Reviewer’s report

Title: Salivary pellets induce a pro-inflammatory response involving the TLR4 - NF-κB pathway in gingival fibroblasts

Version: 0 Date: 27 Dec 2015

Reviewer: Qian Wang

Reviewer's report:

This manuscript reports on the pro-inflammatory activity of the saliva pellet and possible underlying mechanisms. Conclusions documented by the data presented suggest that the saliva pellet and the corresponding washing solution contain a pro-inflammatory activity without impairing cell viability. Blocking TLR4 and depletion of lipopolysaccharide lowered the capacity of the saliva pellet to increase chemokine expression and phosphorylation of p65.

1. In "Materials and methods", the human saliva was collected from the group of authors, which means saliva from several donors. So does all the data in study come from one specific donor or different donors?

2. Page 2, line 34, and page 7, line 31. failed to find any data about chemokine expression in response to BAY11-7082 in this manuscript.

3. What's the LPS concentration in a series of dilutions of saliva pellet?

4. How is the TLR4 expression in whole saliva and saliva pellet?

5. Page 6, line 61. Did authors try other MyD88 inhibitor? How's the MyD88 expression in response to pellet after blocking TLR4 by TAK-242?

6. Move Table 2 and Table 3 to "supplementary data".
7. Table 4. Any insight about elevated expression of CXCL 8 in response to autoclaved pellet?

8. Table 5. Add "unit of measurement".

9. Figure 6, how the chemokine expression and p-P65 in pellet without LPS when exposed to TAK-242.

10. Figure 6B, change "p-NF-KB" to "p-P65".

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 am able to assess the statistics

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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