Name of journal: Artificial Intelligence in Gastrointestinal Endoscopy

Manuscript NO: 60490

Dear Editor,

Dear Reviewers,

Thank you for your time to revise our Manuscript ID: 60490, Artificial intelligence assisted endocytoscopy: a novel eye in endoscopy.
Authors: Monika Peshevska-Sekulovska, Tsvetelina Veselinova Velikova, and Milena Peruhova. We have incorporated most of the suggestions made by the reviewers. Please see below, in blue, for a point-by-point response to the reviewers' comments.

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: Endocytoscopy (EC) is a innovative endoscopic technique facilitates a more accurate evaluation of the superficial mucosal surface and allows real-time examination with the capability to distinguish normal from abnormal mucosa. This review aims to represent the most relevant information related to the latest EC technology and its clinical application in the lower GI tract diagnostic. The paper discussed mainly the role of artificial intelligence-assisted endocytoscopy in colorectal polyps, colorectal cancer and IBD. It means that EC has shown an excellent diagnostic accuracy, offering to aid in the in-vivo diagnosis of lesions in the lower GI tract. It is more helpful for readers to learn.

➢ Thank you for your very positive comments.

Reviewer #2

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Extremely interesting topic. the authors present the real time histology results of a new device – endocytoscope (EC) – in the diagnosis and characterisation of GI neoplasms. The authors

also introduce the role and value of artificial intelligence (AI) technology combined with EC in the real time histology diagnosis of colorectal polyps. However, it is not clear whether the authors deal only with the study results performed with EC or also with the results achieved by conventional NBI colonoscopies. Question is whether colonoscopy studies are also involved in the analysis? For example, publication by Cesare Hassan et al. (citation 25) is a meta-analysis of studies performed by colonoscopies and not only by endocytoscopes. Despite of these anomalies the review is correct and very informative.

> ➤ We are grateful for the critical note. Due to the insufficient number of publications related to AI combined with EC, in our review, we included those studies comprising data about colonoscopy with NBI and CAD, as well as EC.
> ➤ We have added this disclaimer in the abstract and at the end of the introduction.

Reviewer #3

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: The paper presents a review about the most relevant information related to the latest Endocytoscopy technology and its clinical application in the lower gastrointestinal tract diagnostic. The subject matter is within the scope of the journal. The article is well written and structured. I consider that it can be published in its current state.

> ➤ Your evaluation of the manuscript is of great importance to us. Thus, we are grateful for your time and overall positive assessment of the manuscript.

(1)Science editor: 1 Scientific quality: The manuscript describes a review of the artificial intelligence assisted endocytoscopy. The topic is within the scope of the AIGE. (1) Classification: Grade B and two Grades C; (2) Summary of the Peer-Review Report: This review aims to represent the most relevant information related to the latest EC technology and its clinical application in the lower GI tract diagnostic. The paper discussed mainly the role of artificial intelligence-assisted endocytoscopy in colorectal polyps, colorectal cancer and IBD. It means that EC has shown an excellent diagnostic accuracy, offering to aid in the in-vivo diagnosis of lesions in the lower GI tract. The questions raised by the reviewers should be answered; and (3) Format: There is 1 table and 1 figures A total of 34 references are cited, including 12 references published in the last 3 years. There is 1 self-citation. 2 Language

evaluation: Classification: Three Grades B. No language editing certificate was provided. 3 Academic norms and rules: No academic misconduct was found in the CrossCheck detection and Bing search. 4 Supplementary comments: This is an invited manuscript. No financial support was obtained for the study. The topic has not previously been published in the AIGE. 5 Issues raised: (1) The authors did not provide original pictures. 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. 6 Re-Review: Required. 7 Recommendation: Conditional acceptance.

> Thank you for your insightful comment. We prepared the figures, and we will attach them.

(2) Editorial office director: I have checked and revised the comments written by the science editor.

(3) Company editor-in-chief: I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the Artificial Intelligence in Gastrointestinal Endoscopy, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors.