Reviewer’s report

Title: A comparison of early versus late initiation of renal replacement therapy for acute kidney injury in critically ill patients: an updated systematic review and meta-analysis of randomized controlled trials

Version: 0 Date: 05 Mar 2017

Reviewer: Lili Chan

Reviewer's report:

Overall comments:

This paper was well written and addresses an important clinical question regarding "early" vs "late" start RRT for AKI. In this systematic review and meta-analysis, the authors do not find a significant benefit to early or late start HD, and notes that there is significant heterogeneity. This systematic review and meta-analysis is done appropriately, with appropriate consideration of statistical method especially with regard to heterogeneity and random effects. They also appropriate discuss the limitations to their analysis.

Major issues:

1. The authors notes that prior systematic reviews and meta-analysis have included low quality studies. However, there have many at least one that I have found that looked at RCT's only, which included both the AKIKI and ELIANE trial.
   d. PMID: 27485542

2. I am curious as to why the authors utilized these three databases only. Many often use Medline and GoogleScholar. Also there is the potential for abstracts/posters to have additional RCT data that many not be available on these databases as they are not published in journals yet. Did the authors attempt to find non-traditional publications?
Minor issues:

1. Page 6 Line 58, "if sufficient trials" can the authors please describe what was considered sufficient?

2. Page 6 Line 54: here they state that ethics board approval was not needed, however later on Page 18, they declare that this study was approved by the ethics board.

3. Tables 2 and 3: consider grouping by criteria instead of year, as in all those with urine output together, and those with BUN together

4. Forrest plots: some are blue and some are green boxes.

**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.

Unable to assess

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

Yes

**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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