

ANSWERING REVIEWERS

Dear Editor,

We would like to thank the reviewers for their valuable feedbacks which are tremendously helpful to improve the manuscript. Our corrections are now added to the manuscript in red text highlighted in yellow (deleted texts are in “strike through”/“track change” format) and responses to the reviewers are given below:

We look forward receiving your final decision.

Sincerely yours
The authors

Reviewer’s code: 00506481

Comment 1: A few corrections have been made and shown as green highlight; in some instances 'strikethrough' was done to correct the manuscript.

Our response: We have addressed this.

Reviewer’s code: 00506472

Comment 1: More details needed from vaccine history of participated infants: number of Tdap doses administered prior to PCV dose, interval between last Tdap dose and PCV administration, age of single PCV dose administration.

Our response: We have acknowledged this as a limitation in the manuscript (page 16) that we did not have access to this information. The NDDS system registers only the vaccines related to the disease, in this case PCV, and did not have chronological details of any other vaccination history.

Comment 2: Page 6, lines 5-6: “All cases \geq 2 months old are presumed to receive DTPa”. Please see the comment above.

Our response: This has been addressed now in the limitation (page number 16 and reference number 24 [Hull et al. 2009]).

Comment 3: Page 6, lines 7-8: “Due to strong evidence of cross protection with 6B, we considered 6A as vaccine type (VT)”. Evidence of cross protection is not a condition that changes a pneumococcal serotype from non-vaccine type to vaccine type. Please define how the inclusion of 6B in vaccine types impact the results.

Our response: We agree with the reviewer, hence we have modified the method (page 9) and updated Table 3 and Figure 5 accordingly.

Comment 4: Page 10, lines 18-21: “...involving 13-valent PCV demonstrated that the vaccine is effective in preventing vaccine-type pneumococcal, bacteraemia, and nonbacteraemic community-acquired pneumonia and vaccine-type IPD [24]”. Vaccine is not effective in nonbacteraemic community-acquired pneumonia. It has a low efficacy against all-cause pneumonia, due to the fact that a large proportion of all-cause pneumonia is pneumococcal.

Please correct.

Our response: The statement is now deleted (page 16).

Comment 5: Language needs minor revision.

Our response: We have addressed this, all grammatical errors have been corrected.

Reviewer's code: 00506492

Comment 1: With a proper reference please clarify invasive and noninvasive PD.

Our response: This has been addressed (page 6) and a new reference (ref 2 [Randle et al 2011]) is added.

Comment 2: Tables 1 & 2, it is not very clear in the legend how the p value was determined. Please explain the statistical comparison in the legend as written in the text.

Our response: The statistical test used is now added as a footnote under the tables 1 and 2.

Comment 3: Page 10 line 6, it is third "world" not "word".

Our response: We thank the reviewer for noticing this, it is now corrected (page 15).

Comment 4: All cases ≥ 2 months old "were" not "are" presumed.

Our response: This is now corrected (page 9).

Comment 5: Was this presumption based on the questionnaire or general national vaccination program. Please clarify on your assumption.

Our response: The presumption was based on the Australian national immunization surveillance data (reference number 24 [Hull et al. 2009]). This clarification is now added to the 'Materials and Methods' and Discussion sections (pages 9 and 16).

Comment 6: In the M & M, isolation of the serotypes contained in 7vPCV (4, 6B, 9V, 14, 18C, 19F, and 23F) was considered. Yet, no data is given about the serological types of the 5 VT-IPD in the study.

Our response: These serotypes are now added to the Result section (page 11) and Figure 2. Also the other serotypes of non-primed VT and primed NVT are added to the text (page 12).

Somehow, a revision of the discussion is needed where the status of PCV and PD in Australian is missing (before and after PCV) which would strengthened the discussion.

Our response: A paragraph about the impact of PCV in Australia has been added in page 14.