

Dear Company Editor-in-Chief and reviewers,

Thank you very much for your professional review work on our manuscript (NO.: 56970) “**Diagnostic advances of artificial intelligence and radiomics in gastroenterology**”. We would like to express our sincere thanks to the reviewers for the constructive and positive comments. According to your nice suggestions, we have made extensive revisions to our previous draft and provided a new revised version, in which changes to our manuscript were all highlighted within the document by using yellow colored text. The detailed point-by-point responses are listed below (Our reply is in italic font, whereas the reviewer’s specific comments are not italicized):

Replies to Reviewer #1

Specific Comments

Comment 1: This review discusses great potentials for the application of AI and radiomics on gastroenterology. In my opinion, a good review should not just focus on summarizing positive aspects of AI available in the literatures. It should also discuss its limitations as well. Could the authors discuss what are the major barriers to bring AI and radiomics to routine clinical practice and how to overcome these barriers?

Answer: Thank you for your nice comments on our article. According to

your suggestions, we have made extensive modifications in the last paragraph of our manuscript by supplementing the major limitations of AI and radiomics and some feasible solutions. We hope these revisions can improve the quality of our articles.

Comment 2: Could the authors discuss studies comparing the performance of AI to radiologists in diagnosis of difficult entities?

***Answer:** Thank you for your suggestion. In the previous version, we made some sporadic comparisons between AI and radiologists in diagnosis in separated sections. In this revised version, we have cited some new references and made more detailed comparisons in the supplemented Table 1 in the end of the article.*

Comment 3: Could the author provide a model that how AI could be incorporated into current clinical radiology workflow to help radiologists to improve accuracy of diagnosis?

***Answer :** Thank you for your suggestion and we have provided a figure in the revised manuscript to illustrate the workflow of AI and radiomics in clinical practice. We wish it would make our article more understandable.*

Replies to Reviewer #2 (The peer-review report of Reviewer #2 was initially mistaken with another one and lately):

Specific Comments

Comment 1: Some spelling and grammatical mistakes throughout

manuscript. Please revise.

***Answer:** We feel sorry for our poor writings, however, we do have invited a special language editing company to polish the previous manuscript and have submitted the non-native speakers of English editing certificate. Nevertheless, we have invited one of our doctor friends who is a native English speaker from USA to polish our article again. The spelling and grammatical mistakes in previous version have been corrected and we hope this revised version could be acceptable for you.*

Comment 2: The manuscript flow needs improvement. Each section appears to be completely separate from the rest of the manuscript.

***Answer:** Thank you very much for your valuable comments. In our previously submitted draft, considering the wide variety of gastrointestinal diseases, we discussed the applications of AI and radiomics in esophageal cancer, gastric disease, hepatic disease, pancreatic disease and colorectal disease in separated sections. As you pointed out, we now realize that the flow of the previous version really needs to be improved, so in this resubmitted version, we have made extensive revisions in the last paragraph and added three tables to strengthen the connections between each section. We hope these revisions will comply with your comments.*

Comment 3: Many references are before 2015. There are many of the last three years, but I recommend to add more references from 2019-2020

if it is possible.”

***Answer:** According to your nice suggestions, except for some classic literature, we have deleted most references before 2015 and added nine references published from 2019-2020.*

Comment 4: I strongly recommend the authors to prepare a table where the authors will present summarized results for each type of gastrointestinal cancer.

***Answer:** We thank your constructive comment. As your suggestion, we have provided three tables in the end of the article to summarize the application of AI and radiomics in the diagnosis, efficacy evaluation and prognosis of gastroenterology.*

Comment 5: In addition, a figure which presents the application of AI in gastroenterology will be useful.

***Answer:** Thank you for this insightful suggestion which will significantly improve this manuscript. We have supplemented a schema in the end of the revised manuscript to demonstrate the application of AI in clinical practice.*

According to the reviewer’s comments, we have revised the manuscript extensively. If there are any other modifications we could make, we would like very much to modify them and we really appreciate your help.

Artificial Intelligence in Gastroenterology is a journal of great

popularity and prestige. We hope that our manuscript could be considered for publication in your journal. Thank you very much for your help.

Please let me know if you have any questions regarding this revised manuscript.

Thank you very much for your consideration.

With best regards,

Jing-jing Pan

Department of Radiology

PLA Rocket Force Characteristic Medical Center

Beijing 100088, China

E-mail: panjingjing3969@sina.com