

**GLOSSARY****CONCORDANCE INDEX**

An index used to measure the accuracy of a predictive model, ranging from 0.5 (no discriminating ability) to 1.0 (perfect discrimination)

**LEPTIN**

A hormone released by adipose cells in concentrations proportional to body fat levels

most significant variable was depression, followed by ED, then age. The study revealed that the relationship between the three variables and hypogonadism is nonlinear.

This study presents ANN as a clinically useful tool with which to accurately assess the need for endocrinologic evaluation in men.

*Tamsin Osborne*

**Original article** Kshirsagar A *et al.* (2006) Predicting hypogonadism in men based upon age, presence of erectile dysfunction, and depression. *Int J Impot Res* **18**: 47–51

## A nomogram to predict outcomes in men with benign prostatic hyperplasia

A new nomogram has been developed that enables clinicians to predict whether a patient with benign prostatic hyperplasia (BPH) is likely to progress to acute urinary retention or require surgical intervention within 2 years of diagnosis, and whether dutasteride therapy is likely to benefit this patient.

To construct this nomogram, Slawin and colleagues used baseline clinical data from three 2-year, multicenter, placebo-controlled, double-blind, phase III studies that evaluated the safety and efficacy of dutasteride versus placebo in men with BPH. Using Cox proportional hazards regression analysis, the baseline variables of 4,294 of these men were assessed in relation to their risk of developing acute urinary retention or requiring surgical intervention within 2 years.

The predictive ability of the nomogram, as measured by the area under the curve for censored data, was found to be high, with a bootstrap-corrected CONCORDANCE INDEX of 0.71 ( $P=0.001$ ).

The authors note that a limitation of this nomogram is that it was constructed using a population of patients with a PSA level between 1.5 and 10 ng/ml, and is, therefore, not suitable for patients with a PSA level outside of this range. When used for the appropriate patients, however, this nomogram will help patients and their clinicians to make decisions regarding treatment for BPH.

*Tamsin Osborne*

**Original article** Slawin KM *et al.* (2006) Development of nomogram to predict acute urinary retention or surgical intervention, with or without dutasteride therapy, in men with benign prostatic hyperplasia. *Urology* **67**: 84–88

## Hypogonadism might cause insulin resistance in prostate cancer

Men with prostate cancer often receive androgen-deprivation therapy (ADT), which renders them hypogonadal. Basaria *et al.* performed a cross-sectional study to see if the insulin-resistant profile associated with ADT is caused by an increased BMI—a side effect of hypogonadism—or by hypogonadism directly.

The authors compared two groups with prostate cancer: 18 hypogonadal men who had received ADT for at least 12 months and 17 men who had undergone nonchemotherapeutic treatment but not ADT. Also included were 18 age-matched controls with normal serum PSA levels. Most participants were white and none had diabetes mellitus.

The highest LEPTIN levels and BMI were seen in hypogonadal men. After adjustment for age and BMI, these men still had the highest fasting blood levels of insulin and glucose. They were more insulin-resistant than eugonadal men, and 44% had fasting glucose levels sufficient for a clinical diagnosis of diabetes mellitus. Combining all groups' data, there was a substantial negative correlation of testosterone with the metabolic parameters measured.

Insulin resistance is a risk factor for cardiovascular disease, and the authors suggest that leptin could promote the growth and survival of prostate-cancer cells. So, although ADT might be beneficial initially, its effects on insulin and leptin levels could cause the high cardiovascular mortality of patients with prostate cancer, and enhance recurrence and metastasis of the disease itself. The authors recommend hyperglycemic screening of patients on ADT and investigation into the use of insulin-sensitizing agents.

*Chrissie Giles*

**Original article** Basaria S *et al.* (2006) Hyperglycemia and insulin resistance in men with prostate carcinoma who receive androgen-deprivation therapy. *Cancer* **106**: 581–588

## Cryopreservation of testicular sperm: the way forward

Sperm for assisted reproduction procedures can be obtained from azoospermic men, by aspiration from the epididymis or testicles, or through testicular biopsy. Cryopreservation of surgically