226.

●● [Enlace al texto completo \(gratis o de pago\) 1111/ans.12226](#)

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**INSTITUCIÓN / INSTITUTION:** - Nepean Urological Research Centre, Nepean Hospital, University of Sydney, Kingswood, New South Wales, Australia.

[949]

**TÍTULO / TITLE:** - A case of spontaneous rupture perforation of sarcomatoid carcinoma in the urinary bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tunis Med. 2013 Sep;91(9):553-4.

**AUTORES / AUTHORS:** - Sallami S; Chelly I; Kacem C; Ben Slima M

[950]

**TÍTULO / TITLE:** - A retrospective study of prostate cancer cases mimicking urothelial cell carcinoma of the bladder.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Med Res. 2013 Oct 3;18:36. doi: 10.1186/2047-783X-18-36.

●● [Enlace al texto completo \(gratis o de pago\) 1186/2047-783X-18-36](#)

**AUTORES / AUTHORS:** - Liu R; Xie X; Zhang Z; Xu Y

**INSTITUCIÓN / INSTITUTION:** - Tianjin Institute of Urology & Department of Urology, Second Hospital of Tianjin Medical University, Tianjin 300211, China.

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**RESUMEN / SUMMARY:** - BACKGROUND: Prostate cancer (PCa) originating from the prostate base may intrude into the urinary bladder and may be misdiagnosed as bladder cancer. In this retrospective study, we reviewed the clinic data on PCa cases which were initially misdiagnosed as bladder cancer in order to identify diagnostic methods that would allow a better differential diagnosis for PCa. METHODS: Out of a total of 455 patients treated for PCa at our hospital between April 2003 and June 2011, 14 patients (3.1%) had been initially misdiagnosed as urinary bladder urothelial cell carcinoma. The clinical data on these 14 cases was retrieved and analyzed. RESULTS: Of the 14 patients, 11 patients were eventually diagnosed with PCa after MRI examination, and seven out of these had PCa with bladder neck invasion. Prostate needle biopsy or transurethral resection of prostate (TURP) revealed that all 14 patients had adenocarcinoma of prostate with Gleason scores ranging from 7 to 9. Nine patients received TURP for hematuria or lower urinary tract blockage. The mean follow-up was 37 months, during which six patients survived. CONCLUSIONS: As clinical presentation and in emergency settings, prostate cancer originating from the prostate base can be confused with bladder cancer originating from the neck or the triangle region of the urinary bladder. Serum prostate specific antigen (PSA) levels and digital rectal examination, in combination with transrectal ultrasound (TRUS), MRI, and prostate needle biopsy are valuable tools for definitive differential diagnosis of the basal prostate cancer.

[951]

**TÍTULO / TITLE:** - Pathological characteristics and prognostic effect of peritumoral capsule penetration in renal cell carcinoma after tumor enucleation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00309-8. doi: 10.1016/j.urolonc.2013.07.018.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.07.018](http://1016/j.urolonc.2013.07.018)

**AUTORES / AUTHORS:** - Minervini A; Rosaria Raspollini M; Tuccio A; Di Cristofano C; Siena G; Salvi M; Vittori G; Sebastianelli A; Lapini A; Serni S; Carini M

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, University of Florence, Careggi Hospital, Florence, Italy. Electronic address: [andreamine@libero.it](mailto:andreamine@libero.it).

**RESUMEN / SUMMARY:** - OBJECTIVE: To evaluate the pathological characteristics of peritumoral capsule (PC) and the prognostic effect of capsule penetration on tumor recurrence in patients treated with tumor enucleation for clinically intracapsular renal cell carcinomas (RCCs). METHODS AND MATERIALS: PC status was analyzed in 304 consecutive patients with single intracapsular RCC. Degree and side of capsule penetration if present were evaluated. Mean (median, range) follow-up was 49 months (46, 25-69). Local recurrence rate, progression-free survival (PFS), and cancer-specific survival were the main outcomes. Statistical analyses included the Kaplan-Meier method, log-rank test, and univariate and multivariate Cox regression models. RESULTS: Overall, 51% of RCCs had intact PC and free from neoplastic invasion (PC-), 34.9% had capsular penetration on the parenchymal side (PCK), and 14.1% had tumor invasion on the perirenal fat tissue side (PCF). None of the patients had positive surgical margins. The 5-year PFS rates for tumors PC-, PCK, and PCF were 97.5%, 96.7%, and 77.1%, respectively (P<0.0001). The multivariate Cox model showed PCF to be the sole significant independent predictor of PFS, whereas patients who had PCK

did not present a significant increased risk in developing recurrence. CONCLUSIONS: Tumor enucleation is an oncologically safe nephron-sparing surgery technique. PCF is a significant and independent predictor of tumor recurrence in patients with clinically intracapsular RCCs scheduled for nephron-sparing surgery. PCK does not predict the risk of recurrence.

[952]

**TÍTULO / TITLE:** - Detection of Urinary Metabolomics before and after Pringle Maneuver-Induced Liver Ischemia and Reperfusion Injury in Rats Using Gas Chromatography-Mass Spectrometry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Dis Markers. 2013;35(5):345-51. doi: 10.1155/2013/792391. Epub 2013 Sep 23.

●● Enlace al texto completo (gratis o de pago) [1155/2013/792391](#)

**AUTORES / AUTHORS:** - Chen L; Luo Z; Fu W; Liao X; Cui Z; Zhou J

**INSTITUCIÓN / INSTITUTION:** - Department of Hepatobiliary Surgery, Nanfang Hospital, Southern Medical University, Guangzhou, Guangdong Province 510515, China.

**RESUMEN / SUMMARY:** - Background. Metabolomics studies can quantitatively detect the dynamic metabolic response of living systems. Objective. To detect urinary metabolomics after hepatic ischemia/reperfusion (I/R) injury induced by the Pringle maneuver using gas chromatography-mass spectrometry (GC-MS). Methods. Male Sprague-Dawley rats (N = 80) were randomly divided into 4 groups (n = 20/group): sham operation, day 1, day 3, and day 5. Rats in the day 1, day 3, and day 5 groups underwent the Pringle maneuver. Serum alanine transaminase (ALT) and total bilirubin (TBIL) were measured, and hematoxylin and eosin (HE) staining of the liver tissue was performed. GC-MS was used to detect urinary metabolomics. Results. Compared with the sham group, the serum ALT and TBIL levels at day 1 were significantly elevated (P < 0.01) and then decreased and reached close to normal levels at day 5. GC-MS detected 7 metabolites which had similar changes as those of liver tissue revealed by histological examination. Significant differences in lactic acid, pyruvic acid, alanine, serine, and glycerol-3-phosphate were found among the groups (P < 0.001). Principle component analysis showed that 7 metabolites distinguished the day 1 and day 3 groups from the sham group. Conclusions. Noninvasive urinary metabolomic analysis is a potential means for the early detection and diagnosis of hepatic I/R injury.

[953]

**TÍTULO / TITLE:** - 'It's not like you just had a heart attack': decision-making about active surveillance by men with localized prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Psychooncology. 2013 Nov 14. doi: 10.1002/pon.3444.

●● Enlace al texto completo (gratis o de pago) [1002/pon.3444](#)

**AUTORES / AUTHORS:** - Volk RJ; McFall SL; Cantor SB; Byrd TL; Le YC; Kuban DA; Mullen PD

**INSTITUCIÓN / INSTITUTION:** - Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

**RESUMEN / SUMMARY:** - BACKGROUND: Growing recognition that active surveillance (AS) is a reasonable management option for many men diagnosed with localized prostate cancer led us to describe patients' conceptualizations of AS and reasons for their treatment decisions. METHODS: Men were patients of a multidisciplinary prostate cancer clinic at a large tertiary cancer center where patients are routinely briefed on treatment options, including AS. We conducted a thematic analysis of interviews with 15 men who had chosen AS and 15 men who received radiation or surgery. RESULTS: Men who chose AS described it as an organized process with a rigorous and reassuring protocol of periodic testing, with potential for subsequent and timely decision-making about treatment. AS was seen as prolonging their current good health and function with treatment still possible later. Rationales for choosing AS included trusting their physician's monitoring, 'buying time' without experiencing adverse effects of treatment, waiting for better treatments, and seeing their cancer as very low risk. Men recognized the need to justify their choice to others because it seemed contrary to the impulse to immediately treat cancer. Descriptions of AS by men who chose surgery or radiation were less specific about the testing regimen. Getting rid of the cancer and having a cure were paramount for them. CONCLUSIONS: Men fully informed of their treatment options for localized prostate cancer have a comprehensive understanding of the purpose of AS. Slowing the decision-making process may enhance the acceptability of AS. Copyright © 2013 John Wiley & Sons, Ltd.

[954]

**TÍTULO / TITLE:** - Isolated cerebellar metastasis from prostate adenocarcinoma diagnosed by F-fluorocholine PET/CT: a rare but not impossible complication.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nucl Med Mol Imaging. 2013 Oct 1.

●● Enlace al texto completo (gratis o de pago) [1007/s00259-013-2577-6](#)

**AUTORES / AUTHORS:** - Imperiale A; Bergerat JP; Saussine C; Abu Eid M; Kehrl P; Namer IJ

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[955]

**TÍTULO / TITLE:** - In-Vitro and In-Vivo Imaging of Prostate Tumor Using NaYF<sub>4</sub>: Yb, Er Up-Converting Nanoparticles.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathol Oncol Res. 2013 Nov 14.

●● Enlace al texto completo (gratis o de pago) [1007/s12253-013-9700-7](#)

**AUTORES / AUTHORS:** - Yu Y; Huang T; Wu Y; Ma X; Yu G; Qi J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Xinhua Hospital, Shanghai Jiaotong University School of Medicine, No.1665 Kongjiang Road, Yangpu District, Shanghai, 200092, China.

**RESUMEN / SUMMARY:** - The aim of this study was to investigate the feasibility of prostate tumor bioimaging both in vitro and in vivo using an upconversion fluorophore, NaYF<sub>4</sub>: Yb, Er nanoparticles. Luminescent signals of human prostate cancer cells (CWR22R and LNCaP) labeled with NaYF<sub>4</sub>: Yb, Er nanoparticles were detected by

laser scanning confocal microscope, while Cy3 or FITC was used as control probe. Mouse-human prostate cancer model was developed by subcutaneously injecting the CWR22R cells into BALB/c nude mice to investigate the in-vivo imaging properties of NaYF<sub>4</sub>:Yb, Er nanoparticles. Both CWR22R and LNCaP cells could phagocytose NaYF<sub>4</sub>:Yb, Er nanoparticles in vitro, and the cellular uptake of CWR22R cells was much higher than that of LNCaP cells (95.42 +/- 3.47 % vs. 51.63 +/- 6.43 %), which made us choose the former for the further study. CWR22R cells pre-labeled with NaYF<sub>4</sub>:Yb, Er nanoparticles showed no obvious decrease of fluorescence intensity (P > 0.05) after light exposure, while the fluorescence intensity of Cy3 or FITC labeled cells decreased rapidly with prolonged bleaching (P < 0.05). Furthermore, the in-vivo results showed that the prostate cancer cells pre-labeled with or without NaYF<sub>4</sub>:Yb, Er nanoparticles formed tumors 4 weeks after injection, and the tumor length-diameter of the nanoparticle group and the control group was (10.3 +/- 2.0) mm and (9.8 +/- 2.5) mm, respectively. Significant upconversion fluorescence signals were observed in the tumors of the nanoparticle group when being excited at 980 nm by a NIR laser. In summary, the results suggest that as an intensive fluorescence imaging label agent, NaYF<sub>4</sub>:Yb, Er nanoparticles possess unique features and can be used for imaging prostate tumor cells both in vitro and in vivo by phagocytosis.

[956]

**TÍTULO / TITLE:** - The prognostic value of cyclin D1 in renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Nov 17.

