Reviewer's report

Title: Effect of Hyperplasia and Apoptosis in Neural Stem Cells Treated with Sevoflurane

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Reviewer: You Shang

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The manuscript by Qiu et al. entitled “Effect of Hyperplasia and Apoptosis in Neural Stem Cells Treated with Sevoflurane” reports that ABAA-dependent up-regulation of apoptosis in NSCs by treated with 1MAC sevoflurane. The data of the study are generally well-designed and experiments seem well-done and conclusions are supported by obtained results. However, there are a number of points that need to be addressed before accept for publication.

Specific comments

1. To add the control group in this paper would be better. Because the GABAA inhibitor bicuculine was dissolved in DMSO, DMSO may affect apoptosis of cells. To declare whether or not the DMSO cause the change, and then to ensure the effects of sevoflurane on the neural stem cells.

2. The data described Group B in the results of viability and cytotoxicity, but did not be found in Annexin V/PI staining and western blots. Please explain this phenomenon.

3. Please merge the Fig.3A with Fig.3B. As the the same to merge the Fig.4A with Fig.4B, and Fig.5A with Fig.5B.

4. There are some spelling errors in manuscript. Please check and correct them.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests