Dear Editors and Reviewers:

Thank you for your letter and for the reviewers' comments concerning our manuscript entitled "Automatic detection of small bowel lesions with different bleeding risks based on deep learning models" (ID: 89649). 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.

Reviewer #1:

Despite being a novel piece of work, it presents certain challenges that may hinder the reader's ability to fully understand its main point. These challenges stem from both technical jargon and limitations in the English language. Below are some examples of these obstacles: My Comments and Suggestions to Authors: 1- In my view, the abstract is overly cumbersome and difficult to extract the main point. It would be helpful to include more detailed keywords to enhance clarity. 2- The contributions made in this manuscript may not be adequate for publication in this journal. Therefore, I strongly recommend that the authors clearly define and elaborate on their contributions. 3- The proposed method and experiments are not clearly illustrated. 4- The Results and Discussion section of the paper appears inadequate and requires more attention, with a need for better explanation and elaboration. 5- The paper needs to be carefully looked upon for grammatical mistakes. 6- Some sentences seem to be incomplete and less meaningful. Authors are suggested to carefully check for such sentences. Additional References: The following articles could be useful: • From Pixels to Diagnoses: Deep Learning's Impact on Medical Image Processing-A Survey. https://doi.org/10.31185/wjcms.178 • Deep Convolutional Neural Network Architecture to Detect COVID-19 from Chest X-Ray Images. https://doi.org/10.24996/ijs.2023.64.5.38

The author's answer:

We have carefully revised and annotated the article according to the suggestions put forward by the reviewers. Now I will reply to the review

suggestions one by one: 1- I have condensed the introduction and highlighted the main points（Pages 3-4）. 2- At the end of the introduction, I describe my contributions to this study. The contributions from our work are as follows:(1) To the best of our knowledge, this is the first time that image classification combined with an object detection model is used to automatically identify a variety of SB lesions and evaluate their bleeding risks; (2) The model based on deep learning has high accuracy, high sensitivity and high specificity, which improves the diagnostic efficiency of doctors and the ability to identify high-risk bleeding populations. Its diagnostic performance has good potential for clinical application（Page 7）. 3- This paper is a two-stage method that combines image classification and object detection, and screened by ablation experiments the optimal module (RGB channel, Multi-head self-attention module, the parallel network, feature erase module and atrous spatial pyramid pooling) added to the model, the model was used to classify and label various small intestinal lesions and their bleeding risk. We have also improved this part of the content（Page 8）. 4- I have improved and deepened the analysis of the conclusion and discussion part of the paper (Pages 14-17). 5- We feel sorry for our poor writings, however the article has been polished by a professional polishing company after revision, and has been certified by the editor, we hope the revised manuscript could be acceptable for you. 6- The incomplete sentences in the article have been revised and supplemented, and the meaningless sentences have been deleted. 7-To review the two latest references mentioned has carefully read and reference (Page 5, Lines 4-6). As suggested by the reviewer, we have added more references to support our views (From Pixels to Diagnoses: Deep Learning's Impact on Medical Image Processing-A Survey. https://doi.org/10.31185/wjcms.178 • Deep Convolutional Neural Network Architecture to Detect COVID-19 from Chest X-Ray Images. https://doi.org/10.24996/ijs.2023.64.5.38).

Thank you very much for your attention and time. Look forward to hearing from you.

Yours sincerely,

Jun-Ping Wang

15 Dec.，2023