

Peer Review File

Article information: <https://dx.doi.org/10.21037/jtd-22-890>

Reviewer A

The authors presented a fascinating and well-written paper. Creating nomograms that allow for a precise risk assessment is currently an exciting direction, among others, in oncology and oncological surgery. An essential advantage of this work is the vast group of patients and the collection of various data, which are very relevant to NSCLC treatment.

Please allow some comments meant to improve the quality of the paper.

Comment 1. The paper needs some language editing. For example:

- Line 26 - "was" seems unnecessary here,
- Line 29- "the training group",
- Line 32- "the concordance index",
- Line 39- "the testing group",
- Line 40- put the comma before "which",
- Line 51- "were", instead of "was",
- Line 56- "a decrease in survival",
- Line 70 - "as" seems unnecessary after "considered".
- Line 75 - "still" seems unnecessary here,
- Line 77 - "for", instead of "of",
- Line 198 - "the survival",
- Line 216 - "to" instead of "for"

Reply 1: Thanks for the reviewer's comments to help us improve the first manuscript. we have modified our text as advised

Changes in the text:

See Page 4, line 67, Page 4, line 70, Page 4, line 73, Page 4, line 80, Page 4, line 81, Page 5, line 98, Page 5, line 95, Page 6, line 112, Page 12, line 247, Page 12, line 249, Page 11, line 239, and Page 12, line 258.

Comment 2. I have doubts about the sentence starting with "In the last decade, the main strategy ..." (line 50). Only for a decade? For example, the 5th edition of TNM for lung cancer was presented in 1997. I don't quite understand this sentence.

Reply 2: I'm sorry for the confusion caused by my expression. What I was trying to point out is that adjuvant therapy has been routinely recommended for patients with advanced lung cancer and not for patients with early-stage lung cancer based on the TNM staging system.

Changes in the text: see Page 5, line 98.

Comment 3. Sentences in lines 73 (from "With the wide application ...") to line number 78 (to the words " and adjuvant treatment " - I suggest transferring them to the Discussion section.

Reply 3: Thanks for the reviewer's comments. We considered your suggestion valuable and transferred the sentence to the discussion section.
Changes in the text: see Page 12, line 245.

Comment 4. Methods

Line 90 - "ranged" seems unnecessary here. Skip it or rewrite this part of the sentence.

Line 95 - "(3) age 18<and age >80 years old" - I suggest replacing it with an "age> 18 and <80" and include it in the inclusion criteria as mentioned above.

Line 99 - Please describe - what method of randomization was used?

Reply 4: Thanks for the reviewer's comments. I'm sorry for the lack of description of the methods used for grouping. We randomized the general population into 1:1 groups by R version.

Changes in the text: See Page 6, line 127, Page 7, line 131, and Page 7, line 136.

Comment 5.

Line 114 - The word "approach" does not seem most appropriate here. The approach is typically used in the context of surgical incision/access. I think the "extent of the operation" fits better here. Moreover, could you add what surgical accesses were used in patients?

Similarly: Line 92 - "(3) known surgical approach" - approach or extent?

Line 114 - Can you write down exactly what types of sublobectomies you included in the study?

Reply 5: Thanks for the reviewer's comments. We have changed the "approach" into "extent of the operation" and added some detailed information about the sublobectomies. We didn't talk about the types separately because some types of surgery were not documented in detail.

Changes in the text: See Page 7, line 151, Page 6, line 129, and Page 7, line 152.

Reviewer B

The authors have created a prognostic risk model to predict overall survival for patients with early-stage non-small cell lung cancer. The model used a training cohort from SEER for its creation and then validated with another SEER cohort followed by a small cohort from Shanghai Pulmonary Hospital.

This nomogram identifies high risk patients, but does not demonstrate who benefits from adjuvant therapy. For example, we should consider adjuvant therapy for a “high risk” stage IA?

The authors seem to quickly discount their own work in line 235 by saying it is a small attempt. I encourage the authors to list with the limitations.

I suspect this manuscript will require a few more revisions prior to acceptance.

Major:

Comment 1. In the introduction, line 57-58, the authors seem to be suggesting that not all lung cancer patients need follow-up. Only some?

Reply 1: Thanks for the reviewer's comments. I'm sorry for that my expression wasn't very clear. My thought is that all patients with early-stage NSCLC after surgery require follow-up and who are at risk for recurrence and metastasis seem to need more frequent follow-up management.

Changes in the text: see Page 5, line 96.

Comment 2. Line 186: in the text, please include how the validation cohort and the Shanghai Pulmonary Hospital cohort compares to the training cohort. Only the figures are referenced without explanation. Even in the figure legend there is no explanation.

Reply 2: I'm sorry for the lack of explanation of the results. Figure 4a-b showed the differences in OS of high-risk groups and low-risk groups both in the validation cohort and the Shanghai Pulmonary Hospital cohort.

Changes in the text: see Page 11, line 224.

Comment 3. The main conclusion of this study is to identify high risk individuals and then define who would benefit. But the study did not go that far. It only identified high risk individuals without comment on whether adjuvant chemotherapy is appropriate or beneficial. As noted in line 84 when saying this will help clinicians make “optimal decisions.”

Reply 3: Thanks to reviewer for asking such insightful questions. The question you raised is the topic of our next research and we will include more risk factors. Making “optimal decisions” may be inappropriate, and we have modified the sentence. The nomogram may provide some guidance for the clinician's decision

Changes in the text: see Page 6, line 119.

Minor: I think broadly, there is some difficulty with fluid use of the English language in this manuscript but I think it can be overcome. I addressed some of the issues in the

minor comments.

Comment 4.

- 1) Line 47-48: “total cancer diagnoses” not diagnosis and add the word cancer.
- 2) Line 66: “thus it may not be accurate”
- 3) Line 69: including etc is too informal
- 4) Line 70: remove “as”
- 5) Line 74: what is meant by an “ascending trend”?
- 6) Line 90: “patients who accorded with all” does not make sense. Maybe “Patients who met selection criteria” or “patients were included if...”
- 7) Line 121: replace contain with include
- 8) Line 212: pondering is an incorrect word choice

Reply 4: Thanks for the reviewer's comments. We have changed the vocabulary and grammar into a proper form.

Changes in the text:

See Page 5, line 88, Page 5, line 108, Page 6, line 110, Page 6, line 112, Page 12, line 247, (An “ascending trend” means that more and more NSCLC patients can be diagnosed at an early stage with the widespread of LDCT), Page 6, line 128, Page 8, line 162, and Page 12, line 255.