

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 76668

Title: Therapeutic potential of mesenchymal stem cells in the treatment of acute liver failure

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 02560127

Position: Editorial Board

Academic degree: PhD

Professional title: Professor

Reviewer's Country/Territory: Pakistan

Author's Country/Territory: Serbia

Manuscript submission date: 2022-03-24

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-25 13:48

Reviewer performed review: 2022-04-02 12:31

Review time: 7 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 Grade E: Do not publish
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 checked="" 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="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

Manuscript Review Report The manuscript entitled, “Therapeutic potential of mesenchymal stem cells in the treatment of acute liver failure” has been reviewed and it possess few concerns which are listed as follows: 1. Abstract needs improvement. Briefly discuss acute liver failure in abstract. 2. In the introduction, a brief overview of structural and functional aspects of the liver should be included. 3. Page no. 5, author mentioned “2.” in the heading of 2nd paragraph. It should be removed. 4. The global epidemiology of acute liver failure (ALF) should be mentioned. 5. Different sources of MSCs should be included. 6. Mention different routes of MSCs transplantation in ALF. Discuss which route showed better results in hepatic regeneration. 7. There are some spelling e.g.(Kupffer cells) and grammatical errors in the text which needs to be corrected.

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Manuscript NO: 76668

Title: Therapeutic potential of mesenchymal stem cells in the treatment of acute liver failure

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05848379

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Serbia

Manuscript submission date: 2022-03-24

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-26 07:34

Reviewer performed review: 2022-04-04 03:43

Review time: 8 Days and 20 Hours

Scientific quality	[<input checked="" type="radio"/>] Grade A: Excellent [<input type="radio"/>] Grade B: Very good [<input type="radio"/>] Grade C: Good [<input type="radio"/>] Grade D: Fair [<input type="radio"/>] Grade E: Do not publish
Language quality	[<input checked="" type="radio"/>] Grade A: Priority publishing [<input type="radio"/>] Grade B: Minor language polishing [<input type="radio"/>] Grade C: A great deal of language polishing [<input type="radio"/>] Grade D: Rejection
Conclusion	[<input checked="" type="radio"/>] Accept (High priority) [<input type="radio"/>] Accept (General priority) [<input type="radio"/>] Minor revision [<input type="radio"/>] Major revision [<input type="radio"/>] Rejection
Re-review	[<input type="radio"/>] Yes [<input checked="" type="radio"/>] No

**Peer-reviewer
statements**

Peer-Review: [☐] Anonymous [☒] Onymous

Conflicts-of-Interest: [☐] Yes [☒] No

SPECIFIC COMMENTS TO AUTHORS

Mesenchymal stem cells (MSCs) are immunoregulatory stem cells which are able to modulate phenotype and function of all immune cells that play pathogenic role in the development and progression of acute liver failure (ALF). In this review, the author emphasize the current knowledge about molecular and cellular mechanisms which are responsible for MSC-based modulation of liver-infiltrated immune cells and we discuss different insights regarding the therapeutic potential of MSCs in liver regeneration. In the author's work ,they focused in examination of molecular and cellular mechanisms involved in MSC-based modulation of liver-infiltrated immune cells. Good review of relevant research.