Reviewer's report

Title: Oral Squamous Cell Carcinoma Proliferative Phenotype is Modulated by Proanthocyanidins: A Potential Prevention and Treatment Alternative for Oral Cancer

Version: 3 Date: 30 April 2007

Reviewer: Kapila Rodrigo

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Pages 16 and 17: Dose-dependent cell morphology responses.

I do not think that any further experimentation is warranted. The inclusion of numeric evidence would support your conclusions. Despite the visually dramatic differences in cell morphology between the different doses, an apoptotic response has not been demonstrated. In order to conclude that apoptosis is indeed the empirical observation, there should be further evidence. Could an assay for a caspase-3 or another apoptosis marker be run? I saw that an attempt was made to use IHC, however, lifting of the cells proved to be problematic. Or, perhaps RT-PCR may be run for the various markers to show an increased signal.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Page 3: ...PAC-induced proliferation inhibition and apoptosis...
...PAC-induced proliferation, inhibition, and apoptosis...

Page 8: ...seeded in T25cm2 BD Falcon...
...seeded in 25 cm2 BD Falcon...

Page 12: ...cell lines (Fig. 1C, H). The...
...cell lines (Fig. 1C, 1H). The...
...non-transfected CAL 27 (Fig. 1F). Some...
...non-transfected CAL 27 (Fig. 1D, 1I). Some...

Page 17: ...and blebbing at day 4 (K), while...
...and blebbing at day 4 (I), while...
...the majority of GH354 cells (L) and...
...the majority of GH354 cells (G) and...
...non-transfected CAL 27 cells (M) had...
...non-transfected CAL 27 cells (H) had...

Discretionary Revisions (which the author can choose to ignore)

Page 11 An overall reduction...numbers of cells observed.
[Rewrite as proportionality. The current wording is too colloquial]

Figure 2 A,C,E,G,and I are very confusing. The data is understood from the paper. However, I believe that the author should distinguish the different curves. The author should then reference the designations in the figure description.
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

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.