Reviewer’s report

Title: Sirtuin1 activator SRT2183 suppresses glioma cell growth involving activation of endoplasmic reticulum stress pathway

Version: 0 Date: 19 Feb 2019

Reviewer: Tan Bibo

Reviewer’s report:

In this study, author concluded that SRT2183 as a potential new therapeutic strategy in glioma, and author carried many experiments to verify his conclusion. There are some defects that author should explain as followings:

Major:

1. Since author consider that SRT2183 as a potential new therapeutic strategy in glioma, author should verify that SRT2183 is harmless to normal cells. Author should provide experiments to detect the effect of STR2183 to normal cell line (HUVEC, etc.).

2. In this study, author found that STR2183 was involved in proliferation, apoptosis, autophagy and ER pathway in glioma cells. Then what is the main effect of STR2183 in glioma cells?

3. Many genes and proteins related to proliferation, apoptosis, autophagy and NF-κB/STAT3 pathways were all tested in this study. I suggest that author should arrange these results, and verify the effect axis of STR2183 in glioma cells.

Minor:

1. In Fig.1A, asterisk (*) should be provided to show the difference.

2. In Fig.2B, PCNA and Ki67 should be detected.

3. In Fig.2D, cleaved caspase-3 should be tested.

4. English should be checked carefully.

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.

No

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:

Needs some language corrections before being published

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