Reviewer's report

Title: Retino-protective effect of Bucida buceras against oxidative stress induced by H2O2 in human retinal pigment epithelial cells line.

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Reviewer: Hoi-Hin Kwok

Reviewer's report:

Major comments:

1/ Many grammatical mistakes and misspelling were found throughout the text, the authors must carefully proofread the manuscript. Since some mistakes make the sentence barely understandable. i.e. Page 7, line 23, ‘Apoptotic cell lysates containing active caspase-3 yield a considerable compared to non apoptotic cell lysates.’

2/ There were no background information on the plant Bucida buceras introduced, the authors should provide at least the ground of studying this plant extract on retinal cells.

3/ A positive control such as ascorbic acid should be incorporated in the DPPH assay, which verify the assay validity. In Figure 11, the Bucida buceras showed certain direct H2O2 scavenging activity, how the author confirm the cytoprotective effect of the extract is not due to its direct anti-oxidative activity? What were the treatment procedures of those protection experiments? The cells were pre-treat, co-treat or post-treat with the extract and H2O2? Figure legend of 11C is missing.

4/ Figure 16 is difficult to understand, does the gel labeling incorrect? And it is better use parallel bar chart in Figure 16B.

5/ Although the plant extract showed increasing activities on various anti-oxidantive enzymes, it showed limited cytoprotective effect on the endpoint, which is the cell viability (Figure 17 and Figure 18). Indeed, MTT could just give preliminary data for cell viability, more experiments such as Annexin V staining or DNA fragmentation assay may provide more solid result for the proposed model.

6/ Page 21, part of the discussion in this page is out of subject.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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