●● Enlace al texto completo (gratis o de pago) [1007/s11255-013-0602-0](#)

**AUTORES / AUTHORS:** - Lima MS; Pereira RA; Costa RS; Tucci S; Dantas M; Muglia VF; Ravinal RC; Barros-Silva GE

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Ribeirao Preto School of Medicine, University of Sao Paulo (USP), Av Bandeirantes 3900, Ribeirao Preto, Sao Paulo, 14110-000, Brazil.

**RESUMEN / SUMMARY:** - INTRODUCTION: Renal cell carcinoma (RCC) is a family of distinct tumors, and a variety of molecules have been evaluated as prognostic markers for RCC. Cyclin D1, a cell cycle regulator, is overexpressed in several primary tumors. OBJECTIVE: To evaluate cyclin D1 expression as a prognostic marker in RCC. METHOD: In total, 109 tumor specimens from patients with RCC were obtained from 2005 to 2010 at Hospital das Clinicas-Ribeirao Preto School of Medicine-USP, Brazil, and submitted to immunohistochemical analysis along with seven normal kidney tissue samples. RESULTS: All of the normal kidney samples lacked cyclin D1 immunohistochemical staining. In addition, there was lower protein expression in the papillary and chromophobe RCC samples. Patients with cyclin D1 low tumors (<=30 % positive cells) showed worse clinical outcome (p = 0.03), lower survival without metastasis and/or death by RCC (p = 0.03), high nuclear grade (p = 0.001), larger tumor size (p = 0.01), presence of symptoms at diagnosis (p = 0.04), necrosis (p = 0.004) and sarcomatoid morphology (p = 0.04). After multivariate analysis, cyclin D1 was not an independent significant factor for worse outcome; however, it improved the accuracy of the adopted prognostic system. The analysis performed for clear cell RCC alone showed similar statistical significance to that of the total cases. CONCLUSIONS: Cyclin D1 protein was overexpressed in RCC. The types of RCC appear to exhibit

different immunohistochemical staining patterns for cyclin D1; high protein expression was related to good clinical outcome and to most known favorable prognostic factors. Further investigations are necessary to reveal which mechanisms lead to cyclin D1 accumulation in neoplastic cells.

[957]

**TÍTULO / TITLE:** - PIM1 Kinase as a Target in Prostate Cancer: Roles in Tumorigenesis, Castration Resistance, and Docetaxel Resistance.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Curr Cancer Drug Targets. 2013 Nov 25.

**AUTORES / AUTHORS:** - Holder SL; Abdulkadir SA

**INSTITUCIÓN / INSTITUTION:** - Department of Pathology, Microbiology and Immunology, Vanderbilt University Medical Center, Nashville, Tennessee, USA.

**RESUMEN / SUMMARY:** - PIM1 kinase is a serine/threonine kinase that has been shown to be overexpressed in multiple human malignancies, including prostate cancer. PIM1 phosphorylates multiple cellular substrates to inhibit apoptosis and promote cell cycle progression. Increased PIM1 can also facilitate genomic instability to promote neoplastic processes. PIM1 kinase is overexpressed in high-grade prostate intraepithelial neoplasia and in prostate cancer compared to normal prostatic tissue and benign prostate hyperplasia. Elevated PIM1 levels have been shown to be the direct result of oncogenic fusion proteins and active signal transduction pathways. In vitro and in vivo mouse studies indicate the PIM1 is weakly tumorigenic but synergizes dramatically when coexpressed with MYC. PIM1 kinase can also phosphorylate the androgen receptor (AR), thereby regulating AR degradation and function, including in a low androgen environment. This finding implicates PIM1 in castrate-resistant prostate cancer. Furthermore, expression of PIM1 has been shown to be increased in prostate tissue after docetaxel exposure, conferring partial resistance to docetaxel. Correlatively, decreased PIM1 levels sensitize prostate cancer cells to docetaxel treatment. Thus, PIM1 may be a target in docetaxel resistant disease. In summary, PIM1 kinase is involved in prostate tumorigenesis, castration resistance, and docetaxel resistance. Several PIM1 kinase inhibitors have been reported and are in varied stages of drug development. PIM1 is involved multiple processes in the development and propagation of prostate cancer, thus a PIM1 kinase inhibitor may serve as an effective therapeutic agent in this prevalent disease.

[958]

**TÍTULO / TITLE:** - Phosphoproteomic Profiling Identifies Focal Adhesion Kinase as a Mediator of Docetaxel Resistance in Castrate Resistant Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer Ther. 2013 Nov 5.

●● [Enlace al texto completo \(gratis o de pago\) 1158/1535-7163.MCT-13-](#)

[0225-T](#)

**AUTORES / AUTHORS:** - Lee BY; Hochgrafe F; Lin HM; Castillo L; Wu J; Raftery MJ; Shreeve SM; Horvath LG; Daly RJ

**INSTITUCIÓN / INSTITUTION:** - 1Cancer Research Program, The Kinghorn Cancer Centre, Garvan Institute of Medical Research.

**RESUMEN / SUMMARY:** - Docetaxel remains the standard-of-care for men diagnosed with metastatic castrate resistant prostate cancer (CRPC). However, only ~50% of patients benefit from treatment and all develop Docetaxel-resistant disease. Here, we characterize global perturbations in tyrosine kinase signaling associated with Docetaxel-resistance and thereby develop a potential therapeutic strategy to reverse this phenotype. Using quantitative mass spectrometry-based phosphoproteomics, we identified that metastatic Docetaxel-resistant prostate cancer cell lines (DU145-Rx and PC3-Rx) exhibit increased phosphorylation of focal adhesion kinase (FAK) on Y397 and Y576, in comparison to parental controls (DU145 and PC3, respectively). Bioinformatic analyses identified perturbations in pathways regulating focal adhesions and the actin cytoskeleton and in protein-protein interaction networks related to these pathways in Docetaxel-resistant cells. Treatment with the FAK tyrosine kinase inhibitor (TKI) PF-00562271 reduced FAK phosphorylation in the resistant cells, but did not affect cell viability or Akt phosphorylation. Docetaxel administration reduced FAK and Akt phosphorylation, while co-treatment with PF-00562271 and Docetaxel resulted in an additive attenuation of FAK and Akt phosphorylation and overcame the chemoresistant phenotype. The enhanced efficacy of co-treatment was due to increased autophagic cell death, rather than apoptosis. These data strongly support that enhanced FAK activation mediates chemoresistance in CRPC, and identify a potential clinical niche for FAK TKIs, where co-administration with Docetaxel may be used in CRPC patients to overcome chemoresistance.

[959]

**TÍTULO / TITLE:** - Feasibility and Preliminary Efficacy of Adding Behavioral Counseling to Supervised Physical Activity in Kidney Cancer Survivors: A Randomized Controlled Trial.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Nurs. 2013 Nov 13.

- Enlace al texto completo (gratis o de pago)

[1097/NCC.0b013e3182a40fb6](#)

**AUTORES / AUTHORS:** - Trinh L; Plotnikoff RC; Rhodes RE; North S; Courneya KS

**INSTITUCIÓN / INSTITUTION:** - Author Affiliations: Faculty of Physical Education and Recreation, University of Alberta, Edmonton, Canada (Drs Trinh and Courneya); Priority Research Centre in Physical Activity and Nutrition, The University of Newcastle, Callaghan, Australia (Dr Plotnikoff); Faculty of Education, University of Victoria, Canada (Dr Rhodes); and Department of Medicine, Cross Cancer Institute, Edmonton, Canada (Dr North).

**RESUMEN / SUMMARY:** - BACKGROUND:: Supervised physical activity (PA) improves short-term health outcomes in cancer survivors, but longer-term adherence is rarely achieved. OBJECTIVE:: The aim of this study was to evaluate the feasibility and preliminary efficacy of adding behavioral counseling to supervised PA in kidney cancer survivors (KCSs). METHODS:: Thirty-two KCSs were randomized to a 4-week supervised PA program plus standard exercise counseling (SPA + EC group; n = 16) or a 4-week supervised PA plus behavioral counseling based on the Theory of Planned Behavior (SPA + BC group; n = 16). The primary outcome was self-reported PA at 12 weeks. Secondary outcomes were quality of life, anthropometric measures, cardiorespiratory fitness, and physical function. RESULTS:: Follow-up rates for

outcomes at 12 weeks were 88% and 94% for fitness testing and questionnaires, respectively. Adherence to the interventions was 94% in both groups with a 6% attrition rate. Analyses of covariance revealed that PA minutes at 12 weeks favored the SPA + BC group by +34 minutes (95% confidence interval, -62 to 129), which was a small effect size ( $d = 0.21$ ) not reaching statistical significance ( $P = .47$ ). Moreover, the SPA + BC group increased their 6-minute walk by 48 m more than the SPA + EC group (95% confidence interval, 1-95;  $d = +0.64$ ;  $P = .046$ ). There were no significant changes in quality of life measures. **CONCLUSIONS::** This pilot study provides preliminary evidence that adding behavioral counseling to supervised PA in KCSs is feasible and may improve PA and fitness in the short-term. Larger and longer-term trials are needed. **IMPLICATIONS FOR PRACTICE::** Oncology nurses may consider adopting behavioral counseling strategies in addition to supervised PA to motivate KCSs to maintain PA.

[960]

**TÍTULO / TITLE:** - NADPH oxidase subunit p22(phox)-mediated reactive oxygen species contribute to angiogenesis and tumor growth through AKT and ERK1/2 signaling pathways in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochim Biophys Acta. 2013 Dec;1833(12):3375-85. doi: 10.1016/j.bbamcr.2013.09.018. Epub 2013 Oct 8.

●● Enlace al texto completo (gratis o de pago) [1016/j.bbamcr.2013.09.018](#)

**AUTORES / AUTHORS:** - Li Q; Fu GB; Zheng JT; He J; Niu XB; Chen QD; Yin Y; Qian X; Xu Q; Wang M; Sun AF; Shu Y; Rui H; Liu LZ; Jiang BH

**INSTITUCIÓN / INSTITUTION:** - State Key Lab of Reproductive Medicine, and Department of Pathology, Cancer Center, Nanjing Medical, Nanjing 210029, China.

**RESUMEN / SUMMARY:** - Excessive generation of reactive oxygen species (ROS) in cancer cells is associated with cancer development, but the underlying mechanisms and therapeutic significance remain elusive. In this study, we reported that levels of ROS and p22(phox) expression are greatly increased in human prostate cancer tissues, and knockdown of p22(phox) by specific small interfering RNA (siRNA) decreased ROS levels in prostate cancer cells. We also showed that stable downregulation of p22(phox) in prostate cancer cells inhibited cell proliferation and colony formation, which was mediated by AKT and extracellular signal-regulated kinase (ERK)1/2 signaling pathways and their downstream molecules hypoxia-inducible factor 1alpha (HIF-1alpha) and vascular endothelial growth factor (VEGF). The NADPH oxidase subunit NOX1 was also elevated in prostate cancer cells, and was involved in activation of AKT/ERK/HIF-1/VEGF pathway and regulation of cell proliferation. Knockdown of p22(phox) resulted in inhibition of tumor angiogenesis and tumor growth in nude mice. These findings reveal a new function of p22(phox) in tumor angiogenesis and tumor growth, and suggest that p22(phox) is a potential novel target for prostate cancer treatment.

[961]

**TÍTULO / TITLE:** - Intensity-modulated radiotherapy combined with endocrine therapy for intermediate and advanced prostate cancer: long-term outcome of Chinese patients.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Asian Pac J Cancer Prev. 2013;14(8):4711-5.

**AUTORES / AUTHORS:** - Luo HC; Cheng HH; Lin GS; Fu ZC; Li DS

**INSTITUCIÓN / INSTITUTION:** - Department of Radiation Oncology, Fuzhou General Hospital of Nanjing Command, PLA, Fuzhou, China E-mail : [chenghuihua@hotmail.com](mailto:chenghuihua@hotmail.com).

