Dear Editors and Reviewers:

Thank you very much for your comments and recognition on the manuscript entitled “Da Vinci robot-assisted pancreato-duodenectomy in a patient with situs inversus totalis: A case report and literature review” (ID: 76483) on March 20, 2022.

Based on your comment and request, we have made extensive modification on the original manuscript. Here, we attached revised manuscript in doc for your approval. A document answering every question from the referees was also summarized and enclosed. Should you have any questions, please contact us without hesitate.

Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. Revised portion are marked in highlighted in the paper. The main corrections in the paper and the responds to the reviewer’s comments are as following:

Responds to the reviewer’s comments:

Reviewer #1(ID:03009363):

1. **Response to comment:** There is no list of abbreviations, provide it. In the details os the operation there is a lot of list like that: "L5, 8a, 12A were dissected". What are these? You should provide an explanation.
   Response: Thank you for your questions and suggestions. The list of abbreviations has been refined and is on **page 7** of the manuscript. L5 refers to suprapyloric lymph node (NO.5); 8a refers to anterosuperior lymph node of common hepatic artery (NO.8a); 12A refers to

hepatoduodenal ligament lymph nodes (along the hepatic artery) (NO. 12a); L12P refers to hepatoduodenal ligament lymph nodes (along the portal vein) (NO. 12p); L12B refers to hepatoduodenal ligament lymph nodes (along the bile duct) (NO. 12b); L6 refers to subpyloric lymph nodes (NO.6); A detailed supplement to this section is on **pages 7 and 8**.

2. **Response to comment:** You mention: The patient had a history of gallbladder-preserving lithotomy due to cholecystolithiasis. Explain why, as this is not an accepted mode of treatment for gallstone.
   Response: Thank you for your advice. This case received a "gallbladder-preserving lithotomy" operation in another hospital 10 years ago, and the specific treatment process has nothing to do with us. We made revisions to the history of past illness of this case. The patient underwent surgery for cholecystolithiasis 10 years ago. A detailed supplement to this section is on **pages 5**.

3. **Response to comment:** There are some misspellings to be corrected: p1 keywords: the name of the operation is: Whipple, p2: complaints: the patient weight loss is surley NOT 1,5 g, this is kg, or even 15 kg. history: two mo. Write instead out: months. Do not use slang abbreviations.
   Response: We have made correction according to the Reviewer's comments. The correct surgical name is Whipple, not Whiple. Patients lost 1.5kg of body weight instead of 1.5g. We've used two months instead of two mo. A detailed supplement to this section is on **pages 3 and 5**.

Reviewer #2(ID: 06229302):

1. **Response to comment:** English spelling correction is needed (i.e. Whiple in the table, mo-probably months etc)
   Response: Thank you for your questions and suggestions. We have corrected our English spelling. Whiple changed to whipple. We've used two months instead of two mo.

2. **Response to comment:** Review of some sentences is necessary: not abnormal (better normal), "general condition good, the condition is stable…" must be reconsidered." Therefore, we postulated that there is no direct correlation between congenital total visceral inversion and the occurrence of choledochal carcinoma" please rephrase, no sufficient data.
   Response: Thank you for your suggestion, which provides reference value for our further research. We review and revise the relevant sentences. The revised sentence reads as follows. 1. Tumor markers dropped to normal. 2. After treatment, he lived completely independently and is still alive. A

detailed supplement to this section is on **pages 9**.In addition, we delete the "Therefore, we postulated that there is no direct correlation between congenital total visceral inversion and the occurrence of choledochal carcinoma ".

3. **Response to comment:** Even if it is a surgeon perspective of a very rare case, this patient was interdisciplinary approached. So a perioperative risk score assessment (ASA, Lee Score or similar) should be addressed in the case presentation. Any other chronic comorbidities? Does the patient presented any anesthetic particularititis? (sleep apnea, heart etc)
   Response: We have made correction according to the Reviewer's comments. According to the American Society of Anesthesiologists Physical Status classification system (ASA PS), the ASA score of the patient was P2. The patient had no other chronic comorbidities or anesthetic particulars. A detailed supplement to this section is on **pages 7**.

4. **Response to comment:** Could you justify/ motivate the surgical approach (daVinci), which is, however, not necessary, the standard of care?
   Response: Thank you for your questions and suggestions. To our knowledge, we are the first to perform pancreaticoduodenectomy in a patient with situs inversus totalis and cholangiocarcinoma assisted by a da Vinci robot. This case proves that this surgical method is feasible in the treatment of patients with SIT complicated with cholangiocarcinoma, and it has exploratory significance. However, due to the lack of sufficient cases and evidence, we cannot prove that the surgical method (Da Vinci) is better than other surgical methods, and expect more relevant studies and cases to be reported in the future.

