Reviewer's report

Title: Growth arrest and apoptosis via caspase activation of dioscoreanone in human non-small cell lung cancer A549 cells

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Reviewer: Liron Berkovich

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A Review of Manuscript Number: 8103250711179083, for BMC Complementary and Alternative Medicine Journal

Manuscript Title: Growth arrest and apoptosis via caspase activation of dioscoreanone in human non-small cell lung cancer A549 cells.

First I would like to note that this study is of an original theme, clearly involving an extensive work and is well put together. Having gone through the journal's recommended points for the reviewer I have made some suggestions, mainly to clarify the publication.

Minor Essential Revisions:

1. Add ‘Dioscoreanone’ and ‘Dioscorea membranacea’ to the manuscript’s keywords.

2. In Table 1 the term “amount of DM” should be revised to “DM concentrations”, and concentration units should be indicated in the table.

3. On page 12, 2nd paragraph, of the manuscript the fact that DM’s growth inhibition had been evident starting from 24 and 48 hr treatments should be mentioned in the text. Also, on Figure 2 itself, statistical significances of the growth inhibition effects should be indicated as *p values.

4. I would suggest to delete the first sentence of page 13, 1st paragraph, and start it with “the effect of DN on cell cycle distribution…”.

5. Regarding figures 3 and 4; has its data been statistically analyzed? If not, it should undergo a statistical analysis and p values should be indicated in the figure in order to consider this data significant. In addition, at each case it should be noted how many such independent experiments were performed.

6. On the Discussion section; published data regarding the biological availability of Dioscoreanone when consumed per os should be discussed in compliance with the DM’s concentrations examined in this study. If such data isn’t available-this should be addressed by the authors as well.