Reviewer's report

Title: Terminalia catappa attenuates urokinase-type plasminogen activator expression through Erk pathways in Hepatocellular carcinoma

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Reviewer: Yuan-Wei Shih

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Comments to the Author:
The manuscript "Terminalia catappa attenuates urokinase-type plasminogen activator expression through Erk pathways in Hepatocellular carcinoma" by Hsieh et al, explores Terminalia catappa leaf extract (TCE) has an inhibitory effect on cell invasion and migration by regulating the activities and protein level of u-PA and their natural inhibitors involves the ERK1/2 signaling pathway. The findings provide new insight on the chemopreventive treatment on hepatoma. This submission is presented in a suitable way and shows a solid experimental data. In conclusion, this is a written manuscript in which the mechanism of the anti-metastatic activity of TCE could be convincingly demonstrated in a number of in vitro experiments. However, there are still a number of minor problems need to be addressed.

Suggestions:
(1) The last paragraph of the “Introduction” describing NF-κB and AP-1 needs more clarification.
(2) The authors should include information about whether the compound was tested at physiologically-relevant and attainable concentrations.
(3) The authors should discuss in detail the next step in the investigation of the utility of TCE as a chemotherapeutic agent: its ability to inhibit breast cancer in vivo.
(4) The introduction gives a very nice background for the reader. I would like to see something about the bioavailability of TCE discussed in this section. I feel that this is an important aspect to be able to link an in vitro study to the feasibility of this compound as being functional in the body once consumed. Have the authors noted any similar effects of metabolites or breakdown products of TCE in their studies or others (these may also be important as they will be present in the body post consumption)?
(5) General, it is not clear where the authors included the statistical information gained from the analysis mentioned under M&M.

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.