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Letter to the Editor

Reply to Nicholas G. Zaorsky, Daniel E. Spratt, and Pierre Blanchard's Letter to the Editor re: Marco Moschini, Emanuele Zaffuto, Pierre I. Karakiewicz, et al. External Beam Radiotherapy Increases the Risk of Bladder Cancer When Compared with Radical Prostatectomy in Patients Affected by Prostate Cancer: A Population-based Analysis. Eur Urol. In press. https://doi.org/10.1016/j.eururo.2018.09.034

We welcome the important comments raised by Zaorsky and colleagues [1] regarding our recently published article assessing the higher risk of developing secondary bladder cancer for patients affected by localized prostate cancer treated with external beam radiotherapy (RT) compared to those treated with radical prostatectomy.

We recognize the limitations of the Surveillance, Epidemiology and End Results (SEER)-Medicare database, especially regarding RT. RT dose, volume treated, technique, treatment intent, and of course many important risk factors for the development of secondary cancer are only partly reported in the SEER-Medicare database, so only suboptimal analyses are possible. This issue was extensively discussed in the limitation section of our discussion. The SEER-Medicare database has to be considered as a hypothesis-generating source and might be a useful tool for testing hypotheses from daily clinical practice.

In support of their theories, Zaorsky and colleagues [2] reported results from a meta-analysis of 6884 patients from 12 randomized controlled trials of localized prostate cancer treated with external beam RT, which revealed that almost no patients have died from a secondary cancer. However, almost none of the trials included reported specific data regarding secondary bladder cancer, and no data regarding other risk factors for bladder cancer were considered.

Finally, we did not perform any survival analyses since our aim was to assess the impact of RT on the risk of developing a secondary bladder cancer. However, given the relatively low incidence and the advanced age of patients, it would not be surprising to find no effect on survival outcomes for this occurrence. However, the occurrence of a new bladder cancer, even if without a direct impact on survival outcomes, has to be considered because of the high impact on quality of life and health care costs.

In summary, we agree that the only correct way to answer almost every important question in medicine is a well-designed prospective trial. Well-designed meta-analyses of prospective trials are also possible; however, analyses of population registries can also be helpful in testing questions that arise in daily clinical practice.

Conflicts of interest: The authors have nothing to disclose.

References

[1] Moschini M, Zaffuto E, Karakiewicz PI, et al. External beam radiotherapy increases the risk of bladder cancer when compared with radical prostatectomy in patients affected by prostate cancer: a population-based analysis. Eur Urol. In press. https://doi.org/10.1016/j.eururo.2018.09.034.

[2] Zaorsky NG, Keith SW, Shaikh T, et al. Impact of radiation therapy dose escalation on prostate cancer outcomes and toxicities. Am J Clin Oncol 2018;41:409–15.

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