**Name of journal:** World Journal of Hepatology

**Manuscript NO:** 78965

**Title:** Long-term and non-invasive in vivo tracking of DiD-labeled human hepatic progenitors in chronic liver disease models

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer’s code:** 02446101

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Professor, Surgeon

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

**Author’s Country/Territory:** India

**Manuscript submission date:** 2022-07-26

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-07-27 06:49

**Reviewer performed review:** 2022-07-28 09:41

**Review time:** 1 Day and 2 Hours

<table>
<thead>
<tr>
<th>Scientific quality</th>
<th>[ ] Grade A: Excellent</th>
<th>[Y] Grade B: Very good</th>
<th>[ ] Grade C: Good</th>
<th>[ ] Grade D: Fair</th>
<th>[ ] Grade E: Do not publish</th>
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<th>Language quality</th>
<th>[ ] Grade A: Priority publishing</th>
<th>[Y] Grade B: Minor language polishing</th>
<th>[ ] Grade C: A great deal of language polishing</th>
<th>[ ] Grade D: Rejection</th>
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<th>Conclusion</th>
<th>[ ] Accept (High priority)</th>
<th>[ ] Accept (General priority)</th>
<th>[Y] Minor revision</th>
<th>[ ] Major revision</th>
<th>[ ] Rejection</th>
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| Re-review          | [Y] Yes | [ ] No |
SPECIFIC COMMENTS TO AUTHORS
In this study, lipophilic fluorescent dye DiD-labeled fetal hepatic progenitor cells (fHPCs) were transplanted into chronic liver disease (CLD) mice livers. The results showed that DiD labeling of cells enabled long-term and non-invasive tracking of transplanted cells in vivo up to 80 days. This manuscript provides a new method to understand the homing, distribution, and differentiation into the desired cell types contributing to the organ regeneration. However, there’re still two issues which should be addressed. 1. "DiD labeling" Section: Why did the authors choose 1 X 105 cells (100 µL) to inject? Did you try other dosages? 2. Why did you choose human fetal liver cells instead of animal cells? So, revision should be recommended for this manuscript.
Name of journal: World Journal of Hepatology

Manuscript NO: 78965

Title: Long-term and non-invasive in vivo tracking of DiD-labeled human hepatic progenitors in chronic liver disease models

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05185768

Position: Editorial Board

Academic degree: MD, MSc, PhD

Professional title: Associate Professor

Reviewer’s Country/Territory: Thailand

Author’s Country/Territory: India

Manuscript submission date: 2022-07-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-08-13 16:49

Reviewer performed review: 2022-08-14 04:19

Review time: 11 Hours

Scientific quality

[ Y ] Grade A: Excellent  [ ] Grade B: Very good  [ ] Grade C: Good
[ ] Grade D: Fair  [ ] Grade E: Do not publish

Language quality

[ Y ] Grade A: Priority publishing  [ ] Grade B: Minor language polishing
[ ] Grade C: A great deal of language polishing  [ ] Grade D: Rejection

Conclusion

[ Y ] Accept (High priority)  [ ] Accept (General priority)
[ ] Minor revision  [ ] Major revision  [ ] Rejection

Re-review

[ Y ] Yes  [ ] No
SPECIFIC COMMENTS TO AUTHORS
Thank you very much for the opportunity to review this manuscript. In this manuscript, the authors evaluated DiD labeling of cells and found this staining could be enable long-term and non-invasive tracking of transplanted cells in vivo up to 80 days. DiD might be the promising staining and further evaluation is needed. The topic is interesting and the manuscript is well written. I have few comments as following; the author should discuss the novelty of DiD in liver transplanted cell more in introduction part. The full name of DiD and SCID should be added in the abstract part. The number/values at the figures are too small and it will be better to increase the font size.