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Letter

Hypofractionated Accelerated Concurrent Chemoradiotherapy in Inoperable Stage III Non-small Cell Lung Cancer: SOCCAR. A Large Single-Centre Experience



Madam — Recent Royal College of Radiologists' treatment guidelines for lung cancer during the COVID-19 pandemic [1] motivated us to share the findings of our recent audit of accelerated hypofractionated concurrent chemoradiotherapy in inoperable stage III non-small cell lung cancer (NSCLC; SOCCAR regimen): 55 Gy in 20 fractions over 26 days with concomitant chemotherapy (cisplatin and vinorelbine) [2].

All 163 stage III A/B NSCLC patients who received this regimen between January 2012 and December 2016 were included. Data were censored on 31 March 2018. Kaplan–Meier analysis was used to estimate 1-, 2- and 3-year survival rates and the median overall survival. The median follow-up was 38 months.

Our data allay concerns over the delivery of chemotherapy concurrently with hypofractionated radiotherapy and confirm the efficacy of the SOCCAR regimen. Only 3% of our patients did not complete the planned radiotherapy and 76% received both cycles of concurrent chemotherapy. There were no 30- or 90-day treatment-related deaths. The median overall survival was 31.2 months; 1-, 2- and 3-year survival rates were 75, 56 and 45%, respectively.

To our knowledge this is the largest series of patients treated with this regimen; a number similar to the control arm of RTOG 0617. The median survival of 31.2 months in this real-life population outperforms all the 2 Gy per fraction arms delivering 60–66 Gy in recently published trial populations prior to the use of adjuvant immunotherapy. The median survival in the control arm of RTOG 0617 was 28.7 months [3]. The median survival was 25 and 26.8 months in the arms of the PROCLAIM trial [4] and 29.1 months in the control arm of PACIFIC [5].

Our findings validate a smaller series that reported a median survival of 43 months in patients treated with the SOCCAR regimen [6] and support the use of moderately hypofractionated radiotherapy with concomitant chemotherapy in patients with stage III NSCLC.

Conflicts of interest

Authors declare no conflicts of interest.

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