Reviewer’s report

Title: Use of methods to calculate the number needed to treat in randomised controlled trials where the outcome is time to an event: literature survey

Version: 1 Date: 16 February 2008

Reviewer: Dirk Stengel

Reviewer’s report:

The NNT is an increasingly used measure of effect size in clinical trials with binary events. It is still questionable whether it provides substantial advantages over the risk difference when interpreting study results and counseling patients (see Kristiansen IS et al., J Clin Epidemiol 2002;55:888-892, Christensen PM et al. Clin Ther 2003;25:2575-2585 [and other papers of this group], Aino H et al. J Public Health 2004;26:84-87).

When calculating the NNT, it should be done properly, especially when investigating time-to-event outcomes. This is one of the key messages of this systematic review, which makes it valuable work even for those who do not believe in the NNT paradigm.

I do have few comments and recommendations:

1) The trial selection procedure should better be illustrated in a flow chart according to the QUOROM statement; Table 1 can be deleted

2) Readers need more details about the 38 included studies. Sample sizes, experimental and control interventions, primary endpoints etc. should be tabulated on an individual basis and added to the main manuscript or an electronic appendix

3) The authors pointed out that “the error produced by using an inadequate method to calculate NNTs is unpredictable.” In addition to trial details, the reported individual NNT should be compared to appropriately computed NNT (using both the fixed time point and reciprocal hazard difference method)

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.