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Editorial

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As we finalize the first issue of *Prostate Cancer and Prostatic Diseases* for 2004, Roger Kirby and I want to sincerely thank you for your continued support. Since achieving Index Medicus status, the receipt of manuscripts has steadily risen and we are now faced with an even more competitive peer review process. We also continue to be grateful for an outstanding Editorial Board that supports us to the fullest extent. We remain in search of the best work being done in this field and encourage you to contact Roger or myself with submissions of original clinical or basic work and timely review articles or case reports.

In this issue, we have a variety of work featured. The issue leads off with three timely review articles. Karayi and Markham from Leeds have a timely review on the molecular biology of prostate cancer. With more centers concentrating on tissue acquisition from patients with BPH and prostate cancer and advances in 'high-throughput' molecular assays, the field is quickly expanding. It is difficult for basic scientists to keep up and near to impossible for clinicians or translational workers as well. Having review articles such as this helps 'us clinical guys' stay somewhat abreast. Despite the advances in molecular biology, we still lack widely accepted and used molecular biomarkers. Furthermore, until we can prospectively validate such biomarkers, we will not likely have these tools at our clinical disposal anytime soon. On a related note, Ronquist and Nilsson of Uppsala, Sweden review the fascinating area of prostasomes and how they may contribute to prostate tumorigenesis. They contend that the prostasomes that are critical for sperm survival in the reproductive process become defective after the age of 50 y and contribute to the development of BPH and prostate cancer. We hope that this provocative review may stimulate others in the field to further test this hypothesis.

The third review article focuses on a clinical issue well known to urologists—acute urinary retention (AUR). This is a topic that is near-and-dear to my heart—one of my first peer review publications was on this topic! Years ago in the Pre-PSA era, many American urologists believed that AUR was a sign of occult prostate cancer and we were taught to perform a prostate biopsy when a man presented in AUR. In the study that I documented when I was a resident, we prospectively performed biopsy on approximately 90 men in AUR finding a 13% rate of prostate cancer (Moul *et al*. *J Urol* 1989; **141**: 1375). This was pre-PSA and pre-transrectal ultrasound-guided prostate biopsy (all biopsies were digitally directed perineal biopsies). Our conclusion at the time was that prostate biopsy was not routinely indicated in men with AUR due to the 'low' rate of cancer. Looking back now, the 13% rate is reasonably high! It would be interesting for someone to repeat this study in the PSA-era with the modern transrectal ultrasound-guided biopsy technique! Although most of the prostate cancer cases might be 'culled' out by prior PSA screenings, it would still be interesting to know how often occult cancer is at least partially involved with AUR.

Moving to the original articles, we lead off with an interesting paper by Karam and colleagues from Dallas on the level of residency training and the cancer detection rate on modern ultrasound-guided prostate biopsy. Interestingly, there was no association between training level and cancer detection rate. While intriguing, it would be nice to follow this up with a larger experience and see if the patient's satisfaction and pain level varied by the experience level of the operator. I know from personal experience that I am a lot better at performing prostate ultrasound and biopsy now after 16 y in practice than I was years ago. However, a lot has changed in 16 y going from digital-guided perineal biopsy, to first-generation ultrasound-guided sextant biopsy, now to late-generation ultrasound and extended core biopsy focusing on laterally directed cores in all men. Nevertheless, this is a very interesting study concept and could be translated to other areas of medicine and prostate practice.

The second original article deals with the hot topic of chemotherapy for hormone refractory prostate cancer (HRPC). The study by Bernardi *et al* from Italy reports a phase II trial of 'MVD'—Mitoxantrone, vinorelbine, and prednisone. In the United States, mitoxantrone and estramustine are the only officially FDA-approved chemotherapeutic agents for advanced prostate cancer. However, as we go to press with this issue, 'word-on-the-street' is that the phase III trials using docetaxel (taxotere)-based chemotherapy in HRPC to be presented at ASCO and/or AUA 2004 will show a survival benefit over mitoxantrone-based standard regimens. If this is in fact the case, it will have a profound impact on the landscape of the clinical care of men with advanced prostate cancer.

The next article by Ramsden *et al* looks at the current trends in the management of men undergoing radical retropubic prostatectomy (RRP) in the UK using a survey of urologists. While the length of stay is still 5.2 days, the article addresses the important topic of care pathways to improve timely discharge. In our studies in the US Department of Defense Center for Prostate Disease Research (DoD-CPDR), we have demonstrated profound changes in the epidemiology of RRP including operative time, blood loss, and patient characteristics (Moul *et al*. *Surgery* 2002; **132**(2): 213–219). The 'PSA Era' has given us a younger, healthier patient with better disease characteristics—this also facilitates a more rapid recovery and quick hospital discharge!

Venkateswaran, Fleshner, and Klotz next looked at vitamin E and selenium effect on prostate cell lines. Fortunately, their data would seem to support the SELECT trial examining the clinical efficacy of these two supplements on the prevention of prostate cancer. The SELECT trial is doing very well. As of mid-January 2004, the study had enrolled more than 29 500 men out of the planned 32 400. It is scheduled to close to enrollment in May or June of 2004—a full 2 y ahead of schedule. Our clinical site at Walter Reed was proud to be part of this study, enrolling over 120 men to date and putting us in the top 20% nationwide. As one of the Site PIs for this big trial, I am very happy to see the nice work from the Toronto group!

The final three studies wrapping up this issue are focused on basic science original investigations. Smith *et al* from Liverpool study the estrogen receptor pathway and implicate alterations here as responsible for BPH. Orange *et al* from New York examine the exciting area of immunology and vaccines to treat prostate cancer. There are a number of early phase clinical trials in this area and we are hopeful that they will show efficacy in advanced disease, biochemical recurrence, and even in secondary prevention. Finally, Planz *et al* from Vienna and Boston examine the characteristics of primary prostate cell cultures. There is no question that we need more cell lines available for the study of prostate cancer and disease. Our group is also working to create more useful cell lines. Under the direction of Dr Johng Rhim (also on the PCAN Editorial Board), the DOD-CPDR has funded a prostate cell center with the sole mission of attempting to develop more cell lines for use on this field. While the lines to date are primarily immortalized virally or with telomerase, there is hope that we will soon have additional spontaneously immortalized lines available to researchers in the field.

We hope you enjoy this issue and look forward to your continued support and collaboration.

JW Moul and R Kirby