Reviewer's report

Title: A cross sectional survey of attitudes, awareness and uptake of the parental pertussis booster vaccine as part of a cocooning strategy, Victoria, Australia

Version: 1 Date: 27 January 2013

Reviewer: Alberto E Tozzi

Reviewer's report:

The Authors touch an important issue in pertussis immunization strategy in a time period when additional efforts to control pertussis are needed. Although it seems obvious that the cocoon would prevent secondary cases of infection, we do not have sufficient evidence that this is efficacious and its implementation is difficult. It is of note that they report a high immunization coverage in their study population.

However there are several points that should be addressed for a correct interpretation (major revisions):

1. The Authors should better specify which assumptions were considered for calculating the sample size. It seems from the text that they used as an outcome immunization coverage, but they do not state which level of precision of the estimates they wanted to obtain. The Authors should also report how many total births are registered in each district. This information may be shown in table. Was the number of births in each stratum similar?

2. The Authors should also report the response rate in each stratum since the approach to retrieve completed questionnaires was different. This may have led to potential bias (metropolitan vs rural?).

3. Data analysis: the Authors state that adjusted proportions of parents vaccinated were calculated. It is not clear if this adjustment consisted in calculating weighted proportions. This information should be added.

4. It seems that recruitment was not properly designed to catch a sufficient number of participants according to the sample size estimation. The Authors may calculate the precision of their estimates with the available sample size. Moreover, some statistical comparisons were made that may be easily flawed by a beta error,

5. One of the important information that seems missing from the paper is at what age of the infants the interviews were performed. It is likely that the attitude to be vaccinated may vary with the age of the infant. Since information on time at parents vaccination is also lacking, it is difficult to correctly interpret the results.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I participated in scientific meetings supported by Glaxo SmithKline and Sanofi Pasteur MSD to discuss perspectives of the cocoon strategy without receiving any compensation.