PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 55040

Title: Application of artificial neural network in the detection and diagnosis of gastrointestinal and liver tumors

Reviewer's code: 05060546

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

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Reviewer chosen by: AI Technique

Reviewer accepted review: 2020-03-02 23:31

Reviewer performed review: 2020-03-08 10:32

Review time: 5 Days and 11 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Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [Y] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Authors described "At present, machine learning methods applied to intelligent diagnosis of diseases include linear regression models, support vector machines, artificial neural networks, decision trees, Bayesian classification, ensemble learning, k nearest neighbor classification algorithms, and deep reinforcement learning, improved model The model also obtained better prediction results on some diagnostic problems." in the third paragraph. But the reader cannot comprehend the overview of machine learning methods from this description. Please show the history or the special feature of machine learning.   Authors show the application of AI diagnosis for gastric cancer, liver cancer, and colorectal cancer. But the presented cases are limited to the tumor marker and the CT image diagnosis. In the detection and diagnosis of gastrointestinal and liver tumors, we use endoscopic and ultrasonic examination. Recently, several studies reported using endoscopic images and ultrasocic diagnosis. Please consider to show recent trend of computer aided detection and diagnosis for endoscopic and ultrasonic images.