

The authors wish to thank the Editor and the Reviewers for the consideration given to our manuscript. In particular, we do acknowledge the effort to provide us constructive criticism, for an appropriate improvement of our study.

Please find below the point-by-point answer.

Reviewer 1 (R1): This manuscript briefly reviews the role of AI in the field of IBD and focuses primarily on the important literature in the field. I believe this manuscript could be considered for publication with minor revisions. The following issues need to be considered.

IBD-related studies based on AI are gradually increasing. It is suggested that a bibliometric tool be used to generate a figure to illustrate this trend.

Authors (A): 1. We thank the reviewer for the valuable suggestion. A bibliometric figure has been added.

R1: The literature on AI and IBD-related literature is quite large. Therefore, the authors need to explain the criteria for inclusion of the literature listed in Table 2.

A: Criteria for the selection of pertinent literature have been added in the main text, as wisely suggested by the reviewer.

R1: AI can be used not only in clinical settings, but also in preclinical aspects and drug discovery in IBD. It is suggested to add a chapter describing this. (doi: 10.1038/s42003-021-01822-x).

A: After this insightful comment from the reviewer a specific section on preclinical studies and drug discovery has been added.

R1: How should development resources be conserved to increase the rate of repeat application of IBD models in the context of the increasing number of models? How can different models with similar purposes be evaluated and selected? How to increase the transparency of IBD-related AI model algorithms? These questions are proposed to be mentioned in the future of AI in IBD. (doi: 10.3748/wjg.v27.i38.6476)

A: We appreciate the reviewer's contribution. These relevant questions, and the related citation, have been added in the relative section of the text.

Reviewer 2: It is suggested that the authors improve the application of pathological artificial intelligence in inflammatory bowel disease (doi: 10.1038/s41591-019-0508-1.) and the contents of the detection of IBD-related CRC by endoangel (doi: 10.1016/S2468-1253(19)30413-3.)

A: We thank the reviewer for the contribution: the sections on AI application in pathology and adenoma detection by endoangel have been expanded as suggested. The relate citations have been added.

Reviewer 3 (R3): The purpose of this review is to summarize the latest and important scientific findings regarding the application of AI in inflammatory bowel disease and to provide an outlook on the current state. I consider this review to be of great interest. Overall, this manuscript is written in a relatively fluid and focused style. I think this manuscript could be improved in the following three areas.

First, the authors should add some background knowledge and describe how this review differs from existing reviews.

A: The reviewer's suggestion is very welcome and more information has been added in the background section.

R3: Second, the review lacks a research limitations section.

A: We agree on the reviewer's point; limitations have been added in the main text.

R3: Third, the research outlook section of this review is a highlight. The authors should expand the research outlook section appropriately and make a bold speculation about the future direction of research in this field.

A: The section on future direction of AI in IBD has been expanded and speculations have been made as rightfully suggested by the reviewer.