

PEER-REVIEW REPORT

Name of journal: *World Journal of Orthopedics*

Manuscript NO: 85312

Title: In vitro laboratory infection research in orthopaedics: Why, when, and how

Provenance and peer review: Invited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05382254

Position: Peer Reviewer

Academic degree: MD

Professional title: Assistant Professor, Associate Chief Physician, Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Greece

Manuscript submission date: 2023-04-22

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-05-09 07:57

Reviewer performed review: 2023-05-14 13:54

Review time: 5 Days and 5 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input checked="" type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input checked="" type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input checked="" type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input checked="" type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input checked="" type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The idea is not clear, the structure is not reasonable, and the citations do not serve to highlight the topic. The topic of this review is not only not a current hot topic but also has little significance in guiding clinical practice and basic research. It is recommended that the authors highlight the "context" of this review in the Introduction Section, i.e., "why" an in vitro laboratory infection research in orthopaedics should be established. Then, they should explain "when" it is appropriate to establish an in vitro laboratory for orthopedic infections. And finally, they should explain "how" to establish an in vitro laboratory for orthopedic infections, and what are the issues to be noted. To form a higher quality review, at least each section has a combination of major headings and subheadings so that it appears logical and clear, rather than just multiple subheadings throughout. The use of picture and chart in the article seem far-fetched. References do not conform to journal guidelines and the references 4,5,6 are identical.

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Peer-review model: Single blind

Reviewer's code: 05480683

Position: Peer Reviewer

Academic degree: PhD

Professional title: Academic Fellow, Academic Research, Adjunct Professor

Reviewer's Country/Territory: Italy

Author's Country/Territory: Greece

Manuscript submission date: 2023-04-22

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-05-16 05:33

Reviewer performed review: 2023-05-18 19:21

Review time: 2 Days and 13 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In vitro laboratory infection research in Orthopaedics: why, when, and how This review is interesting as well as well written and organized other than detailed. It succinctly describes the evolution of biomedical research at a basic level and explain why the perception of orthopaedic conditions has fundamentally changed over the last decades. The figures are well done. I recommend the publication of this manuscript in World Journal of Orthopedics. Few suggestions for minor revision are as follows: 1. Several sentences are gray. Please fix it 2. Several subsections, composed of few sentences should be merged to each other for a better readability. 3. The aim of the work should be detailed at the end of the introduction. 4. Concerning Molecular biology techniques, I strongly suggest including several general notions of the described techniques and including these reviews as supporting reference which describe with high detail all these techniques PMID:35744711 and <https://www.mdpi.com/2073-4441/13/24/3551> 5. Concerning AI and in vitro models, which is a very interesting topic, I suggest including more notions on the topic. I also suggest introducing these couple of interesting publications PMID: 37060240 and PMID:



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PEER-REVIEW REPORT

Name of journal: *World Journal of Orthopedics*

Manuscript NO: 85312

Title: In vitro laboratory infection research in orthopaedics: Why, when, and how

Provenance and peer review: Invited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05420434

Position: Peer Reviewer

Academic degree: MD

Professional title: Associate Professor

Reviewer's Country/Territory: China

Author's Country/Territory: Greece

Manuscript submission date: 2023-04-22

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-05-22 13:24

Reviewer performed review: 2023-05-22 13:53

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
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Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
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Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

This paper reveals some important research advances in orthopedics at the level of basic science. It is worth emphasizing that recently there has been a fundamental change in the perception of the orthopaedic condition, which is reflected in clinical practice. The authors describe the fundamental aspects of successful laboratory experiments on in vitro infections and expand on the latest evidence related to molecular biology, in vitro research, and orthopaedic artificial intelligence. The article is clear, readable and enlightening.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: *World Journal of Orthopedics*

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Reviewer's code: 05382254

Position: Peer Reviewer

Academic degree: MD

Professional title: Assistant Professor, Associate Chief Physician, Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Greece

Manuscript submission date: 2023-04-22

Reviewer chosen by: Jing-Jie Wang

Reviewer accepted review: 2023-06-08 04:33

Reviewer performed review: 2023-06-08 07:54

Review time: 3 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors have updated the structure of the article, added subheadings in the main text, and corrected errors in the references, as suggested by the reviewer. In short, the revision attitude is serious. The revision effect is good.