PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 83468

Title: Application of artificial intelligence in trauma orthopedics: limitation and prospects

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05382551

Position: Editorial Board

Academic degree: PhD

Professional title: Associate Professor

Reviewer's Country/Territory: Spain

Author's Country/Territory: Iran

Manuscript submission date: 2023-01-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-01-26 21:05

Reviewer performed review: 2023-01-26 22:47

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Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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

Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No scientific significance
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 [Y] 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 article is within the scope of the journal. It deals with an interesting topic.   It is well written. The reading is fluent.   A review of the state of the art about "Application of artificial intelligence in trauma orthopedics" is carried out.   To accept the article it is necessary to make some improvements: a) It must explain how the review was carried out: sources consulted, article retrieval criteria, type of review. b) A discussion section should be included in which the results obtained from the review are shown: current lines of work, possible future lines of work, limitations of the review carried out, comparison with other reviews... c) A conclusions section should be included summarizing the scientific contribution of the article, and proposing lines of future work.

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Reviewer's code: 05631016

Position: Peer Reviewer

Academic degree: MSc

Professional title: Senior Researcher, Senior Scientist

Reviewer's Country/Territory: Czech Republic

Author's Country/Territory: Iran

Manuscript submission date: 2023-01-26

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-03-28 11:54

Reviewer performed review: 2023-03-28 12:06

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 [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No novelty
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SPECIFIC COMMENTS TO AUTHORS

The introduction does not clearly state the purpose or objective of the study, making it difficult to understand the scope of the research. It is highly recommended to use the below references to improve the introduction: 1. Artificial Intelligence and COVID-19: Deep Learning Approaches for Diagnosis and Treatment 2.   Cancer Digital Twins in Metaverse 3.   A Hybrid Echo State Network for Hypercomplex Pattern Recognition, Classification, and Big Data Analysis 4. A conceptual deep learning framework for COVID-19 drug discovery   The term "neural networks" is not clearly defined, and readers who are not familiar with machine learning may find this confusing.   The manuscript makes a claim about the sensitivity and specificity of machine learning in detecting fractures, but there is no data or reference to support this claim.   The conclusion suggests that future studies are necessary to develop more accurate and effective detection models, but it does not specify what kind of studies or research would be required.   The manuscript does not mention any potential limitations or challenges associated with using machine learning in orthopedic surgery, such as data quality, bias, or ethical considerations.   The use of jargon and technical terms may make

it difficult for a non-expert audience to understand the manuscript. The manuscript does not provide any practical guidance or recommendations for orthopedic surgeons or healthcare professionals on how to incorporate machine learning into their clinical practice.

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good
	[ ] Grade D: Fair [ ] Grade E: Do not publish
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	[Y] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority)
	[ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer	Peer-Review: [Y] Anonymous [ ] Onymous

| **statements** | Conflicts-of-Interest: [   ] Yes   [Y] No |

SPECIFIC COMMENTS TO AUTHORS

The paper can be accepted in current form