sildenafil. The sperm samples were divided into two populations according to their fertilizing potential.

The results showed that incubation with sildenafil significantly increased the number of progressively motile sperm, as well as sperm velocity, in both sperm populations. Furthermore, the proportion of acrosome-reacted sperm was also significantly increased by exposure to sildenafil.

The authors conclude that their findings have important clinical implications, as fertilization cannot occur if the acrosome reaction takes place before contact with the oocyte. It is therefore important that the effect of sildenafil on human reproduction is further studied and the findings made known to the many users of this drug. However, the authors note that, as their experiments were carried out *in vitro*, the findings will need to be confirmed before any extrapolations to the *in vivo* situation can safely be made.

Original article Glen DRJ *et al.* (2007) Sildenafil citrate improves sperm motility but causes a premature acrosome reaction *in vitro*. *Fertil Steril* **87:** 1064–1070

Adjuvant docetaxel following radical prostatectomy improves progression-free survival

There is currently no standard adjuvant therapy for patients at high risk of disease recurrence or distant metastases following radical prostatectomy. Kibel *et al.*, therefore, performed a multi-institutional, phase II pilot study of the systemic adjuvant docetaxel, which has shown survival benefits for patients with hormone-refractory prostate carcinoma in randomized controlled trials.

The trial included 77 patients who had undergone radical prostatectomy for localized disease, and who had a risk of biochemical recurrence within 3 years of ≥50%. Postoperatively, 50 (65%) of 77 patients had positive seminal vesicles, 29 (38%) of 77 had positive lymph nodes, and 50 (65%) of 77 had positive surgical margins. Patients underwent six 28-day cycles of 35 mg/m^2 intravenous docetaxel infusions (administered on days 1, 8 and 15 of each cycle) with 10 mg dexamethasone pretreatment. Patients were evaluated weekly during treatment cycles, and were followed up every 3 months after treatment.

At the median follow-up (29.2 months, range 1.3–39.2 months), 46 (60.5%) out of 76 patients in the final analysis had disease progression. Median progression-free survival was 15.7 months, compared with a nomogram-predicted progression-free survival of 10.0 months. Grade I/II toxicity occurred in 54 (70%) patients, grade III toxicity occurred in 20 (26%) patients and grade IV toxicity occurred in 3 (4%) patients.

The authors conclude that adjuvant docetaxel increases progression-free survival with acceptable toxicity in high-risk patients, and suggest that a phase III trial investigating the efficacy of adjuvant androgen deprivation, with or without docetaxel, is warranted.

Original article Kibel AS *et al.* (2007) Adjuvant weekly docetaxel for patients with high risk prostate cancer after radical prostatectomy: a multi-institutional pilot study. *J Urol* **177:** 1777–1781

New bulking agent for the urethral sphincter shows promise in patients with SUI

Injection of bulking agents into the urethral sphincter is the standard minimally invasive procedure used to treat stress urinary incontinence (SUI). Mayer *et al.* examined the safety and effectiveness of calcium hydroxylapatite, a novel bulking agent, and compared it to bovine collagen, the FDA standard agent.

This prospective, single-blind study enrolled 296 women with SUI who had not undergone previous urethral bulking procedures and whose incontinence had not improved for 6 months before study entry. Patients were randomly allocated to receive up to five transurethral injections of either calcium hydroxylapatite or bovine collagen during the first 6 months of the study. The primary outcome measure was an improvement of ≥1 grade on the Stamey Urinary Incontinence Scale 12 months after the first injection.

The proportion of patients who achieved an improvement of ≥1 grade at 6 months and 12 months did not differ significantly between groups. A significantly greater proportion of patients in the calcium hydroxylapatite group required only one injection compared with the collagen group (38.0% versus 26.1%, $P = 0.03$), and the mean total volume of injected material was significantly lower in the