Reviewer's report

**Title:** Otitis media in children vaccinated with either 7-valent or 10-valent pneumococcal conjugate vaccines: a cross sectional comparison

**Version:** 4  **Date:** 17 June 2014

**Reviewer:** Arto Palmu

**Reviewer's report:**

Review round 2
There has been major improvement in the manuscript and the review answers are acceptable. However, there are still a couple of major issues warranting changes in the manuscript as detailed below.

**Major**
1. The selection process for enrolment of participants in the communities needs more details. Especially, whether all families were approached and were there some forms of random selection processes. If known, give the proportion (and range) of enrolled children per community per year.
2. The clinical meaning on purulent OM versus non-purulent OM needs to be discussed in detail. As there seems to be a difference in the distribution of prevalences within OM the question remains what is the clinical relevance of this finding.
3. This study should be considered as a hypothesis generating study. This should be emphasized, or at least mentioned in the text.

**Minor**
Male gender is usually associated with more disease, but not in this study. Any comments?

Abstract: OR not to be repeated in the Conclusions.

Results: row220: “less than one dose”: this would mean zero, but this is not the case!
row 286: for clarity, give number of children evaluated for each group.
row 339: 12% reduction (add the word “absolute”)
row 370: “We have not presented….” If not, what is presented on page 12, r293?

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

**Quality of written English:** Acceptable
**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

A.A. Palmu has had travel paid for and honoraria by GlaxoSmithKline group of companies to attend expert group meetings, has had travel paid by Merck to attend expert group meetings and has received a travel grant from SanofiPasteur MSD. He is the head of Clinical Research Unit at the National Institute for Health and Welfare, which has received research funding from GlaxoSmithKline group of companies.