April, 5 2022

Dear Editors-in-Chief

Peter Schemmer, FACS, MD, Ph.D., Chairman, Professor

Re: Submission of a re-revised manuscript to the WORLD JOURNAL OF GASTROINTESTINAL SURGERY

Thank you very much for giving us the opportunity to revise our *invited review* (Manuscript NO: 75183)

We would be grateful for the consideration of our revised manuscript "*Three-dimensional visualization and virtual reality simulation role in hepatic surgery: further research warranted*" (by Faiza Ahmed, Vinay Jahagirdar, Sravya Gudapati, and Mohamad Awf Mouchli) for publication in the *World Journal of Gastrointestinal Surgery*.

The authors have read and complied with author guidelines, and they all have seen and approved this manuscript for publication. None of the authors had a conflict of interest to disclose concerning this manuscript.

We are grateful to the Editors for their precious contributions and comments. We have revised our manuscript accordingly for grammar, style, structure and we hope that you will now find it suitable for publication in the *World Journal of Gastrointestinal Surgery*. In case of final acceptance, we agree to make this manuscript open-access.

The changes in the manuscript are identified in track change mode. Below you can find a point-by-point reply to the reviewers.

Thank you for your precious time.

We are looking forward to receiving your decision in due time.

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Reviewer #1:
Scientific Quality: Grade C (Good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Accept (General priority)
Specific Comments to Authors: No comments

Thank you for taking some time out of your busy schedule to review our manuscript.

Reviewer #2:
Scientific Quality: Grade C (Good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Minor revision
Specific Comments to Authors: The manuscript type is letter article to discuss 3D visualization and virtual simulation in the context of the published paper "Role of Artificial Intelligence in Hepatobiliary and Pancreatic Surgery'. and virtual reality, 3D imaging and related model fabricating by 3D printing are involved. Overall, it's a good paper. However, several issues need to be corrected before acceptation. 1. Abstract: This description "Artificial intelligence (AI) is based on machine learning (ML) which works on available data to recognize patterns and make decisions" is inaccurate, as ML is a type of AI. Similar descriptions in the second paragraph of the text need to be corrected. 2. What does the abbreviated PDF mean? 3. It is recommended to describe the process to fabricate 3D models involving image scanning, 3D modeling and 3D printing. 4. May be 3DV and VR technology will synergistically contribute to to evaluate the reliability and validity of HPB surgery. Are there any examples of the simultaneous application of these two techniques? Please write or discuss. 5. Please correct the grammatical errors in this sentence "Zhang J conducted his research first time in the Tibet population for hepatic echinococcosis and his results revealed the 3DV technology contributing towards improved diagnosis and treatment of patients by accurately formulating a preoperative plan with a high compliance rate and reducing surgical time (210 vs. 135; P = <0.05)"

Thank you for taking some time out of your busy schedule to review our manuscript.

1. *Yes, we have addressed this within the abstract and replaced the previous sentence with the one below:*

   Artificial intelligence (AI) is the study of algorithms that enable machines to analyze and execute cognitive activities including problem solving, object and word recognition, reduce the inevitable errors to improve the diagnostic accuracy, and decision-making.

   Also, replaced the sentence in second paragraph with the one below:

   Artificial intelligence (AI) is a vast field, which includes machine learning (ML) as a subfield, is steadily being integrated into healthcare settings to provide a more precise and individualized approach [2].

2. *We have included the full form of PDF abbreviation within the manuscript:*

   Most obtainable publications on hepatic models are described by means of 3D prints or 3D Portable Document Formats (PDFs) for preoperative planning [8, 9, 10].

3. *Unfortunately, we cannot describe the full process of 3D imaging, 3D modeling and 3D printing because our manuscript is a short letter. To do such, we need several long paragraphs and space to write out the details of the process. There are also numerous published papers describing the full processes of such technology. If we are going to include what you have requested, the letter is insufficient to address this. Only full-length manuscripts are capable of describing these processes, as it is complex to just briefly include in a letter. Kindly refer to already published manuscripts to understand their detailed usage.*

4. *We have reported recently published literature (year limit 2021) as a response to Bari et al.'s article "Role of artificial intelligence in hepatobiliary and pancreatic surgery". To date, we are the first to present such novel data collectively. Since our search year limit was only 2021, we have included all the recent data published within the mentioned year. Our aim was to include only recent literature and we have successfully addressed it within our letter as a response to Bari et al.'s published manuscript. Unfortunately, none of the published literature within our search limit mentioned any examples as you have requested to address.*

5. *Yes, we have corrected the grammatical errors. Since the sentence was long, we have shortened it:*

Zhang J is the first to conduct research in the Tibet population for hepatic echinococcosis and his results revealed the 3DV technology contributing towards improved diagnosis and treatment of patients. Moreover, the 3DV technology accurately formulated a preoperative plan with a high compliance rate and reduced surgical time (210 vs. 135; P = <0.05).

Reviewer #3:
Scientific Quality: Grade C (Good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Accept (General priority)
Specific Comments to Authors: Thank you for the opportunity of review this paper. The topic is very interesting and the paper is well written and clear. Personally i think that all this new tecnique will be the future in our work and it can contribute to improve the surgical results not only in general surgery

Thank you for taking some time out of your busy schedule to review our manuscript. We are extremely happy to see your positive comments.

(1) Science editor:

I congratulate the authors for highlighting novel points so nicely
Language Quality: Grade A (Priority publishing)
Scientific Quality: Grade B (Very good)

Thank you for taking some time out of your busy schedule to review our manuscript. We are extremely happy to see your positive comments.

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, 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.

Thank you for taking some time out of your busy schedule to review our manuscript.