Reviewer's report

Title: Acupuncture for the Treatment of Tinnitus: A Systematic Review

Version: 4 Date: 15 February 2012

Reviewer: Arndt Büsingen

Reviewer's report:

Although the topic of the review is important for the practitioners, one may speculate why there are just a few RCT on this topic.

Minor essential revisions:

The statement that “the rationale for the use of acupuncture is based on the principle that a needle stimulus may elicit an electrical charge that triggers action potentials to rebalance the neurophysiological system or the function of the olivocochlear nucleus” may not fully meet the intentions of Eastern acupuncturist referring to the classical TCM system; nevertheless, it is the interpretation of Western physiologist.

Please define “treatments of unproven efficacy in the control group” which resulted in an exclusion of the respective studies. Some of them could nevertheless be of relevance for the discussion.

Please describe why you found 58 papers not related to acupuncture and 126 not related to tinnitus when you were searching for `acupuncture AND tinnitus´. Please describe the 16 excluded papers: What was used as “mixed intervention (n=8)” or “another types of CAM (n=6)” etc.

Is it correct to compare studies using conventional acupuncture with EA or scalp acupuncture? While it is appropriate to have them in the review, the findings should be carefully discussed with respect to the underlying conceptual and/or physiological differences.

If you state that the studies “were too small to generate reliable findings”, please discuss it in the light of the often lacking power calculation.

Please add, if possible, effect sizes (both for acupuncture and control) to judge the effectiveness of the controls.

You should discuss that the two Chinese studies compared acupuncture with (probably) less effective drug treatment. The results thus might be in favour of the acupuncture group. Moreover, two studies from Brasil using scalp acupuncture vs sham acupuncture had some positive results. Please discuss more clearly putative bias effects in these two studies as you mentioned a risk of bias for sequence generation.

The statement that “several RCTs fail to mention adverse effects highlights the
poor ethical and reporting standards of acupuncture research“ must not be true. One could also argue that the AE were small or even absent – and thus not worth to mention. At least one can state that these important issues were unfortunately not clearly addressed, and this is in fact a “poor reporting standard”.

**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.