Reviewer's report

Title: Granulocyte colony-stimulating factor attenuates myocardial remodeling and ventricular arrhythmia susceptibility via the JAK2-STAT3 pathway in a rabbit model of coronary microembolization

Version: 0 Date: 10 Sep 2019

Reviewer: Benzhi Cai

Reviewer's report:

Dear author:

This manuscript first discovered that granulocyte colonystimulating factor (G-CSF) has a therapeutic effect on coronary microembolization (CME). The authors described G-CSF as a CME treatment by regulating Cx43 and JAK2-STAT3 phosphorylation in terms of myocardial infarct size, fractional shortening and left ventricular (LV) ejection fraction and LV end-diastolic and end-systolic volumes. The article covers a wide range, but there are several serious questions raised as followed:

1. Fig3 The picture and the chart do not match. The picture shows sham and G-csf same but the statistics are statistically significant.

2. Fig5 The expression of each group in t-STAT3, t-CX is different on the western blot analysis, but the statistical graph shows no meaning. Please explain this phenomenon.

3. There is no standard deviation in fig2G, 2H, is there only one result?

4. Is there a connection between JAK2-STAT3 and cx43? Please explain briefly.

5. Please correct some grammar errors in the paper.

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.
Unable to assess

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

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.

I declare that I have no competing interests

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