The Canadian Urological Association’s 67th Annual Meeting showcased both clinical and basic science urologic research from across various academic and community centres across Canada. While scientific sessions focused on all aspects of urology, the genitourinary oncology program was tremendous. Oncology topics highlighted ranged from assessment of cryotherapy in the management of localized prostate cancer to evaluation of the novel therapeutics for metastatic castrate-resistant prostate cancer.

A main focus of many abstracts was the influence of surgeon-specific factors on oncologic outcomes. Toren et al from University of Toronto presented data showing how surgeon volume affects perioperative morbidity and mortality in patients with inferior vena cava (IVC) thrombus undergoing radical nephrectomy (POD-02.05). Using Canadian Institute for Health Information (CIHI) datasets from 1998-2007, 816 patients were identified with IVC thrombus that had undergone radical nephrectomy. Not surprisingly, age and comorbidity were the strongest predictors of in-hospital mortality, but surgeon volume was also shown to affect perioperative mortality in multivariate analysis. Although there is no defined volume that predicts optimal outcome, surgeons with the volumes in the highest quartile had the lowest perioperative mortality. The influence of surgeon volume on outcomes post radical nephrectomy has been studied before, but this dataset is the first to assess the impact of surgical experience in patients with IVC thrombus that predicts optimal outcome, surgeons with the volumes in the highest quartile had the lowest perioperative mortality.

Nayak at al from the University of Manitoba (POD-05.03) and Fairey et al from the University of Alberta (POD-05.04) both presented data showing the influence of surgeon volume and training on clinical outcomes after radical prostatectomy. Nayak’s review of 1080 men treated with radical prostatectomy in Manitoba between 2003-2008 assessed the influence of fellowship training and hospital affiliation (academic vs nonacademic) on oncologic outcomes. Margin positivity was lowest in patients operated by fellowship-trained surgeons at academic centres, but fellowship training did not appear to influence outcomes in surgeons at nonacademic centres. Although a surrogate of biochemical failure and overall survival, margin positivity is one metric to assess postoperative outcomes and has been previously used as a metric for surgical expertise. These results are the first to suggest that surgeon education and academic affiliation may influence outcomes postradical prostatectomy.

Similarly, Fairey et al showed the influence of surgical expertise on margin positivity postradical prostatectomy. Using data from the University of Alberta Radical Prostatectomy Database, 1019 patients who underwent radical prostatectomy from 2007-2010 were included in the analysis. There was significant variation in positive margin rates between surgeons within a single academic institution. Although influence of fellowship training and surgical volumes of prostatectomy patients per surgeon were not revealed, these results further emphasize that surgeon quality depends on a multitude of factors. All of these factors must be considered when trying to identify the optimal surgical environment for patients — one that will provide them the best outcomes in terms of perioperative morbidity as well as oncologic outcomes.

The findings presented at CUA 2012 further underline the impressive standard of urologic research that is being performed in Canada. The high-quality projects reported at this meeting will undoubtedly help to shape clinical management in the future.