Reviewer's report

**Title:** A Multi-arm Multi-stage Design for Binary Outcomes and Application to Tuberculosis

**Version:** 4  **Date:** 30 September 2013

**Reviewer:** Thomas Jaki

**Reviewer's report:**

The authors have addressed my previous comments well. There remains only one statement the authors may wish to alter:

**Minor revision**

In the last paragraph of the discussion it says "Such a correction may be acceptable in a trial with a large number of arms and low FWER, otherwise it will result in a trial that is larger than necessary, thus losing efficiency."

I believe that adding more arms increases the conservatism of the Bonferroni adjustment in this setting rather than decreases it. To see note that under the null many treatments will be dropped prior to the final analysis. For dropped treatments, however, no error correction is necessary as no hypothesis can be incorrectly be rejected. Increasing the number of treatments increases the number of dropped treatments and hence make the adjustment to stringent.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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