Dear Professor Ma,

Manuscript Title: IS ARTIFICIAL INTELLIGENCE THE FINAL ANSWER TO MISSED POLYPS IN COLONOSCOPY?

Thank you for reviewing our manuscript with constructive comments from Reviewer and Editors. The manuscript has been revised according to the Editorial Board and Reviewer's comments. The changes have been highlighted in the revised manuscript for easy reference. The point-by-point responses to the reviewers' comments and the English editing letter are attached.

We hope that the reviewers and editors will find this revised version acceptable for publication in the *World Journal of Gastroenterology*.

Yours sincerely,

Wai K. Leung

RESPONSES TO EDITORS' AND REVIEWER'S COMMENTS

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Minor revision

Specific Comments to Authors: This is an interesting review, addressing the role of Artificial Intelligence in missed lesions and the detection of polyps during colonoscopy. The paper is timely appropriated and the contents are clear and easy to understand. AI is actually a hot topic and this mini-review highlights recent research with promising results that will be surely incorporated to every day practice in colonoscopy in the near future. There are some comments I'd like to share with the authors:

The title is a clear reflection of the main subject. The abstract has an extended introduction and jumps directly in to the conclusions. It can be a little bit more elaborate on the subject to be revised.

Thank you for your comment. We have amended the abstract with more elaboration on the subject accordingly. (Abstract)

Key words are accurate. Although Background and Results are adequate, clear and straightforward important methodological issues are missing such as criteria selection of the papers selected for revision and statistical analysis descriptions used in the paper.

Thank you for the suggestion. As this is a review rather than a meta-analysis paper, the method used in the search of the studies as well as the statistical analysis of the meta-analysis have been included as new Supplementary Materials.

Background can incorporate a mention to interval carcinoma and Illustration and Tables can be added to the section that discusses the role of AI on missed polyps.

Thank you for the suggestion. Discussion on interval cancer was added to the Introduction (Page 3, 1st paragraph). Table 1 was expanded to include the new RCT of AI on missed polyps (Wang, Gastroenterology 2020).

Discussion is accurate but can be extended. The section about "strategies to minimise missed polyps" is conceptually wright but can be put up together in a more elaborate way to strengthen its importance. Although the review is focused on the detection of missing

lesions, a mention on the role of AI in the diagnosis and characterization of polys (CADx) can be included.

Thank you for your suggestion. A new section on "Use of AI on Characterization of Polyps" was added in the revised manuscript (P.9-10).

Biostatistics and use of SI units appear to be adequate. The manuscript cites appropriate references although there is continuous self-citing in a pair of passages of the discussion. Despite being easy to read with adequate organization and presentation the manuscript must be extensively revised and the language significantly improved. There are many spelling, grammar and syntaxes mistakes.

Thank you for your suggestion. The paper has been edited by a professional language company and the certificate was attached.

Mini-reviews can include sections or specific mentions on areas such as: Current state of the art Highlight of future directions Key concepts Finally, despite being in nature a mini-review and not a systematic review PRISMA 2009 checklist should be aspired and topics such as eligibility criteria, information sources, study selection and synthesis of results should be included.

Thank you for your suggestion. A new section on "State of the art" was added to discuss the role of AI for missing colorectal polyps (P.9). Another new section on "Limitations and Future Directions" was also included in the revised manuscript (P. 10)

In addition, the PRISMA checklist was attached as new Supplementary Material. Information on eligibility criteria, information sources, study selection and synthesis of results, were included the Supplementary Material.

Editorial Office's comments

The author must revise the manuscript according to the Editorial Office's comments and suggestions, which listed below:

(1) *Science Editor***:** 1 Scientific quality: This is a minireview of the AI for missed colonic polyps. The topic is within the scope of the WJG. (1) Classification: Grade B; (2) Summary of the Peer-Review Report: This is an interesting review, addressing the role of AI in missed lesions and the detection of polyps during colonoscopy. AI is actually a hot topic and this minireview highlights recent research with promising results that will be surely incorporated to everyday practice in colonoscopy in the near future. Despite being easy to read with adequate organization and presentation the manuscript must be extensively revised and the language significantly improved. There are many spelling, grammar and syntaxes mistakes. The questions raised by the reviewers should be answered; and (3) Format: There is 1 table and 2

figures. A total of 42 references are cited, including 17 references published in the last 3 years. There are 6 self-citations. 2 Language evaluation: Classification: Grade C. The authors need to provide the language certificate of professional language company. 3 Academic norms and rules: The authors provided the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement. No academic misconduct was found in the CrossCheck detection and Bing search. 4 Supplementary comments: This is an invited manuscript. The study is without financial support. The topic has not previously been published in the WJG. The corresponding author has published 2 articles in the BPG. 5 Issues raised: (1) I found the language classification was grade C. Please visit the following website for the professional English language editing companies we recommend: https://www.wjgnet.com/bpg/gerinfo/240; (2) I found the authors did not provide the original figures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor; and (3) I found the authors did not add the PMID and DOI in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout. 6 Re-Review: Required. 7 Recommendation: Conditionally accepted.

Response: Thank you for your comments.

1. *The manuscript has been edited by a professional English language editing company as recommended with the certificate attached.*
2. *The original figure was provided in PowerPoint format.*
3. *The PMID and DOI were added to the reference list.*