Reviewer’s report

Title: Value of information methods to design a clinical trial in a small population to optimise a health economic utility function

Version: 0 Date: 23 Sep 2017

Reviewer: Donglin Yan

Reviewer's report:

1. Figure labels in section results, subsection Operating Characteristics are not correctly displayed.

2. A few minor editorial errors.

3. As N increases, the proposed method doesn't seem to converge to standard 2-arm RCT. Why didn't the method converge or why should it not converge?

4. When N is small, as discussed in the article, the recommended n* could be 0. Based on the proposed method, the optimal decision is to "approve the experimental treatment based on prior belief alone" under certain circumstances.

   Under what range of N is the proposed method appropriate?

5. How do the operating characteristics of the proposed method compare to that of commonly used methods?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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