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Platinum Priority

Reply from Authors re: Evangelos Liatsikos, Panagiotis Kallidonis. Laparoscopic or Open Nephroureterectomy? Which is the More Efficient Way to go? *Eur Urol* 2009;56:10–12

Hendrik Isbarn^{a,b}, Umberto Capitanio^{a,c},
Shahrokh F. Shariat^{a,d}, Pierre I. Karakiewicz^{a,*}

^aCancer Prognostics and Health Outcomes Unit, University of Montreal Health Center, Montreal, Quebec, Canada

^bMartiniclinic, Prostate Cancer Center Hamburg-Eppendorf, Hamburg, Germany

^cDepartment of Urology, Vita-Salute San Raffaele, Milan, Italy

^dDepartment of Urology, University of Texas Southwestern Medical Center, Dallas, TX, USA

The outcomes of upper urinary tract urothelial carcinoma (UTUC) are relatively poorly explored. Three types of databases may be used to better elucidate the effect of risk factors and the impact of various therapeutic modalities: randomized controlled trials (RCTs), multi-institutional case series [1–4], and population-based registries [5].

RCTs are ideal for assessing therapeutic alternatives. Unfortunately, RCTs are virtually nonexistent for UTUC; therefore, it is doubtful that multi-institutional, randomized trials will provide information regarding most bias-free relative efficacy of available treatment options for UTUC within a short or intermediate time frame. Moreover, the applicability of the findings from RCTs may not be ideal in the general population. The findings of an RCT comparing open nephroureterectomy (ONU) and laparoscopic nephroureterectomy (LNU) at high-volume tertiary-care referral centers, for example, may not be applicable in the community or even in lower volume, less specialized institutions.

To circumvent this limitation, several investigators, including the Upper Tract Urothelial Carcinoma Collaboration, relied on multi-institutional databases [1–4]. The current study by Capitanio et al [2], which specifically addressed the efficacy of ONU versus LNU, represents an example of a large-scale database. Despite an excellent confidence level regarding the lack of the presence of outcome differences, such databases are limited by selection criteria. Patients who are treated at tertiary-care centers that maintain clinical records and that participate in multi-institutional studies may be different from those treated in the community or even at less prestigious referral centers. Moreover, the investigation, treatment, and follow-up at such tertiary-care centers may differ from other institutions. Consequently, results derived from tertiary-care centers need to be validated in the community to ensure generalizability in that setting.

Population-based data sets, such as the Surveillance, Epidemiology, and End Results (SEER) registry, may circumvent the tertiary-care selection biases [6–9]. The amount of detail that may be derived from such databases, however, cannot parallel that of either RCTs or well-designed institutional databases. Therefore, limited specificity is the price of generalizability in population-based databases. Moreover, population-based registries are rare. The SEER database allows the study of urologic tumors in the United States; however, except for the Scandinavian countries, no equivalent is yet available in Europe, Asia, or Africa. Efforts should be made to develop population-based tumor registries in other countries and on other continents. Moreover, efforts should be made to increase the amount of information available for each individual patient within the existing population-based databases.

In summary, as highlighted by Liatsikos and Kallidonis [10], Capitanio et al's study [2] suffers from several limitations for which the authors cannot control. Unfortunately, there are no alternatives for completely circumventing various selection biases that undermine the validity and the generalizability of all databases. Consequently, it is

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* Corresponding author. Cancer Prognostics and Health Outcomes Unit, University of Montreal Health Center (CHUM), 1058, rue St-Denis, Montréal, Québec, Canada, H2X 3J4 Tel. +1 514 890 8000 35336;

Fax: +1 514 412 7363.

E-mail address: pierre.karakiewicz@umontreal.ca (P.I. Karakiewicz).

important to critically appraise the available data before directly implementing it in clinical practice.

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