

PEER-REVIEW REPORT

Name of journal: Artificial Intelligence in Gastroenterology

Manuscript NO: 63358

Title: Artificial intelligence in gastrointestinal radiology: a review with special focus on recent development of magnetic resonance and computed tomography

Reviewer's code: 00717560

Position: Peer Reviewer

Academic degree: MD

Professional title: Professor

Reviewer's Country/Territory: China

Author's Country/Territory: Taiwan

Manuscript submission date: 2021-01-27

Reviewer chosen by: Ya-Juan Ma

Reviewer accepted review: 2021-02-04 15:38

Reviewer performed review: 2021-02-17 12:07

Review time: 12 Days and 20 Hours

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 Grade E: Do not publish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

SPECIFIC COMMENTS TO AUTHORS

Overall, the introduction covers too many general contents without the focus on the specific topics in this review. The first and second paragraphs can be merged into a more concise presentation. Notable statements are problematic even ungrounded, for example, I strongly disagree with the opinion the machine learning “will” replace, or “soon surpass” human experts. Also, the authors mentioned, “the practice of interventional procedures in gastrointestinal radiology can be best exemplified by the treatment of liver cancer.” Please note that liver cancer is only one example of gastrointestinal radiology. For a review, it is much needed to cover a broad range of representative studies instead of only one type of cancer. Authors mentioned that “Due to more limited public database available, the development of AI in endoscopic radiology is less developed, so in this review article, we will focus on non-endoscopic radiological examination, particularly on CT and MRI.” Are there any reasons why AI endoscopic radiology is less developed? Insightful discussions are highly appreciated to enhance the quality of the discussion. The section of “Introduction of AI” is not appropriated with many general contents. Given the focus of the work, please consider focusing heavily on the modern AI models, which is deep learning technology. The discussion on the main challenges and pitfalls of AI in radiology is too general. Much of the contents have been repeatedly reported in the literature. This section is less useful and less tied to the focus of the review. For future works, please discuss more how different deep learning models can be better integrated into gastrointestinal radiology. Like how unsupervised, or automated ML models, can be used to use clinical data to improve the prediction or diagnostics performance. How can we utilize multi-center clinical data for generalized model evaluation? How can develop truly clinically-related applications in related areas?

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: Artificial Intelligence in Gastroenterology

Manuscript NO: 63358

Title: Artificial intelligence in gastrointestinal radiology: a review with special focus on recent development of magnetic resonance and computed tomography

Reviewer's code: 05260772

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Taiwan

Manuscript submission date: 2021-01-27

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2021-04-06 05:19

Reviewer performed review: 2021-04-07 01:16

Review time: 19 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

It was an interesting review on deep learning use in radiology