Reviewer’s report

Title: Genetic risk for atrial fibrillation could motivate patient adherence to warfarin therapy: a cost effectiveness analysis

Version: 5
Date: 30 June 2015

Reviewer: Devender Dhanda

Reviewer’s report:

The authors have made great efforts to address most of the concerns raised by the reviewer in first round review.

Major Essential Revisions

1) The authors mentioned in methods section "A 3% annual discount rate was applied to costs". Did they also apply the same 3% discount rate to the outcomes. As per the ISPOR Good Research practices for modeling and US Panel of Cost-effectiveness in Health and Medicine, the discount rates should be applied to both the costs and outcomes. If the authors already applied the discount rate to the outcomes that it is highly recommended that the authors can clearly state the same in the methods section. However, if the authors have not applied the 3% discounting to the outcomes than it is highly recommended to carry out the analysis after applying the discounting to the outcomes because this will have the impact on the ICERs and the outcomes results of the study.

2) Sensitivity analysis in the methods and results section:

In line 119-121, the authors used the term 'multivariate analysis" whereas in the results sections the authors reported the results from "probabilistic sensitivity analysis". It is important that the authors understand the differences in the two methods. Multivariate sensitivity analysis is performed by varying just a few parameters whereas the probabilistic sensitivity analysis (PSA) is performed by assigning the distributions to all the parameters of the model and running the simulations. Figure 6 represents results from the PSA and is correctly stated in the figure legend. The authors need to clearly state in the methods section which parameters were varied simultaneously in the "multivariate analysis". It would be helpful for the audience if authors can clearly mention distributions assigned to all the parameters while performing the PSA.

3) The authors should amend paragraph starting from line 160 on page 9 in the results section. The results presented in figure 5 are not from probabilistic sensitivity analysis, but the results presented in figure 6 are from probabilistic sensitivity analysis. It would be helpful to make that distinction.
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.