5. **Response to comment:** In the subsection entitled outcome and follow-up, could you mention the time spent in ICU.
   Response: Thank you for your suggestion. Fortunately, the patient was not admitted to ICU after surgery.

6. **Response to comment:** Please mention the total time spent in hospital
   Response: Thank you for your suggestion. The total length of hospital stay was 30 days, and the patient was discharged 22 days after surgery.

7. **Response to comment:** You mentioned about postoperative severe complications? Were there any? There are some reports that advocates the prolonged apnoea, pseudocolinestherasis deficits or airway obstruction……
   Response: Thank you for your advice. We mentioned serious postoperative complications including biliary fistula, pancreatic leakage,

gastric emptying dysfunction, pseudocolinestherasis deficits and airway obstruction. However, this case did not experience similar complications after surgery. A detailed supplement to this section is on **pages 10 and 11**.

Reviewer #3(ID: 05098925):

1. **Response to comment:** In the last line of page 1, as author mentioned "patient with situs inversus totalis", please change to Abbreviations.
   Response: Thank you for your suggestion. We have changed the abbreviation as you suggested, and the details are on the last line of the first page.

2. **Response to comment: 2.**To enhance the readiness, please provide the normal ranges of presenting laboratory.
   Response: Thank you for your suggestion. The normal ranges of the laboratory examinations are as follows: Total bilirubin:3.4-20.5μmol/L; Direct bilirubin: 0-6.8μmol/L; Indirect bilirubin: 3.1-14.3μmol/L; Aspartate aminotransferase: 13-40U/L; Alanine aminotransferase: 7-45U/L; Alkaline phosphatase: 50-135U/L; Abnormal prothrombin (DCP): 0-40ng/mL; CA19-9: 0-37.00ng/ml. A detailed supplement to this section is on **pages 5**.

3. **Response to comment:** In figure 1a, I think the arrow point to the wrong area (arrow mention point to heart but end of arrow point to trachea). Please consider changing adjust the arrow.
   Response: Thank you for your suggestion. We have adjusted the position of the arrow in figure 1a.

4. **Response to comment:** It would be more impressive if author provide the picture of pathologic finding of immunohistochemical staining.
   Response: Thank you for your questions and suggestions. We provide images of CDX-2, CK7 and CK19 immunohistochemistry. A detailed supplement to this section is on **Figure 2B, Figure 2C and Figure 2D.**

5. **Response to comment:** In the "outcome and follow up" section, author described that "There were no severe complications during or after the operation, and the patient was discharged once the abdominal incision healed". Can you reveal the accurate length of hospitalization after surgery?
   Response: Thank you for your suggestion. The total length of hospital stay was 30 days, and the patient was discharged 22 days after surgery. A detailed supplement to this section is on **pages 8**.

6. **Response to comment:** In the “discussion” section, author described that “Whipple operation was performed in 8 patients, and 1 patient underwent choledochectomy + Roux-en-Y hepaticojejuno”. I think this sentence was not complete.
   Response: Thank you for your questions and suggestions. We have changed this sentence to read "8 out of the 9 patients underwent the Whipple procedure, and 1 patient underwent choledochectomy and Roux-en-Y hepaticojejunostomy". A detailed supplement to this section is on **pages 9**.

7. **Response to comment:** The “conclusion” section is redundant, please adjust it more concisely.
   Response: We have made correction according to the Reviewer’s comments. The revised conclusions are as follows: Situs inversus totalis (SIT) is a rare genetic disease and da Vinci robotic surgery is the current poster child for minimally invasive surgery. We believe that with thorough preoperative planning, precise intraoperative anatomical knowledge, effective teamwork, meticulous treatment, and postoperative care, da Vinci robotic-assisted pancreaticoduodenectomy in patients with SIT is feasible and developmental. A detailed supplement to this section is on **pages 11**.

We tried our best to improve the manuscript and made some changes in the manuscript. These changes will not influence the content and framework of the paper. And here we did not list all the changes but marked in highlight in revised paper. We appreciate for Editors/Reviewers’ warm work earnestly, and hope that the correction will meet with approval.

On behalf of my co-authors, we would like to expression our great appreciation to the editors and reviewers.

Yours sincerely,

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