PEER-REVIEW REPORT

Name of journal: *Artificial Intelligence in Gastroenterology*

Manuscript NO: 74644

Title: Machine learning approaches using blood biomarkers in non-alcoholic fatty liver diseases: a mini-review

Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05572950

Position: Peer Reviewer

Academic degree: PhD

Professional title: Doctor, Reader (Associate Professor), Teacher

Reviewer's Country/Territory: India

Author's Country/Territory: Brazil

Manuscript submission date: 2021-12-31

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-30 04:17

Reviewer performed review: 2022-01-30 04:21

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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
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

1. The authors can compare the current review with recent reviews and state the novelty of this review. 2. A section, challenges, open issues and future directions can be added.

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Title: Machine learning approaches using blood biomarkers in non-alcoholic fatty liver diseases: a mini-review

Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03737783

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Assistant Professor, Lecturer

Reviewer's Country/Territory: Italy

Author's Country/Territory: Brazil

Manuscript submission date: 2021-12-31

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2022-02-09 09:09

Reviewer performed review: 2022-02-24 03:19

Review time: 14 Days and 18 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Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [Y] Grade E: Do not publish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 [ ] Grade B: Minor language polishing [Y] 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

Dear Editor,   Carteri et al wrote a mini-review on a hypothetically interesting topic in the field of hepatology: machine learning approaches on NAFLD diagnosis. However their aims were not fulfilled by the resulting paper. The data presented are scarce and incomplete and the paper is too brief. Also there are several typos and the english has to be reviewed.   You can find more details in the comments provided with the copy of the manuscript attached to this review.

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Title: Machine learning approaches using blood biomarkers in non-alcoholic fatty liver diseases: a mini-review

Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05769197

Position: Peer Reviewer

Academic degree: MSc, PhD

Professional title: Professor

Reviewer's Country/Territory: Germany

Author's Country/Territory: Brazil

Manuscript submission date: 2021-12-31

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2022-03-02 07:43

Reviewer performed review: 2022-03-11 04:55

Review time: 8 Days and 21 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] 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) [Y] Accept (General priority) [ ] 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

The manuscript "Machine learning approaches using blood biomarkers in non-alcoholic fatty liver diseases: a mini-review." is well written and introduces AI methods to predict stages of fatty liver diseases. ML becomes more important in clinical practice and could be serve a precision tool in the prediction of disease severity.   The authors give a short overview of fatty liver diseases and introduce briefly in ML. They highlight the importance and new approaches of ML in fatty liver diseases. Finally, the authors also underline the limitations of current knowledge and the importance for further research in this field.   There are no major or minor comments to the authors.

PEER-REVIEW REPORT

Name of journal: *Artificial Intelligence in Gastroenterology*

Manuscript NO: 74644

Title: Machine learning approaches using blood biomarkers in non-alcoholic fatty liver diseases: a mini-review

Provenance and peer review: Invited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03434021

Position: Editorial Board

Academic degree: MD

Professional title: Associate Professor

Reviewer's Country/Territory: Turkey

Author's Country/Territory: Brazil

Manuscript submission date: 2021-12-31

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2022-03-02 19:27

Reviewer performed review: 2022-03-12 20:36

Review time: 10 Days and 1 Hour

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] 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) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No

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

SPECIFIC COMMENTS TO AUTHORS

The authors evaluated the efficacy of using artificial intelligence in a common disease such as nafld in the manuscript entitled "' Machine learning approaches using blood biomarkers in non-alcoholic fatty liver diseases: a mini-review". Although this study is short, its subject has been chosen well and I think that it has the capacity to guide future studies on this subject. It is well written and and contains correct expressions.   But in source 22, is it canbay or cambay? I think it needs clarification. In the text Cambay but in the references Canbay. After few spelling mistakes I recommend that it could be accepted for publication.   Best regards.