Reviewer’s report

Title: Hemopexin alleviates cognitive dysfunction after focal cerebral ischemia-reperfusion injury in rats

Version: 0 Date: 24 Nov 2018

Reviewer: Feng Liang

Reviewer’s report:

I read this manuscript with much interest. The authors designed and demonstrated a clinical application of Hemopexin attenuated focal cerebral ischemia-reperfusion induced cognitive dysfunction impairment via up-regulated HO-1 protein expression. The authors provide effective regulate cognitive impairment and a potentially clinical applicable research trend to attenuate brain function impairment, this is an important research achievement for the neuron impairment recovery. The manuscript is basically well written and organized, but I have several suggestions for the authors’ reference to improve their paper.

First, the author should pay more attention to the narration of the paper, especially the conclusion of the paper. The conclusion is an important part of the summary for your paper's "Essence" highlight. The author need "dig" further of their experiments for make a stronger significance of your achievement.

Second, the author should pay more attention of their paper's narration. Especially the basic of the rule of English grammar, such as" circulating circulating endothelial progenitor cells (EPCs)".

And in your Figure section, like Figure 4. (B)., it is hard to convince people that there is significant difference between HPX group vs Sham Group. So, I suggest the author either provide the exact p value or use some other data chat to descript the difference, such as, try to use the Box & whiskers chat to do it.

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.
Yes

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 recommend additional statistical review

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

Needs some language corrections before being published

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All answers are None.

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