Reviewer's report

Title: Acupuncture for post anaesthetic recovery and postoperative pain: study protocol for a randomized controlled trial

Version: 5 Date: 2 May 2014

Reviewer: Xiong Lize

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Major Compulsory Revisions

The protocol of AcuARP trial was designed to investigate the effectiveness of an acupuncture therapy in the perioperative period on post anesthetic recovery and postoperative pain. The clinical trial is interested in the field of acupuncture-assisted anesthesia because the results of this study will provide evidence whether acupuncture may improve patients post anesthetic recovery. In general, the patients inclusion/exclusion criteria, randomization, blinding, Interventions ande statistical analysis was suitable, but my main consideration is sample size estimation. The main outcome measure is the time from extubation to "ready for discharge" from the post-anaesthesia care unit, the sample size can be estimated by the mean time and anticipated percent decrease in the primary outcome measure.

An example from Anaesthesia proof as attachment. For the primary outcome measure of time to achieve recovery room discharge eligibility, the mean (SD) time to achieve recovery room discharge eligibility was 50 (20) min in a pilot study. To capture an anticipated 30% decrease in the primary outcome measure to 35 (15) min, a sample of 46 patients (23 per group) would provide a two-sided unpaired Student's t-test with 80% power at an alpha of 0.05. To account for potential loss to follow-up and enable greater statistical power for secondary analyses, the sample size was increased to 72 patients (36 per group).

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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.