**RESUMEN / SUMMARY:** - AIM: The aim of this study was to evaluate acute adverse events and efficacy of three-dimensional intensity- modulated radiotherapy (IMRT) combined with endocrine therapy for intermediate and advanced prostate cancer. METHODS: Sixty-seven patients were treated with three-dimensional IMRT combined with maximum androgen blockade. The correlation between radiation-induced rectal injury and clinical factors was further analyzed. RESULTS: After treatment, 21 patients had complete remission (CR), 37 had partial remission (PR), and nine had stable disease (SD), with an overall response rate of 86.5%. The follow-up period ranged from 12.5 to 99.6 months. Thirty-nine patients had a follow-up time of  $\geq$  five years. In this group, three-year and five-year overall survival rates were 89% and 89.5%, respectively; three-year and five-year progression-free survival rates were 72% and 63%. In univariate analyses, gross tumor volume was found to be prognostic for survival ( $\chi^2 = 5.70$ ,  $P = 0.037$ ). Rates of leucopenia and anemia were 91.1% and 89.5%, respectively. Two patients developed acute liver injury, and a majority of patients developed acute radiation proctitis and cystitis, mainly grade  $\frac{1}{2}$ . Tumor volume before treatment was the only prognostic factor influencing the severity of acute radiation proctitis ( $P < 0.05$ ). CONCLUSIONS: IMRT combined with endocrine therapy demonstrated promising efficacy and was well tolerated in patients with intermediate and advanced prostate cancer.

[962]

**TÍTULO / TITLE:** - Apocynin, an NADPH oxidase inhibitor, suppresses rat prostate carcinogenesis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Sci. 2013 Sep 30. doi: 10.1111/cas.12292.

●● Enlace al texto completo (gratis o de pago) [1111/cas.12292](#)

**AUTORES / AUTHORS:** - Suzuki S; Shiraga K; Sato S; Punfa W; Naiki-Ito A; Yamashita Y; Shirai T; Takahashi S

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**RESUMEN / SUMMARY:** - Recent evidences suggest that oxidative stress contributes to the pathogenesis of prostate cancer. This study focused on the effect of apocynin, an inhibitor of NADPH oxidase, on prostate carcinogenesis using the transgenic rat for adenocarcinoma of prostate (TRAP) model. There were no toxic effects with apocynin treatment. The percentages and numbers of carcinomas in both ventral and lateral prostate were significantly reduced by apocynin treatment, with dose dependence. Reduction of reactive oxygen species (ROS) by apocynin was confirmed by

immunohistochemistry of 8-OHdG and dihydroethidium staining. Positivity of Ki67 was significantly reduced by apocynin treatment and down-regulation of clusterin expression, as well as inactivation of the MEK-ERK1/2 pathway, was a feature of the apocynin treated groups. In human prostate cancer cell line, LNCaP, apocynin also inhibited ROS production and blocked cell growth by inducing G0/G1 arrest with down-regulation of clusterin and cyclin D1. These data suggest that apocynin possesses a chemopreventive potential for prostate cancer. This article is protected by copyright. All rights reserved.

[963]

**TÍTULO / TITLE:** - Do theoretical potential and advanced technology justify the use of high-dose rate brachytherapy as monotherapy for prostate cancer?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Anticancer Ther. 2013 Oct 15.

●● Enlace al texto completo (gratis o de pago) [1586/14737140.2013.836303](#)

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**RESUMEN / SUMMARY:** - Low-dose rate brachytherapy (LDR-BT), involving implantation of radioactive seeds into the prostate, is an established monotherapy for most low-risk and select intermediate- and high-risk prostate cancer patients. High-dose rate brachytherapy (HDR-BT) is an advanced technology theorized to be more advantageous than LDR-BT from a radiobiological and radiophysics perspective, to the patient himself, and in terms of resource allocation. Studies of HDR-BT monotherapy have encouraging results in terms of biochemical control, patient survival, treatment toxicity and erectile preservation. However, there are still certain limitations that preclude recommending HDR-BT monotherapy for prostate cancer outside the setting of a clinical trial. HDR-BT monotherapy should be considered experimental at present.

[964]

**TÍTULO / TITLE:** - Boldine induces cell cycle arrest and apoptosis in T24 human bladder cancer cell line via regulation of ERK, AKT, and GSK-3beta

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00076-8. doi: 10.1016/j.urolonc.2013.02.012.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.02.012](#)

**AUTORES / AUTHORS:** - Gerhardt D; Bertola G; Dietrich F; Figueiro F; Zanotto-Filho A; Moreira Fonseca JC; Morrone FB; Barrios CH; Battastini AM; Salbego CG

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**RESUMEN / SUMMARY:** - OBJECTIVE: Bladder cancer is one of the most prevalent genitourinary malignancies. Despite active chemotherapy regimens, patients with bladder cancer suffer from a high rate of tumor recurrence. Thus, new approaches and agents to improve quality of life and survival still need to be developed. The objective of

the present study was to evaluate the effect and underlying mechanisms of boldine, an aporphine alkaloid of *Peumus boldus*, on bladder cancer proliferation and cell death. METHODS: Sulforhodamine B assay, Tetrazolium reduction assay, Flow Cytometry Analysis, Ecto-5'-nucleotidase activity and Western blot assay were performed. RESULTS: The results showed that boldine was able to reduce cell viability and cell proliferation in T24 cells. In addition, boldine arrests the cell cycle at G2/M-phase and cause cell death by apoptosis. Boldine-induced inhibition of cell growth and cell cycle arrest appears to be linked to inactivation of extracellular signal-regulated kinase protein (ERK). Additionally, the efficacy of boldine in apoptosis-induced in T24 cells is correlated with modulation of AKT (inactivation) and glycogen synthase kinase-3beta (GSK-3beta) (activation) proteins. CONCLUSIONS: The present findings may, in part, explain the therapeutic effects of boldine for treatment of urinary bladder cancer.

[965]

**TÍTULO / TITLE:** - Reversal of chemosensitivity and induction of cell malignancy of a non-malignant prostate cancer cell line upon extracellular vesicle exposure.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer. 2013 Oct 8;12(1):118. doi: 10.1186/1476-4598-12-118.

●● [Enlace al texto completo \(gratis o de pago\) 1186/1476-4598-12-118](#)

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**INSTITUCIÓN / INSTITUTION:** - Division of Hematology/Oncology and Department of Medicine, Rhode Island Hospital, Providence, RI, USA.

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**RESUMEN / SUMMARY:** - BACKGROUND: Extracellular vesicle (EV) trafficking is a fundamental cellular process that occurs in cells and is required for different aspects of pathophysiology. EV trafficking leads to changes in cellular function including apoptosis, angiogenesis and proliferation required for increased tumor formation. RESULTS: We report several phenotypic changes mediated by EVs isolated from non-malignant and malignant prostate cells as well as patient biopsied prostate tumor samples. EVs can reverse the resistance of prostate cancer cells to camptothecin EVs isolated from non-malignant PrECs (Prostate Epithelial Cells) can reverse soft agar colony formation of malignant DU145 cells, with the reciprocal effect observed. Isolation of EVs from 2 Gleason grade 8 prostate cancer patients significantly induced soft agar colony formation of non-malignant PrECs. We have identified proteins via antibody and Mass spectrometry analysis that may be responsible for the phenotypic changes. Mass spectrometry analysis of protein lysates using ProteoIQ revealed protein candidates associated with gene ontology annotations that may be responsible for this phenotypic change. Ingenuity Pathway Analysis was used to identify statistically relevant canonical pathways and functions associated the protein IDs and expression values obtained using ProteoIQ. Western blot analysis confirmed the increase of 14-3-3 zeta, pRKIP and prohibitin protein levels in PrEC cells co-cultured with patient EVs. 14-3-3 proteins were also found as common proteins of 3 other Gleason grade 8 patients. CONCLUSION: Our study provides a rational basis to further investigate putative proteins, such as 14-3-3 and prohibitin and genetic factors that may be

responsible for phenotypic changes that are associated with prostate cancer progression.

[966]

**TÍTULO / TITLE:** - The epigenetic potentials of dietary polyphenols in prostate cancer management.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Biochem Cell Biol. 2013 Dec;91(6):361-8. doi: 10.1139/bcb-2012-0044. Epub 2012 Oct 23.

●● Enlace al texto completo (gratis o de pago) [1139/bcb-2012-0044](#)

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**INSTITUCIÓN / INSTITUTION:** - Byrd Biotechnology Building, Department of Biological Sciences, Marshall University, 1 John Marshall Drive, Huntington WV 25755, USA.

**RESUMEN / SUMMARY:** - Prostate cancer is a disease that is greatly affected by lifestyle, particularly diet, and is more prevalent in US and European countries compared with South and East Asia. Among several known causes and risk factors, nutrition plays an important role in prostate cancer pathogenesis. Various dietary components including polyphenols have been shown to possess anticancer properties. Dietary polyphenols have been the subject of extensive studies for the last decade because of their anticancer and chemopreventive potentials. Besides possessing various antitumor properties, dietary polyphenols also contribute to epigenetic changes associated with the fate of cancer cells and have emerged as potential drugs for therapeutic intervention. Various polyphenols have been shown to affect DNA methylation, histone posttranslational modifications, and microRNA expression patterns in prostate cancer. In this review, we discuss the contribution of dietary polyphenols to various epigenetic modifications in prostate cancer. Since prostate cancer and diet are intimately associated, polyphenol-rich diets that epigenetically modify tumor biology have great significance in the prevention and management of prostate cancer.

[967]

**TÍTULO / TITLE:** - The diet as a cause of human prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Cancer Treat Res. 2014;159:51-68. doi: 10.1007/978-3-642-38007-5\_4.

●● Enlace al texto completo (gratis o de pago) [1007/978-3-642-38007-5\\_4](#)

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**RESUMEN / SUMMARY:** - Asymptomatic prostate inflammation and prostate cancer have reached epidemic proportions among men in the developed world. Animal model studies implicate dietary carcinogens, such as the heterocyclic amines from over-cooked meats and sex steroid hormones, particularly estrogens, as candidate etiologies for prostate cancer. Each acts by causing epithelial cell damage, triggering an inflammatory response that can evolve into a chronic or recurrent condition. This

milieu appears to spawn proliferative inflammatory atrophy (PIA) lesions, a type of focal atrophy that represents the earliest of prostate cancer precursor lesions. Rare PIA lesions contain cells which exhibit high c-Myc expression, shortened telomere segments, and epigenetic silencing of genes such as GSTP1, encoding the pi-class glutathione S-transferase, all characteristic of prostatic intraepithelial neoplasia (PIN) and prostate cancer. Subsequent genetic changes, such as the gene translocations/deletions that generate fusion transcripts between androgen-regulated genes (such as TMPRSS2) and genes encoding ETS family transcription factors (such as ERG1), arise in PIN lesions and may promote invasiveness characteristic of prostatic adenocarcinoma cells. Lethal prostate cancers contain markedly corrupted genomes and epigenomes. Epigenetic silencing, which seems to arise in response to the inflamed microenvironment generated by dietary carcinogens and/or estrogens as part of an epigenetic “catastrophe” affecting hundreds of genes, persists to drive clonal evolution through metastatic dissemination. The cause of the initial epigenetic “catastrophe” has not been determined but likely involves defective chromatin structure maintenance by over-exuberant DNA methylation or histone modification. With dietary carcinogens and estrogens driving pro-carcinogenic inflammation in the developed world, it is tempting to speculate that dietary components associated with decreased prostate cancer risk, such as intake of fruits and vegetables, especially tomatoes and crucifers, might act to attenuate the ravages of the chronic or recurrent inflammatory processes. Specifically, nutritional agents might prevent PIA lesions or reduce the propensity of PIA lesions to suffer “catastrophic” epigenome corruption.

[968]

**TÍTULO / TITLE:** - Does altering diet affect progression of prostate cancer? The MEAL study.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Bull Am Coll Surg. 2013 Oct;98(10):57-9.

**AUTORES / AUTHORS:** - Parsons JK; Marshall JR; Nelson H

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[969]

**TÍTULO / TITLE:** - Bilateral cancer in prostate biopsy associates with the presence of extracapsular disease and positive surgical margins in low risk patients: a consideration for bilateral nerve sparing radical prostatectomy decision.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol J. 2013 Sep 26;10(3):966-72.

**AUTORES / AUTHORS:** - Sfoungaristos S; Perimenis P

**INSTITUCIÓN / INSTITUTION:** - Urology Resident, Patras University Hospital, Urology Department, Greece. [sfoungaristosst@gmail.com](mailto:sfoungaristosst@gmail.com).

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate the epidemiological, clinical and pathological parameters that may predict the presence of positive surgical margins and extraprostatic disease in patients with low risk [prostate specific antigen (PSA) < 10, and Gleason score <= 6, stage T1c] prostate cancer. MATERIALS AND METHODS: We retrospectively analyzed the medical records of patients who had undergone

radical prostatectomy from January 2005 until January 2011. The analysis comprised patients age, preoperative serum prostate specific antigen (PSA) level, prostate volume, PSA density, biopsy Gleason score, the presence of bilateral disease according to the results of biopsy cores analysis, the percentage of cancer in biopsy material and the presence of high grade prostatic intraepithelial neoplasia. RESULTS: A total of 117 patients were included in the study. Positive surgical margins were found in 37 (31.6%) patients and 23 (19.7%) had advanced disease. The results of the multivariate analysis showed that bilateral disease was the single significant predictor for advanced disease prediction ( $P = .04$ ). Same results was obtained by the univariate analysis of the variables for prediction of positive surgical margins, where bilateral disease after biopsy cores analysis was the only factor to be statistical significant ( $P = .018$ ). CONCLUSION: Bilateral prostate cancer in prostate biopsy is significantly associated with positive surgical margins and advanced disease in patients that are operated for prostate cancer of low risk. This observation may assist the selection of patients in whom a bilateral nerve sparing radical prostatectomy is planned to be performed.

[970]

**TÍTULO / TITLE:** - Development of exposure assessment method based on the analysis of urinary heterocyclic amines as biomarkers by on-line in-tube solid-phase microextraction coupled with liquid chromatography-tandem mass spectrometry.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Anal Bioanal Chem. 2013 Oct 19.

•• Enlace al texto completo (gratis o de pago) [1007/s00216-013-7420-1](http://1007/s00216-013-7420-1)

**AUTORES / AUTHORS:** - Kataoka H; Inoue T; Ikekita N; Saito K

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**RESUMEN / SUMMARY:** - Heterocyclic amines (HCAs) formed in cooked meats and fish are mutagens and carcinogens in rodents and nonprimates. Exposure to HCAs may also be a risk factor for human tumors, but the association between dietary intake and human cancer risk has not been determined. To assess recent exposure to HCAs, we developed a simple and sensitive method for measuring HCAs in urine by automated on-line in-tube solid-phase microextraction (SPME) using a Supel-Q PLOT capillary column as an extraction device, in combination with liquid chromatography-tandem mass spectrometry (LC-MS/MS). Thirteen HCAs were separated within 15 min using a ZORBAX Eclipse XDB-C8 column and detected selectively by multiple reaction monitoring using MS/MS. This method can be applied easily to the analysis of small amounts of urine samples without any other pretreatment except for alkaline hydrolysis of bound forms of HCAs. The quantification limits of HCAs in 0.2 mL of urine samples were about 1.7-4.1 pg/mL ( $S/N = 10$ ). Using this method, we evaluated the exposure to HCAs in persons who consumed well-done pan-fried beef and the suitability of using urinary HCAs as exposure biomarkers. We also analyzed the ability of vegetable consumption to prevent carcinogenic risks from exposure to HCAs by measuring free and bound forms of HCAs in urine.

[971]

**TÍTULO / TITLE:** - Unravelling mechanisms of cisplatin sensitivity and resistance in testicular cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Rev Mol Med. 2013 Sep 30;15:e12. doi: 10.1017/erm.2013.13.

●● Enlace al texto completo (gratis o de pago) [1017/erm.2013.13](#)

**AUTORES / AUTHORS:** - Koster R; van Vugt MA; Timmer-Bosscha H; Gietema JA; de Jong S

**INSTITUCIÓN / INSTITUTION:** - Department of Medical Oncology, University of Groningen, University Medical Center Groningen, The Netherlands.

**RESUMEN / SUMMARY:** - Testicular cancer is the most frequent solid malignant tumour type in men 20-40 years of age. At the time of diagnosis up to 50% of the patients suffer from metastatic disease. In contrast to most other metastatic solid tumours, the majority of metastatic testicular cancer patients can be cured with highly effective cisplatin-based chemotherapy. This review aims to summarise the current knowledge on response to chemotherapy and the biological basis of cisplatin-induced apoptosis in testicular cancer. The frequent presence of wild-type TP53 and the low levels of p53 in complex with the p53 negative feed-back regulator MDM2 contribute to cisplatin sensitivity. Moreover, the high levels of the pluripotency regulator Oct4 and as a consequence of Oct4 expression high levels of miR-17/106b seed family and pro-apoptotic Noxa and the low levels of cytoplasmic p21 (WAF1/Cip1) appear to be causative for the exquisite sensitivity to cisplatin-based therapy of testicular cancer. However, resistance of testicular cancer to cisplatin-based therapy does occur and can be mediated through aberrant levels of the above mentioned key players. Drugs targeting these key players showed, at least pre-clinically, a sensitising effect to cisplatin treatment. Further clinical development of such treatment strategies will lead to new treatment options for platinum-resistant testicular cancers.

[972]

**TÍTULO / TITLE:** - Role of SMAD4 in the mechanism of valproic acid's inhibitory effect on prostate cancer cell invasiveness.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Int Urol Nephrol. 2013 Nov 22.

●● Enlace al texto completo (gratis o de pago) [1007/s11255-013-0609-6](#)

**AUTORES / AUTHORS:** - Jiang W; Zheng Y; Huang Z; Wang M; Zhang Y; Wang Z; Jin X; Xia Q

**INSTITUCIÓN / INSTITUTION:** - Minimally Invasive Urology Center, Provincial Hospital Affiliated to Shandong University, No. 324 Jingwu Road, Jinan, 250001, China.

**RESUMEN / SUMMARY:** - PURPOSE: To investigate the influence of the histone deacetylase inhibitor valproic acid (VPA) on SMAD4 expression and invasive ability of prostate cancer cell lines. METHODS: DU145 and PC3 cell lines were treated with 0, 2, and 5 mMol/l of VPA; invasion of DU145 and PC3 cells were then examined by transwell assay. Immunohistochemistry and Western blot were used to examine SMAD4 protein expression in DU145 and PC3 cells. RESULTS: Compared with controls, VPA significantly suppressed invasiveness in both PC3 and DU145 cells in a dose-dependent way ( $P < 0.05$ ). VPA also inhibited AKT protein (which was regarded as an effective indicator here), and meanwhile, SMAD4 expression was down-

regulated after VPA treatment in a dose-dependent manner in both DU145 ( $P < 0.05$ ) and PC3 ( $P < 0.01$ ) cells. CONCLUSIONS: Valproic acid could suppress invasiveness of prostate cancer cell lines PC3 and Du145, possibly through multiple pathways other than the SAMD4 pathway. This implies that VPA treatment combined with other SMAD4 enhancers could form a basis for a novel prostate cancer treatment.

[973]

**TÍTULO / TITLE:** - Dose-escalated salvage radiotherapy after radical prostatectomy in high risk prostate cancer patients without hormone therapy: outcome, prognostic factors and late toxicity.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Radiat Oncol. 2013 Nov 27;8(1):276.

●● Enlace al texto completo (gratis o de pago) [1186/1748-717X-8-276](#)

**AUTORES / AUTHORS:** - Shelan M; Abo-Madyan Y; Welzel G; Bolenz C; Kosakowski J; Behnam N; Wenz F; Lohr F

**RESUMEN / SUMMARY:** - Purpose: Evaluation of dose escalated salvage radiotherapy (SRT) in patients after radical prostatectomy (RP) who had never received antihormonal therapy. To investigate prognostic factors of the outcome of SRT and to analyze which patient subsets benefit most from dose escalation. Materials and methods: Between 2002 and 2008, 76 patients were treated in three different dose-groups: an earlier cohort treated with 66 Gy irrespective of pre-RT-characteristics and two later cohorts treated with 70 Gy or 75 Gy depending on pre-RT-characteristics. Biochemical-relapse-free-survival (bRFS), clinical-relapse-free-survival (cRFS) and late toxicity were evaluated. RESULTS: Four-year bRFS and cRFS were 62.5% and 85%. Gleason score  $<8$ , positive surgical resection margin (PSRM) and low PSA ( $\leq 0.5$  ng/ml) before SRT resulted in higher bRFS. Analysis of the whole group showed no clear dose-outcome relationship. Patients with PSRM, however, had improved bRFS when escalating  $>66$  Gy. While  $> 70$  Gy did not improve the overall results, 4-year bRFS for patients with manifest local recurrence in the high-dose group was still comparable to those without manifest local recurrences. No grade 4 and minimal grade 3 gastrointestinal and urinary toxicity were observed. CONCLUSIONS: Dose-escalated SRT achieves high biochemical control. The data strongly support the application of at least 70 Gy rather than 66 Gy. They do not prove positive effects of doses  $>70$  Gy but do not disprove them as these doses were only applied to an unfavorable patients selection.

[974]

**TÍTULO / TITLE:** - Emerging drugs for urothelial carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Opin Emerg Drugs. 2013 Dec;18(4):477-94. doi: 10.1517/14728214.2013.853741. Epub 2013 Nov 6.

●● Enlace al texto completo (gratis o de pago) [1517/14728214.2013.853741](#)

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**RESUMEN / SUMMARY:** - Introduction: Advanced urothelial carcinoma is associated with a poor prognosis. In the metastatic setting, the response rate to first-line, cisplatin-containing chemotherapy is high, but survival is poor. Second-line treatment options are limited. Advanced age at diagnosis and the presence of comorbidities often preclude treatment with cisplatin-containing regimens. Areas covered: This review addresses the current therapy of urothelial carcinoma, the unmet needs in treatment and the status of drug development in this disease. The molecular targets identified and efforts to incorporate targeted agents into therapy will be addressed. Expert opinion: There have been no major advances in the treatment of urothelial carcinoma in three decades. Despite high response rates in the first-line setting, survival is limited. Major impediments to improved outcomes include poor durability of response to first-line chemotherapy and lack of second-line treatments. Better understanding in tumor biology has identified multiple targets in urothelial carcinoma; however, such discoveries have yet to lead to the incorporation of targeted agents into the routine treatment of urothelial carcinoma. Multiple ongoing clinical trials are investigating the use of targeted agents in urothelial carcinoma. Continued efforts are underway to better understand the molecular drivers of disease and such efforts are likely to identify additional therapeutic targets.

[975]

**TÍTULO / TITLE:** - Emerging drugs for prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Opin Emerg Drugs. 2013 Dec;18(4):533-50. doi: 10.1517/14728214.2013.864635.

●● Enlace al texto completo (gratis o de pago) [1517/14728214.2013.864635](#)

**AUTORES / AUTHORS:** - Chung PH; Gayed BA; Thoreson GR; Raj GV

**INSTITUCIÓN / INSTITUTION:** - UT Southwestern Medical Center, Department of Urology, 5323 Harry Hines Blvd. J8130, Dallas, TX 75390, USA.

**RESUMEN / SUMMARY:** - Introduction: Androgen deprivation therapy is the mainstay treatment for patients with prostate cancer who are not candidates for definitive treatment, are diagnosed with advanced disease on initial presentation or progress after primary treatment. Patients who stop responding to androgen deprivation therapy develop castration resistant prostate cancer (CRPC). Emerging drugs undergoing clinical evaluation and drugs that have recently received FDA approval for the treatment of CRPC are reviewed. Areas covered: As the natural history and signaling pathways of prostate cancer are better understood, new treatments and targeted therapies will be developed. The FDA recently approved 5 medications that increase survival in patients with CRPC. Additional medications and drug classes are being explored that may eventually lead to new treatment options. Articles were identified using a PubMed database search. Expert opinion: Recent FDA medication approvals and the development of emerging treatments are promising for the future of patients with prostate cancer. The addition of new medications challenges physicians to identify the optimal sequence and/or combination in which newer and older medications should be administered. Physicians treating patients with prostate cancer have a growing responsibility to keep pace with these new medications so that they may counsel and treat patients appropriately.

[976]

**TÍTULO / TITLE:** - The PFP/RAG2 double-knockout mouse in metastasis research: small-cell lung cancer and prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Methods Mol Biol. 2014;1070:191-201. doi: 10.1007/978-1-4614-8244-4\_14.

●● Enlace al texto completo (gratis o de pago) [1007/978-1-4614-8244-4\\_14](#)

**AUTORES / AUTHORS:** - Muller I; Ullrich S

**INSTITUCIÓN / INSTITUTION:** - Institute for Anatomy, Experimental Morphology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany.

**RESUMEN / SUMMARY:** - Patients with small-cell lung cancer (SCLC) and prostate cancer (PCa) as well as other solid tumors may have micro- or macro-metastatic spread at an early stage of the disease. SCLC and PCa xenograft transfer models in immunodeficient mice fail to model this metastatic spread in vivo. In both tumor types the depletion of NK cells found in immunodeficient mice results in an increased number of spontaneous metastases, mirroring the clinical situation where NK cell activity in patients is related to metastatic spread of the disease. As a result NK cell activity directly influences treatment options and mortality. Newly developed immunodeficient mouse strains lacking functional T- and B-cells (rag2 knockout) however presenting functional NK cells (perforin knockout) are superior in producing spontaneous metastasis of SCLC and PCa cells compared to the system using SCID mice.

[977]

**TÍTULO / TITLE:** - Renal tumor ablation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tech Vasc Interv Radiol. 2013 Dec;16(4):230-8. doi: 10.1053/j.tvir.2013.08.006.

●● Enlace al texto completo (gratis o de pago) [1053/j.tvir.2013.08.006](#)

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**RESUMEN / SUMMARY:** - Percutaneous, image-guided ablation for renal cell carcinoma (RCC) is an important treatment option for many patients. With more than 60,000 new cases every year and nearly three-fourths of those presenting as stage 1A, minimally invasive, nephron-sparing therapies have become the standard of care. Stage 1 A (<4cm, organ confined) disease presents the best scenario for percutaneous ablation. Various other factors influence the decision-making tree, such as patient age, life expectancy, comorbid condition, renal function, and the risk of metachronous lesions. Preparation aims at minimizing risks and has been discussed in detail. Computed tomography guidance remains the best option, and conscious sedation is adequate for most cases. Ultrasound and more recently magnetic resonance guidance are becoming viable alternatives. Whether radiofrequency or cryoablation are chosen, a margin of at least 5mm and up to 10mm is recommended. Various maneuvers required for optimum outcome, including hydrodissection and preoperative embolization are also discussed. Most renal ablations can be performed on an outpatient basis. Reasons to admit include complications, high-risk patients, and the

need for symptom management. Follow-up aims at (1) ensuring complete ablation and (2) monitoring against a metachronous lesion. For the former, a 3-month contrast computed tomography or magnetic resonance imaging is required and for the latter an annual examination is recommended. Though partial nephrectomy remains the gold standard, image-guided, percutaneous ablation for RCC can result in very similar outcomes. Over the last 10 years, there have been numerous studies reporting the efficacy and safety of ablation, and more recently, long-term studies have confirmed those numbers. Overall, the efficacy for percutaneous ablation for RCC stands at 90%-95% with a complication rate of 6%-7%. The most important factors for positive outcome are patient or tumor selection and operator experience.

[978]

**TÍTULO / TITLE:** - A new Model Consists of Intravesical Prostatic Protrusion, Prostate Volume and Serum Prostatic-Specific Antigen in the Evaluation of Prostate Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathol Oncol Res. 2013 Nov 1.

●● Enlace al texto completo (gratis o de pago) [1007/s12253-013-9714-1](#)

**AUTORES / AUTHORS:** - Xu D; Yu Y; Zhu Y; Huang T; Chen Y; Qi J

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, XinHua Hospital Affiliate to Shanghai Jiao Tong University School of Medicine, Shanghai, China.

**RESUMEN / SUMMARY:** - The Prostate-specific antigen (PSA) level is largely used to diagnose prostate cancer (PCa) in last decades. However, its specificity is low in patients with a PSA level ranging from 4.0 to 10.0 ng/ml. This study aims to define the correlation between intravesical prostatic protrusion (IPP) and PSA and to establish a new model to predict PCa. A total of 339 patients older than 45 years examined between October 2010 and June 2012 were enrolled. Eligible patients were recommended for transrectal ultrasonography (TRUS)-guided prostate biopsies after measuring total prostate volume (TPV), transitional zone volume (TZV) and IPP. The levels of total PSA (tPSA), free PSA (fPSA) were analyzed by using Hybritech calibrated Access tPSA and fPSA assays. A new mathematical model, named IPP removed PCa predicting score (IRPPS), consists of tPSA, TZV and IPP was established. The predictive accuracy of IRPPS, PSA density (PSAD), %PSA and tPSA were compared using receiver-operator characteristic (ROC) analysis. Eighty-six patients had PSA levels of 4.0-10.0 ng/ml. Twenty of them were diagnosed as PCa. Using ROC curves, the areas under the curve for IRPPS, PSAD and %PSA and tPSA were 0.786, 0.768 and 0.664 and 0.585, respectively. We suggested IPP grade had a significant relationship with serum tPSA levels. The predictive accuracy of IRPPS was higher than the other 3 indicators.

[979]

**TÍTULO / TITLE:** - Dicer is down-regulated in clear cell renal cell carcinoma and in vitro Dicer knockdown enhances malignant phenotype transformation.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Oct 3. pii: S1078-1439(13)00260-3. doi: 10.1016/j.urolonc.2013.06.011.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.06.011](#)

**AUTORES / AUTHORS:** - Ma X; Fan Y; Gao Y; Zhang Y; Huang Q; Ai Q; Ni D; Chen W; Zhang P; Song E; Wang B; Shi T; Zheng T; Zhang X

**INSTITUCIÓN / INSTITUTION:** - State Key Laboratory of Kidney Diseases, Department of Urology, Military Postgraduate Medical College, Chinese People's Liberation Army General Hospital, Beijing, People's Republic of China.

**RESUMEN / SUMMARY:** - **OBJECTIVES:** Although emerging evidence has shown that the deregulation of micro-ribonucleic acid (RNA) biogenesis machinery is involved in various human malignancies, this role has not been investigated in clear cell renal cell carcinoma (ccRCC). This study aims to determine whether Dicer, a key enzyme responsible for biogenesis of microRNA, is deregulated in ccRCC. The biological roles of Dicer in vitro are also determined. **MATERIALS AND METHODS:** The expression of Dicer at messenger RNA and protein levels was detected by real-time quantitative polymerase chain reaction and western blot, respectively, in human kidney tubule epithelial cell line, nonmetastatic 786-O ccRCC cell line, and metastatic ACHN ccRCC cell line, as well as in 42 cases of ccRCC surgical specimens including 14 cases with distant metastasis and their corresponding adjacent normal renal tissues. Dicer expression levels in specimens were also measured by immunohistochemical staining. Knockdown of Dicer expression in 786-O and ACHN ccRCC cell lines was achieved by transfecting short interfering RNA against Dicer. The effects of Dicer on cell proliferation, migration, and invasion were detected by 3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulfophenyl)-2H-tetrazolium, inner salt (MTS) assay, flow cytometric analyses, and Boyden chamber Transwell assay, respectively. **RESULTS:** Compared with human kidney tubule epithelial cell line, Dicer expression levels were significantly down-regulated in 786-O and ACHN ccRCC cell lines, with the metastatic ACHN ccRCC cell line having even lower levels. Meanwhile, Dicer expression levels were significantly down-regulated in ccRCC surgical specimens compared with adjacent normal renal tissues, with the metastatic ones further reduced, and Dicer messenger RNA levels were significantly correlated with overall tumor-node-metastasis stage of ccRCC. In vitro, the knockdown of Dicer significantly promoted cell proliferation, migration, and invasion. **CONCLUSIONS:** Reduced expression of Dicer may play a role in the tumorigenesis of ccRCC and further decline may be associated with distant metastasis of ccRCC.

[980]

**TÍTULO / TITLE:** - Is a Single-Site Laparoendoscopic Approach a Real Surgical Advancement for the Management of Small Renal Masses?

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Surg Technol Int. 2013 Sep 30;XXIII. pii: sti23/36.

**AUTORES / AUTHORS:** - Neri F; Berardinelli F; Cindolo L; Sountoulides P; Pellegrini F; Mirone V; Schips L

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, S.Pio da Pietrelcina Hospital Vasto, Italy.

**RESUMEN / SUMMARY:** - Nephron-sparing surgery (NSS) ensures equivalent oncological results while improving overall survival compared with radical nephrectomy when applied to the treatment of small renal masses, moreover warm ischemia is associated with a risk of acute renal failure and advanced chronic kidney disease (CKD). Laparoendoscopic single-site (LESS) unclamp NSS is the next step forward in

the management of small renal masses. From 2009 to 2013 we have treated 23 patients with small renal masses (< 4 cm) amenable to the LESS approach using unclamp LESS NSS. In 20 cases we were able to complete the operation using LESS, in 3 cases conversion to standard laparoscopy was required. Pathologic examination revealed 16 cases of clear-cell renal cell carcinoma (RCC), 4 cases of renal cysts, 2 oncocytomas, and 1 angiomyolipoma. We did not find any significant variation in renal function or any case of tumor recurrence, and the majority of the patients were very satisfied of the cosmetic results. LESS unclamp partial nephrectomy is a safe and feasible procedure, oncological outcomes are similar to standard laparoscopy, there is an advantage with respect to renal function and cosmesis, although the procedure is more technically demanding compared with standard laparoscopy.

[981]

**TÍTULO / TITLE:** - Suppression of bladder cancer growth by adeno-associated virus vector-mediated combination of HSV-TK and endostatin in vitro.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Clin Lab. 2013;59(9-10):1077-89.

**AUTORES / AUTHORS:** - Pan JG; Luo RQ; Zhou X; Han RF; Zeng GW

**INSTITUCIÓN / INSTITUTION:** - The Second Affiliated Hospital of Guangzhou Medical University, Guangzhou 510260, China.

**RESUMEN / SUMMARY:** - BACKGROUND: Gene therapy may offer a new tool for the treatment of bladder cancer. Previously, we have shown a significant antitumor effect in bladder cancer xenografts in a nude mouse model using intratumoral herpes simplex virus thymidine (HSV-TK) and endostatin gene monotherapy. OBJECTIVES: Given the high vascularity of human bladder cancer and the ability of HSV-TK or endostatin monotherapy to eradicate the tumors, we decided to test a novel combination of cytotoxic and antiangiogenic gene therapy using HSV-TK and endostatin adeno-associated viruses (AAV) in vitro. METHODS: We constructed the plasmid AAV-TK-IRES-Endostatin (pAAV-TIE) and packaged the AAV particles containing gene fragments of HSV-TK and endostatin. The combination anticancer effect of recombinant AAV-TIE (rAAV-TIE) was measured in vitro while rAAV-HSV-TK and rAAV-Endostatin were used as control groups. RESULTS: The inverted terminal repeat sequences were amplified using only one primer and the fragment between two ITRs of pAAV-TIE measuring about 4 kb, which indicated a stable sequence of pAAV-TIE. Three clear bands representing the AAV capsid proteins VP1, VP2, and VP3 could be seen on both lanes against a very low background, which demonstrated that chloroform extraction could effectively extract contaminants from rAAV stock without significant loss of the rAAV. In vitro, our results found that the transduction efficiency, measured from GFP-transduced tumors, was about 62%. The combination therapy led to an obvious apoptosis of bladder tumor cells compared with single HSV-TK or endostatin treatment. CONCLUSIONS: We concluded that the inhibition of angiogenesis using endostatin gene transfer, together with the cytotoxic HSV-TK gene therapy, resulted in a significant antitumor effect in vitro compared to the single gene based therapy in BTCC.

[982]

**TÍTULO / TITLE:** - PinX1 suppresses bladder urothelial carcinoma cell proliferation via the inhibition of telomerase activity and p16/cyclin D1 pathway.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Mol Cancer. 2013 Nov 23;12(1):148.

●● Enlace al texto completo (gratis o de pago) [1186/1476-4598-12-148](#)

**AUTORES / AUTHORS:** - Liu JY; Qian D; He LR; Li YH; Liao YJ; Mai SJ; Tian XP; Liu YH; Zhang JX; Kung HF; Zeng YX; Zhou FJ; Xie D

**RESUMEN / SUMMARY:** - BACKGROUND: PIN2/TRF1-interacting telomerase inhibitor1 (PinX1) was recently suggested as a putative tumor suppressor in several types of human cancer, based on its binding to and inhibition of telomerase. Moreover, loss of PinX1 has been detected in many human malignancies. However, the possible involvement of PinX1 and its clinical/prognostic significance in urothelial carcinoma of the bladder (UCB) are unclear. METHODS: The PinX1 expression profile was examined by quantitative real-time polymerase chain reaction (qRT-PCR), western blotting, and immunohistochemistry (IHC) in UCB tissues and adjacent normal urothelial bladder epithelial tissues. PinX1 was overexpressed and silenced in UCB cell lines to determine its role in tumorigenesis, development of UCB, and the possible mechanism. RESULTS: PinX1 expression in UCB was significantly down-regulated at both mRNA and protein level as compared with that in normal urothelial bladder epithelial tissues. PinX1 levels were inversely correlated with tumor multiplicity, advanced N classification, high proliferation index (Ki-67), and poor survival ( $P < 0.05$ ). Moreover, overexpression of PinX1 in UCB cells significantly inhibited cell proliferation in vitro and in vivo, whereas silencing PinX1 dramatically enhanced cell proliferation. Overexpression of PinX1 resulted in G1/S phase arrest and cell growth/proliferation inhibition, while silencing PinX1 led to acceleration of G1/S transition, and cell growth/proliferation promotion by inhibiting/enhancing telomerase activity and via the p16/cyclin D1 pathway. CONCLUSIONS: These findings suggest that down-regulation of PinX1 play an important role in the tumorigenesis and development of UCB and that the expression of PinX1 as detected by IHC is an independent molecular marker in patients with UCB.

[983]

**TÍTULO / TITLE:** - Searching for urine biomarkers of bladder cancer recurrence using a liquid chromatography-mass spectrometry and capillary electrophoresis-mass spectrometry metabolomics approach.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Chromatogr A. 2013 Nov 29;1318:163-70. doi: 10.1016/j.chroma.2013.10.002. Epub 2013 Oct 4.

●● Enlace al texto completo (gratis o de pago) [1016/j.chroma.2013.10.002](#)

**AUTORES / AUTHORS:** - Alberice JV; Amaral AF; Armitage EG; Lorente JA; Algaba F; Carrilho E; Marquez M; Garcia A; Malats N; Barbas C

**INSTITUCIÓN / INSTITUTION:** - CEMBIO, Facultad de Farmacia, Universidad CEU San Pablo, Campus Montepincipe, Boadilla del Monte, Madrid, España; IQSC, Instituto de Quimica de Sao Carlos, Universidade de Sao Paulo, Sao Carlos, Sao Paulo, Brazil.

**RESUMEN / SUMMARY:** - The incidence and rate of recurrence of bladder cancer is high, particularly in developed countries, however current methods for diagnosis are limited to detecting high-grade tumours using often invasive methods. A panel of

biomarkers to characterise tumours of different grades that could also distinguish between patients exhibiting the disease with first incidence or recurrence could be useful for bladder cancer diagnostics. In this study, potential metabolic biomarkers have been discovered through mass spectrometry based metabolomics of urine. Pre-treatment urine samples were collected from 48 patients diagnosed of urothelial bladder cancer. Patients were followed-up through the hospital pathological charts to identify whether and when the disease recurred or progressed. Subsequently, they were classified according to whether or not they suffered a tumour recurrence (recurrent or stable) as well as their risk group according to tumour grade and stage. Identified metabolites have been analysed in terms of disease characteristics (tumour stage and recurrence) and have provided an insight into bladder cancer progression. Using both liquid chromatography and capillary electrophoresis-mass spectrometry, a total of 27 metabolite features were highlighted as significantly different between patient groups. Some, for example histidine, phenylalanine, tyrosine and tryptophan have been previously linked with bladder cancer, however until now their connection with bladder cancer progression has not been previously reported. The candidate biomarkers revealed in this study could be useful in the clinic for diagnosis of bladder cancer and, through characterising the stage of the disease, could also be useful in prognostics.

[984]

**TÍTULO / TITLE:** - Dual inhibition by S6K1 and Elf4E is essential for controlling cellular growth and invasion in bladder cancer,?>

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00315-3. doi: 10.1016/j.urolonc.2013.08.005.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.08.005](#)

**AUTORES / AUTHORS:** - Kyou Kwon J; Kim SJ; Hoon Kim J; Mee Lee K; Ho Chang I

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Chung-Ang University College of Medicine, Seoul, Republic of Korea.

**RESUMEN / SUMMARY:** - PURPOSE: We investigated how dual inhibition of the molecular mechanism of mammalian target of rapamycin (mTOR) downstream of S6K1 and the eukaryotic initiation factor 4E (eIF4E) can lead to suppression of proliferation and progression of urothelial carcinoma. MATERIALS AND METHODS: We characterized the molecular mechanism of the mTOR pathway in the T24 and 5637 urothelial carcinoma cell lines by interfering with different molecular components using rapamycin and short interfering (siRNA) technology (S6K1 or eIF4E) and analyzed the effects on molecular activation status, cell growth, proliferation, and invasion. RESULTS: A high concentration of rapamycin (10µM) blocked both S6K1 and eIF4E phosphorylation and inhibited cell proliferation in T24 and 5637 cells. The inhibition of both S6K1 and eIF4E phosphorylation by rapamycin reduced cell viability and proliferation more than transfection of siRNA against S6K1 or eIF4E in 5637 and T24 cells. Cells silenced for S6K1 or eIF4E expression exhibited significantly reduced cell migration and invasion compared with those of the control but inhibition of both S6K1 and eIF4E phosphorylation by rapamycin reduced cell migration and invasion more than siRNA transfection against S6K1 or eIF4E in 5637 and T24 cells. CONCLUSION: These findings suggest that both the mTOR pathway downstream of eukaryotic

initiation factor 4E and S6K1 can be successfully inhibited, therefore, the recurrence of bladder cancer can be prevented by high-dose rapamycin only, suggesting that 4E-BP1 might be still under mTORC1.

[985]

**TÍTULO / TITLE:** - The predominance of M2-polarized macrophages in the stroma of low-hypoxic bladder tumors is associated with BCG immunotherapy failure.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 16. pii: S1078-1439(13)00454-7. doi: 10.1016/j.urolonc.2013.10.012.

●● [Enlace al texto completo \(gratis o de pago\) 1016/j.urolonc.2013.10.012](#)

**AUTORES / AUTHORS:** - Lima L; Oliveira D; Tavares A; Amaro T; Cruz R; Oliveira MJ; Ferreira JA; Santos L

**INSTITUCIÓN / INSTITUTION:** - Experimental Pathology and Therapeutics Group, Portuguese Institute of Oncology, Porto, Portugal; ICBAS, Abel Salazar Biomedical Sciences Institute, University of Porto, Porto, Portugal; Nucleo de Investigacao em Farmacia-Centro de Investigacao em Saude e Ambiente (CISA), School of Allied Health Sciences-Polytechnic Institute of Oporto, Porto, Portugal; Research Department, LPCC-Portuguese League Against Cancer (NRNorte), Portugal. Electronic address: [luis14lima@gmail.com](mailto:luis14lima@gmail.com).

**RESUMEN / SUMMARY:** - **OBJECTIVE:** Bacillus Calmette-Guerin (BCG) immunotherapy is the gold standard treatment for superficial bladder tumors with intermediate/high risk of recurrence or progression. However, approximately 30% of patients fail to respond to the treatment. Effective BCG therapy needs precise activation of the type 1 helper cells immune pathway. Tumor-associated macrophages (TAMs) often assume an immunoregulatory M2 phenotype and may directly interfere with the BCG-induced antitumor immune response. Thus, we aim to clarify the influence of TAMs, in particular of the M2 phenotype in stroma and tumor areas, in BCG treatment outcome. **PATIENTS AND METHODS:** The study included 99 patients with bladder cancer treated with BCG. Tumors resected before treatment were evaluated using immunohistochemistry for CD68 and CD163 antigens, which identify a lineage macrophage marker and a M2-polarized specific cell surface receptor, respectively. CD68+ and CD163+ macrophages were evaluated within the stroma and tumor areas, and high density of infiltrating cells spots were selected for counting. Hypoxia, an event known to modulate macrophage phenotype, was also assessed through hypoxia induced factor (HIF)-1alpha expression. **RESULTS:** Patients in whom BCG failed had high stroma-predominant CD163+ macrophage counts (high stroma but low tumor CD163+ macrophages counts) when compared with the ones with a successful treatment (71% vs. 47%, P = 0.017). Furthermore, patients presenting this phenotype showed decreased recurrence-free survival (log rank, P = 0.008) and a clear 2-fold increased risk of BCG treatment failure was observed in univariate analysis (hazard ratio = 2.343; 95% CI: 1.197-4.587; P = 0.013). Even when adjusted for potential confounders, such as age and therapeutic scheme, multivariate analysis revealed 2.6-fold increased risk of recurrence (hazard ratio = 2.627; 95% CI: 1.340-5.150; P = 0.005). High stroma-predominant CD163+ macrophage counts were also associated with low expression of HIF-1alpha in tumor areas, whereas high counts of CD163+ in the tumor presented high expression of HIF-1alpha in tumor nests.

CONCLUSIONS: TAMs evaluation using CD163 is a good indicator of BCG treatment failure. Moreover, elevated infiltration of CD163+ macrophages, predominantly in stroma areas but not in the tumor, may be a useful indicator of BCG treatment outcome, possibly owing to its immunosuppressive phenotype.

[986]

**TÍTULO / TITLE:** - Capillary electrophoresis-mass spectrometry for direct determination of urinary modified nucleosides. Evaluation of synthetic urine as a surrogate matrix for quantitative analysis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Chromatogr B Analyt Technol Biomed Life Sci. 2013 Dec 30;942-943:21-30. doi: 10.1016/j.jchromb.2013.10.022. Epub 2013 Oct 21.

●● Enlace al texto completo (gratis o de pago) [1016/j.jchromb.2013.10.022](#)

**AUTORES / AUTHORS:** - Rodriguez-Gonzalo E; Hernandez-Prieto R; Garcia-Gomez D; Carabias-Martinez R

**INSTITUCIÓN / INSTITUTION:** - Departamento de Química Analítica, Nutrición y Bromatología, Facultad de Química, Universidad de Salamanca, 37008 Salamanca, España. Electronic address: [erg@usal.es](mailto:erg@usal.es).

**RESUMEN / SUMMARY:** - This work describes the development of a fast and reliable method based on capillary zone electrophoresis coupled with electrospray ionization-mass spectrometry (CZE-ESI-MS) for the determination of modified nucleosides in untreated human urine. The target compounds were guanine, 1-methyl-guanine, 7-methyl-guanine, 9-methyl-guanine, adenosine, 1-methyl-adenosine, cytidine, guanosine, 7-methyl-guanosine. As internal standards, ribose-2-(13)C-adenosine and 8-(13)C-guanine were used. The CZE separation was carried out in acidic medium (pH 2.5). MS detection with a single quadrupole, with ESI operating in positive-ion mode, was optimized. For the analysis of urine samples, owing to the endogenous character of these analytes different quantification strategies were explored. The standard additions method, matrix-matched calibration in synthetic urine and calibration in pure aqueous medium were compared in order to evaluate the endogenous levels of these compounds in human urine. The results obtained showed that calibration in synthetic urine as a surrogate matrix was an appropriate alternative to the method of standard additions for the accurate quantitation of compounds such as guanine, 1-methyl-guanine, 7-methyl-guanine, adenosine, 1-methyl-adenosine and cytidine by CE-ESI-MS directly in the urine matrix; values in the range 0.1 µg/mL for cytidine and 6.4 µg/mL for 7mGua, as the lowest and the highest level, were found in untreated urine from healthy volunteers. These results were confirmed by LC-MS/MS detection. It can be concluded that the electrophoretic CZE-ESI-MS methodology offers a valid and reliable alternative for the determination of urinary nucleosides at naturally occurring levels in healthy individuals.

[987]

**TÍTULO / TITLE:** - Denosumab-induced hypocalcaemia in high bone turnover states of malignancy and secondary hyperparathyroidism from renal failure.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Intern Med J. 2013 Nov;43(11):1243-6. doi: 10.1111/imj.12283.

- Enlace al texto completo (gratis o de pago) [1111/imi.12283](http://1111/imi.12283)

**AUTORES / AUTHORS:** - Farinola N; Kanjanapan Y

**INSTITUCIÓN / INSTITUTION:** - Royal Adelaide Hospital, Adelaide, South Australia, Australia.

**RESUMEN / SUMMARY:** - Denosumab, an anti-resorptive treatment for osteoporosis and skeletal metastases from solid tumours, can cause hypocalcaemia. The incidence may be higher than previously reported due to varying serum calcium cut-off and timing of measurement. The following cases illustrate patients at risk of hypocalcaemia despite supplementation. These populations, with underlying high bone turnover from metastatic bone disease or secondary hyperparathyroidism due to renal failure, may require closer monitoring of calcium levels post-denosumab administration.

[988]

**TÍTULO / TITLE:** - Moderately hypofractionated radiotherapy for localized prostate cancer : Long-term outcome using IMRT and volumetric IGRT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Strahlenther Onkol. 2013 Nov 8.

- Enlace al texto completo (gratis o de pago) [1007/s00066-013-0443-x](http://1007/s00066-013-0443-x)

**AUTORES / AUTHORS:** - Guckenberger M; Lawrenz I; Flentje M

**INSTITUCIÓN / INSTITUTION:** - Klinik und Poliklinik für Strahlentherapie, Universitätsklinikum Würzburg, Josef-Schneider-Str. 11, 97080, Würzburg, Germany, [Guckenberger\\_m@klinik.uni-wuerzburg.de](mailto:Guckenberger_m@klinik.uni-wuerzburg.de).

**RESUMEN / SUMMARY:** - PURPOSE: To evaluate long-term outcome after dose-escalated, moderately hypofractionated radiotherapy for prostate cancer. METHODS: Since 2005, 150 consecutive patients were treated with primary radiotherapy for localized prostate cancer. Intensity modulated radiotherapy (IMRT) using the simultaneous integrated boost (SIB) technique was practiced in all patients and doses of 73.9 Gy (n = 41) and 76.2 Gy (n = 109) were delivered in 32 and 33 fractions, respectively. The pelvic lymph nodes were treated in 41 high-risk patients. Treatment was delivered using cone-beam CT based image-guided radiotherapy (IGRT). Toxicity was assessed prospectively using CTCAE 3.0; biochemical failure was defined according to the Phoenix definition of nadir + 2 ng/ml. RESULTS: Median follow-up of living patients was 50 months. Gastrointestinal (GI) toxicity was mild with > 80 % of the patients free from any GI toxicity during follow-up and no time trend to increased rates or to higher grade of GI toxicity. Two patients suffered from late grade 3 GI toxicity. Acute genitourinary (GU) toxicity grade 1-2 was observed in 85 % of the patients; most patients recovered quickly within 6 weeks after treatment. The rate of GU toxicity grade  $\geq 2$  was < 10 % at 6-12 month but increased continuously to 22.4 % at 60 months; grade 3 GU toxicity remained below 5 % during follow-up. The 5-year freedom from biochemical failure (FFBF) was 82 % for all patients and 88, 80, and 78 % for low-, intermediate-, and high-risk disease. CONCLUSION: Favorable FFBF with simultaneously low rates of toxicity was observed after moderately hypofractionated radiotherapy with 2 Gy-equivalent doses  $\geq 80$  Gy. Conformal IMRT planning and accurate IGRT treatment delivery may have contributed to these results.

[989]

**TÍTULO / TITLE:** - The prostate cancer genome: Perspectives and potential.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00336-0. doi: 10.1016/j.urolonc.2013.08.025.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.08.025](#)

**AUTORES / AUTHORS:** - Barbieri CE; Tomlins SA

**INSTITUCIÓN / INSTITUTION:** - Department of Urology, Weill Medical College of Cornell University, New York, NY; Department of Pathology and Laboratory Medicine, Weill Medical College of Cornell University, New York, NY. Electronic address: [christopher.barbieri@gmail.com](mailto:christopher.barbieri@gmail.com).

**RESUMEN / SUMMARY:** - **OBJECTIVES:** Prostate cancer has a variable clinical course, and molecular characterization has revealed striking mutational heterogeneity that may underlie the unpredictable clinical behavior of the disease. Advances in technology have resulted in a rapid expansion of our understanding of the genomic events responsible for the development and progression of prostate cancer. In this review, we discuss the genomic alterations underlying prostate cancer, and potential to utilize this knowledge for diagnostic and prognostic benefit. **METHODS AND MATERIALS:** We reviewed the relevant literature, with a focus on recent studies on somatic alterations in prostate cancer. **RESULTS:** Pathways known to affect tumorigenesis across a wide spectrum of tissues are dysregulated, such as the PI3K pathway, cell cycle control, and chromatin regulation. Lesions more specific to prostate cancer include alterations in androgen signaling, gene fusions of ETS transcription factors, and mutations in SPOP. Accumulating data suggests that prostate cancer can be subdivided based on a molecular profile of these genetic alterations. **CONCLUSIONS:** These findings raise the possibility that prostate cancer could transition from a poorly understood, heterogeneous disease with a variable clinical course to a collection of homogenous subtypes, identifiable by molecular criteria, associated with distinct risk profiles, and perhaps amenable to specific management strategies or targeted therapies.

[990]

**TÍTULO / TITLE:** - Emerging antiangiogenics for renal cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Expert Opin Emerg Drugs. 2013 Dec;18(4):495-511. doi: 10.1517/14728214.2013.858697.

●● Enlace al texto completo (gratis o de pago) [1517/14728214.2013.858697](#)

**AUTORES / AUTHORS:** - Domblides C; Gross-Goupil M; Quivy A; Ravaud A

**INSTITUCIÓN / INSTITUTION:** - Bordeaux University Hospital, Hopital Saint-Andre, Department of Medical Oncology, Bordeaux, France.

**RESUMEN / SUMMARY:** - Introduction: Antiangiogenic therapy is considered to be the backbone of treatment strategy in metastatic renal cell carcinoma (mRCC). New, more focused, targeted drugs are emerging, while other targeted drugs oriented toward resistance or alternative mechanisms are under development. Areas covered: Antiangiogenic agents include two types of agents: the monoclonal antibody, targeting vascular endothelial growth factor (VEGF), bevacizumab and the tyrosine kinase inhibitors (TKIs). Data regarding efficacy and safety of these agents are reported. Differences between the first generation of TKIs, sunitinib, sorafenib, and the new generation, pazopanib, axitinib and tivozanib are also detailed. Most of these agents

have been approved in the treatment of kidney cancer in specific settings of the disease. Expert opinion: The class of antiangiogenic drugs for treatment of mRCC is already relatively full. After 'me-too' drugs, more targeted drugs against VEGFR have been developed but have to demonstrate a benefit in first-line treatment. Another option for the development is to combine a known drug with an antiangiogenic inhibition profile and at least one additional target involved in resistance to an antiangiogenic or in an alternative pathway. The cost of approach with targeted drugs, including antiangiogenics, has led to a tremendous increase in the cost of care in mRCC.

[991]

**TÍTULO / TITLE:** - Tristetraprolin regulates prostate cancer cell growth through suppression of E2F1.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - J Microbiol Biotechnol. 2013 Oct 22.

●● Enlace al texto completo (gratis o de pago) [4014/jmb.1309.09070](#) [pii]

**AUTORES / AUTHORS:** - Lee HH; Lee SR; Leem SH

**INSTITUCIÓN / INSTITUTION:** - Department of Biological Sciences, Dong-A University, Busan 604-714, Korea.

**RESUMEN / SUMMARY:** - The transcription factor E2F1 is active during the G1 to S transition and is involved in cell cycle and progression. A recent study reported that increased E2F1 is associated with DNA damage and tumour development in several tissues using transgenic models. Here, we show that E2F1 expression is regulated by tristetraprolin (TTP) in prostate cancer. Overexpression of TTP decreased the stability of E2F1 mRNA and the expression level of E2F1. In contrast, inhibition of TTP using siRNA increased the E2F1 expression. E2F1 mRNA contains three AREs within the 3'UTR and TTP destabilized a luciferase mRNA that contained the E2F1 mRNA 3'UTR. Analyses of point mutants of the E2F1 mRNA 3'UTR demonstrated that ARE2 was mostly responsible for the TTP-mediated destabilization of E2F1 mRNA. RNA EMSA revealed that TTP binds directly to the E2F1 mRNA 3'UTR of ARE2. Moreover, treatment with siRNA against TTP increased the proliferation of PC3 human prostate cancer cells. Taken together, these results demonstrate that E2F1 mRNA is a physiological target of TTP and suggests that TTP controls proliferation as well as migration and invasion through regulation of E2F1 mRNA stability.

[992]

**TÍTULO / TITLE:** - Evaluation of the PET component of simultaneous [(18)F]choline PET/MRI in prostate cancer: comparison with [(18)F]choline PET/CT.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur J Nucl Med Mol Imaging. 2014 Jan;41(1):79-88. doi: 10.1007/s00259-013-2560-2. Epub 2013 Oct 2.

●● Enlace al texto completo (gratis o de pago) [1007/s00259-013-2560-2](#)

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**RESUMEN / SUMMARY:** - PURPOSE: The aim of this study was to evaluate the positron emission tomography (PET) component of [(18)F]choline PET/MRI and compare it with the PET component of [(18)F]choline PET/CT in patients with histologically proven prostate cancer and suspected recurrent prostate cancer. METHODS: Thirty-six patients were examined with simultaneous [(18)F]choline PET/MRI following combined [(18)F]choline PET/CT. Fifty-eight PET-positive lesions in PET/CT and PET/MRI were evaluated by measuring the maximum and mean standardized uptake values (SUVmax and SUVmean) using volume of interest (VOI) analysis. A scoring system was applied to determine the quality of the PET images of both PET/CT and PET/MRI. Agreement between PET/CT and PET/MRI regarding SUVmax and SUVmean was tested using Pearson's product-moment correlation and Bland-Altman analysis. RESULTS: All PET-positive lesions that were visible on PET/CT were also detectable on PET/MRI. The quality of the PET images was comparable in both groups. Median SUVmax and SUVmean of all lesions were significantly lower in PET/MRI than in PET/CT (5.2 vs 6.1,  $p < 0.05$  and 2.0 vs 2.6,  $p < 0.001$ , respectively). Pearson's product-moment correlation indicated highly significant correlations between SUVmax of PET/CT and PET/MRI ( $R = 0.86$ ,  $p < 0.001$ ) as well as between SUVmean of PET/CT and PET/MRI ( $R = 0.81$ ,  $p < 0.001$ ). Bland-Altman analysis revealed lower and upper limits of agreement of -2.77 to 3.64 between SUVmax of PET/CT vs PET/MRI and -1.12 to +2.23 between SUVmean of PET/CT vs PET/MRI. CONCLUSION: PET image quality of PET/MRI was comparable to that of PET/CT. A highly significant correlation between SUVmax and SUVmean was found. Both SUVmax and SUVmean were significantly lower in [(18)F]choline PET/MRI than in [(18)F]choline PET/CT. Differences of SUVmax and SUVmean might be caused by different techniques of attenuation correction. Furthermore, differences in biodistribution and biokinetics of [(18)F]choline between the subsequent examinations and in the respective organ systems have to be taken into account.

[993]

**TÍTULO / TITLE:** - STEAP1 is overexpressed in prostate cancer and prostatic intraepithelial neoplasia lesions, and it is positively associated with Gleason score.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00339-6. doi: 10.1016/j.urolonc.2013.08.028.

●● Enlace al texto completo (gratis o de pago) [1016/j.urolonc.2013.08.028](http://1016/j.urolonc.2013.08.028)

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**INSTITUCIÓN / INSTITUTION:** - CICS-UBI-Health Sciences Research Centre, University of Beira Interior, Covilha, Portugal.

**RESUMEN / SUMMARY:** - BACKGROUND: Six transmembrane epithelial antigen of the prostate 1 (STEAP1) is a transmembrane protein of epithelial cells, mostly located at cell-cell junctions, and is overexpressed in several types of tumors, particularly prostate cancer. Several studies have pointed STEAP1 as a biomarker, but the clinical significance of its overexpression is not fully understood. Therefore, we aimed to establish the association of STEAP1 immunoreactivity with histologic diagnosis and

clinical data of patients. MATERIALS AND METHODS: Human tissue microarrays were constructed from tissue biopsies of prostate adenocarcinoma (n = 63), including nonneoplastic adjacent tissue (n = 41), prostatic intraepithelial neoplasia (PIN) lesions (n = 7), and 41 prostate samples from patients diagnosed with benign prostatic hyperplasia (BPH). The histologic features of tumor specimens were classified and clinical and pathologic data were retrieved. STEAP1 expression was evaluated by immunohistochemical analysis, and a semiquantitative quantification was performed using a grade score system based on the intensity and percentage of stained cells. RESULTS: Overexpression of STEAP1 protein was found in both plasma membrane and cytoplasm of prostate cancer and PIN lesions when compared with nonneoplastic adjacent tissue and BPH samples. Furthermore, its expression associates positively with higher Gleason scores, but not with other clinical data, such as age, prostate-specific antigen levels, pathologic stage, and metastasis. Regarding its role as a biomarker, STEAP1 is highly liable for distinguishing malignant prostate stages from BPH. On the contrary, it lacks specificity in distinguishing PIN lesions from prostate cancer. CONCLUSIONS: STEAP1 is consistently overexpressed in malignant prostate tissue, namely adenocarcinoma and PIN lesions. Its overexpression in PIN lesions and positive association with higher Gleason scores suggest that STEAP1 could be involved in tumor initiation and progression. The high sensitivity and specificity for detection of malignant lesions suggests that STEAP1 may be of clinical usefulness in early disease diagnosis.

[994]

**TÍTULO / TITLE:** - Pancreatic metastasis from a solitary fibrous tumor of the kidney: A rare cause of acute recurrent pancreatitis.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pancreatology. 2013 Nov-Dec;13(6):631-3. doi: 10.1016/j.pan.2013.06.004. Epub 2013 Jun 22.

●● Enlace al texto completo (gratis o de pago) [1016/j.pan.2013.06.004](#)

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**RESUMEN / SUMMARY:** - Solitary fibrous tumors are unusual spindle cell neoplasms that uncommonly originate from the kidney. We report a case of a 43-year old male who presented with acute recurrent pancreatitis secondary to a mass in the head of the pancreas. Endoscopic ultrasound with fine needle aspiration (EUS-FNA) was performed. Cytology revealed solitary fibrous tumor of the kidney. This is the first reported case of solitary fibrous tumor metastasizing to the pancreas and presenting as acute recurrent pancreatitis.

[995]

**TÍTULO / TITLE:** - SOCS2 correlates with malignancy and exerts growth promoting effects in prostate cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Endocr Relat Cancer. 2013 Nov 26.

●● Enlace al texto completo (gratis o de pago) [1530/ERC-13-0446](#)

**AUTORES / AUTHORS:** - Hoefler J; Kern J; Ofer P; Eder IE; Schafer G; Dietrich D; Kristiansen G; Geley S; Rainer J; Gunsilius E; Klocker H; Culig Z; Puhf M

**INSTITUCIÓN / INSTITUTION:** - J Hoefler, Department of Urology, Innsbruck Medical University, Innsbruck, Austria.

**RESUMEN / SUMMARY:** - Deregulation of cytokine- and growth factor signaling due to altered expression of endogenous regulators is well recognized in prostate and other cancers. Suppressor of cytokine signaling 2 (SOCS2) is a key regulator of growth hormone, insulin-like growth factor and prolactin signaling pathways that have been implicated in carcinogenesis. In this study we elucidate expression pattern and functional significance of SOCS2 in prostate cancer (PCa). Protein expression analysis employing tissue microarrays from two independent patient cohorts revealed significantly enhanced expression in tumor compared to benign tissue as well as association with Gleason score and disease progression. In vitro and in vivo assays uncovered the involvement of SOCS2 in the regulation of cell growth and apoptosis. Functionally, SOCS2 knockdown inhibited prostate cancer cell proliferation and xenograft growth in a CAM assay. Decreased cell growth after SOCS2 downregulation was associated with cell-cycle arrest and apoptosis. In addition, we prove that SOCS2 expression is significantly elevated upon androgenic stimulation in androgen receptor - positive cell lines, providing a possible mechanistic explanation for high SOCS2 levels in PCa tissue. Consequently, SOCS2 expression correlated with androgen receptor expression in malignant tissue of patients. Taken together, our study linked increased SOCS2 expression in PCa with a pro-proliferative role in vitro and in vivo.

[996]

**TÍTULO / TITLE:** - Epithelioid Angiomyolipoma mimicking renal carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Tunis Med. 2013 Oct;91(10):615-6.

**AUTORES / AUTHORS:** - Boulma R; Gargouri MM; Sellami A; Kallel Y; Ben Rhouma S; Fitouri Z; Noura Y

[997]

**TÍTULO / TITLE:** - Mdm2 SNP309 G-Variant Is Associated with Invasive Growth of Human Urinary Bladder Cancer.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pathobiology. 2013 Nov 9;81(2):53-59.

●● Enlace al texto completo (gratis o de pago) [1159/000355976](#)

**AUTORES / AUTHORS:** - Hitzentichler F; Stoehr CG; Rogenhofer M; Wieland WF; Ruemmele P; Hartmann A; Stoehr R

**INSTITUCIÓN / INSTITUTION:** - Department of Internal Medicine I, Caritas St. Josef Medical Center, University of Regensburg, Regensburg, Germany.

**RESUMEN / SUMMARY:** - Objective: Human mouse double minute 2 (Mdm2) is essential in degrading p53 by acting as an ubiquitin ligase and therefore plays a vital role in cell cycle and survival. The G-variant of the Mdm2 SNP309, which is located within the promoter of the Mdm2 gene, increases expression of Mdm2 and thereby inhibits the p53 pathway. Several studies have investigated the influence of this SNP

on disease risk and onset of various malignancies. The impact of Mdm2 SNP309 on bladder cancer is still to be established due to inconsistent data. Methods: In a case-control study we determined the distribution of Mdm2 SNP309 genotypes in 111 patients with an early-onset bladder cancer (diagnosis <45 years of age), in 113 consecutive bladder cancer patients and in a control group consisting of 140 patients without any malignancy. Results: There was no significant association between the allelic distribution of the Mdm2 SNP309 and tumor risk, early onset, gender or grade of the tumor. According to tumor stage we found a significant difference in the distribution of the Mdm2 SNP309 between patients with noninvasive and invasive ( $\geq$ pT1) tumor growth ( $p = 0.016$ ). In patients with invasive tumors a significant increase of the G allele was found (T/T vs. T/G + G/G;  $p = 0.023$ ; OR 2.203, 95% CI 1.111-4.369). Conclusion: These data indicate that the G-variant of the Mdm2 SNP309 might influence the development of a more aggressive tumor phenotype in patients with bladder cancer without affecting the overall tumor risk. © 2013 S. Karger AG, Basel.

[998]

**TÍTULO / TITLE:** - Detection of prostate cancer related copy number variations with SNP genotyping array.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Eur Rev Med Pharmacol Sci. 2013 Nov;17(21):2916-22.

**AUTORES / AUTHORS:** - Wang Y; Yao X; Li SN; Suo AL; Tian T; Ruan ZP; Guo H; Yao Y

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**RESUMEN / SUMMARY:** - AIM: Prostate cancer is characterized by the accumulation of multiple copy number variants (CNVs) across the genome. We aim to identify potential prostate cancer related CNVs. MATERIALS AND METHODS: Whole-genome SNP genotyping data of 18 prostate cancer patients was downloaded from the GEO (Gene Expression Omnibus) database. PennCNV was used to detect CNVs. All genes and miRNAs affected by CNVs were annotated. We also identified biological processes where these genes over-represented to capture the characteristics of prostate cancer. RESULTS: Dominance of deletions was identified in all subjects. A total of 131 genes and 2 miRNAs which were affected by CNVs supported by at least two samples were detected. Over-representations of biological processes related with immune or inflammation response and cell cycle were identified. Two miRNAs, hsa-miR-1302 and hsa-miR-548j, were affected by CNVs and their target genes were reported to be related with prostate cancer according to the Mendelian Inheritance in Man database. CONCLUSIONS: We identified genes known to be affected by prostate cancer associated CNVs in previous studies; we also identified new genes and miRNAs not reported as interesting. The discoveries in this study may advance the knowledge of the prostate cancer pathogenesis.

[999]

**TÍTULO / TITLE:** - Renal cell carcinoma development and miRNAs: a possible link to the EGFR pathway.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Pharmacogenomics. 2013 Nov;14(14):1793-803. doi: 10.2217/pgs.13.184.

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**RESUMEN / SUMMARY:** - Renal cell carcinoma (RCC) is the most common solid cancer of the adult kidney and the majority of RCC cases are detected accidentally. This reality and the nonexistence of a standard screening test contribute to the fact that one third of patients are diagnosed with local invasive disease or metastatic disease. miRNAs are a family of small ncRNAs that regulate gene expression and have been identified as key regulators in many biological processes including cell development, differentiation, apoptosis and proliferation. The EGF receptor signaling pathway is usually deregulated in cancer and it is suggested to have an important role in RCC. Further studies are needed to characterize deregulation of this pathway during RCC development. In this review we highlight some potential miRNAs that could be involved in the modulation of the EGF receptor pathway and consequently in RCC development.

[1000]

**TÍTULO / TITLE:** - Biomarkers of renal cell carcinoma.

**RESUMEN / SUMMARY:** - [Enlace al Resumen / Link to its Summary](#)

**REVISTA / JOURNAL:** - Urol Oncol. 2013 Nov 13. pii: S1078-1439(13)00302-5. doi: 10.1016/j.urolonc.2013.07.011.

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**RESUMEN / SUMMARY:** - The incidence of renal cell carcinoma (RCC) has increased steadily in past few decades and is partially attributable to the increased utilization of cross-sectional imaging. Many of these carcinomas are small incidental discoveries, although a subset leads to locally advanced or distant disease. Although its molecular pathophysiology is not completely understood, knowledge of hereditary RCCs has shed light on some of the pathways involved. More recently, the rapid advances in genomics, proteomics, and metabolomics have allowed for a deeper and more nuanced understanding of the genetic aberrations that lead up to and result from the transformation of a renal tubular epithelial cell into a carcinoma. These discoveries have allowed for the development of novel therapeutics that target these pathways. They have also led to the development of diagnostic, prognostic, and predictive biomarkers that could radically change the way RCC is diagnosed and treated. Although some of the current investigations are nascent and it remains to be seen which biomarkers will become clinically available, many candidate biomarkers show promise and require external validation. Ultimately, biomarkers may allow for cost-effective screening of high-risk patients, the identification of aggressive cancers among small renal masses, the identification of high-risk patients, the detection of recurrences postoperatively with minimal imaging, and the ability to choose appropriate targeted therapies for patients with metastatic disease.