Reviewer's report

Title: Resveratrol enhances anticancer effects of paclitaxel in HepG2 human liver cancer cells

Version: 0 Date: 16 Jul 2017

Reviewer: Siwen Chen

Reviewer's report:

1. The text itself contains various grammatical errors, extensively long sentences, confusing statements and disorganisation. A native English speaker should review the document to ensure this is remedied. We only point out few of these mistakes below.

2. Wrong English tenses: In the introduction, "Clinical trials revealed that paclitaxel can treat other diseases to some extent……", the tenses of "revealed" and "can" are different. "In-depth research found that resveratrol can enhance the sensitizing effect of prostate cancer cell line PC-3 in vitro", the tenses of "found" and "can" are different. There are many mistakes like this in the text.

3. In the introduction: "These cancer inhibitors that occur naturally are more safer as having low toxicity……", the expression of "more safer" is wrong.

4. For the first time, abbreviations should be accompanied by full names. Such as "Hp", "NF-xB", "CDK" and "ECM" in the discussion. If the word appears only once, do not enclose an abbreviation, such as "tumor infiltrating T lymphocytes (TIL)" in the discussion.

5. Some citation formats are wrong, such as "Wong found that a lot of receptor-mediated cell signal transduction……[13]", the citation format should be stated as follows "Wong [13] found that a lot of receptor-mediated cell signal transduction……"

6. In the materials and methods, please confirm that the cell lines are from Kunming in Guangxi?

7. Academic papers should use professional vocabulary. In the background, it is more appropriate to use "proliferation" and "apoptosis" instead of "cell replication" and "die naturally".

8. In the background, "In this paper, we study the effects of paclitaxel combined with resveratrol, to reduce the concentration of toxicity and side effects of paclitaxel, Meanwhile observe their joint anticancer effects.". what is the "concentration of toxicity"? Have they observed "side effects of paclitaxel" in cell lines?
9. In the discussion, "their ratio determines whether the cell is able to accept the apoptotic signal", the correct sentence maybe "heir ratio determines whether the cell is able to accept the apoptotic signal or not".

10. Some expressions can cause ambiguity. Such as "The 10 ug/mL of Res had no effect on Nthy-ori 3-1 normal cells…….", which effect do they mean? In this paper, they only determined the effect of Res on proliferation, apoptosis, and so on. They should be clearly stated.

11. The methods in the abstract is too simple. They only list the methods used, they should point out what these methods are for.

12. In the figure legends of Figure 3 to Figure 11, the letters "a", "b", "c", and "d" above the bar were stated as the mean values, but I don't know why the values were not numerical value but the letters? Do they mean the same letter represent the same numerical value?

13. In the figure legends of Figure 1 and Figure 2, they have not stated the meaning of the letters "A" and "B", please state it.

14. In MTT assay in the materials and methods and in Figure 1, do they only perform the test once?

15. The discussion should be rewrite. They only showed the research progress of the gene or protein they had determined. They should discuss their own results.

16. The conclusion section should be rewrite. In this paper, the conclusion was written as the abstract. They should conclude the possible therapeutic mechanisms of the combination of Res and PA.
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.

Yes

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

Yes

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

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Please indicate the quality of language in the manuscript:

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