

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Gastrointestinal Surgery*

**Manuscript NO:** 86218

**Title:** Hepatic ischemia-reperfusion syndrome and its effect on the cardiovascular system: The role of treprostinil, a synthetic prostacyclin analog

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

**Peer-review model:** Single blind

**Reviewer's code:** 03721758

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Lecturer, Surgeon

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

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

**Manuscript submission date:** 2023-06-09

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2023-06-09 18:29

**Reviewer performed review:** 2023-06-12 19:30

**Review time:** 3 Days and 1 Hour

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 Grade E: Do not publish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 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

<b>Scientific significance of the conclusion in this manuscript</b>	<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
<b>Language quality</b>	<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
<b>Conclusion</b>	<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
<b>Re-review</b>	<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 authors This is a well designed study summarizing the potential beneficial role of treprostinil, a new synthetic prostacyclin analogue in the management of hepatic ischemia-reperfusion syndrome. This is a well designed and arranged and written study addressing this critical issue. My only comments are: 1- Conclusion section: better to be shortened. 2- Title: please delete the words (relatively new). 3- Grammar: I could hardly find any grammatical defects. 4- References: well updated.

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**Peer-review model:** Single blind

**Reviewer's code:** 02542027

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

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

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

**Manuscript submission date:** 2023-06-09

**Reviewer chosen by:** Geng-Long Liu

**Reviewer accepted review:** 2023-07-14 07:40

**Reviewer performed review:** 2023-07-14 08:49

**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
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<b>Conclusion</b>	<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
<b>Re-review</b>	<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

This is a very interesting review. Overall, the perspective chosen in this paper is the current hot field, and focusing on liver transplant immunity and IRI is a trend in our digestive system. The amount of literature cited in this article is a little low, so it needs to be supplemented appropriately. For the part of non-coding Rnas regulating hepatic IRI, please refer to the following literature: Inhibition of miR-450b-5p ameliorates hepatic ischemia/reperfusion injury via targeting CRYAB, PMID: 32532961 PMCID: PMC7293338 DOI: 10.1038/s41419-020-2648-0. and Research progress of lncRNA and miRNA in hepatic ischemia-reperfusion injury, PMID: 35934611 DOI: 10.1016/j.hbpd.2022.07.008. The language of this article is fluent, and I don't think additional polishing is needed. In exploring the mechanism of hepatic IRI, I suggest that the authors cite the following literature (for consideration only): A new heparin fragment decreases liver ischemia-reperfusion injury , PMID: 34366197 DOI: 10.1016/j.hbpd.2021.07.004 . MicroRNA-125b protects liver from ischemia/reperfusion injury via inhibiting TRAF6 and NF-κB pathway, PMID: 30686117 DOI: 10.1080/09168451.2019.1569495 . TRIM37 exacerbates hepatic ischemia/reperfusion

injury by facilitating IKK $\gamma$  translocation, PMID: 37158850 PMCID: PMC10165779  
DOI: 10.1186/s10020-023-00653-2. Finally, in Table 1. Hepatic ischemia-reperfusion  
injury mechanisms, the large arrow in the table does not seem to be necessary