Reviewer's report

Title: Down-regulation of estrogen receptor-alpha and RET are associated with Withaferin A-induced apoptosis in MCF-7 breast cancer cells

Version: 1 Date: 30 June 2011

Reviewer: Vanessa Steenkamp

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Major compulsory Revisions
There are many acronyms which have not been included in the abbreviation list. Titles should not contain acronyms.
On first mention the abbreviation should be given in full.
The methodology is not described in depth. The methods need to be expanded and include the concentration ranges tested as well as whose method was followed i.e. reference to the methodology.
For the instrumentation the manufacturer and model should be given as well as the programme used.
Regarding the cytotoxicity assay the number of cells placed in the wells are extremely low. This is further of concern when looking at the results where there is only a ~20% viability = 200 cells and this will influence the accuracy of determinations.
Was a positive control not included in the study?
What concentration of DMSO was used in the Trypan Blue Exclusion assay?
The experiments appear to have been carried out on a single occasion in triplicate. If so this is not acceptable.
With regards to the Discussion: this work has not been discussed relevant to the literature. Withinolides have been widely studied. If not the same compound findings for similar compounds should be included.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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