Reviewer's report

Title: Gamma-tocotrienol and hydroxy-chavicol synergistically inhibits growth and induces apoptosis of human glioma cells

Version: 1 Date: 17 March 2014

Reviewer: HoKeun Kwon

Reviewer's report:

1. In this manuscript, author showed no cytotoxic effects of GTT+HC in normal embryonic liver cells (WRL68) compared with tumor cells. However, this cell line is also transformed cell line and also regarded as HELA (Cervix Adenocarcinama) derivative. Hence, it should be pointed out this by using normal primary cells such as hepatocyte or splenocyte from human or at least mice to confirm selectivity of these compounds for not normal but cancer (or glioma) cells.

2. In introduction, authors mentioned pathways which have been shown to be affected by these two compounds. Some of them are specific but others are common in both GTT and HC. However, based on these synergistic results of two compounds, we can assume that each compound might touch different pathways which can make synergistic effects for cell growth inhibition and induction of apoptosis. This specificity of each compound will be very critical for the future usage of these compounds with other drugs or compounds at the clinic. Hence, I strongly recommend to check and show specific pathways affected by single GTT, HC and GTT+HC to answer how this synergisms can be possible and to get better understanding which pathways are the major targets of each or both compounds treatment.

Level of interest: An article whose findings are important to those with closely related research interests

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

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