# RESEARCH HIGHLIGHTS

# **IN BRIEF**

#### PROSTATE CANCER

Decreasing the duration of androgen suppression in locally advanced prostate cancer compromises patient survival. Interim analysis of data from a trial in which 970 men were randomized to radiotherapy plus either short-term or long-term androgen suppression has shown that cessation of hormone therapy after 6 months (compared with 3 years) is associated with an increased risk of death (hazard ratio 1.42).

**Original article** Bolla, M. et al. Duration of androgen suppression in the treatment of prostate cancer. N. Engl. J. Med. **360**, 2516–2527 (2009).

### PROSTATE CANCER

Determining the level of androgen receptor activity in tumors would facilitate individualization of treatment for castration-resistant prostate cancer. A team from Duke University in North Carolina has used a transcription-based approach to elucidate the androgen receptor activity 'signature' of both cell lines and human tumors. The signature was found to accurately reflect an individual's hormone status and intraprostatic dihydrotestosterone level.

**Original article** Mendiratta, P. *et al.* Genomic strategy for targeting therapy in castration-resistant prostate cancer. *J. Clin. Oncol.* **27**, 2022–2029 (2009).

## PROSTATE CANCER

Data from a phase I trial of transdermal testosterone support establishment of a larger study in castration-resistant prostate cancer. Randomization to 2.5 mg, 5.0 mg or 7.5 mg per day increased testosterone levels to approximately 300 ng/dl. Only one of the 15 participants withdrew—after 53 weeks—owing to adverse effects. One patient experienced symptomatic progression, whereas the PSA level of three men decreased (by up to 43%).

**Original article** Szmulewitz, R. et al. A randomized phase 1 study of testosterone replacement for patients with low-risk castration-resistant prostate cancer. *Eur. Urol.* **56**, 97–104 (2009).

#### **PATHOLOGY**

Prospective evaluation has confirmed the validity of saving unstained interval sections of paraffin-embedded prostate tissue for later immunohistochemistry. The atypical features of clinical interest were more often lost from newly cut sections than from saved sections (50% versus 8%). Of the 38 sets of biopsy samples concurrently compared, staining results were identical for saved and recut sections in just over half of the cases.

**Original article** Hameed, O. & Humphrey, P. A. Immunohistochemical evaluation of prostate needle biopsies using saved interval sections vs new recut sections from the block: a prospective comparison. *Am. J. Clin. Pathol.* **131**, 683–687 (2009).

NATURE REVIEWS UROLOGY VOLUME 6 | JULY 2009 | 346