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Letter to the Editor

METASTATIC DIRECTED THERAPY IN OLIGOMETASTATIC PROSTATE CANCER

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Dear Editor,

We reviewed the article by Ost et al[1] recently published in the *Journal of Clinical Oncology* with great intrigue and note that it adds much value to the current literature on oligometastatic prostate cancer treatment. We hope to draw attention to this study and share some of these insights with readers of the *Journal of Men's Health*.

The current standard of care for most patients with metastatic recurrence after treatment with localized prostate cancer (PCa) disease is Androgen-Deprivation Therapy (ADT) by means of medical or surgical castration.[2] This approach has been shown to delay PCa progression and increase survival rates; however, it can cause significant adverse effects which has led to the search for alternative treatment options.[3]

Patients diagnosed with a limited number of metastases, called oligometastases, have been found to have better outcomes than patients with widely metastatic PCa.[4] Clinically, this implies that localized forms of treatment, such as metastases-directed therapy (MDT) or stereotactic body radiotherapy (SBRT), may be effective in these patients. A systematic review by Ost et al[5] analyzed 15 single-arm studies looking at the effectiveness of MDT. They found 51% of patients were progression free one to three years after salvage MDT. This review provided promising evidence that MDT may be an effective treatment for oligometastatic PCa, however, the review was limited by inclusion of studies with a low number and the heterogeneity of patients treated, and non-standardized use of sequential treatments. Thus, the need for a randomized control trial to further study the efficacy of MDT treatment compared to the current standard of care became evident after this review.

This is where the Surveillance or metastasis-directed Therapy for OligoMetastatic Prostate cancer recurrence (STOMP) trial by Ost et al[1] contributes greatly to the existing literature. The main outcome of the STOMP trial was that men randomly assigned to the MDT group had longer mean ADT-free survival of 21 (80% CI, 14 to 29) months compared to the 13 (80% CI, 12 to 17) months for the active surveillance group. The MDT arm also proved to be safe, with only 17% grade 1 toxicity and no grade 2 or higher events found among patients. This prospective study helps to validate a number of the previous retrospective case series and provides stronger evidence that MDT via surgery or

radiotherapy may be a better oncological and safer treatment option for select patients with oligometastatic PCa recurrence as compared to surveillance. We agree with Phillip et al[6] that studying MDT with immediate ADT may be necessary to fully understand the overall survival benefits associated with MDT as opposed to measuring ADT-free survival as the primary outcome. Although there has been much progress made in the management and treatment of oligometastatic prostate cancer, many questions still remain.

There is some evidence from retrospective studies of efficacy of local treatment of prostate in presence of metastatic disease, and currently several ongoing trials are exploring this in metastatic prostate cancer patients.[7] If the results of these trials are encouraging, coupled with studies on MDT, it can be speculated to simultaneously treat both primary and metastatic sites in patients with metastatic prostate cancer for improved oncological outcomes. It would be interesting to see how future studies in this patient population pans out. In addition to clinical parameters, future trials should also incorporate genomic markers to identify the subgroups which might benefit the most from these aggressive strategies.

Nevertheless, the next step as Ost et al[1] stated is to test MDT in future phase III clinical trials. We congratulate Ost et al. on the contributions made by the STOMP trial and look forward to following it in the future.

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