

## Author's response

Dear Editor and Reviewer,

Thank you very much for your valuable comments and suggestions on our manuscript entitled "Prognostic Value of Preoperative Immune-Nutritional Score Systems in Remnant Gastric Cancer Patients Undergoing Surgery". We appreciate the opportunity to revise the manuscript. We have tried our best to revise the manuscript to address your concerns. The revisions do not influence the framework of this paper. The point-by-point response to the reviewers are listed as below.

Thank you very much for your attention and consideration.

Sincerely yours,

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Reviewer #1:

The manuscript is devoted to an important oncological problem - Remnant Gastric Cancer, the frequency of which, according to different authors, ranges from 2 to 7% of the number of partial gastrectomy performed (Mak TK, et al 2021). This pathology is associated with both problems of diagnosis and patients treatment. The authors show that the assessment of preoperative immune-nutritional status has an important prognostic value. Moreover, it can be assumed that the correction of the identified disorders can improve the long-term results of treatment of these patients. Despite the relevance of the study, the manuscript has a number of shortcomings that require correction.

Title of the manuscript. I think it's worth changing the title of the manuscript, as "score" can't influence the prognosis. Alternatively, you can use the following wording: "Prognostic Significance..." or similar, as, for example, you use in the introduction "prognostic value".

**RE: Thank you for your valuable suggestions. We have revised the word "impact" to "value".**

Abstract

Method Similarly, you should change the wording in Background and Aims and further down the text; Specify the number of patients included in the study; It is necessary to briefly indicate which statistical methods and for what purpose you used (ROC analysis, log-rank test, Kaplan-Meier method)

Result Indicate the Cutoff for PNI, CONUT and NPS. Cutoff is the indicator value that stratifies cases with high and low risk of death with the greatest sensitivity and specificity. Many softwares offer several Cutoff with different AUCs. The sentence "PNI was 75 months compared with 42 months,  $p = 0.001$ ; CONUT is 69 to 48 months,  $p = 0.033$ ; NPS is 77 to 40 months;  $P < 0.001$ " is incorrect. Reword so that it is clear that here you are comparing OS in two groups formed according to the Cutoff values for each of the Immune-Nutritional Score Systems.

**RE: Thank you for your comment. We have specified the number of patients and statistical methods in the Method and changed the relevant statements in the Result as required.**

## Method

Patient (I) The patient has a previous history of gastrectomy, and the interval from the occurrence of residual gastric cancer is five years or more. After admission, the patient underwent a radical resection of residual gastric cancer, and the postoperative pathological diagnosis is gastric adenocarcinoma. – I think it is more correct to divide this criterion into 4 criteria. Definition of immune-nutritional prognosis system It is important to explain in detail how you divided patients into risk groups depending on the immune-nutritional status. In particular, explain why you used PNI score  $<45$  and CONUT score  $\geq 3$  as indicators that the patient has immune-nutritional risks? Are these values based on Cutoff ROC curves or based on literature data? Then you should give the appropriate links. This remark also applies to the division of patients into risk groups, depending on the NPS score. Statistical analysis You can use the T-test if the scores were properly distributed only. Therefore, it is necessary to note which methods you used to determine the distribution of the relevant indicators.

**RE:** Thank you for your valuable suggestions. We have divided the first inclusive criteria into four as required. The cut-off value of the immune-nutritional score is determined according to the literature. We have listed the relevant literature in the references (See the discussion section for details, Paragraph 4, Line 5). For statistical analysis, we choose the t-test or chi square test according to whether the data is normally distributed.

## Results

Patient characteristics This title does not reflect the essence of the section.

Table 1. It is not clear what the fractions in the PNI, CONUT and NPS columns mean. If the numerator and denominator of the fraction indicate the number of cases with high and low immune-nutritional status, then this should be explained. In this case, the Table 1 shows the distribution of patients according to immune-nutritional status and clinical and pathological characteristics of RGC. Care should be taken in wording, as the data presented in Table 1 cannot be used to assess the presence or absence of correlations between pathological signs and the immuno-nutrient status of patients with RGC. Correlation analysis methods are used to evaluate correlations. ROC curve of immune-nutritional systems for predicting postoperative survival When describing the values of the indicators, you show the averages!!! values of lymphocytes, monocytes and neutrophils (the fact that they are expressed in absolute values can be seen from the units of measurement). It is necessary to bring Cutoff for each of the ROC curves. It is Cutoff that allows stratification of cases with high and low risk of death from RGC. Survival Analysis of OS The name is incorrect! If we remove the abbreviation, we get "Survival Analysis of overall survival" Must be changed. Specific values of PNI, CONUT and NPS should be given for cases with high and low risk of death from RGC!!! This remark is the most important! Considering that you used ROC analysis, it is most likely that these values are determined by Cutoff.

**RE:** Thank you for the above suggestions. The title "Patients characteristics" has been changed to "Clinical characteristics of patients". The numerator and denominator of the fraction indicate the number of cases with high and low immune-nutritional status, it has been explained in the Table 1 legend. The relevant description of Table 1 has been modified as required (Paragraph 1, Line 6). The unit of blood cells (lymphocytes, monocytes and neutrophils) have been modified as required. The cut-off value with high and low risk of death from RGC have been described in the Method section (Paragraph 2-4). The title "Survival Analysis of OS" has been changed to "Analysis of OS".

The manuscript contains a number of stylistic inaccuracies, for example: In Abstract: It's more correct to use "Methods" and "Results" In Introduction: Incorrect sentence "«Reports indicate that approximately 2%–3% of remnant stomach will develop RGC [3, 4].", please reformulate Incorrect wording: "systemic immune system" In the Methods, in the subchapter "«Definition of

immune-nutritional prognosis system»" there is incorrect sentence: "The CONUT score is defined as the sum of the three groups based on serum ALB concentration, lymphocyte count, and TC concentration" and others. The authors should correct these comments, after which the manuscript can be published.

**RE: Thank you for your valuable comments. We have corrected the above description as required.**

Reviewer #2:

Specific Comments to Authors: 1 Title. YES 2 Abstract. YES, Reflects the topic 3 Key words. Suitable 4 Background. Well described 5 Methods. Suitable 6 Results. Well analysed, 7 Discussion. They covered the subject well. They used up-to-date resources 8 Illustrations and tables. OK, 9 Biostatistics. YES 10 Units. YES 11 References. Suitable. 12 Quality of manuscript organization and presentation. Well organised 13 Research methods and reporting. Suitable 14 Ethics statements. YES, No ethic issue

**RE: Thank you for your valuable comments.**

Editor:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastrointestinal Surgery, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before its final acceptance, please upload the primary version (PDF) of the Institutional Review Board's official approval in official language of the authors' country to the system; for example, authors from China should upload the Chinese version of the document, authors from Italy should upload the Italian version of the document, authors from Germany should upload the Deutsch version of the document, and authors from the United States and the United Kingdom should upload the English version of the document, etc. Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022. Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the Reference Citation Analysis (RCA). RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: <https://www.referencecitationanalysis.com/>.

**RE: Dear editor, thank you for your comments. We have revised the manuscript according to your comments. The primary version (PDF) of the Institutional Review Board's official approval was uploaded. We have send the manuscript to the English language expert to revise the grammar and sentence errors. We have tried our best effort to use the concrete work and avoid the vague words.**