World journal of gastroenterology

Editorial Office

Dear Dr. Jia-Ping Yan,

Thank you for your kind consideration of our review article entitled "Therapeutic potential of mesenchymal stem cells in the treatment of acute liver failure" for the publication in the World journal of gastroenterology.
We have taken into account all the comments raised by the editors and reviewers and we believed that we were able to successfully address all of them.

Comments of the editors and reviewers and our answers are submitted in the enclosure.

Many thanks for your consideration of our revised manuscript.

Sincerely,

Prof. Vladislav Volarevic

Reviewer 1:

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.

- **We are very thankful to the reviewer for nice words related to our manuscript.**

Reviewer 2:

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.

- **As suggested by the reviewer, we briefly discussed acute liver failure in revised abstract.**

2. In the introduction, a brief overview of structural and functional aspects of the liver should be included.

- **As suggested by the reviewer, we added a new paragraph in Introduction section in which we provided a brief overview of liver structure and function (please see the 1st paragraph of revised Introduction).**

3. Page no. 5, author mentioned "2." in the heading of 2nd paragraph. It should be removed.

- **We apologize for this mistake. Number "2" is removed from the heading of 2nd paragraph in revised manuscript.**

4. The global epidemiology of acute liver failure (ALF) should be mentioned.

- **As suggested, the epidemiology of ALF is mentioned in the revised introduction.**

5. Different sources of MSCs should be included.

- **Different sources of MSCs are now emphasized in revised manuscript (please see page 11 of revised manuscript).**

6. Mention different routes of MSCs transplantation in ALF. Discuss which route showed better results in hepatic regeneration.

- **As suggested by reviewer, we described how different routes of MSCs injection affected their therapeutic effects in the treatment of ALF (please see page 5 of revised manuscript).**

7. There are some spelling e.g.( Kupffer cells) and grammatical errors in the text which needs to be corrected.

- **We apologize for these mistakes. All spelling and grammatical errors are now corrected in revised manuscript.**


(1) Science editor:

According to reviewers suggestion the manuscript is suitable for publication in WJG, but the resolution of pictures aren't good.

Language Quality: Grade A (Priority publishing)

Scientific Quality: Grade B (Very good)

- **We modified the resolution of figures according to the Instructions.**

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastroenterology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Please be sure to use Reference Citation Analysis (RCA) when revising the manuscript. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. For details on the RCA, please visit the following web site: https://www.referencecitationanalysis.com/. Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022. If an author of a submission is re-using a figure or figures published elsewhere, or that is copyrighted, the author must provide documentation that the previous publisher or copyright holder has given permission for the figure to be re-published; and correctly indicating the reference source and copyrights. For example, "Figure 1 Histopathological examination by hematoxylin-eosin staining (200 ×). A: Control group; B: Model group; C: Pioglitazone hydrochloride group; D: Chinese herbal medicine group. Citation: Yang JM, Sun Y, Wang M, Zhang XL, Zhang SJ, Gao YS, Chen L, Wu MY, Zhou L, Zhou YM, Wang Y, Zheng FJ, Li YH. Regulatory effect of a Chinese herbal medicine formula on non-alcoholic fatty liver disease. World J Gastroenterol 2019; 25(34): 5105-5119. Copyright ©The Author(s) 2019. Published by Baishideng Publishing Group Inc[6]". And please cite the reference source in the references list. If the author fails to properly cite the published or copyrighted picture(s) or table(s) as described above, he/she will be subject to withdrawal of the article from BPG publications and may even be held liable.

- **All figures are original. With revised manuscript, we provided figures in PPT, as suggested by Editor.**