Reviewer's report

Title: Correlation of nasopharyngeal cultures prior to and at onset of acute otitis media with middle ear fluid cultures

Version: 2 Date: 7 October 2014

Reviewer: Thijs M.A. van van Dongen

Reviewer's report:

I apologize for my report being overdue, I have been on a holiday without access to the internet. Because it is already overdue, I can only provide a short response.

Overall, the manuscript has improved and I am satisfied with the answers of the authors. We will have to agree to disagree on the clinical relevance of the study's main objective (or I do not understand the main aim properly).

I can understand that the predictive value of a healthy NP-sample would be useful for children who participate in a study/cohort and who are already regularly sampled. For daily clinical practice however, I do not see the merit of regularly sampling children during 'health', to be able to predict what the pathogen will be during a potential future episode of 'disease', instead of only sampling NP/NW during disease.

If the reason is that you don't have to wait for the results: guidelines recommend to not immediately start with antibiotics, so you do have time to wait for the results.

Another reason could be that there is a better correlation, but I can't think of a plausible hypothesis why NP samples taken weeks before the AOM-onset would better correlate with the middle ear than NP samples taken at onset of disease. And if they would be more or less equal; I would not even recommend to always sample NP/NW of children at AOM onset based on previous studies on this topic showing a poor correlation between the NP and middle ear. Only in children with complicated disease, it may have some value to assess resistance patterns, as the authors show in their manuscript.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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