Title: Compound K, a metabolite of ginseng saponin, induces apoptosis via caspase-8-dependent pathway in HL-60 human leukemia cells

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Reviewer: Harendra Shantilal Parekh

Reviewer's report:

Cho et al. aim to identify the specific mechanisms by which Compound K is purported to exhibit its anti-tumour activity.

A series of detailed experiments (MTT assay, DNA fragmentation assay, PI & Annexin V double staining, mitochondrial membrane potential determination, protein extraction & w. blot, immunoprecipitation) were performed to elucidate the pathways and substrates responsible for apoptosis. This effect was identified as being caused by initiator- and executioner-caspases, induced via the mitochondria and primarily responsible for the apoptotic properties of Compound K in human leukaemic cells. The studies are performed and presented in a clear and methodical manner and the discussion that follows is sound in the explanation of the data that has been presented in Figures 1-6.

Some minor (essential), primarily grammatical revision is required prior to publication:

1) All terms such as Bid, Fas, Bcl-2 etc etc.. should appear in 'italics' throughout the manuscript
2) Change 'activations' to 'activation' throughout the manuscript
3) Change 'compound K' to ' Compound K' throughout the manuscript
4) Change 'ul' to 'uL' throughout the manuscript

END OF COMMENTS.

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.