BJC

British Journal of Cancer (2018) 118, e2 | doi: 10.1038/bjc.2017.406

Reply to 'Comment on 'Efficacy of stereotactic body radiotherapy in oligorecurrent and in oligoprogressive prostate cancer: new evidence from a multicentric study''

Luca Triggiani[1], Rosario Mazzola[2], Stefano Maria Magrini[1], Filippo Alongi[*,2,3] and Michela Buglione[1]

[1]Radiation Oncology, University and Spedali Civili Hospital, Brescia, Italy; [2]Radiation Oncology, Sacro Cuore Don Calabria Hospital, Negrar-Verona, Italy and [3]University of Brescia, Brescia, Italy

Sir,

The letter by Bravo (2017) and colleagues that was raised by our study, recently published in the *British Journal of Cancer* (Triggiani *et al*, 2017), gives us the opportunity to expand the discussion regarding the results following our study.

In our study (Triggiani *et al*, 2017), we tried to design a large-scale retrospective multicentre trial with the intent to investigate the role of SBRT in oligorecurrent castrate-sensitive and oligoprogressive castration-resistant prostate cancer. Although the limits related to the retrospective nature, inclusion criteria were highly selective. This last aspect justified the small number of patients enrolled by four of the participating nine centres. We are conscious that the follow-up is relatively short (i.e., median of 20.4 months in oligorecurrent group and 24 months in the oligoprogressive arm): nevertheless, the outcomes here reported (Triggiani *et al*, 2017), in terms of distant progression-free survival and androgen deprivation therapy-free survival in oligorecurrent patients, as well as distant progression-free survival and second-line systemic treatment-free survival in the oligoprogressive castration-resistant group, were exciting. Regarding the last group, we obtained interesting results considering the worse prognosis of these patients. Provocatively, metastases-directed focal therapy could be considered a 'new drug' in the therapeutic armamentarium available for the heterogeneous landscape of oligometastatic prostate cancer; moreover, SBRT can easily be integrated with systemic treatments.

Considering radiation schedules, local treatments were given according to the policy of each centre. To equalise the different schedules, the biological effective dose (BED) was calculated assuming an α/β of 3 Gy. It is known that the BED calculation is a continuous field of research with several 'gray areas'. To date, a BED of at least 80 Gy, using an α/βequal to 3 Gy is generally recommended in the setting of oligometastatic prostate cancer, to guarantee excellent local control rates (Ost *et al*, 2016). This last point was considered among the inclusion criteria. Conversely to other experiences (Ost *et al*, 2016), we did not find any statistical correlation between distant progression-free survival and BED values. From our point of view, this aspect could be explained by the inclusion of many patients treated for bone lesions and by the percentage of patients given adjuvant androgen deprivation therapy, which was smaller than in other experiences (Ost *et al*, 2016). These last characteristics impact on oligometastatic prostate cancer management and prognosis. In our opinion, considering BED as the only biological factor influencing the results of SBRT may be deceptive in the current molecular era. Obviously, oligometastatic patients represent a mosaicism in which unknown biological aspects could have a relevant role in the natural history of the disease (Alongi *et al*, 2012, 2017).

The present findings may be viewed as new evidence to support clinicians in a possible scenario of SBRT application in prostate cancer patients.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

Alongi F, Arcangeli S, Filippi AR, Ricardi U, Scorsetti M (2012) Review and uses of stereotactic body radiation therapy for oligometastases. *Oncologist* **17**: 1100–1107.

Alongi F, Mazzola R, Ricchetti F (2017) Consolidative local therapy in oligometastatic patients. *Lancet Oncol* **18**: e60.

Bravo I (2017) Comment on 'Efficacy of stereotactic body radiotherapy in oligorecurrent and in oligoprogressive prostate cancer: new evidence from a multicentric study'. *Br J Cancer*; e-pub ahead of print 16 November 2017; doi:10.1038/bjc.2017.342.

Ost P, Jereczek-Fossa BA, As NV, Zilli T, Muacevic A, Olivier K, Henderson D, Casamassima F, Orecchia R, Surgo A, Brown L, Tree A, Miralbell R, De Meerleer G (2016) Progression-free survival following stereotactic body radiotherapy for oligometastatic prostate cancer treatment-naive recurrence: a multi-institutional analysis. *Eur Urol* **69**: 9–12.

Triggiani L, Alongi F, Buglione M, Detti B, Santoni R, Bruni A, Maranzano E, Lohr F, D'Angelillo R, Magli A, Bonetta A, Mazzola R, Pasinetti N, Francolini G, Ingrosso G, Trippa F, Fersino S, Borghetti P, Ghirardelli P, Magrini SM (2017) Efficacy of stereotactic body radiotherapy in oligorecurrent and in oligoprogressive prostate cancer: new evidence from a multicentric study. *Br J Cancer* **116**: 1520–1525.

*Correspondence: Professor F Alongi; E-mail: dott.filippoalongi@gmail.com

Published online 16 November 2017