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IN BRIEF

PROSTATE CANCER

Increased adverse event risk with GnRHa therapy

The risk of several adverse events is higher in patients who receive gonadotropin-releasing hormone agonist (GnRHa) therapy for prostate cancer than in those who undergo orchiectomy, according to a new paper. In their population-based study of 3,295 men with metastatic prostate cancer, Sun *et al.* found that men who received GnRHa therapy had significantly increased risks of fracture, peripheral arterial disease and cardiac-related complications compared with patients who underwent bilateral orchiectomy. Patients on GnRHa therapy for ≥35 months were also at increased risk of venous thromboembolism and diabetes mellitus.

ORIGINAL ARTICLE Sun, M. *et al.* Comparison of gonadotropin-releasing hormone agonists and orchiectomy: effects of androgen-deprivation therapy. *JAMA Oncol.* http://dx.doi.org/10.1001/jamaoncol.2015.4917 (2015)

CLINICAL TRIALS

Novel topical gel treatment for Peyronie's disease

H-100, a topically applied gel composed of nicardipine, superoxide dismutase and emu oil, shows promise for the treatment of Peyronie's disease, say researchers. In the study, 11 patients received H-100 for 3 months and 11 patients received placebo for 3 months. All 22 patients then received H-100 for an additional 3 months. H-100 treatment was associated with increased mean stretched penile length, reduced mean penile curvature and reduced mean pain level. Placebo was only associated with a small improvement in mean stretched penile length. Improvements in all parameters were seen in patients who switched from placebo to H-100 treatment.

ORIGINAL ARTICLE Twidwell, J. & Levine. L. Topical treatment for acute phase Peyronie's disease utilizing a new gel, H-100: a randomized, prospective, placebo-controlled pilot study. *Int. J. Impot. Res.* http://dx.doi.org/10.1038/ijir.2015.22 (2015)

PROSTATE CANCER

Gene expression signature in tumours of smokers

Researchers have identified a distinct pattern of molecular alterations in tumours from patients with prostate cancer who smoke. The alterations were either diminished or not present in past smokers and nonsmokers. The gene expression signature included increased immunoglobulin expression by tumour-infiltrating B cells, NF-κB activation and increased chemokine expression. The researchers also found that nicotine increased glutamine consumption and cancer cell invasiveness *in vitro* and sped up metastatic progression in TRAMP mice.

ORIGINAL ARTICLE Prueitt, R. *et al.* An immune-inflammation gene expression signature in prostate tumors of smokers. *Cancer Res.* http://dx.doi.org/10.1158/0008-5472.CAN-14-3630 (2015)

PROSTATE CANCER

Adverse events associated with intermittent ADT

Intermittent (versus continuous) androgen deprivation therapy (ADT) seems to be associated with an increase in the incidence of ischaemic and thrombotic events, according to a new study. Hershman *et al.* linked Medicare claims data with data from a multicentre trial comparing intermittent with continuous ADT. They found that the 10-year cumulative incidence of ischaemic and thrombotic events was 24% in the continuous ADT group and 33% in the intermittent ADT group. No differences were seen between groups in bone, endocrine or cognitive events.

ORIGINAL ARTICLE Hershman, D. L. *et al.* Adverse health events following intermittent and continuous androgen deprivation in patients with metastatic prostate cancer. *JAMA Oncol.* http://dx.doi.org/10.1001/jamaoncol.2015.4655 (2015)