Reviewer’s report

Title: Model-based estimation of measures of association for time-to-event outcomes

Version: 2  Date: 2 June 2014

Reviewer: Werner Vach

Reviewer’s report:

The revision by the authors has substantially improved the paper. The focus is now more clear with more emphasis on estimation methods and less emphasis on the association measures themselves. This is fair enough and makes sense.

However, I feel the problem of the definition of the measures has not been solved completely in an adequate manner. For example, the definitions given on page 2 are just not definitions, as they have a time dependent quantity on the right side, and a time constant quantity on the left side. I think it would contribute to the clarity of the paper, if all quantities are introduced as time dependent parameters, and that it is explicitly stated, where in the different procedures the assumption of a constant RD, HR or RR is made, or not made.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.