PEER-REVIEW REPORT

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Reviewer's code: 04022782

Position: Peer Reviewer

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Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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	[ ] Yes [Y] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This manuscript presents a survey for research on gastroenterology and hepatology using artificial intelligence techniques. Based on the title, the emphasis is focused on challenges and opportunities. The use of AI in the field of gastroenterology has become more and more evident. This is a clear and well-structured review, which summarizes the advances and limitations of the application of AI in gastroenterology and hepatology.

However, I found that the manuscript has some limitations. I break these down into 2 issues in the following section. (1) The opportunities of AI applications were not extensively discussed. There were a lot of bullets on opportunities. However, there is no connections to previous literatures discussed earlier. These sections should be discussed in more details since it is one of the major focuses of this article. Moreover, in section 4 and 5, there is so much information about previous literatures. The authors should summarize them into tables, which will give the highest benefits to readers. (2) Technical accuracy and clarity. [2.1] In section 3, the author stated that ANN is a supervised ML ANN is just another name of neural network and can be used for both supervised and unsupervised learning. [2.2] The authors separately mentioned Deep Learning (DL) and Deep Neural Network (DNN). In fact, they are very much the same. I would suggest using only one term to avoid confusion. Otherwise, the authors should clearly state their differences. [3.3] The last sentence of section 3 is a bit confusing because of the terms "before been fed to the CNN". Normally, the convolutional process is an integral part of CNN. So far, I really enjoy reading section 6 the most. However, in section 6.2, I cannot really relate cybersecurity in the second paragraph to specific AI applications. Section 6.3 (IP) is also an important issue that was nicely covered by the authors. In general, I agree with the publication of the article after minor revisions.