

**Manuscript ID:** 46855

**Title:** A novel risk scoring system for the prediction of pancreatic fistula after pancreaticoduodenectomy

**Journal:** World Journal of Gastroenterology

## **Response to Reviewers' comments**

Dear Dr. Yan,

We thank you for your careful consideration of our manuscript. We appreciate your response and overall positive initial feedback, and made modifications to improve the manuscript. After carefully reviewing the comments made by the Reviewers, we have modified the manuscript to improve the presentation of our results and their discussion, therefore providing a more complete context for the research that may be of interest to your readers.

We hope that you will find the revised paper suitable for publication, and we look forward to contributing to your journal. Please do not hesitate to contact us with other questions or concerns regarding the manuscript.

Best regards,

## Reviewer #1

### Major

*1, This manuscript didn't write the exist of cholangitis. The inflammation influence several factors as albmin level, CRP, etc. Did these cases do the biliary tract decompression? Were the methods of recompression PTCD, ENBD with plastic or mertalic tube? You should describe these problems.*

**Answer:** We thank the Reviewer for the comment. The acute abdomen accompanied with fever and abdominal pain was not investigated in this study. Regarding prophylactic jaundice reduction in the patients with jaundice, the practice at our center is that preoperative jaundice reduction should only be conducted for the patients with total bilirubin >400  $\mu\text{mol/L}$ . PTCD and plastic stents were the preferred choice for the prophylactic jaundice reduction, which could reduce the inflammation in the surgical area. Implantation of metal stent under PTCD or ERCP was conducted for jaundice reduction only for the jaundice patients with local progression and in whom the lesions could not be resected, or those who refuse radical operations. This was added to the Methods.

*The decompression conditions of bile duct should be added to Table 1 and Table 2:*

**Answer:** We thank the Reviewer for the comment. They were added to Tables 1 and 2, as below.

Table 1

Variables	Study group (n=189)	Validation group (n=109)	P-value
biliary tract decompression	23	15	0.691

Table2

Variables	non-CR-POPF group (n=237 )	CR-POPF group (n=61 )	P-value
biliary tract decompression	31	7	0.738

### Minor

*1, In surgical procedure, you should describe the procedure of pancreaticojejunostomy.*

**Answer:** Pancreaticojejunostomy was performed using the duct-to-mucosa method and by the dunking method. For the duct-to-mucosa method, the antimesenteric seromuscular layer at the site on the jejunum loop was selected for the anastomosis and incised to expose an area identical to the section of the pancreas. A small hole was made at the middle of the jejunum mucosa for the anastomosis with the pancreatic duct. Then, 5-0 absorbable thread was used for the interrupted suturing of the pancreatic parenchyma at the section to the posterior wall of the seromuscular

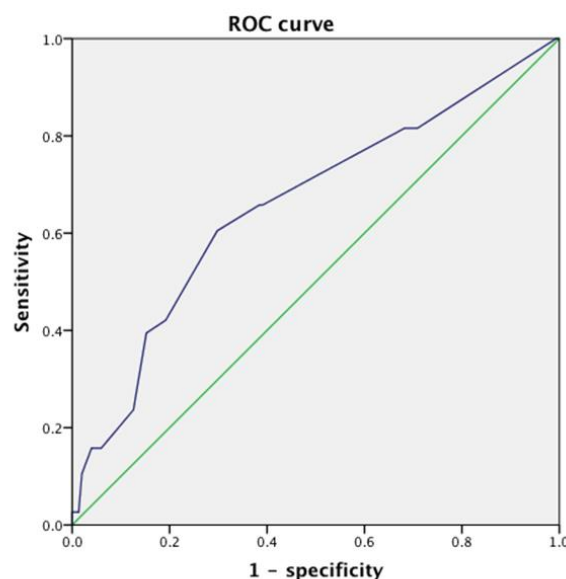
layer of jejunum. Interrupted suturing of the pancreatic duct and the posterior wall of jejunum mucosa was conducted using 2-4 stitches. The pancreatic duct supporter was implanted (or not in some cases), and interrupted suturing of the pancreatic duct and the anterior wall of the jejunum mucosa was conducted using 2-4 stitches. Interrupted suturing of the pancreatic parenchyma at the section and seromuscular layer of jejunum was conducted. Finally, strengthening suturing using one stitch each at the upper and lower ends of the pancreaticojejunostomy was conducted.

For the dunking method, end-to-side anastomosis was performed for pancreaticojejunostomy. The antimesenteric seromuscular layer at the site on the jejunum loop was selected for the anastomosis and incised to expose an area identical to the section of the pancreas. Atraumatic thread (4-0) was used for the continuous suturing of the pancreatic parenchyma at the section and the posterior wall of the full layer of jejunum. Afterwards, 4-0 atraumatic thread was used for the continuous suturing of the pancreatic parenchyma at the section and the anterior wall of the full layer of jejunum. Then strengthening suturing for one stitch each at the upper and lower end of the pancreaticojejunostomy was conducted.

These were added to the Methods.

*2, Why is the reason for 500ml of blood loss criteria? You should reveal the reason of criteria.*

**Answer:** We thank the Reviewer for the comment. In the 189 patients of the validation cohort, we evaluated the effect of intraoperative blood loss on pancreatic fistula using the ROC curve method, and the best cutoff was 475 ml. Therefore, we used the rounded value of 500 ml since in clinical practice the exact amount of bleeding is relatively subjective and inaccurate. Univariable and multivariable verifications were performed subsequently. It was clarified in the manuscript.



## **Additional editorial comments**

*A succinct and impactful title will include minimal nonfunctional words, such as “a,” “an,” “the,” “roles of,” etc. and will avoid non-standard abbreviations.*

**Answer:** The title was edited accordingly.

*Designation of co-first authors and co-corresponding authors is not permitted. You can move this sentence to author contribution part.*

**Answer:** The statement was moved accordingly.

*You need to provide the grant application form(s) or certificate of funding agency for every grant, or we will delete the part of "Supported by..."*

**Answer:** We now provide the documentation.

*Please provide detailed street address.*

**Answer:** The exact address is now provided.

*Please list 5-10 key words for each paper, which reflect the content of the study.*

**Answer:** We added additional key words.

*Please offer the audio core tip, the requirement are as follows:*

*In order to attract readers to read your full-text article, we request that the first author make an audio file describing your final core tip. This audio file will be published online, along with your article. Please submit audio files according to the following specifications:*

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*Maximum file size: 10 MB*

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**Answer:** We now provide an audio core tip, but please note that we are not equipped to perform quality recordings.

*The guidelines for writing and formatting Article Highlights are as follows:*

*(1) Research background*

*The background, present status and significance of the study should be described in detail.*

*(2) Research motivation*

*The main topics, the key problems to be solved, and the significance of solving these problems for future research in this field should be described in detail.*

*(3) Research objectives*

*The main objectives, the objectives that were realized, and the significance of realizing these objectives for future research in this field should be described in detail.*

*(4) Research methods*

*The research methods (e.g., experiments, data analysis, surveys, and clinical trials) that were adopted to realize the objectives, as well as the characteristics and novelty of these research methods, should be described in detail.*

*(5) Research results*

*The research findings, their contributions to the research in this field, and the problems that remain to be solved should be described in detail.*

*(6) Research conclusions*

*The following questions should be briefly answered:*

*What are the new findings of this study?*

*What are the new theories that this study proposes?*

*What are the appropriate summarizations of the current knowledge that this study provided?*

*What are the original insights into the current knowledge that this study offered?*

*What are the new hypotheses that this study proposed?*

*What are the new methods that this study proposed?*

*What are the new phenomena that were found through experiments in this study?*

*What are the hypotheses that were confirmed through experiments in this study?*

*What are the implications of this study for clinical practice in the future?*

*(7) Research perspectives*

*What experiences and lessons can be learnt from this study?*

*What is the direction of the future research?*

*What is/are the best method/s for the future research?*

**Answer:** This section is now provided.

*Please check and confirm that there are no repeated references!*

*Please add PubMed citation numbers (PMIDNOT PMCID) and DOI citation to the reference list and list all authors. Please revise throughout. The author should provide the first page of the paper without PMID and DOI.*

*PMID (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=PubMed>) (Please begin with PMID: ) DOI (<http://www.crossref.org/SimpleTextQuery/>) (Please begin with DOI: 10.\*\*)*

**Answer:** We verified the references and no references are repeated. We also provide the PMID and DOI numbers.

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*Please explain all the abbreviations of each figure/table under each piece of figure/table legends.*

**Answer:** We now provide editable figures. In addition, all abbreviations are now explained.

*Figure file names should identify the figure and panel. Avoid layering type directly over shaded or textured areas in the figure.*

*for example, “Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...”*

**Answer:** We now provide editable decomposed figures, as requested.

***Please mark the location of Figure 4 in the text.***

**Answer:** Figure 4 is now cited in the text.

*Please put supplementary materials into another file named as “xxxxx-Supplementary material.pdf”*

**Answer:** The Supplementary materials are now in a separate file.