Reviewer’s report

Title: Induction of beta Defensin 2 by NTHi requires TLR2 Mediated MyD88 and IRAK-TRAF6-p38MAPK Signaling Pathway in Human Middle Ear Epithelial Cells

Version: 1 Date: 19 February 2008

Reviewer: Joseph E Kerschner

Reviewer’s report:

Minor Revisions

The authors present an elegant study examining the induction of beta-Defensin 2 (HBD-2) and signaling pathways associated with this. There are a couple of comments which should be addressed as the manuscript is prepared for publication.

There are a few grammatical and typographical errors.

The authors could provide the reader with some brief information on the current state of research into soluble macromolecules from NTHi in the Discussion section as they propose (and demonstrate with data) that this is the likely candidate from NTHi as the initiator of HBD-2 up-regulation.

The authors demonstrate that the 3 strains that they employed were similar in up-regulation of HBD-2 but there should be some comment as to why these strains were selected and if there are possibilities that other strains would behave differently.

The authors should comment on the dose selected (5μg/ml) of NTHi whole cell lysate (WCL).

The authors should comment on the antibody concentrations (isogenic, TLR2 and TLR4) selected in the antibody blocking experiments and whether this could have impacted the results in Figure 3.

What next?: Accept after minor essential 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