Nature Reviews Urology **12**, 180 (2015); published online 10 March 2015;
doi:10.1038/nrurol.2015.45;
doi:10.1038/nrurol.2015.46;
doi:10.1038/nrurol.2015.47;
doi:10.1038/nrurol.2015.48

IN BRIEF

PROSTATE CANCER

A urine-based methylation signature for risk stratification

New research has shown that a urine-based methylation signature can accurately identify men with clinical low-risk disease. A prediction model was developed using urine samples from 665 patients undergoing biopsy for elevated serum PSA levels. This model was then prospectively tested for accuracy of prediction of adverse disease using urine samples from a separate cohort of 96 men before radical prostatectomy. The test correctly identified all men with adverse disease with a negative predictive value of 100%.

Original article Jatkoe, T.A. *et al.* A urine-based methylation signature for risk stratification within low-risk prostate cancer. *Br. J. Cancer* doi:10.1038/bjc.2015.7

PROSTATE CANCER

Enzalutamide has durable antitumour activity

Updated results from a phase I–II study have shown the long-term safety and antitumour activity of enzalutamide treatment for castration-resistant prostate cancer. 140 patients who either had or had not received docetaxel were treated with enzalutamide. Outcomes were analysed at 17 months follow-up duration for antitumour activity and >4 year follow-up period for safety. Enzalutamide showed durable antitumour activity in both patients groups and its safety profile was consistent over time.

Original article Higano, C.S. *et al.* Long-term safety and antitumor activity in the phase 1–2 study of enzalutamide in pre- and post-docetaxel castration-resistant prostate cancer. *Eur. Urol.* doi:10.1016/j.eururo.2015.01.026

PROSTATE CANCER

The end of the road for orteronel

Orteronel is not undergoing further development as a treatment for metastatic castration-resistant prostate cancer (mCRPC). In a phase III, double-blind, placebo-controlled trial orteronel plus prednisone did not improve overall survival (the primary end point of the study) compared with placebo plus prednisone. Orteronel plus prednisone treatment was also associated with an increase in toxic effects compared with placebo plus prednisone. However, in chemotherapy-naïve patients with mCRPC, orteronel prolonged radiographic progression-free survival.

Original article Saad, F. *et al.* Orteronel plus prednisone in patients with chemotherapy-naïve metastatic castration-resistant prostate cancer (ELM-PC 4): a double-blind, multicentre, phase 3, randomised, placebo-controlled trial. *Lancet Oncol.* doi:10.1016/S1470-2045(15)70027-6

KIDNEY CANCER

IL8 polymorphisms affect overall survival in advanced RCC

Variant alleles of *IL8* polymorphisms are associated with worse outcomes in patients treated with pazopanib or sunitinib for advanced renal cell carcinoma (RCC). Xu *et al.* identified two germline single nucleotide polymorphisms in *IL8*—rs1126647 and rs4073—that were significantly associated with overall survival in three studies (two phase III trials and one observational study). In combined analysis, rs1126647 was associated with overall survival after multiple-test adjustment (HR 1.32), without evidence for heterogeneity of effect between studies or treatment.

Original article Xu, C.-F. *IL8* polymorphisms and overall survival in pazopanib- or sunitinib-treated patients with renal cell carcinoma. *Br. J. Cancer* doi:10.1038/bjc.2015.64