Reviewer’s report

Title: The Antiangiogenic and cytotoxic activities of ethanolic crude extracts of four Salvia species on MCF 7 breast cancer cell line

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Reviewer: Jun Peng

Reviewer’s report:

1. Is the question posed by the authors well defined?
   Partially.
2. Are the methods appropriate and well described?
   Only partially.
3. Are the data sound?
   Only partially
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   5. Are the discussion and conclusions well balanced and adequately supported by the data?
      Not really.
6. Are limitations of the work clearly stated?
   No.
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   Yes mostly
8. Do the title and abstract accurately convey what has been found?
   No, need to be revised.
9. Is the writing acceptable?
   No, this manuscript paper has been carelessly prepared, containing too many typos and spelling errors.

# The overall quality and scientific soundness of this study is low.
# Most of the anti-angiogenic data were obtained using rat aortic ring, CAM and HUVEC; and the cytotoxic experiment was performed using fibroblast cells. So I don’t understand why this manuscript was titled ‘The Antiangiogenic and cytotoxic activities of ethanolic crude extracts of four Salvia species on MCF 7 breast cancer cell line’?
# In section of ‘Materials’, authors wrote ‘Plant samples were collected during
spring/summer 2009 from different areas in Jordan’ in the first paragraph, but ‘Plant samples, collected during early flowering period…’ in the second paragraph. It’s better to combine these paragraphs.

# For MTT assay, authors used 100ug/ml as one of drug concentrations. However, if the stock concentration of drug was 10mg/ml, the final DMSO concentration would be 1%; kind of too high.

# Counting the number of migration cells seems not a good quantitative method.

# In line 6 of page 7, should ‘5×10⁵ in 6-well plate’ be ‘5×10⁵/well in 6-well plate’?

# What is G6PDH in line 18 of page 8? GAPDH?

# In line 19 of page 8, ‘GAPDH primers (Invitrogen, USA) sequences used in this study were as previously mentioned [ref]’, what does the ‘ref’ stand for?

# Why used up to 100ug/ml of drug in MTT assay but 200-300ug/ml in MCF-7 cells?

# For HIF-1#, the protein degradation is very critical. Therefore, protein level should be tested.

# What is the label of Y-axis in Figure 4?

# No statistical analysis in Figs. 2, 4 and 5.

# This paper has been carelessly prepared, containing too many typos and spelling errors.

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

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.