Reviewer's report

Title: Systematic review of models estimating the cost-effectiveness of routine varicella and herpes zoster vaccination in high-income countries

Version: 1 Date: 24 September 2014

Reviewer: Patricia Soarez

Reviewer's report:

• Major Compulsory Revisions
The literature search was performed only on PubMed. Did the authors mean MEDLINE via PubMed? Relevant studies could also be identified if the search was extended to other bibliographic databases such as MEDLINE and EMBASE and to specialised databases such as CRD’s NHS Economic Evaluation Database (NHS EED) and the Health Economic Evaluations Database (HEED). This should be reported as a limitation.

The authors stated that one of the inclusion criteria was that the study should be a full economic evaluation. But, table 3 presents 10 cost comparison analyses that only considered costs and costs offsets, and therefore are classified as partial economic evaluations and could not be included in this systematic review, according to the previously mentioned eligibility criteria.

The Philips framework for quality assessment of decision-analytic appeared to be used. But the quality assessment was not presented in the results section. The quality assessment of economic studies should be discussed in more detail.

• Minor Essential Revisions
In page 7, line 145, says that 90 papers were considered for full-text review. But in the figure 1, page 45, it says that were 92 papers. Please, correct the inconsistency.

• Discretionary Revisions
Table 7 presents the economic results from the health care payer and society perspective. It would be very useful to include one more column with the funding source, and the analysis of the impact of the funding source on the results of the economic studies. Was there a relationship between the source of funding and the reporting of positive results?

Level of interest: An article of importance in its field

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.