Peer Review File

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Reviewer A

This manuscript analyzes big data and validate nomograms to predict survival after treatment for patients with bronchopulmonary carcinoid tumors. I read with great interest and think that these results are interesting and practical. There are several comments I would like to make about the manuscript.

1.The authors sometimes write the word “tumor” as “tumour”. British or American English language should be used consistently in the paper. A paper should not mix words with British spelling with words with American spelling.

Response: Many thanks for your comment. We have modified the word "tumour" as "tumor" and highlighted them in red.

2. They sometimes write carcinoid as carcinoma in the manuscript and tables.

Response: Special thanks for your comment. We have changed the word "carcinoma" to "carcinoid" in the manuscript and tables and highlighted them in red.

3. I would like them to add the smoking status of patients to analyze.

Response: Thank you for underlining this deficiency. This problem was a limitation of this study. It is well known that lung malignancies are closely related to the smoking status of patients, and we also consider this issue. However, due to the limitations of the SEER database, we unable to obtain this information. In future studies, we will complete the relevant information to better solve this problem.

4. I believe that “Fig.4 “ is the most important information in this paper, therefore, the figure should be easier to read.

Response: Many thanks for your comment. We have added more detailed explanations of "Figure 5" in the results section (see page 11, line 239-242; page 12, line 255-258). Figure 5A showed the prediction of the 1-, 3-, and 5-year overall survival (OS) of bronchopulmonary carcinoid tumors (BPCs)in the nomogram model. Each variable was given a score on the points scale. By adding up the total scores shown in the bottom scale, the nomogram could predict the 1-, 3-, and 5-year OS for the individual patients. Figure 5B shown the prediction s of 1-year, 3-year, and 5-year cancer-specific survival (CSS) of BPCs in the nomogram model. Each variable had a score on the score scale. By adding the total scores shown in the underlying scale, the histogram could predict 1-, 3-, and 5-years CSS for each patient.

Reviewer B

General comments

This study is interesting, aiming to develop a novel prognostic nomogram for patients with bronchopulmonary carcinoid. However, there are not a few faults in the manuscript, which requires fundamental revision.

Minor comments

1. Line 160 on page 8, 'variables that achieved significance at $P < 0.1$ in univariate Cox regression were entered into multivariate Cox proportional hazard models for further analysis.' In table 2, however, the factors such as 'middle lobe,' regional,' 'tumor size,' 'lobectomy,' 'chemotherapy' were not included in the multivariate analysis. The same faults were found in table 3, such as 'SEER stage,' 'M stage' and 'Chemotherapy.'

Response: Thanks for your comment. Actually, when we carried out Cox multi-factor analysis, we did follow the " variables that achieved significance at $P < 0.1$ in univariate Cox regression were entered into multivariate Cox proportional hazard models for further analysis " mentioned in the part of methods. However, the method we used was "Forward: LR" in the univariate Cox regression, and the results only showed the 95% confidence intervals (CI) of the variables in the equation (i.e., the variables with *P*-value <0.05) and the results could not show the 95% CI of the variables not in the equation, so we did not record them in the table.

2. Line 151 and 152 on page 7, the TNM stage was shown in the 7th edition. However, the TNM stage was presented in the 8th edition in the results.

Response: Thank you for underlining this question. We have changed the word "8th" to "7th" in the tables and highlighted them in red.

3. If the T stage was not the predictor for CSS, tumor size must not be the predictor. Please explain the controversy.

Response: Thanks for your comment. The T stage of BPCs includes not only the size of the tumor but also the extent of tumor invasion. Moreover, the BPCs in this study were divided into two groups by the best cutoff value determined by X-tile (tumor size < 2.5cm, tumor size ≥ 2.5cm), while the T stage was divided into four groups (T1-4). The two grouping methods are not the same, so we think the above situation is possible.

4. Provide the x-tile analysis results of cutoff construction of the tumor size, 2.5cm.

Response: Thank you for the suggestion. We have added the information required as explained above (see page 9, line 190-194). In the training cohort, the X-tile analysis of CSS was performed using the data of patients in the SEER database to determine the optimal cut-off value for tumor size, We have added an image of the X-Tlie analysis (see figure 2). The optimal cut-off value was 2.4cm. According to the optimum cut-off points of the above values, patients then were divided into 2 groups (tumor size < 2.5cm, tumor size ≥ 2.5cm).

5. Line 336 to 340 on page 16, 'Compared with the seventh edition of the TNM staging system, the most significant change in the eighth edition was the decrease in tumor size. In other words…' is wrong. No tumors as T1 in the 7th edition can be classified into

the T2 stage in the 8th edition.

Response: Thank you for pointing this question out. We have revised the relevant content (see page 16, line 348-350). Compared with the seventh edition of the TNM staging system, the most significant change in the eighth edition was the decrease in tumor size. In other words, a tumor of a certain size may related to higher risk in the eighth edition of the TNM staging system compared with the seventh edition, indicating to some extent that the effect of tumor size on staging and prognosis is increasingly valued.