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Radiotherapy for metastatic prostate cancer

Authors' reply

Compliance with randomised treatment in the STAMPEDE radiotherapy comparison was very good.[1] Of the 1032 patients randomised to standard of care and radiotherapy, 968 (94%) received radiotherapy within 1 year of randomisation. Of the 1029 patients randomised to standard of care alone, only 20 (2%) received radiotherapy within 1 year of randomisation. Any confusion on this point could have arisen because the choice of radiotherapy fractionation schedule for an individual patient, should they be allocated to receive radiotherapy, was nominated before randomisation.

The two radiotherapy schedules used are predicted to have similar efficacy. Assuming an alpha to beta ratio in the range of 1·5–3·0, and without any correction for time, the equivalent doses in 2 Gy fractions for 55 Gy in 20 fractions schedule is 63–67 Gy and 65–77 Gy for the 36 Gy in 6 fractions schedule.

We agree that patients with low-burden metastatic disease, as defined using the CHAARTED trial criteria, vary in their pattern of spread and in their tumour biology, and that this classification of disease burden is made using CT and bone scan, and is not readily applicable to patients imaged using PET. We also agree that further studies should be done on potential factors that might predict benefit from prostate radiotherapy in men with metastatic disease. Such exploratory studies are underway using the STAMPEDE dataset. However, the prespecified analyses

showed that disease burden, despite all its limitations, was a significant (p=0.01) predictive factor for benefit from prostate radiotherapy. We believe that the STAMPEDE trial, taken together with the results from HORRAD,[2] provides sound evidence to recommend prostate radiotherapy for patients with newly diagnosed, low-burden metastatic disease.

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1 Parker CC, James ND, Brawley CD, et al. Radiotherapy to the primary tumour for newly diagnosed, metastatic prostate cancer (STAMPEDE): a randomised controlled phase 3 trial. *Lancet* 2018; **392:** 2353–66.

2 Boevé LMS, Hulshof MCCM, Vis AN, et al. Effect on survival of androgen deprivation therapy alone compared to androgen deprivation therapy combined with concurrent radiation therapy to the prostate in patients with primary bone metastatic prostate cancer in a prospective randomised clinical trial: data from the HORRAD trial. *Eur Urol* 2019; **75:** 410–18.