Reviewer's report

Title: Investigation of the anti-cataractogenic mechanisms of curcumin through in vivo and in vitro studies

Version: 1 Date: 07 Aug 2017

Reviewer: Hyuk Jin Choi

Reviewer's report:

Reviewer's comments

Manuscript BOPH-D-17-00163R1; "Investigation of the anti-cataractogenesis mechanisms of curcumin: in vivo and in vitro studies" by Tao Wang, Jing Cao and Meng Wang

The authors correctly answered all questions and introduced the requested changes. I think this improved the manuscript considerably. However, there are a couple of minor issues that have arisen.

1. Statistical analyses

I respect a statistical expert's opinion on using t-test in the analysis of small sample size. However, I still do not think t-test is suitable for the analysis as the data from small sample size usually do not follow a normal distribution. Non-parametric analysis such as Mann-Whitney U test would be better than parametric analysis.

2. Figure 3 (Revised) and description of the results

I think it's better that the description (Cell proliferation and apoptosis analysis) follows the order shown in the Figure 3 A-D.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal