

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Hepatology*

**Manuscript NO:** 66490

**Title:** New progress in understanding roles of nitric oxide during hepatic ischemia-reperfusion injury

**Provenance and peer review:** Invited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 05083839

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** Egypt

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-03-29

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-04-15 14:13

**Reviewer performed review:** 2021-05-06 09:07

**Review time:** 20 Days and 18 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 Grade E: Do not publish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 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 checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<b>Peer-reviewer statements</b>	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

[Dear Dr Shu-long Yang, your article is very important in the medical field however I've some comments for you & your team to consider. 1st of all is the language which needs precise revision by an expert as there are some spelling mistakes ( for example in the abstract line 4 it is phase not phage as you wrote) also formulation of many sentences need to be adjusted. Regarding the scientific content I've some questions to raise so you can clarify or adjust in your manuscript 1st you just mentioned in the introduction that the ET/NO ratio is increased in early ischemia, however you didn't mention any details as regarding the normal ratio or even the mechanism for this increase. Next, you mentioned in your manuscript that iNOS may decrease the HIRI however all mentioned data in your article showed only the bad aspect and deleterious effect of iNOS you just mentioned that its action depends on length & duration of ischemia without any clarification, moreover all data in your article revealed the deleterious effect of iNOS both early & prolonged ischemia without any evidence or even a mechanism for its role in improving the HIRI so I think this needs justification. Also the role of NO in apoptosis, you reported that it can induce or inhibits apoptosis, however you didn't even write a single evidence for its role in stimulating apoptosis or even when this happens. Not only this, but you also reported that inhibiting NO can reduce HIRI by cell apoptosis which I think need to be revised. Finally I also would like to highlight 2 contradictory sentences in your conclusion, the 1st reporting that adding NO or increasing its bioavailability have both protective & deleterious effects then you reported that increasing NO bioavailability in hepatic tissue is a good way to prevent & treat HIRI.] Thank you for in advance for having patience to my comments & considering them.

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**Title:** New progress in understanding roles of nitric oxide during hepatic ischemia-reperfusion injury

**Provenance and peer review:** Invited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 03786725

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** Italy

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-03-29

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-04-29 10:05

**Reviewer performed review:** 2021-05-11 11:21

**Review time:** 12 Days and 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
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 checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="radio"/> ] Anonymous [ <input type="radio"/> ] Onymous Conflicts-of-Interest: [ <input type="radio"/> ] Yes [ <input checked="" type="radio"/> ] No
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### **SPECIFIC COMMENTS TO AUTHORS**

The manuscript of Yiping Zhang et al. deals with the role of nitric oxide during hepatic ischemia reperfusion injury. The authors conducted a systematic review analyzing a series of possible molecular interaction mechanisms. The topic would be interesting with important repercussions on clinical practice, especially in transplantology. However, The bibliographic research was not performed according to standardized methodologies (e.i PRISMA guidelines). Sometimes the results are listed in difficult to understand way. The discussion could be developed more extensively. Furthermore, the possible clinical implications of the research have not been reported and the study limits should be highlighted.