RESEARCH HIGHLIGHTS

IN BRIEF

PROSTATE CANCER

Testosterone replacement affects disease risk

The findings of a nested case-control study of the National Prostate Cancer Register of Sweden reveal no significant differences in prostate cancer risk among men who previously received testosterone replacement therapy (TRT) compared with that of the general population. However, further analyses revealed an increased risk of early (<1 year of TRT) favourable-risk prostate cancer and a decreased risk of aggressive prostate cancer >1 year after TRT. The investigators attribute this increase in early, favourable-risk disease to detection bias, while emphasizing that the decreased risk of aggressive disease warrants further investigation.

ORIGINAL ARTICLE Loeb, S. *et al.* Testosterone replacement therapy and risk of favorable and aggressive prostate cancer. J. Clin. Oncol. <u>http://dx.doi.org/10.1200/JCO.2016.69.5304</u> (2017)

BLADDER CANCER

TCGA cohort is representative of invasive disease

The Cancer Genome Atlas (TCGA) dataset provides a valuable reference for researchers with an interest in the genetic basis of bladder cancer. Now, evaluations of the clinical and pathological characteristics of patients in this cohort confirm that the outcomes of patients in the TCGA cohort, which contains a large number of patients with advanced-stage disease, are concordant with data presented in previous reports. The 5-year overall survival durations of patients in this cohort were slightly lower than that of patients in other series; however, the findings from the TCGA cohort became consistent when stratified by disease stage. This evaluation confirms that TCGA data provide a representative sample of the genetics of invasive bladder cancer observed in real-world settings.

ORIGINAL ARTICLE Seiler, R. et al. Is The Cancer Genome Atlas (TCGA) bladder cancer cohort representative of invasive bladder cancer?. Urol. Oncol. <u>http://dx.doi.org/10.1016/</u>j.urolonc.2017.01.024 (2017)

PROSTATE CANCER

Cabozantinib activates innate immunity

The tyrosine-kinase inhibitor cabozatinib does not increase overall survival compared with prednisone. However, significant increases in progression-free survival duration have been observed with this approach. Now, investigations involving PTEN/P53-deficient mouse models reveal remarkable responses to cabozantinib that are mediated by robust neutrophilmediated infiltration of the tumour. These results indicate a novel mechanism of action of cabozantinib.

ORIGINAL ARTICLE Patnaik, A. et al. Cabozantinib eradicates advanced murine prostate cancer by activating antitumor innate immunity. Cancer Discov. <u>http://dx.doi.</u> org/10.1158/2159-8290.CD-16-0778 (2017)

PROSTATE CANCER

Clustirsin fails to improve outcomes

Clusterin is a chaperone protein that is upregulated in response to chemotherapy and might mediate resistance, Now, data from SYNERGY, a phase III randomized-controlled trial indicate that custirsin, an antisense oligonucleotide that inhibits clusterin production, does not improve the efficacy of docetaxel plus prednisone in patients with metastatic, castration-resistant prostate cancer.

ORIGINAL ARTICLE Chi, K. N. et al. Custirsen in combination with docetaxel and prednisone for patients with metastatic castration-resistant prostate cancer (SYNERGY trial): a phase 3, multicentre, open-label, randomised trial. *Lancet Oncol.* <u>http://dx.doi.org/10.1016/S1470-2045(17)30168-7</u> (2017)