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## **EDITORIAL**

## Report from Durham

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Welcome to another issue of Prostate Cancer and Prostatic Diseases and the semiannual report from this side of the pond in Durham, North Carolina. I am writing this on my way home from the 56th Annual James C Kimbrough Seminar in Washington, DC. The Kimbrough is the annual meeting of the Society of Government Service Urologists in the United States. Traditionally, the first day of the meeting is always devoted to resident competition papers. As I listened to these talks, I was enthusiastic about the high caliber of the presentations and research by the young people on stage. On one hand, we should be in great shape for the future. However, we are also in the midst of a global economic crisis with pressure on medical funding, particularly on research funding. We are also less than 1 week away from the presidential inauguration of Barak Obama. I do hope and pray that he and others in governments around the globe can start to bring us out of this economic slump and back to prosperity.

We begin this issue with three timely review articles. Silberstein and colleagues lead with a nice review regarding prostate cancer and human immunodeficiency virus. As the survival of patients with human immunodeficiency virus approaches that of normal controls, we will see more and more prostate cancer. These patients should generally be treated stagefor-stage no different than men without human immunodeficiency virus based on current evidence. Michael et al. next provide a very useful review of prostate cancer chemotherapy. Although estramustine, mitoxantrone and docetaxel are the only currently approved chemotherapy agents (at least in the United States), the era of targeted therapy is rapidly approaching. It will be exciting to see what new compounds are added to our medical armamentarium in the next 10 years. Finally, Costello and Franklin provide a review on biomarkers in prostatic fluid that might be exploited in the future to screen more effectively for prostate cancer. Years ago (around 1990), I was part of a multicenter study looking at biomarkers in the ejaculate to screen for and prognosticate for localized prostate cancer. In that era of older men, we had difficulty in getting sufficient numbers of men to provide an ejaculated sample. It would seem that this barrier is much less of a hurdle in the current era of younger and healthier men being screened. However, we still do not see much in the literature in this regard. I suppose it is still challenging and blood and urine, or even postprostate massage urine, is still easier to get from subjects than a semen sample.

This issue contains three original basic scientific contributions that are placed directly after the three reviews. Although we alter the run order from issue to issue, I wanted to place the basic science right up front this time to let the readers know that we value these contributions. I wish we had room for more, but we have limits and do our best to balance topics. Anyway, we feature a paper related to the mechanism of bicalutamide and two papers exploring the molecular phenotype of castrationresistant prostate cancer. Having effective treatments for castration-resistant prostate cancer remains one of our biggest challenges and frustrations. Beyond docetaxel approval in 2004, we have had a number of high-profile compounds 'crash-andburn' in this disease state including calcium supplements to enhance docetaxel, vaccine therapy, chemotherapy and novel oral agents, such as atrasentan. In other words, the basic scientific discoveries are still critically needed.

We also feature 10 original clinical articles spanning early to late disease. Leading off in the clinical section is a paper by Connolly and colleagues that shows over 37% of men with an initial

 $prostate\text{-specific} \quad antigen \quad (PSA) \!>\! 4.0\, ng\, ml^{-1} \quad went \quad below$ 4.0 ng ml<sup>-1</sup> on repeated testing. Even for men who subsequently were biopsy positive for prostate cancer, 43% had a repeat PSA that was lower than the initial screening value. The authors caution against delaying the biopsy even when the repeat PSA initially falls below  $4.0\,\mathrm{ng\,m}^{-1}$ . In my referral practice, the decision to proceed to biopsy is sometimes as much art as science. In other words, we must take into account multiple factors in addition to PSA including age, comorbidities and, perhaps most importantly, the individual patient's 'Worry Quotient', reliability for follow-up and (at least in the United States) litigious nature. Moving on to other risk factors for prostate cancer, Jones and Lee report that male breast cancer patients may have a higher risk for prostate cancer. Although uncommon, male breast cancer should signal a possible increased risk for prostate cancer. Dr Jones and colleagues also have a second clinical paper showing that the incidence of prostate cancer at the time of TURP has decreased in the PSA era presumably due to better screening with PSA before eventual surgical treatment of BPH.

Moving on to treatment of prostate cancer, Nobes et al. report on a series of 400 men treated with brachytherapy. They further stratify by risk groupings as well as adjuvant hormonal therapy and the addition of external beam therapy. With a mean followup of 54 months, the authors nicely report stratified outcomes. I applaud the authors for reporting clearly on the type of treatment received. We look forward to longer term follow-up of this nicely characterized series. We next feature two studies examining quality-of-life outcomes in localized prostate cancer. Litwin and colleagues, in collaboration with investigators in Japan, study over 800 men after either radical prostatectomy or brachytherapy, finding that social bother is related to culture. Japanese patients had less bother associated with urinary and bowel dysfunction than their American counterparts. Stone et al. report on a study of 150 men and a new hybrid Functional Assessment of Cancer Therapy-Prostate instrument.

Imamoto and investigators studied 125 men both pre- and postradical prostatectomy for testosterone and human luteinizing levels and report that prostate cancer may inhibit T levels. Although provocative, this is intriguing and deserves more study. Tunn and Wiedey next report on a new 6-month experience with depot leuprorelin acetate showing an effective T suppression. This new compound will aid in our armamentarium for those with advanced prostate cancer. Papers on the testosterone theme include those by Armstrong et al., who report on patients with castration-resistant prostate cancer treated on the TAX 327 multicenter clinical trial showing that T level in the castrate range and BMI were not associated with prognosis. Interestingly, similar to our earlier study from Duke University, PSA and alkaline phosphatase levels were altered by hemodilution in obese men. Finally, in another biomarker study in castration-resistant prostate cancer patients, Berruti et al. report that serum calcium levels may be prognostic and help dictate bisphosphonate therapy. We conclude this issue with a case report following on the androgen/testosterone theme. Chertin and colleagues report on a case in which luteinizing hormone-releasing hormone agonist therapy failed to suppress T consistently, and they make the case for combined androgen blockade. It has been 20 years (1989) since flutamide was Food and Drug Administration approved as the first pure non-steroidal antiandrogen, yet we are still debating the pros and cons of combined androgen blockade.

Thank you for your continued support of our journal. On behalf of Dr Kirby and our staff, we wish you a prosperous 2009.