Reviewer’s report

Title: Anti-Inflammatory Effects of Olanexidine Gluconate on Oral Epithelial Cells

Version: 0 Date: 13 Mar 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are minor issues

STATISTICS - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Probably - with minor revisions
GENERAL COMMENTS: The investigators previously discovered that OLG inhibits the ability of Streptococcus mutans to form biofilms. It is not clear how this information led to a hypothesis that OLG would inhibit cytokine production by gingival epithelial cells. In spite of that gap in logic the investigators have shown that OLG exhibits some inhibition of cytokine production without killing the gingival keratinocytes.

The experimental assays were carefully and expertly performed.

The experiments generally meet best practice. However, commercially prepared LPS was used in the study. The authors gave no indication of the purity of this material.

REQUESTED REVISIONS:

The manuscript has several issues such as redundancy among the Results and Discussion sections and figure legends. In some experiments the statistical data shows minimal differences between OLG treated and untreated samples. Also, the figures are poorly prepared. It is difficult to interpret the labels in some figures (fig. 5, 6 and 7) and labels are totally missing in others (fig. 2). The figure legends lack detail.

Note: This reviewer report can be downloaded - see attached pdf file.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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

No

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

No

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 am able to assess the statistics
Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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