Reviewer's report

Title: The flavonoid beverage Haelan 951 induces growth arrest and apoptosis in pancreatic carcinoma cell lines in vitro

Version: 4 Date: 4 March 2015

Reviewer: SUJATHA RAMASAMY

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Minor Essential Revisions

1. Author should include the description of the fibroblasts cell line used in this study including the source.

2. Under "Experimental Design" section, line 2 - line 4: (a) the explanation of the methods sounds like the author did culture all the three PC cell lines and human fibroblasts in one 24-well plate; (b) line 3: what did the phrase "each group" is referring to?; (c) line 5: incubation time 24 or 48 h?

3. p.10 line 11. Author should avoid using the term "toxicity" as this study is not referring to toxicity work. Revised the phrase.

4. Author did mentioned on cellular viability determination using the trypan blue exclusion assay in methodology part but did not include any findings from this assay in the result section.

5. p. 10 line 19-20. "A similar effect of...." the phrase "similar effect" is it referring to "significant increase in proliferation of the fibroblast" similar to the eeffect in CAPAN-1 cell? If yes, the effect is not similar and fibroblast did not show any significant increment in proliferation when treated with 2 % and 4 % Hael. The phrase is suggested to be revised.

6. p.11 line 3. Aim of this work is to look at the proliferation effect fo PC cell lines after treated with Hael. Authors are suggested not to use the term "cytotoxic" interchangeably with the term proliferation and cell viability. Cell proliferation determine the number of cells over a period. While cytotoxicity refers to causing harm to cells thereby killing them. Authors should look at these three terms that also been used in this manuscript and revised it according to the aim of the study.

7. Suggestion to change the labeling for y-axis for (a) Figure 2-change to cell proliferation; (b) Figure 3- change to cell proliferation; and Figure 7-change to growth inhibition.

8. References: (1) Remove the colon punctuation mark (:) at the end of the authors name and replaced with full stop (.); (2) the title and volume no> should not be in bold; (3) replaced the hyphen dash symbol in page number with the end dash symbol; (4) for reference with more than 6 authors, the 7th authors and so
should be written as et al.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests