Nature Reviews Urology 9, 296 (2012); published online 8 May 2012;
doi:10.1038/nrurol.2012.99;
doi:10.1038/nrurol.2012.100;
doi:10.1038/nrurol.2012.101;
doi:10.1038/nrurol.2012.102

IN BRIEF

PROSTATE CANCER

Cancer stem cells better equipped to survive radiotherapy

LNCaP and DU145 cell cultures experienced marked cell death after long-term exposure to radiation (doses of 2 Gy for 5 days) in an *in vivo* experiment. However, when the cultures were allowed to recover, the recurrent colonies displayed increased cancer stem cell (CSC) markers, including CD44. This result suggests that CSCs have the capacity to recover from radiation treatment and are able to regrow. From a clinical perspective, radiotherapy in combination with CSC-targeted therapy might be effective in preventing relapse.

Original article Cho, Y. M. *et al.* Long-term recovery of irradiated prostate cancer increases cancer stem cells. *Prostate* doi:10.1002/pros.22527

BLADDER CANCER

ASA score indicator of survival in radical cystectomy

Of the well-established comorbidity and performance status indices used clinically, the American Society of Anesthesiologists (ASA) score was the most accurate in determining cancer-independent mortality (CIM) in a retrospective study of 555 patients who underwent radical cystectomy for bladder urothelial carcinoma. A combined prognostic model of the ASA and Adult Comorbidity Evaluation-27 scores further improved the predictive accuracy. The model was used to define the parameters for high, intermediate and low risk of CIM based on age.

Original article Mayr, R. *et al.* Comorbidity and performance indices as predictors of cancer-independent mortality but not of cancer-specific mortality after radical cystectomy for urothelial carcinoma of the bladder. *Eur. Urol.* doi:10.1016/j.eurouro.2012.03.057

PROSTATE CANCER

Genes associated with aberrant metabolism identified

Researchers examining 133 prostate cancer samples of various grades from 41 men have identified four genes whose expression was correlated with the reduced citrate and increased choline containing compound (ChoCC) levels characteristic of prostate cancer. *ACLY* ($P=0.003$) and *ACON* ($P<0.001$) expression were associated with reduced citrate levels whereas *PLA2G7* ($P<0.001$) and *CHKA* ($P=0.002$) were associated with increased ChoCCs. These genes might represent potential targets for therapy.

Original article Bertilsson, H. *et al.* Changes in gene transcription underlying the aberrant citrate and choline metabolism in human prostate cancer samples. *Clin. Cancer Res.* doi:10.1158/1078-0432.CCR-11-2929

INCONTINENCE

Rhabdosphincters larger in black women than white women

A small ultrasound imaging study of 37 premenopausal nulliparous women (23 white and 14 black) who were asymptomatic for pelvic floor dysfunction has found that black women have significantly larger rhabdosphincters than white women (8.88 ± 1.65 cm versus 5.97 ± 1.82 cm). Also, the levator hiatal transverse diameters at the maximum cross-section of the vagina in the black women included in the study were wider than those of the white women ($P<0.05$). These anatomical findings might explain the known racial differences in lower urinary tract symptom prevalence.

Original article Derpapas, A. *et al.* Racial differences in female urethral morphology and levator hiatal dimensions: an ultrasound study. *Neurourol. Urodyn.* 31, 502–507 (2012)