

PEER-REVIEW REPORT

Name of journal: *World Journal of Biological Chemistry*

Manuscript NO: 82942

Title: In silico evidence of Remdesivir action in the blood coagulation cascade modulation in the COVID-19 treatment

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03582196

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Director, Professor

Reviewer's Country/Territory: China

Author's Country/Territory: Brazil

Manuscript submission date: 2022-12-30

Reviewer chosen by: Yu-Lu Chen

Reviewer accepted review: 2023-02-17 02:13

Reviewer performed review: 2023-02-28 00:24

Review time: 10 Days and 22 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input 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 Grade E: Do not publish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
Creativity or innovation 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 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 checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input 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

In this paper, the author uses the experiments in silicon to obtain the affinity of Remdesivir with ACE2 and coagulation cascade factors through molecular docking. The stability of drug binding with other factors was evaluated by comparing the affinity. It is proved that Remdesivir can combine with ACE2 and coagulation factor stably. It may be the theoretical basis for Remdesivir to play a pharmacological role and play an anticoagulant role. So that we can better understand the role and application of Remdesivir in the pharmacological treatment of COVID-19. This paper uses the method of in-silicon experiment to transform this pharmacological research into inorganic experiment. And through the affinity between substances, it provides a theoretical basis for the antiviral effect and possible anticoagulant effect of Remdesivir. In the body, the activation of coagulation process and the change of hypercoagulable state is a complex regulatory process. Although, the in silico analyses indicated that Remdesivir interacts with clotting factors, whether this situation still plays a role in the body is still a long process to be proved.

PEER-REVIEW REPORT

Name of journal: *World Journal of Biological Chemistry*

Manuscript NO: 82942

Title: In silico evidence of Remdesivir action in the blood coagulation cascade modulation in the COVID-19 treatment

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05347124

Position: Peer Reviewer

Academic degree: MD

Professional title: Associate Professor, Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Brazil

Manuscript submission date: 2022-12-30

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-03-30 16:24

Reviewer performed review: 2023-03-30 16:48

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" 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 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 checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input checked="" 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 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

There is no experimental evidence to support this paper, which is just the screening of information and data methods. Its research conclusion is weak in science and easy to mislead. In addition, there are some grammatical errors, and the author does not provide language polishing proof. In short, this paper does not reach the level of journal publication.