Tree, Shiarli, Patel and colleagues should have been more critical in their review articles about SABR in the management of patients with metastatic disease.[1-3] ‘Oligometastatic’ disease has no biological basis or agreed definition.[4] The observational evidence of treatment is all flawed by selection and immortal time biases. Showing whether ablative treatments, such as SABR, improve survival requires randomised trials (RCTs) with overall survival (OS) as the primary endpoint. Progression free survival (PFS) is not an adequate surrogate endpoint because radical treatment or removal of visible metastases will inevitably improve PFS without necessarily influencing OS. There are only three such RCTs. The CLOCC trial[5] (119 patients) investigated the use of radiofrequency ablation in CRC patients with liver metastases and reported a hazard ratio [HR] 0.58, 95% CI 0.38 to 0.88. But the mean number of metastases in the two arms differed and there are uncertainties in the survival analysis, undermining the reliability of the results. The SABR-COMET trial [6], also small (99 patients), showed a survival advantage for intervention. But it is also flawed by imbalance in key prognostic factors, with more patients with a solitary metastasis and more patients with breast and prostate cancer in the intervention arm. The PulMiCC trial investigating surgical removal of CRC lung metastases [7] closed early and, despite 512 patients being registered, only 65 were in the end randomised to metastasectomy or not. There was no significant difference in OS (HR 0.82, 95% CI 0.43 -1.56). These three RCTs comprise the meagre evidence supporting the use of any surgical or ablative treatment for ‘oligometastases’. Were this intervention a drug, NICE would not approve it because it has not been shown to be clinically effective. SABR for metastases should not be widely implemented until it has been subject to proper scrutiny and there is reliable evidence of survival benefit.

Reference List


2 Shiarli AM, McDonald F, Gomez DR: When Should we Irradiate the Primary in Metastatic Lung Cancer? Clin Oncol (R Coll Radiol ) 2019;31:815-823.

3 Patel PH, Palma D, McDonald F, Tree AC: The Dandelion Dilemma Revisited for Oligoprogression: Treat the Whole Lawn or Weed Selectively? Clin Oncol (R Coll Radiol ) 2019;31:824-833.


Authors:
Fergus Macbeth, DM FRCR
Associate Director,
Centre for Trials Research, Cardiff University, Cardiff, UK

Tom Treasure MD
Professor of Cardiothoracic Surgery
Clinical Operational Research Unit, University College London, UK