Reviewer’s report

Title: Protective Effect of Hydrogen-Rich Saline on Pressure Overload-induced Cardiac Hypertrophy in Rats: Possible Role of JAK-STAT Signaling

Version: 0 Date: 23 Nov 2017

Reviewer: Umberto Barbero

Reviewer’s report:

Fan et al performed an interesting work on the use of H2 to improve cardiac hypertrophy and evolution to HF in rats. I think the paper is really well written, statistics are correct and the conclusion interesting. Images are of quality and well described. The paper should be suitable for publication after some minor revisions.

Abstract, page 3 line 17-20: after they were divided in 4 group, authors should put a double dot and then the group in numerical order to make this point clearer (i.e 1. sham-operated (sham), 2: AAC-model, 3: AAC + Low HRS (LHRS), 4: AAC + High HRS (HHRS))

Abstract, line 31: what (blue) means? If not pertinent in the abstract it should be removed.

Abstract line 31-37: please re-write the sentence "Apparent interstitium and collagen protein expression (blue) in left ventricle could be observed in AAC-model group, meanwhile, the levels of atrial natriuretic peptide (ANP) and brain natriuretic peptides (BNP), were also attenuated after HRS treatment" because it is not clear.

Abstract line 45: please change "which may associate with decreasing JAK-STAT signaling pathway." To "which may be associated to a decreasing in JAK-STAT signaling pathway."

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 am able to assess the statistics

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

Acceptable

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