Reviewer’s report

Title: 2-Ethoxystypandrone, A Novel Small-Molecule STAT3 Signaling Inhibitor from Polygonum Cuspidatum, Inhibits Cell Growth and Induces Apoptosis of HCC cells and HCC Cancer Stem Cells

Version: 2 Date: 05 Nov 2018

Reviewer: Tomoharu KUBOYAMA

Reviewer's report:

Please show that basal phosphorylation levels of STAT3 are the same between HepG2 and HepG2/STAT3 cells.

Please cite appropriate references showing that STAT3 phosphorylation induces apoptosis and/or inhibition of cell proliferation. Wang et al (Cancer Res, 2009) did not show it. They only showed phenomena of STAT3 dephosphorylation and anti-apoptotic effects.

Please explain why the time lag occurred. STAT3 phosphorylation was inhibited within 2 h, but apoptosis was induced after 24 h. Is it usual? If so, please cite appropriate references.

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:

Acceptable

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