PEER-REVIEW REPORT

Name of journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 69050

Title: Development of artificial intelligence technology in diagnosis, treatment, and prognosis of colorectal cancer

Reviewer's code: 05327699

Position: Editorial Board

Academic degree: MNAMS, MS

Professional title: Additional Professor

Reviewer's Country/Territory: India

Author's Country/Territory: China

Manuscript submission date: 2021-06-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-06-15 08:33

Reviewer performed review: 2021-06-15 08:50

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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) [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

Dear Author, 1. Is there any Smartphone based app for early detection of Polyp ? 2. What are the legal aspects associated with use of AI in Colorectal Ca? 3. What lies in the future to increase the sensitivity and specificity to identify CRC at an early stage ? Regards

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 69050

Title: Development of artificial intelligence technology in diagnosis, treatment, and prognosis of colorectal cancer

Reviewer's code: 06113941

Position: Peer Reviewer

Academic degree: MD, MSc

Professional title: Surgeon

Reviewer's Country/Territory: Greece

Author's Country/Territory: China

Manuscript submission date: 2021-06-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-06-19 17:25

Reviewer performed review: 2021-07-02 21:09

Review time: 13 Days and 3 Hours

Scientific quality	[Y] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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	[Y] Accept (High priority) [ ] Accept (General priority) [ ] 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

This is an exceptionally interesting review that will deepen our understanding of the contribution of artificial intelligence in colorectal cancer diagnosis, treatment, and prognosis. The manuscript is concise, well-written and structured, and the tables quickly grab the readers' attention. Based on recent literature, the authors have collected valuable information regarding the utility of artificial intelligence systems in improving colorectal cancer screening and early diagnosis. Interestingly, the study also focuses on AI-based novel applications for a more personalized and targeted approach in colorectal cancer patients. The authors should include in the advantages of robot-assisted surgery that the learning curve for robotic colorectal surgery appears to be shorter than that required for laparoscopic surgery. In addition, competition could drive the price of robotic surgical systems down. The authors should also include that more prospective studies with real-time use of AI models during colonoscopy will be necessary for further validation in the near future. Finally, the "black box" problem in machine learning raises several concerns regarding the widespread use of this novel technology in clinical practice. Overall, this is a high-quality review of in-depth and extensive research. Taking into consideration the points mentioned above, I recommend the publication of this article.