

Responds to the reviewer's comments:

Review of the paper entitled: "A survival nomogram model for patients with resectable non-small cell lung cancer and lymph node metastasis (N1 or N2) based on the Surveillance, Epidemiology, and End Results Database and single-center data" by Ceng He, Department of Thoracic Surgery, the First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, China.

The authors reported the overall survival and the impact on that of several variables including the N status in a large cohort of patients harvested from the SEER database. They concluded that the number of positive lymph nodes (NPLD) and the logODDS were the strongest risk factors of worse OS at the multivariable analysis and at the constructed nomogram. Moreover, they focused on the post-operative radiotherapy (RT) and they found that RT have no impact on OS whereas chemotherapy showed an association with OS. The large numbers of the dataset and the rigorous statistical analyses are the strengths of this study, but I found some issues that need explanation or integration by the authors:

Comment1: methods: I suggest clearly including if the nodal status from the SEER database is clinical or pathological;

Reply1: Thank you for reading our manuscript and reviewing it, which will help us improve it to a better scientific level. We modified our text as advised and the AJCC TNM system from the SEER database is pathological.

Changes in the text: We modified our text as advised (see page 5, line 124).

Comment2: regarding the selection criteria, I suggest excluding patients undergoing pre-operative chemotherapy for N2 disease because the prognosis is different between preoperative evident N2; N1 disease; unforeseen N2 or incidental N2;

Reply2: We feel very sorry about that we can not exclude patients undergoing pre-operative chemotherapy for N2 disease because the SEER database didn't mentioned the detailed chemotherapy information. The SEER database chemotherapy information just included yes and no/unknown.

Changes in the text: none.

Comment3: I suggest explaining the timing of the treatment: I think that the authors should explain how many patients undergoing preoperative chemotherapy or post-operative, how many had pre and post-operative RT; how many patients had upfront surgery followed by adjuvant therapy. This is crucial to understand what kind of treatment pathway could be advantageous in such patients;

Reply3: We can't agree more with your suggestion. In the external validation cohort, 53 patients undergoing adjuvant chemotherapy and 21 patients received

post-operative RT. We excluded patients with pre-operative RT as exclusion criteria mentioned. However, we must acknowledge that we want to present data of patients with neoadjuvant chemotherapy. The result is we can not provide the data because of the number of patients received neoadjuvant chemotherapy is too small limited by the year of treatment. The SEER database chemotherapy information just included yes and no/unknown. Therefore, we feel sorry about this.

Changes in the text: We modified our text as suggestion (see page 8, line 194).

Comment4: I think that SEER database has some limits and these should be analyzed and cited for example the absence of any details about chemotherapeutic regimens, absence of any details about recurrence (disease free survival and progression free survival);

Reply4: I must admit that the SEER database has some limits that it lacks of any details about chemotherapeutic regimens and details about recurrence (disease free survival and progression free survival). In further studies, we want to conduct multicenter experiments to refine this information.

Changes in the text: We analyzed the limits of SEER database in discussion (see page 12, line308)

Comment5: bronchoalveolar carcinoma is a dead entity (table 1) and should be excluded from the analysis;

Reply5: We agree with you and bronchoalveolar carcinoma was excluded from the table1 and table2.

Changes in the text: We modified our text as advised (see page 19 and 21, table1 and table2).

Comment6: please insert the clinical and pathological stage into the table;

Reply6: Thanks for your suggestion. We have added the pathological stage into the table1 and table2.

Changes in the text: We have corrected the table1 and table2 (see page 19, 20 and 21, table1 and table2).

Comment7: table 2: why did the authors exclude RT from the multivariable analysis if the OR and p value showed a significant association between OS and RT? Moreover from this datum RT seems associated with better OS (OR significantly less than 1) and completely different from the results of the recent LUNGART trial.

Reply7: Thanks for your suggestion. We have add Radiation sequence with surgery and Regional nodes examined into multivariable analysis. These two variables have no statistically significant.

Changes in the text: We modified our text as advised (see page 8, line 201 and table2).