



Stereotactic body radiotherapy for oligoprogressive lesions in metastatic castration-resistant prostate cancer patients – A closer inspection will improve your vision

Dear Sir

The study conducted by Baron et al. [1] piqued our interest because it evaluated the oncological outcome after stereotactic body radiation therapy (SBRT) for patients with oligoprogressive metastatic castration-resistant prostate cancer (omCRPC). The authors concluded that SBRT for omCRPC patients provides excellent local control and tolerance and is an acceptable approach to postponing systemic therapeutic escalation and avoiding its side effects. Certain aspects of the study's findings, however, require clarification for a more complete understanding.

The implementation of prostate-specific membrane antigen-positron emission tomography/computed tomography (PSMA-PET/CT) has facilitated early detection of metastasis and recurrence. In a multicentric retrospective study of 200 patients with castration-resistant prostate cancer (CRPC), PSMA/PET-CT was able to detect metastatic disease in 55 % of patients who were designated as M0 based on conventional imaging [2]. In 67 CRPC patients with 133 lesions treated with PSMA-PET/CT-based stereotactic body radiotherapy (SBRT), we found 2-year overall survival (OS) and progression-free survival (PFS) rates of 86.9 % and 34.4 %, respectively [3]. Although the authors stated that the imaging workup was left to the discretion of participating centers in this article, detailed information about the imaging modalities, specifically PSMA-PET/CT, is required to better evaluate the treatment results.

Their study, according to the authors, is the first to report systemic treatment escalation-free survival (STE-FS) from systemic therapy following SBRT in patients with mCRPC. In contrast, we have recently published two studies that demonstrate the predictive factors for NEST-free survival (NEST-FS) in mCRPC patients and the impact of SBRT on next-line systemic treatment (NEST) change [3,4]. We demonstrated in both studies that SBRT could be utilized to treat oligoprogressive lesions in patients with CRPC. The treatment was effective, well-tolerated, and prolonged the effect of ADT by delaying NEST.

This study provides evidence of the effectiveness of SBRT in patients with mCRPC in delaying STE. We believe that by addressing our concerns, the readability of study will be enhanced.

CRedit authorship contribution statement

Cem Onal: Project administration, Supervision, Writing – original

draft, Writing – review & editing. **Aysenur Elmali:** Methodology, Supervision, Writing – review & editing. **Ozan Cem Guler:** Methodology, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- [1] Baron D, Pasquier D, Pace-Loscos T, Vandendorpe B, Schiappa R, Ortholan C, et al. Stereotactic body radiation therapy to postpone systemic therapy escalation for castration-resistant prostate cancer: A multicenter retrospective analysis. *Clin Transl Radiat Oncol* 2024;45:100710.
- [2] Fendler WP, Weber M, Iravani A, Hofman MS, Calais J, Czernin J, et al. Prostate-specific membrane antigen ligand positron emission tomography in men with nonmetastatic castration-resistant prostate cancer. *Clin Cancer Res* 2019;25(24):7448–54.
- [3] Onal C, Ozyigit G, Oymak E, Guler OC, Tilki B, Hurmuz P, et al. Stereotactic radiotherapy to oligoprogressive lesions detected with (68)Ga-PSMA-PET/CT in castration-resistant prostate cancer patients. *Eur J Nucl Med Mol Imaging* 2021;48(11):3683–92.
- [4] Onal C, Kose F, Ozyigit G, Aksoy S, Oymak E, Muallaoglu S, et al. Stereotactic body radiotherapy for oligoprogressive lesions in metastatic castration-resistant prostate cancer patients during abiraterone/enzalutamide treatment. *Prostate* 2021;81(9):543–52.

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