

We are pleased to see a high level of enthusiasm for our paper. We thank the reviewer and the editor for their valuable comments and insightful suggestions. We have considered each of them carefully and made extensive modification of the original manuscript accordingly. Moreover, we have gone through the paper thoroughly to correct all the terms and abbreviations.

Reviewer #1:

1. There is a recommendation for the authors to revise once again all terms and abbreviations used in the article.

We have gone through the paper thoroughly and corrected all terms and abbreviations.

2. Please mention what possible contraindications are there for the mesenchymal stem cells transplantation.

To date, there are no clear contraindications of mesenchymal stem cells transplantation in liver disease. Clarification of contraindications for MSC therapy is required. But we summarize exclusion criteria in clinical trials.

Page 13-14, line 324-331: "Overall, there are still some problems need to be clarified about the clinical application of MSC in the future, for example, the contraindications of MSC in liver disease. Of note, in clinical trials, patients with the following conditions should be excluded, including pregnant and lactating women, severe heart or lung function failure, other important organ dysfunctions, proven other malignancies, spontaneous peritonitis or concomitant infection, and active gastrointestinal bleeding, active substance abuse."

3. Are there any data regarding the stage of liver fibrosis that could still be curable with this type of treatment and when mesenchymal stem cells transplantation would not have an effect? There is recommendation to mention Child-Pugh and/or MELD score of the patients involved in the trials discussed in the review.

In animal models of liver fibrosis induced by CCl₄, preclinical data suggest that MSCs could attenuate and reverse liver fibrosis. But the stage of liver fibrosis in mice/rats was not mentioned in these animal studies. In the clinical trials discussed in the review, we have added Child-Pugh and/or MELD score of the patients to the table 2. But in some trails, only liver function is evaluated but not fibrosis markers. Furthermore, larger-scale studies and randomized trials are needed to gather statistically significant data. So, which stage of liver fibrosis that could be curable is still needed to be elucidated.