Peer Review File

Article information: https://dx.doi.org/10.21037/jtd-23-381

Reviewer A

This paper develops a new clinical prognostic model with better diagnostic efficacy and better guidance for patient prognosis. The data in this paper are also of high value as it uses clinical data rather than database data, which is more in line with the characteristics of the Chinese population. However, the paper could still be improved to some extent:

Reply 1: We thanks for your positive feedback.

1. The diagnostic model in this paper lacks external validation, and it is recommended to add external validation data.

Reply 1: we failed to explore the external validation. We have added it as a limitation in the discussion. Page 7, line 213-214.

2. The discussion section of this paper suggests adding an updated exploration of relevant risk factors to flesh out the discussion section.

Reply 2: We thanks for your suggestion. We have added the updated exploration of relevant risk factors in the discussion. Page 8, line 180-196.

Reviewer B

- 1. Why are factors such as postoperative chemotherapy and radiotherapy not included in the multivariate analysis? Based on the data in Table 1, are these significant factors?
- Reply 1: In the present study, we hope to predict the risk of death for patients at the time of admission, so we did not include factors related to postoperative treatment. We have added related factors in the discussion. Page 5, line 166-168.
- 2. An important factor is the status of lesions of the lymph nodes, it significantly correlates with the histological type of lung cancer. Thus, the prognosis for patients with lung squamous cell carcinoma and N2-3 lymph node involvement is poor, but your analysis does not contain such data.
- Reply 2: According to table 1. The type of pathology was not significant difference between the survival and death group. So the type of pathology was not included in the further analysis. Moreover, the TNM staging was calculated according to the lymph node status. And we have showed the lymph node status in the results.
- 3. Did EGFR mutations determine? Targeted therapy in this case significantly affects the performance. Why were these factors not included in the study?
- Reply 3: We have discussed this as a limitation in the discussion. Page 7, line 212.

4. Were pulmonary comorbidities such as COPD taken into account? Smoking and its experience?

Reply 4: Smoking rate was not significant different between the survival and death, which was showed in table 1. And we have added the factor of COPD in the table 1 in the revised manuscript, but not significant difference was found. See table 1.