Reviewer’s report

Title: The Protective Effect of Activating Nrf2 / HO-1 Signaling Pathway on Cardiomyocyte Apoptosis after Coronary Microembolization in Rats

Version: 0 Date: 05 Jul 2017

Reviewer: Francesco Vieceli Dalla Sega

Reviewer’s report:

In this study the protective role of Nfr2 in the coronary microembolization (CME) is assessed using an animal model. The study report novel data and the topic is of interest.

My major concern is that some control groups are lacking. For an appropriate interpretation and discussion of the data the study should necessarily include groups of animals injected with AAV-Nrf2 and AAV-Control not undergoing CME for all the experiments.

In addition there are several issues in the Figures:

- In all the figures is not clear that AAV-Nrf2 and AAC-control groups also were expose to CME.

- In Fig6 is not clear what was the reference group selected for the normalization (Reference should be 1 in every sets of data). The orders of the groups in the blots is confusing and it is different from the mRNA data: all the blots should be shown in the same order as mRNA. Also the names of the groups are different in the blots and in the densitometries (AAV-control is sometimes named CME-control)

- In Fig7, data should include all the different groups. Is not clear what was the reference for normalization and what CME means.

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

No

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

No

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

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