

Peer Review File

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Review Comments:

Reviewer A:

In this population-based review of the SEER database, the authors classified 451 patients with linitis plastica and developed nomograms to help predict prognosis. Interestingly, the authors found that radiation improved outcome, but chemotherapy did not.

Patients were identified with codes 8142 or 8143. Of these patients, 451 patients underwent gastrectomy.

Additional editing for grammar would be helpful.

The authors constructed nomograms with adequate predictive performance.

The limitations section of the manuscript does not adequately address the difficulty in classifying linitis plastica. As linitis plastica does not have clear diagnostic pathologic criteria, there are many different definitions that exist in the literature. Could this impact their results? As an example, many patients were treated with subtotal gastrectomy which is very difficult to perform for linitis plastica?

Reply 1: Thank you for your critical and professional comment.

(1) We were very sorry about the grammatical mistakes. The manuscript has been edited and revised carefully.

(2) We agree with your opinion that the different definitions that exist in the literature indeed impact their results. As the example you mentioned, many patients were treated with subtotal gastrectomy which is very difficult to perform for linitis plastica. However, The definition of linitis plastica is still controversial. Thus, we only explored this group from the perspective of histology to provide a reference for the management of linitis plastica. And we've modified the part of the limitations section as you suggested.

Changes in the text: The grammar edition in the whole manuscript. The modification of limitations can be seen in the part of Discussions.

Reviewer B:

1. English language of the paper is very poor. Extensive language editing is necessary.

Reply 1: Thank you for your critical and professional comment. We were very sorry for our poor writing in first draft. Now the manuscript has been edited by extensive language editing. In addition, we are very willing to seek professional services from AME Editing Service to further improve the quality of the manuscript in language editing if needed.

2. Surprisingly, the title seems not the title of this paper, completely unrelated to the work done by the authors.

Reply 2: We are very grateful for your help and reminding, and we are sorry for the inappropriate title. Now we've changed the title into "Prognosis Prediction Model for A Special Entity of Gastric Cancer, Linitis Plastica", running title has been modified as well.

3. The C-index, denoting the predictive value of the model, are far lower than 0.8. I do not think the nomogram has sufficient validity for predicting.

Reply 3: Thank you for your important comment. We fully understand your concern about the quality of the model. However, unlike the diagnostic model, C-index for prognostic model based on clinical data and survival analysis usually only reach the 0.6-0.7. Of course, we totally agreed with your opinion to improve the predictive value of the model. And in order to improve the differentiation of the model, we introduced LASSO for a higher level of training and excluded patients with unclear TNM stage or tumor size. Further, to better detect the model, time-dependent ROC curve and DCA curve are also used to analyze the actual distinguishing ability of the model. Encouragingly, the ROC is higher than 0.75 and the DCA curve indicated that this model may have better prediction ability in practice in comparison of AJCC model.

Thank you for your critical and professional comment, which is helpful for improving the quality of our manuscript.

Changes in the text: The part of Methods and Results.

4. Sample sizes for development and validation of the model is very small.

Reply 3: Thank you for your critical comment. It is true that the sample sizes for the development and validation of the model are very small. However, it is the nature of the incidence rate of gastric linitis plastica. We have tried our best to include more patients, and the patients with gastric linitis plastica from 1988 to 2016 in SEER were all obtained. Further, the definition of linitis plastica is still controversial. And in order to maximize the availability of our model, we have to select a very small group to ensure the real linitis plastica for all patients in the group, which affects the training quality of the model. But it ensures the reliability of our research.

4. Introduction is not written well. Please clearly indicate the clinical significance of this research and briefly review existing predictive models of GLP.

(3) Reply 4: Thank you for your valuable suggestions. We have rewritten the introduction of this research. We have cited existing diagnostic models of GLP, however, predictive model of GLP is still limited. As we know, it's the first prognosis predictive model designed for GLP patients. And we've modified the part of Introduction as you suggested.

Changes in the text: The part of the Introduction.

5. Discussion. Please consider the potential methodological limitation of cox proportional hazards theory for construct prognosis predicting models.

Reply 5: We really appreciate your professional and vital comments. We were deeply sorry that we haven't done a complete proportional hazard assumption test for our model. In order to resolve this problem, a complete PH test has been conducted, however, the result is depressing. Therefore, we made a full comprehensive modification to our model, and the new model has been in line with the proportional risk hypothesis. It should be pointed out that because adjuvant therapy is generally not in line with the proportional risk hypothesis in our study, we have introduced a new method of restricted mean survival time(RMST), which does not need to consider the proportional risk hypothesis, to specifically explore the actual effects of radiotherapy and chemotherapy.

Related content has been added to the article. Thanks for your kind help to improve the quality of our manuscript again!

Changes in the text: The part of Methods, Results and Discussions.