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**: 13 February 2008

**Reviewer**: Jorgen Nexoe

**Reviewer's report**:

Review on paper for BMC Medical Research Methodology by Mandy Hildebrandt and colleagues.

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

This is a well written paper on an interesting subject, the review seems to be well performed, and I think the paper may be interesting to the readers of BMC Medical Research Methodology. However, I am not sure that the focus is appropriate.

Minor Compulsory Revisions

This is in my opinion a review not a survey. The title is too long and does not convey accurately what has been found. I suggest that the title is changed to something like: "NNT is often miscalculated in RCTs: a literature review".

Major Compulsory Revisions

The authors quote Laupacis in defining NNT as the average number of patients who must be treated to prevent one adverse outcome. This definition is questionable, as adverse outcomes at best are postponed. This is obvious when the outcome is death and likely in most other cases. The consort statement describing the NNT as helpful is not discussed at all. I doubt that NNT is intuitively meaningful, easily understood, and at all helpful. These issues should be discussed bringing in more recent literature.

The authors find that more than 50% of the NNT reporting papers use inadequate methods of calculations. This may be an indication that NNT concept is difficult to understand to researchers.

There exists already a body of research discussing comprehensibility and utility of NNT that should be included in the discussion [1-4].

Difficulties in calculating confidence intervals especially for non-significant results should be discussed.

Whether it is sensible to apply NNT to present results of RCTs should be discussed.
Reference List


What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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