

Answering Reviewer

Reviewer #1:

Scientific Quality: Grade D (Fair)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors: Interesting and innovative idea, some points are needed to be clear: -Why we use umbilical cord, other sources are more convenient?, please mention different sources suitable for this potential line of treatment with focusing on advantages and disadvantages of each source. -There is no any studies results are mentioned only suggested opinion for role of mesenchymal stem cells as an immunomodulatory choice of treatment - Inclusion criteria are cornerstone for possible use of this option of treatment please clarify. -Proper design and language editing is of intense priority

>>> Answers: Thank you for comments

- We have discussed some advantages of UC-MSCs, why we should use them compared to other sources (all paragraphs in red color); the disadvantages of other sources of MSCs for COVID-19, especiall allogenic MSC source are discussed in the text
- We have add more citations/references related to the immunomodulatory of UC-MSCs published in the previous studies. In this opinion review, we only raise our opinion based on some published evidences for COVID-19.
- We have added new section: **Off-the-shelf UC-MSCs for COVID-19 treatment, in this section we suggested inclusion criteria as well as the general protocol to treat COVID-19 using UC-MSCs.**
- The revised manuscript is edited by professional english editing servce (Edanz Editing).

Reviewer #2:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors: In general, the review is well and logically written, there are a lot of fresh articles written in 2020. There is sufficient evidence of the safety and effectiveness of the use of umbilical cord MSCs in the treatment of COVID-19. This article, as well as the small preclinical study cited in it, can serve as the basis for larger studies. There are a couple of small notes: 1) It may be better to decipher the abbreviation ICU. 2) In the beginning, in one paragraph, the authors focus on chloroquine-as a promising drug, without specifying other substances. But the supporting article is only one and 2003. To draw such a conclusion, it would be more correct to survey contemporary studies. Although at the moment, more research is required.

>>> Answers: Thank you for comments

- I have added and corrected all abbreviations, included ICU.
- I have revised this paragraphs, we have added more references with usage of chloroquine for COVID-19; and emphasize that usage of this drug now is limited in clinical trials; there is not enough evidence to use it as routine treatment for COVID-19.

Reviewer #3:

Scientific Quality: Grade C (Good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors: General comments: The authors commented on a clinical trial using mesenchymal stem cells (MSCs) to treat COVID-19 patients and discussed the mechanisms of MSCs in this treatment. Minor concerns: 1. The clinical characteristic COVID-19 is variable and the study numbers is small that don't have the power to reveal the efficacy and safety in report from Leng et al. (2020). Please discuss the possible side effects of MSCs treatment in COVID-19. 2. The references 65 and 66 were not completely listed. 65 Van Pham P, Vu NB, Phan NK. Umbilical cord-derived stem cells (modulatttm) show strong immunomodulation capacity compared to adipose tissue-derived or bone marrow-derived mesenchymal stem cells. Biomed Res Ther 2016; 3: 687-696 [PMID, 66 Kim J-H, Jo CH, Kim H-R, Hwang Y-i. Comparison of immunological characteristics of mesenchymal stem cells from the periodontal ligament, umbilical cord, and adipose tissue. Stem cells international 2018; 2018: [PMID,

>>> Answers: Thank you for comments

- We have added side-effects of UC-MSC transplantation in the text (red color)
- All references were checked, corrected and updated.

Reviewer #4:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: This is very important to overcome COVID-19 in the world. The immuno-suppression effect of MSCs on COVID-19 inflammation would be one of the candidate treatments, although risk-benefit should be considered carefully. Please check and proofread your manuscript carefully, such as the description for granulocyte-colony stimulating factor (G-CSF).

>>> Answer: Thank you very much for your comment.

The manuscript is carefully checked by authors; and used the proofread from Edanz to improve the English quality. The abbreviation list is updated.

Answering Revision Peer-Review Report

Dear Editor, Thank you for giving me the opportunity to publish my manuscript in your journal. However, I do not agree the reviewer 3. I am sure that this reviewer has not carefully read my manuscript. All his comments were addressed in the manuscript. The Covid-19 study is moving very fast day by day. I can not updated day by day when I write a manuscript. This is not literature review or original research, but this is opinion review. I only suggest my opinion based on the related evidences. Therefore I can not provide details information about the treatment procedure as request. Finally, the manuscript is edited 2 times by 2 different companies with high standard for editing service. However, reviewer always says that there is a issue in the language. Editor can find 2 certificates for editing in the uploaded files. The final decision owns by you. Rejection or acceptance also give me the second experience with this journal.

Thank you Phuc Pham