Reviewer's report

Title: The HO-1-expressing bone mesenchymal stem cells protects intestine from ischemia and reperfusion injury

Version: 3 Date: 28 Jan 2019

Reviewer: Kaatje Lenaerts

Reviewer's report:

Abstract:
- Last sentence states "Administration of BMSC/HO-1 following intestinal I/R, significantly improved survival by limiting intestinal damage and inflammation". This study is not investigating a causal role between survival and tissue injury and inflammation; hence this conclusion cannot be drawn.

General:
- The manuscript still contains a lot of grammatical errors together with incorrect use of scientific English.

Introduction.
- Last sentence should also include the condition to which BMSC/HO-1 is compared.

Materials & Methods:
- Page 4, lines 37/38. "Mice BMSC more than generation 10 were used..." Not clear what is meant.
- Not reported on page 6 how many mice were allocated per group. It should also be reported that, per group, 10 mice per group were used for 7-day survival analysis and 10 mice per group for other assays at 24h after reperfusion.
- Page 6, lines 43-44. "After modeling, the activities and the death time of experimental mice were recorded daily." What is meant with "modeling"? How was activity recorded?
- Statistical analysis: It is mentioned that "Small intestinal injury score evaluation was completed by repeated-measures ANOVA". Why did the authors choose to perform a repeated measures analysis? Were injury scores measured over time?
Results:

- Description of results is not clear. When reporting a significant difference, always the condition to which is compared should be mentioned.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

N/A

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal