PEER-REVIEW REPORT

Name of journal: *Artificial Intelligence in Gastroenterology*

Manuscript NO: 74646

Title: Application of Artificial Intelligence in Non-Alcoholic Fatty Liver Disease and Viral Hepatitis

Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05136367

Position: Peer Reviewer

Academic degree: MD

Professional title: Postdoc

Reviewer's Country/Territory: Italy

Author's Country/Territory: United States

Manuscript submission date: 2021-12-31

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-07 07:48

Reviewer performed review: 2022-01-15 21:23

Review time: 8 Days and 13 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [Y] Grade E: Do not publish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) [ ] Minor revision [ ] Major revision [Y] Rejection
Re-review	[ ] Yes [Y] No

Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

-No references are provided to support the data and statements reported in the Introduction and in other sections of the manuscript. Please provide and cite references as appropriate.   -"Current methods of assessing liver fibrosis progression and mortality in both NAFLD and viral hepatitis have many limitations". Please explain and elaborate discussing the current limitations.   -Is this a systematic review or a simple review of current evidences? Please clarify.   -Literature search and article screening should be more detailed and performed according to PRISMA guidelines for systematic reviews. It is unclear how the Authors selected evaluated the articles.   -This review discussed several articles that have explored different AI applications but the discussion on clinical applications is poor. How these information can be translated in clinical practice?   -Limitations and challenges of current AI studies should be discussed. The Authors can consider to discuss the advances needed for future application of AI in daily practice.

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Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05097657

Position: Peer Reviewer

Academic degree: BSc, MSc, PhD

Professional title: Professor

Reviewer's Country/Territory: India

Author's Country/Territory: United States

Manuscript submission date: 2021-12-31

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-16 11:28

Reviewer performed review: 2022-01-26 14:19

Review time: 10 Days and 2 Hours

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
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SPECIFIC COMMENTS TO AUTHORS

Comments for Manuscript 74646: Application of Artificial Intelligence in Non-Alcoholic Fatty Liver Disease and Viral Hepatitis   The author of this manuscript envisioned appraising the role of Artificial Intelligence in NAFLD and Viral Hepatitis. I read the manuscript; I found some areas in which I would have to appreciate greater clarity. 1. In the introduction, it would be useful if the author could explain a little more about machine learning and its classification and its correlation with deep learning to understand the concept of artificial intelligence in NAFLD and viral hepatitis to non-scientific readers. 2. In the introduction, it would be highly appreciable if the author can provide the global prevalence of non-alcoholic fatty liver disease (NAFLD) statistics. 3. The author should comment on the role of artificial intelligence and drug pioneering also. It has been seen the rise of artificial intelligence presents a significant opportunity in the domain of drug discovery and also predicting both therapeutic and toxic drug effects.   4. A thorough revision of English grammar, punctuation, hyphenation, syntax, and style is needed.