RESEARCH HIGHLIGHTS

IN BRIEF

PROSTATE CANCER

No benefit of combining custirsen with cabazitaxel

A randomized, open-label phase III trial of custirsen in 635 men with metastatic castration-resistant prostate cancer that had progressed after docetaxel showed no survival benefit for the addition of custirsen to cabazitaxel plus prednisone treatment. The antisense oligonucleotide custirsen inhibits the production of the antiapoptotic protein clusterin, which is upregulated in response to chemotherapy and confers treatment resistance. Median overall survival in the custirsen and control groups was 14.1 months and 13.4 months, respectively.

ORIGINAL ARTICLE Beer, T. M. et al. Custirsen (OGX-011) combined with cabazitaxel and prednisone versus cabazitaxel and prednisone alone in patients with metastatic castrationresistant prostate cancer previously treated with docetaxel (AFFINITY): a randomised, open-label, international, phase 3 trial. *Lancet Oncol.* <u>http://dx.doi.org/10.1016/</u>S1470-2045(17)30605-8 (2017)

TESTICULAR CANCER

No activity of pembrolizumab in phase II trial

The first study of immune checkpoint inhibition in men with germ cell tumours found no clinically meaningful activity of the programmed cell death protein 1 inhibitor pembrolizumab. Treatment with a median of two doses (range 1–8) in 12 patients with refractory nonseminoma resulted in no partial or complete responses. Two patients had radiographically stable disease for 19 weeks and 28 weeks but displayed a continued increase in α -fetoprotein levels.

ORIGINAL ARTICLE Adra, N. et al. Phase II trial of pembrolizumab in patients with platinum refractory germ cell tumors: a Hoosier Cancer Research Network Study GU14-206. Ann. Oncol. <u>http://dx.doi.org/10.1093/annonc/mdx680</u> (2017)

PROSTATE CANCER

Brachytherapy monotherapy is efficacious

Findings from a prospective phase II trial in 300 men with ≤cT2b, Gleason score 6 or 7, treatment-naive prostate cancer demonstrate the safety and efficacy of permanent-seed implantation brachytherapy without hormonal therapy. Ten biochemical failures occurred and one patient died of prostate cancer. The median 5-year PSA level was 0.01 ng/ml and 5-year overall survival was 94.9%. Most men (>90%) were "satisfied or extremely satisfied" at 2 years and 4 years after implantation. **ORIGINAL ARTICLE** Frank, S. J. et al. Prospective phase II trial of permanent seed implantation prostate brachytherapy for intermediate-risk localized prostate cancer: efficacy, toxicity, and quality of life outcomes. Int. J. Radiat. Oncol. Biol. Phys. http://dx.doi.org/10.1016/j.ijrobp.201.09.050 (2017)

PROSTATE CANCER

Treatment after ADT plus docetaxel

A retrospective study analysed 245 patients who received ≥1 treatment for metastatic castration-resistant disease subsequent to participating in the GETUG-AFU 15 trial. In those who had previously received androgen deprivation therapy (ADT) alone or plus docetaxel for castration-responsive disease, subsequent docetaxel (first-line or second-line) resulted in PSA decline >50% (PSA50) in 45% or 14% of men and bicalutamide resulted in PSA50 in 43% or 17% of men, respectively. Abiraterone or enzalutamide treatment in those who had received ADT plus docetaxel resulted in PSA50 in 53% of men.

ORIGINAL ARTICLE Wallace, E. *et al.* Anticancer activity and tolerance of treatments received beyond progression in men treated upfront with androgen deprivation therapy with or without docetaxel for metastatic castration-naïve prostate cancer in the GETUG-AFU 15 phase 3 trial. *Eur. Urol.* http://dx.doi.org/10.1016/j.eururo.2017.09.022 (2017)