Reviewer's report

Title: Effects of Ginsenoside Re on LPS-induced Inflammatory Mediators in BV2 Microglial Cell

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Reviewer: Kwang Chul Chung

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Title: Effects of Ginsenoside Re on LPS-induced Inflammatory Mediators in BV2 Microglial Cells
Authors: Lee KW et al.

In this paper the authors provide evidence that G-Re (ginsenoside-Re) attenuates LPS-induced microglial toxicity and pro-inflammatory activation. More specifically, they demonstrated that G-Re prevents LPS-induced microglial cell death and attenuates LPS-induced activation of p38MAPK in BV2 cells. In addition, G-Re attenuates the protein expression of LPS-induced pro-inflammatory mediators in BV2 microglial cells. These data support that p38MAPK is important for microglial cell death and pro-inflammatory cytokine up-regulation in response to LPS and may be a therapeutic target for neuroinflammatory diseases, where overproduction of pro-inflammatory cytokines has been implicated in disease progression. G-Re is one promising therapeutic approach for the treatment of neuroinflammatory diseases.

The studies are well designed and performed properly, and the methods are appropriate and well described. The data are also supportive of the conclusions. Nevertheless, there are several minor concerns to be addressed:

1. In the legend of Fig. 1, the last sentence, 'The values shown are the mean~' is not applied to (C). So, it should be move to the back of the legend of (A) and (B).
2. In whole legends of Figures, the description of statistical value ‘P<number’ should be corrected to ‘p, >number.
3. In Figs 1, 3, and 4, they only showed the single picture of immunostaining data. For consistency, at least two pictures should be provided for each sample.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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' below