RESEARCH HIGHLIGHTS

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Testosterone has clinical benefit for postmenopausal hypoactive sexual desire disorder

Two phase III trials have previously demonstrated a statistically significant effect of transdermal testosterone treatment in surgically postmenopausal women with hypoactive sexual desire disorder. To evaluate the clinical relevance of these findings, Kingsberg *et al.* interviewed a subset of trial participants about perceived benefits of the treatment.

The representative sample comprised 132 of the original 1,094 study participants. The women were asked whether they experienced a meaningful benefit from the study patches; 33 of 64 women (52%) who received testosterone gave a positive response, compared with 21 of 68 women (31%) who received placebo. Women who reported meaningful benefit had significantly greater improvements in frequency of satisfying sexual activity (measured by the Sexual Activity Log), sexual desire (measured by the Profile of Female Sexual Function), and personal distress (measured by the Personal Distress Scale) than those who reported no meaningful benefit.

The authors conclude that testosterone treatment confers clinical benefit to postmenopausal women with hypoactive sexual desire disorder, and that the findings of the original studies correspond to a clinically meaningful effect on sexual function.

Original article Kingsberg S *et al.* (2007) Evaluation of the clinical relevance of benefits associated with transdermal testosterone treatment in postmenopausal women with hypoactive sexual desire disorder. *J Sex Med* **4:** 1001–1008

Chromogranin A predicts development of hormonerefractory prostate cancer

Chromogranin A, a marker of neuroendocrine differentiation, has previously been identified as an indicator of poor prognosis in patients with hormone-refractory prostate cancer. Researchers in Italy have now found chromogranin A to be an independent predictor for the development of hormone-refractory disease in newly diagnosed hormone-naive prostate cancer patients.

Berruti et al. measured chromogranin A in tumor biopsy and serum samples from

211 patients with newly diagnosed prostate cancer who received androgen deprivation therapy early (within 1 or 2 months) after diagnosis. Patients whose biopsy samples had <30% chromogranin-reactive cells had a hazard ratio (HR) of 2.0 for development of hormone-refractory disease, and 1.7 for shorter survival; in patients with \geq 30% chromogranin-positive cells, the HRs were 6.0 and 3.9, respectively. Chromogranin A maintained its predictive status both in patients treated with androgen deprivation therapy alone and in patients treated with radiotherapy or radical prostatectomy in combination with androgen deprivation therapy. Excessive plasma chromogranin A was also associated with time to development of hormone-refractory disease (HR 3.0) and reduced overall survival (HR 2.4).

The authors conclude that chromogranin A, in both prostate biopsy samples and in plasma, is an independent predictor of hormonerefractory disease development and of reduced survival in high-risk prostate cancer patients who receive androgen deprivation therapy within a few months of diagnosis.

Original article Berruti A *et al.* (2007) Chromogranin A expression in patients with hormone naive prostate cancer predicts the development of hormone refractory disease. *J Urol* **178:** 838–843

Higher incidence of genitourinary anomalies in girls with congenital adrenal hyperplasia

A high proportion of cases of congenital adrenal hyperplasia (CAH) are attributable to deficiency of 21-hydroxylase, which results in presentation of ambiguous genitalia at birth in girls but with no obvious signs in boys. The lower urinary tract malformations that occur in female CAH patients are well documented; however, no studies have investigated the upper urinary tract malformations in these patients.

Nabhan and Eugster carried out a study to determine the frequency and significance of upper genitourinary tract anomalies that occur in girls with CAH. The study involved reviewing the medical charts of patients who had undergone genitourinary imaging for CAH between 1985 and 2005 at Riley Hospital for Children, Indianapolis, IN.