

 LUNG CANCER

Local therapy, global benefits?

Retrospective data indicate that failure of first-line chemotherapy in patients with non-small-cell lung cancer and ≤ 3 metastases occurs mostly at lesions known to exist prior to treatment, and that advances in local and maintenance therapies can be leveraged to improve survival. This possibility has now been tested prospectively in a phase II trial.

Patients with at least stable disease after first-line treatment were randomly assigned to receive either local treatment plus optional maintenance therapy, or maintenance therapy or observation alone. As first author Daniel Gomez explains, “the intention was to make the trial pragmatic in nature, allowing physicians to deliver the treatment that they would in their clinic. For example, we allowed for variations in frontline treatment based on the presence of *EGFR* or *ALK* alterations, permitted treatment of CNS lesions prior to systemic therapy, and put no major restrictions on the use of local therapies.”

Gomez adds: “the study was powered to enrol 94 patients; however, after 49 patients were randomized, the study was closed by the Data Safety Monitoring Committee for efficacy observed in the experimental arm.” The expected median progression-free survival (PFS) with local therapy was 7 months versus 4 months with maintenance therapy only, but an annual analysis of the data revealed that the actual median PFS durations were 11.9 months versus 3.9 months.

In an exploratory analysis, local therapy also significantly delayed the appearance of disease at new sites. “This result suggests that local therapy can control microscopic disease outside the treated fields, which might involve host factors (the immune system) or tumour factors (reduced tumour-cell seeding),” Gomez opines. On the basis of these data, the next step would be to perform a similar phase III trial using overall survival as the end point, possibly in combination with other novel therapies.

Gomez concludes that, “while historically metastatic lung cancer has been thought to be uniformly ‘incurable’, patient subsets that achieve long-term survival with selective aggressive approaches can be defined.”

David Killock

ORIGINAL ARTICLE Gomez, D. R. *et al.* Local consolidative therapy versus maintenance therapy or observation for patients with oligometastatic non-small-cell lung cancer without progression after first-line systemic therapy: a multicentre, randomised, controlled, phase 2 study. *Lancet Oncol.* [http://dx.doi.org/10.1016/S1470-2045\(16\)30532-0](http://dx.doi.org/10.1016/S1470-2045(16)30532-0) (2016)