PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 84842

Title: Comparison and development of machine learning for thalidomide-induced peripheral neuropathy prediction of refractory Crohn's disease in Chinese population

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05872085

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

Manuscript submission date: 2023-04-05

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-04-05 12:52

Reviewer performed review: 2023-04-17 16:04

Review time: 12 Days and 3 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[Y] Grade A: Excellent [ ] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No scientific significance
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) [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

1. How long were patients followed for after starting thalidomide? Please include this under patient selection. 2. Figure 3, presenting only pts with TiPN would be less confusing. 3. Figure 4, more information is needed to contextualize the information presented. It is not clear what is being measured and compared here. Please elaborate by including any relevant information. 4. It would be good to compare the results of this study with similar studies of TiPN in other patient populations in Discussion. This comparison will have important clinical implications and should be considered.

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Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05759722

Position: Peer Reviewer

Academic degree: PhD

Professional title: Research Scientist, Teaching Assistant

Reviewer's Country/Territory: Malaysia

Author's Country/Territory: China

Manuscript submission date: 2023-04-05

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-04-20 04:13

Reviewer performed review: 2023-04-20 04:27

Review time: 1 Hour

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation

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

SPECIFIC COMMENTS TO AUTHORS

This manuscript develops and compares a predictive model of thalidomide-induced peripheral neuropathy using machine learning based on comprehensive clinical and genetic variables. The paper is well-written and presented. Five predictive models are established and evaluated by the confusion matrix receiver operating characteristic curve, the area under the precision-recall curve, specificity, sensitivity, precision, accuracy, and F1 score. The retrospective cohort of 164 Crohn's disease patients from January 2016 to June 2022 was used to establish the model. Therefore, I have a few concerns: 1.   In the abstract, the authors need to clarify how their model performance compares to state-of-the-art and how it goes beyond the state-of-the-art methods.   2.

The reference list is insufficient, and they are not current. There are no references in the last 3 years.