

## BLADDER CANCER

## Support added for neoadjuvant therapy in MIBC

Neoadjuvant chemotherapy prior to radical cystectomy can improve outcomes in patients with muscle-invasive bladder cancer (MIBC) and is recommended in international treatment guidelines; however, widespread concerns regarding the limited uptake of this approach persist. Two new papers in *European Urology* support the wider adoption of neoadjuvant chemotherapy in patients with MIBC.

“...despite rising adoption, barriers to neoadjuvant chemotherapy remain”

“Many hypothesize that one of the main reasons for the low rates of neoadjuvant chemotherapy use in patients with bladder cancer is related to concerns regarding the risks of perioperative morbidity and mortality associated with this systemic treatment,” explains Giorgio Gandaglia, corresponding author for one of the new papers. To examine whether these worries are justified, Gandaglia *et al.* retrospectively analysed perioperative complications among 3,760 patients with MIBC diagnosed between 2000 and 2009, recorded in a SEER–Medicare database.

Propensity-score-matched data revealed no difference in 30-day or 90-day postoperative complications, including hospital readmission and blood transfusion rates, duration of hospitalization, and mortality, between patients who underwent radical

cystectomy with or without prior chemotherapy. “We should underline that our results are consistent with level 1 evidence from a previous landmark prospective randomized trial, and it is reassuring to know that the results were duplicated in our community-based study,” states Gandaglia.

Nevertheless, the authors note that >60% of patients suffer complications within 90 days of radical cystectomy, most necessitating readmission, and almost 10% die during this period, highlighting the considerable risk of surgery, independent of chemotherapy. “Further investigations are needed to identify modifiable factors that can help decrease the risk of complications and short-term postoperative mortality after radical cystectomy,” says Gandaglia.

Importantly, “our results showed that only 11% of patients with MIBC included in this large contemporary cohort representative of the US population received neoadjuvant chemotherapy,” adds Gandaglia. According to the consensus guidelines, most of the patients analysed should have received neoadjuvant chemotherapy, adding to concerns that improved adherence to these recommendations is needed.

In the second paper, Reardon *et al.* report the use of neoadjuvant chemotherapy in 5,962 patients with MIBC recorded in the US National Cancer Data Base. “Perioperative chemotherapy use increased from 29.5% in 2006 to 39.8%

in 2010, with neoadjuvant usage increasing from 10.1% to 20.8% over this period,” states Reardon. “I believe this shows an encouraging adoption of level 1 evidence by clinicians,” he continues. Clearly, a 100% administration rate is not possible, as “between 40–60% of patients might actually qualify for standard platinum-based regimens based on renal function or performance status; therefore, current usage might be approaching the theoretical apex,” concludes Reardon. However, nontumour-related factors such as age, insurance status and income were found to substantially influence the use of chemotherapy. Thus, despite rising adoption, barriers to neoadjuvant chemotherapy remain.

David Killock

**Original articles** Gandaglia, G. *et al.*, The effect of neoadjuvant chemotherapy on perioperative outcomes in patients who have bladder cancer treated with radical cystectomy: a population-based study. *Eur. Urol.* doi:10.1016/j.eur-uro.2014.01.014 | Reardon, Z. D. *et al.*, Trends in the use of perioperative chemotherapy for localized and locally advanced muscle-invasive bladder cancer: a sign of changing tides. *Eur. Urol.* doi:10.1016/j.eur-uro.2014.01.009.

