



Letters

Survival Outcomes From Concurrent Chemoradiation for Lung Cancer in Indian Patients are Comparable With Reported UK Outcomes



Madam — We read with interest the article by Iqbal *et al.* [1], reporting the median progression-free survival (PFS) and overall survival of 23.4 and 43.4 months, respectively, in 100 patients with locally advanced non-small cell lung cancer treated using the SOCCAR trial hypofractionated concurrent chemoradiation (CCRT) regimen.

We have recently shown that intensity-modulated radiotherapy (IMRT) enables curative-intent radiotherapy in patients with large volume locally advanced non-small cell lung cancer [2]. In our cohort, 139 patients received CCRT using conventionally fractionated radiotherapy and concurrent cisplatin and etoposide. The median PFS and overall survival for this cohort were 19.2 and 30.3 months, respectively, of which the stage IIIA patients had a median PFS and overall survival of 22.6 and 32.6 months, respectively. CCRT was well tolerated in our series, with chemotherapy dose reduction required in 12 patients (8.6%) and 88% ($n = 122$) completing the planned cycles of chemotherapy. These figures are comparable with those of Iqbal *et al.* [1].

Our cohort had a larger proportion of stage IIIB patients (43%, $n = 60$) compared with 32% in Iqbal *et al.* [1] and a larger median planning target volume (PTV) of 693 cm³ compared with 450 cm³ reported in the RTOG 0617 trial [3]. Consequently, a larger proportion (50.5%) underwent IMRT, unlike the systematic use in the latter 27% of the cohort by Iqbal *et al.* As PTV was a significant predictor of median overall survival in our cohort (53.8 months for PTV \leq 500 cm³ [$n = 36$] versus 24.9 months for PTV $>$ 500 cm³ [$n = 103$]; $P < 0.01$), we are very interested to know the PTV data of Iqbal *et al.* Moreover, our algorithm for selective use of IMRT rather than blanket use could enable more resource sparing for a busy department [4].

Our results showed that using IMRT enables the delivery of curative CCRT to achieve an overall survival similar to the benchmark set by the standard arm of the RTOG 0617 trial [3,5]. Additionally, patients treated in developing nations like India seem to experience similar outcomes as those treated in more developed nations when appropriate doublet CCRT is used.

Conflict of interest

M. Arunsingh received honoraria for consultation/lecturing from Astra Zeneca; R.K. Shrimali received honoraria for consultation/lecturing from Roche, Pfizer, Novartis; S. Chatterjee received honoraria for consultation/lecturing from Roche, Novartis.

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References

- [1] Iqbal MS, Vashisht G, McMenemin R, *et al.* Hypofractionated concomitant chemoradiation in inoperable locally advanced non-small cell lung cancer: a report on 100 patients and a systematic review. *Clin Oncol* 2019;31(2):e1–e10. <https://doi.org/10.1016/j.clon.2018.10.006>.
- [2] Shrimali RK, Chakraborty S, Prasath S, Arun B, Chatterjee S. Impact of modern radiotherapy techniques on survival outcomes for unselected patients with large volume non-small cell lung cancer. *Br J Radiol* 2018. <https://doi.org/10.1259/bjr.20180928>.
- [3] Chun SG, Hu C, Choy H, *et al.* Impact of intensity-modulated radiation therapy technique for locally advanced non-small-cell lung cancer: a secondary analysis of the NRG Oncology RTOG 0617 randomized clinical trial. *J Clin Oncol* 2017;35:56–62.
- [4] Shrimali RK, Chakraborty S, Bhattacharyya T, *et al.* Development and validation of a decision support tool to select IMRT as radiotherapy treatment planning modality for patients with locoregionally advanced non-small cell lung cancers (NSCLC). *Br J Radiol* 2018. <https://doi.org/10.1259/bjr.20180431>.
- [5] Bradley JD, Paulus R, Komaki R, *et al.* Standard-dose versus high-dose conformal radiotherapy with concurrent and consolidation carboplatin plus paclitaxel with or without cetuximab for patients with stage IIIA or IIIB non-small-cell lung cancer (RTOG 0617): a randomised, two-by-two factorial phase 3 study. *Lancet Oncol* 2015;16:187–199.

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