COMMENTARY

Prognostic markers for urologic cancers

Jay D. Raman, MD

Department of Urology, Penn State Milton S. Hershey Medical Center, Hershey, Pennsylvania, USA *Referring to the article published on pp. 8151-8154 in this issue*

RAMAN JD. Prognostic markers for urologic cancers. *Can J Urol* 2016;23(1):8155.

Improved prediction of disease related oncologic outcomes is essential for improved patient counseling prior to surgery. The concept of chronic inflammatory states and association with cancer recurrence and survival is a growing area of interest. Indeed a number of studies highlight the potential prognostic benefit across different malignancies.

Nonetheless, the impact of neutrophil:lymphocyte ratio (NLR) is variable and certainly not uniform. As highlighted by Bazzi et al (as well as others), NLR had no significant prognostic benefit for recurrencefree and cancer-specific survival for clear cell renal cell carcinoma (ccRCC).¹ One wonders if some of these observations are a function of a heterogenous cohort of ccRCC cases ranging from T1a toT4 tumors of various Fuhrman grades. Indeed, a focus on more biologically aggressive ccRCC at higher risk of recurrence and mortality may demonstrate a greater degree of association.

Furthermore, whilst these authors noted an association of NLR with overall survival, there was no incremental benefit over a base model constructed from clinical measures of frailty. These observations highlight that accurate pre-surgical notation of baseline clinical morbidities may be invaluable when assessing overall prognosis for urologic oncology patients. In that regard, more refined scales such as ECOG performance status, Charlson-Romano index, or an amalgam to create a Frailty Index Score may be superior to the ASA score alone.^{2,3}

References

- Bazzi WM, Tin AL, Sjoberg DD, Bernstein M, Russo P. The prognostic utility of preoperative neutrophil-to-lymphocyte ratio in localized clear cell renal cell carcinoma. *Can J Urol* 2016; 23(1):8151-8154.
- Aziz A, Fritsche HM, Gakis G et al. Comparative analysis of comorbidity and performance indices for prediction of oncologic outcomes in patient with upper tract urothelial carcinoma who were treated with radical nephroureterectomy. *Urol Oncol* 2014;32(8):1141-1150.
- Lascano D, Pak JS, Kates M et al. Validation of a frailty index in patients undergoing curative surgery for urologic malignancy and comparison with other risk stratification tools. *Urol Oncol* 2015;33(10):426.e1-e12.

Address correspondence to Dr. Jay D. Raman, Department of Urology, Penn State Milton S. Hershey Medical Center, 500 University Drive, BMR c4830F, Hershey, PA 17033 USA