PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 62738

Title: Artificial intelligence applications in inflammatory bowel disease: Emerging technologies and future directions

Reviewer's code: 02371383

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Associate Professor

Reviewer's Country/Territory: Sweden

Author's Country/Territory: United States

Manuscript submission date: 2021-01-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-01-26 15:42

Reviewer performed review: 2021-01-27 12:47

Review time: 21 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The review by Gubatan and co-workers gives a good review on the current status of AI in IBD. The manuscript is well written and clear. The literature searching strategy is also clear. It's a bit hard to judge the findings without any descriptions of the cohorts included in the studies. Hoe many patients and controls? Could be included in the tables. A large number of AUCs are presented, but how solid are the findings? Only in one study a validation set is mentioned. Do all the other studies lack validation sets? I miss some overall interpretation of the findings in the different chapters. In the conclusion the authors write that AI has potential and suggest future directions for AI research in IBD, but what is the overall current status for the use of AI in clinical handling of IBD patients. Does AI have a role right now? Page 3, bottom. Have AI really revolutionized anything for clinicians yet or is AI still in its infancy in the clinical context? Some of the references are lack Issue and page numbering.

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 62738

Title: Artificial intelligence applications in inflammatory bowel disease: Emerging technologies and future directions

Reviewer's code: 04025483

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Full Professor

Reviewer's Country/Territory: Germany

Author's Country/Territory: United States

Manuscript submission date: 2021-01-26

Reviewer chosen by: Lian-Sheng Ma

Reviewer accepted review: 2021-01-27 09:07

Reviewer performed review: 2021-02-09 11:31

Review time: 13 Days and 2 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [Y] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

However, although well written, large parts of this review are very enumerative and at several instances, the author only provide diagnostic performances of the various AI system without providing a rough outline of the study design. The readability and also the educational value of this otherwise nicely executed and important review would be greatly increased if the authors could provide some more details of the studies in the manuscript text. Further, some recent important studies are completely missing. I hence recommend major revision.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The authors have satisfactorily adressed my concerns raised during the previous Review. I have no further comments.