

EDITORIAL

Report from Durham

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Since my last report 6 months ago, the 'prostate cancer landscape' continues to evolve. In the US, I would say that the 'hot' areas are minimally invasive radical prostatectomy, obesity, Intensity Modulated Radiation Therapy (IMRT), talk of a growing urologist shortage, the future impact of the 'Baby-Boom Generation' on prostate cancer, translating molecular discoveries to 'catch up' with other common cancers (like breast cancer), and whether vaccines will play a clinical role in treatment. This issue touches on many of these hot areas.

Nelson and co-workers provide an extremely well-done overview of neuroendocrine (NE) differentiation. This fits nicely with the androgen receptor (AR) review in that NE differentiation is likely related to androgen-deprivation therapy and androgen-independence. Gupta and co-workers next provide a unique review of experimental models of prostatitis. I think these will be citable key references for years to come.

Next, we have two basic science contributions. Kim *et al.* report a new benign prostate cell line, RC-165N/hTERT, derived from an African-American patient and its AR functional status. Following on the AR theme, Cai *et al.* show multi-drug resistance proteins (MRP's) finding AR regulation and speculate that this pathway may play a role in chemotherapy resistance in advanced prostate cancer.

In the clinical sciences, we feature 12 original articles. Leading with an epidemiological investigation of over 35 000 men by Velicer *et al.* show no statistically significant association of prostate cancer and diabetes but lower risk in men who use insulin. In another epidemiological questionnaire study of 1150 healthy German men aged 45–75 years; Bestmann *et al.* compared their urinary and sexual quality of life to men who had undergone radical prostatectomy or external radiotherapy. The control population had a surprisingly high rate of erectile and urinary dysfunction showing that control groups should be considered in all quality of life studies of older prostate cancer patients.

Hayashi *et al.* studied 268 Japanese radical prostatectomy patients reporting the concept that certain patients have lower PSA secretion levels that predicts higher risk of failure. May *et al.* examine visually-estimated total tumor volume and gland volume in 528 radical prostatectomy patients showing that a tumor volume ratio of greater than 25% predicted recurrence and suggested that this was applicable to clinical practice. Dahm and co-workers prospectively examine prostate fossa biopsies in the apex area at surgery in 77 men who had apical disease. Positive apical soft tissue biopsy, but not apical positive margin, was an independent predictor of biochemical recurrence suggesting that these biopsies should be considered in men with significant apical

disease. Finally, Ozdemir *et al.* conducted an elegant study of seven cadavers where the prostate and pelvic organs were subjected to close step-sectioning and three-dimensional computer reconstructions. They present study models showing the neurovascular bundles in relation to the urethra, seminal vesicles and bladder neck, which should enhance education of the operation. They also document that the urethra is a functional unit between the trigone and the membranous urethra. This study confirms the high level of training needed to master nerve-sparing and continence-preserving radical prostatectomy, whether by open or laparoscopic/robotic means.

One original article in this issue studies localized prostate cancer patients treated with external radiotherapy. Jani *et al.* studied 461 men after either IMRT ($N=355$) or conventional radiotherapy ($N=106$) finding no change in GU toxicity but lessened late GI toxicity after IMRT. Further study will be needed with larger cohorts and longer follow-up to confirm these optimistic results.

One article examines bicalutamide antiandrogen hormonal therapy in prostate cancer. Wirth *et al.* report the follow up of Trial 24 of the Early Prostate Cancer Program (EPCP) at 7 years showing that the addition of bicalutamide improved objective progression-free survival for men with locally advanced disease, but not for men with localized disease. Like other recent EPCP publications, this study points out that risk stratification is critically important to determine hormonal therapy use. In a related advanced disease study, Stein *et al.* studied a portable hand/finger assessment of bone mineral density finding it inferior to the gold-standard DEXA scanning of the hip.

There are then two BPH articles. Erturham *et al.* report a randomized trial of standard TURP versus Plasmakinetic Resection of the Prostate (PRP) in 240 men with BPH finding superior results with the PRP. Rajbabu *et al.* studied 29 patients undergoing 'Green light' Photoselective Vaporization of the Prostate finding no difference in visual quality comparing water and saline irrigation.

One final article is on prostatitis. Hu and co-workers studied the semen of 41 patients with chronic prostatitis comparing inflammatory cytokines to normal control men's semen. Using the marker, Omi/HtrA2 serine protease, they found increased levels in prostatitis and speculated on an inhibited effect on male fertility.

Thanks again for your support of the journal.

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Prostate Cancer and Prostatic Disease