Reviewer's report

Title: Variability of the Impact of Adverse Events on Physicians’ Decision Making

Version: 1 Date: 29 April 2014

Reviewer: Mathieu Nendaz

Reviewer's report:

1. Is the question posed by the authors well defined?
The question is well defined

2. Are the methods appropriate and well described?
The methods are original and appropriate.

The methods could be better described, for example more details on Hierarchical Bayes modeling.

The numbers mentioned in Table 1 do not convey a concrete meaning to the readers if they don’t understand what this modeling is. Is it possible to give a sense on the principles of the Hierarchical Bayes modeling and what kind of information it provides. Not all readers are literate in this modeling.

The modeling would have been stronger if it had tried to predict the decisions made. It would have been interesting to make models to predict the actual treatment decisions made for the patients of the vignettes, based on the perceived importance of AEs. This would request that participants give their treatment choice on the vignettes but if it has not been done, it is probably difficult to correct this.

3. Are the data sound?
No specific comment

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
No specific comment

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion could reinforce that the study demonstrates that different weights are given to AEs and that this is influenced by age but does not demonstrates that this would actually leads to different treatment decisions. Sometimes physicians take similar decisions based on different reasons!

3. Are limitations of the work clearly stated?
Yes they are.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
8. Do the title and abstract accurately convey what has been found?
Yes

9. Is the writing acceptable?
Clearly written. Some remaining spelling mistakes.

• Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)
1. The modeling would have been stronger if it had tried to predict the decisions made. It would have been interesting to make models to predict the actual treatment decisions made for the patients of the vignettes, based on the perceived importance of AEs. This would request that participants give their treatment choice on the vignettes but if it has not been done, it is probably difficult to correct this.

• Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. The methods could be better described, for example more details on Hierarchical Bayes modeling.
2. The numbers mentioned in Table 1 do not convey a concrete meaning to the readers if they don’t understand what this modeling is. Is it possible to give a sense on the principles of the Hierarchical Bayes modeling and what kind of information it provides. Not all readers are literate in this modeling.
3. The discussion could reinforce that the study demonstrates that different weights are given to AEs and that this is influenced by age but does not demonstrates that this would actually leads to different treatment decisions. Sometimes physicians take similar decisions based on different reasons!

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'