### **Peer Review File**

## Article Information: http://dx.doi.org/10.21037/jgo-20-348

## <mark>Reviewer A</mark>

Dear Authors,

thank you very much for submission of this highly interesting manuscript. Due to very detailed evaluation of your study, I have only minor comments, which need to be addressed.

Page 4 line 5, please delete "lethal" and write "is a tumor arising from... resulting in poor prognosis for the patient"

Please review your manuscript again taking care of the expression "palliative surgery". In my opinion an R1 situation after resection of the tumor is also palliative, although the intention of surgery was curative.(e.g. page 5 line 16).

Rate of R1 is relatively low in my experience, excellent!

What is biliary drainage in this study? Stenting via ERCP or external drainage or both? (page 8 line 8)

Had all 18 Patients with pancreatectomy also a liver resection or pancreasresection alone?

What is the grade of liver dysfunction you mean by using the term hypohepatia (page 8 line 19).

Please give data in results that there were no changes in M category. On page 15 there are missunderstandings in my opinion, which have to be corrected: Line 3: Do you mean T4 was UICC IV (7th) and is now UICC III (8th classification). Please correct this also in the following sentences.

### **Answer to Reviewer A:**

We deeply thank reviewer for the valuable comments and hard work.

Comment 1: Page 4 line 5, please delete "lethal" and write "is a tumor arising from... resulting in poor prognosis for the patient". Reply 1: We appreciate the reviewer's comment, and we have amended it accordingly.

Changes in the text: Page 5, line 6-7.

Comment 2: Please review your manuscript again taking care of the expression "palliative surgery". In my opinion an R1 situation after resection of the tumor is also palliative, although the intention of surgery was curative. (e.g. page 7 line 2).

Reply 2: Thanks for this constructive suggestion. It's really the case of R1 situation after resection of the tumor belonged to palliative surgery, we changed the expression as "non-curative intend surgery". Changes in the text: Page 7, line 12.

### Comment 3: Rate of R1 is relatively low in my experience, exellent!

Reply 3: We deeply thank reviewer for good comments.

Changes in the text: not applicable.

## Comment 4: What is biliary drainage in this study? Stenting via ERCP or external drainage or both? (page 8 line 8).

Reply 4: I'm sorry that I didn't express myself clearly enough, which led to the misunderstanding. Biliary drainage in this study was external drainage (PTCD). Stenting mostly used for palliative treatment in our institution.

Changes in the text: Page 11, line 4-5.

## Comment 5: Had all 18 Patients with pancreatectomy also a liver resection or pancreasresection alone?

Reply 5: The patients with partial pancreatectomy had accepted liver resection simultaneously.

Changes in the text: Page 11, line 12.

Comment 6: What is the grade of liver dysfunction you mean by using the term hypohepatia (page 8 line 19).

Reply 6: According to our experience, hypohepatia was defined as the impaired ability of the liver to maintain its synthetic, excretory, and detoxifying functions, which are characterized by an increased international normalized ratio and concomitant hyperbilirubinemia on or after postoperative day 5.

Changes in the text: not applicable.

# Comment 7: Please give data in results that there were no changes in M category.

Reply 7: Thanks for your reminding. Indeed, our cohort did not include patients with distant metastasis, so we did not discuss M category solely. However, we discussed M1 caused by rearrangement of metastatic lymph nodes. (Page 14, line 18-20)

Changes in the text: not applicable.

Comment 8: On page 15 there are missunderstandings in my opinion, which have to be corrected: Line 3: Do you mean T4 was UICC IV (7th) and is now UICC III (8th classification). Please correct this also in the following sentences.

Reply 8: I'm sorry for the confusion caused by my expression. I write "Bismuth-Corlette Type IV was excluded from the T4 category in 8th edition" on page 15, line 3. I want to say invasion of the second order biliary radicals bilaterally was excluded from T4 category in 8th edition. Although it expresses the same idea, I would like to revise it to avoid misunderstanding.

Changes in the text: Page 20, line 19-20.

## <mark>Reviewer B</mark>

Dear authors, I read with great interest your manuscript: External validation study of the eighth edition of American Joint Committee on Cancer Staging System for perihilar cholangiocarcinoma: A single-center experience in China and proposal for simplification.

The manuscript is well written and easy to read, the statistical methods is appropriate.

I have just one comment: you said in the fourth page, 19th line that "Bismuth-Corlette type IV was excluded from T category in this new classification", in fact, Bismuth-Corlette classification was not included in seventh edition of AJCC/UICC TNM classification in their original version.

As you know, Bismuth-Corlette classification is used by the surgeons to adapt the type of surgical resection and several studies found that it is not of prognostic value.

Surprisingly, I found the same error in recent study...!

#### **Answer to Reviewer B:**

We deeply thank reviewer for the valuable comments and hard work.

Comment 1: I have just one comment: you said in the fourth page, 19th line that "Bismuth-Corlette type IV was excluded from T category in this new classification", in fact, Bismuth-Corlette classification was not included in seventh edition of AJCC/UICC TNM classification in their original version. As you know, Bismuth-Corlette classification is used by the surgeons to adapt the type of surgical resection and several studies found that it is not of prognostic value.

#### Surprisingly, I found the same error in recent study...!

Reply 1: We appreciate the reviewer's comment. In seventh edition of AJCC/UICC TNM classification, T4 category includes invasion of the second order biliary radicals bilaterally, which meant Bismuth type IV.(1) Ebata suggest that removal of Bismuth type IV tumours from the T4 determinants may enhance the prognostic ability of the UICC system. (2) So, for the 8th edition, the T4 category excludes bilateral second-order bile duct extension. (3)

Changes in the text: not applicable.

[1] Juntermanns B, Sotiropoulos GC, Radunz S, et al. Comparison of the sixth and the seventh editions of the UICC classification for perihilar cholangiocarcinoma. Ann Surg Oncol. 2013 Jan; 20(1):277-84. doi: 10.1245/s10434-012-2486-0.

[2] Ebata T, Kosuge T, Hirano S, et al. Proposal to modify the International Union Against Cancer staging system for perihilar cholangiocarcinomas. Br J Surg. 2014 Jan; 101(2):79-88. doi: 10.1002/bjs.9379.

[3] Chun YS, Pawlik TM, Vauthey JN. 8th Edition of the AJCC
Cancer Staging Manual: Pancreas and Hepatobiliary Cancers. Ann
Surg Oncol. 2018 Apr; 25(4):845-847. doi: 10.1245/s10434-017-6025-x.