Reviewer's report

Title: Zuo Jin Wan, reverses P-gp mediate Multidrug resistance by inhibiting the activation of PI3K/Akt/NF-kappaB pathway

Version: 2
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Reviewer: Hyung Sik Kim

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Title: Zuo Jin Wan reverses P-gp mediate multidrug resistance by inhibiting activation of the PI3K/Akt/NF-κB pathway

Comments,

This paper entitled "Zuo Jin Wan reverses P-gp mediate multidrug resistance by inhibiting activation of the PI3K/Akt/NF-κB pathway." presents an inclusive study on the regulation of P-gp of the reversal of MDR by PI3K/Akt/NF-κB pathways. The paper is well corrected, the methods are straightforward, and the results are convincing. Overall, the techniques used to reveal their hypothesis appear to be sound, but some data need and discussion sections are not well described. Nevertheless, the presented data seems to be enough to supports their conclusions. Some weaknesses of this manuscript are not correctly indicated.

Minor comments:

1. Title: Zuo Jin Wan reverses P-gp mediated multidrug resistance
-> Zuo Jin Wan reverses P-gp-mediated multidrug resistance

2. Abstract: oxaliplatin (L-OHP) induced cell apoptosis
-> oxaliplatin (L-OHP)-induced apoptotic cell death

3. Authors used the test compound, ZJW, was formulated by Rhizoma Coptidis and Evodia#in a ratio of 6:1#. What is the main component of ZJW?

4. Authors measured the apoptotic cell death using Anexin-V-FITC/PI assay. The rate of apoptotic cell death (%) increased in a concentration-dependent manner. However, late stage of apoptotic cell population was slightly increased. Authors should be measured the sub-G0 population of cell after treatment with ZJW.

5. Authors indicated “ZJW inhibits P-gp expression and the effect of the PI3K/Akt pathway” in Figure 3. As you know, the PI3K/Akt signaling pathway plays an important role in many aspects of cellular homeostasis, it is necessary concern that ZJW, probably act as a PI3K inhibitor, would interfere with the survival and proliferation of critical populations of normal cells and show unacceptable toxicity. Please confirm this experiment.
Level of interest: An article of importance in its field

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

Statistical review: Yes, and I have assessed the statistics in my report.