TO THE EDITOR

Name of Journal: *World Journal of Gastroenterology*

Manuscript NO: 63514

Title: The state of machine and deep learning histopathological applications in digestive diseases.

Dear Editor,

We the authors would like the thank the reviewers for taking the time to review our manuscript. We have looked over the comments and addressed any concerns raised during the process. The specifics can be found below, and our responses are in blue. Thank you for this opportunity to invitation to publish a minireview.

Sincerely,

Soma Kobayashi

Response to reviewer 1

Reviewer's Code: 05382551

Reviewer's Country: Spain

Science Editor: Jia-Ping Yan

SPECIFIC COMMENTS TO AUTHORS
Authors presents a review on the application of machine learning and deep learning techniques in the methodologies for gastrointestinal and hepatological histopathological slides. The article is well written and structured. It is easy to read and is explained in a didactic way. The subject is in the scope of the journal. The bibliography is sufficient and varied. From the scientific point of view, it represents an important contribution since the main contributions made in recent years on the field dealt with in the article are analyzed.

Thank you for taking the time to read and your comments. We appreciate the kind words.

Response to Editorial Office's Comments

1 Scientific quality: The manuscript describes a review of the state of machine and deep learning histopathological applications in digestive diseases. The topic is within the scope of the WJG. (1) Classification: Grade C; (2) Summary of the Peer-Review Report: The article is well written and structured. It is easy to read and is explained in a didactic way. The subject is in the scope of the journal. The bibliography is sufficient and varied; and (3) Format: There are 6 figures. (4) References: A total of 86 references are cited, including 36 references published in the last 3 years; (5) Self-cited references: There are 7 self-cited references. The self-referencing rates should be less than 10%. Please keep the reasonable self-citations that are closely related to the topic of the manuscript, and remove other improper self-citations. If the authors fail to address the critical issue of self-citation, the editing process of this manuscript will be terminated; and (6) References recommend: The authors have the right to refuse to cite improper references recommended by peer reviewer(s), especially the references published by the peer reviewer(s) themselves. If the authors found the peer reviewer(s) request the authors to cite improper references published by themselves, please send the peer reviewer's ID number to the editorialoffice@wjgnet.com. The Editorial Office will close and remove the peer reviewer from the F6Publishing system immediately.

Thank you for checking the number of self-citations. We have confirmed that our self-citations are less than the recommended 10%.

2 Language evaluation: Classification: Grade B. The authors are native English speakers.

3 Academic norms and rules: No academic misconduct was found in the Bing search.

4 Supplementary comments: This is an invited manuscript. The study was supported by National Institutes of Health (US). The topic has not previously been published in the WJG.

5 Issues raised: (1) The "Author Contributions" section is missing. Please provide the author contributions; and (2) Please obtain permission for the use of picture(s). If an author of a submission is re-using a figure or figures published elsewhere, or that is copyrighted, the author must provide documentation that the previous publisher or copyright holder has given permission for the figure to be re- published; and correctly indicating the reference source and copyrights. For example, "Figure 1 Histopathological examination by hematoxylin-eosin staining (200 ×). A: Control group; B: Model group; C: Pioglitazone hydrochloride group; D: Chinese herbal medicine group. Citation: Yang JM, Sun Y, Wang M, Zhang XL, Zhang SJ, Gao YS, Chen L, Wu MY, Zhou L, Zhou YM, Wang Y, Zheng FJ, Li YH. Regulatory effect of a Chinese herbal medicine formula on non-alcoholic fatty liver disease. World J Gastroenterol 2019; 25(34): 5105-5119. Copyright ©The Author(s) 2019. Published by Baishideng Publishing Group Inc[6]". And please cite the reference source in the references list. If the author fails to properly cite the published or copyrighted picture(s) or table(s) as described above, he/she will be subject to withdrawal of the article from BPG publications and may even be held liable. 6 Recommendation: Conditional acceptance.

Thank you for identifying the missing "Author Contributions" section and need to obtain copyright for our figures. The "Authors Contributions" section has now been added. Additionally, we have opted to generate figures in-house for most of the referenced ones in the initially submitted conceptual figures. Two images in Figure 4, the "Input WSI H&E" and "Synthetic IHC/IF WSI", were pulled from a published paper in Nature Scientific Reports. These are under the CC BY license, which permits adaption given proper assigned credit. We have included this information in the figure legends – "Input WSI H&E and Synthetic IF WSI images in the Synthetic IHC/IF Generation pipeline were adapted from Burlingame EL, McDonell M, Schau GF, Thibault G, Lanciault C, Morgan T, Johnson BE, Corless C, Gray JW, Chang YH. SHIFT: speedy histological-to-immunofluorescent translation of a tumor signature enabled by deep learning. Nature Scientific Reports 2020. Copyright © The Author(s) 2020. Creative Commons CC BY License". The work is also included in the references and discussed in the text.