Reviewer's report

Title: Burden of disease and economic evaluation: are we investigating what really matters?

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Reviewer: Jose-Maria Abellan-Perpiñan

Reviewer's report:

This paper studies the strength of the association between economic evaluations and burden of disease measures in Spain. It provides an overview of the economic evaluations undertaken in Spain from 1983 to 2008, updates the burden of disease for Spanish population, and examines whether resources for economic evaluations meets those conditions generating a higher burden of disease.

Discretionary Revisions

Here I make some suggestions with the aim of improving the paper:

1) Introduction, second to last paragraph: Is Neumann et al’s study the only one having previously analyzed the relationship between economic evaluations and burden of disease? It is not clear to me this point.

2) Updating the calculation of the burden of disease: Three burden of disease measures are presented in this section: DALYs, YLLs, and YLDs. Mention mortality as well, since it is also used later on (e.g. it is one of the measures shown under the label “National Burden of Disease in Spain 2006” in Table 2).

3) Results, Main characteristics of the economic evaluations studies, second paragraph: State the number of disease-specific categories and subcategories in the text. It is not clear enough if there were 51 disease sub-categories. The single mention of it appears in Table 4.

4) Discussion: It is claimed that “the results of our study are consistent with those of other previous studies that also evidenced disagreements between the allocation of research resources and some conditions with a substantial burden of disease”. Are those “previous studies” specifically referred to the economic evaluation field or they are general studies?

5) Discussion: It is suggested that research priorities for economic evaluations in Spain may have been partly influenced by the pharmaceutical industry interests. This view seems to be held because the majority of the Spanish economic evaluations concern pharmaceuticals. Could you provide some other indication supporting your argument?

6) Discussion: I think that publication biases or the potential screening that companies may have performed are not limitations of your study. You analyze the economic evaluations published in Spain for a period of time. If such biases have occurred they pose a problem for economic evaluation studies but they are
not a consequence of some limitation of your analysis.

7) Discussion: The authors opted by DALYs as the way to measure health needs. I think they should point out if health needs could have been measured in a different way. In addition, they should state if the construction of DALYs is subjected to some limitation.

8) Conclusions: The authors seem to recognize that social priorities should not only be determined by efficiency criteria when state that available resources should be allocated towards those conditions imposing a higher burden of disease “without neglecting other socially priority conditions”. It would be interesting that the authors explain how disease burden-based allocation may be conciliated with examples such as orphan diseases or end-of-life issues.

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

**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.