Reviewer's report

Title: Clinical and economic evaluation of Spanish 65-year-cohort pneumococcal vaccination measured by a dynamic model

Version: 3 Date: 9 February 2013

Reviewer: Vincenzo Baldo

Reviewer's report:

Please number your comments and divide them into

- Major Compulsory Revisions

- Title: 'Clinical and economic evaluation of Spanish 65-year-cohort pneumococcal vaccination measured by a dynamic model'

It would be better to be more detailed in the title and specify the type of economic evaluation performed (budget impact analysis).

- The costs associated with pneumococcal disease, in Euros for the year 2010, were determined according to published data in the Spanish population [28,29].

You need to be more specific about how you derived the cost separately for hospitalization charges (e.g. hospitalized pneumonia) and cost of illness in an outpatient setting (outpatient pneumonia).

The reference 28 is not available in internet and refers to 2001, while the cases and budget impact analysis that you perform is set in 2010. The reference 29 is also no longer available in internet (Página no encontrada en el portal del Ministerio de Sanidad, Servicios Sociales e Igualdad) and seems to refer, according to the title, to vaccination coverage, not cost.

Please provide a column in table 2 in which each cost has an up-to-date and available reference.

- The cost of the vaccination programme was calculated using the official price of PCV13 [31](Table 2)

Please justify why you consider only the cost of the vaccine in costing the vaccination programme disregarding the cost of health care personnel or other direct costs involved in a vaccination programme.

- You should also explain the cost analysis perspective in the methods (not only in the discussion) and the temporal horizon for the cost analysis.
- The authors report only the cases of pneumococcal disease and the costs avoided, but could pneumococcal vaccination carry any complications related to the vaccine? They need to add a comment or analysis on this issue in the text.

- Minor essential revisions

Both publications took into account indirect effects (herd immunity) using a static approach due to the Markovian structure of the models used.

Are you sure this sentence is correct?

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

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

No, I have no financial or other competing interest to disclose.