Reviewer's report

Title: Hospital Acquired Acute Kidney Injury is associated with increased mortality but not increased readmission rates

Version: 0 Date: 30 Mar 2017

Reviewer: Chethan Puttarajappa

Reviewer's report:

The manuscript is well-written with clear description of objectives and methods used. Results are provided clearly

Issues

- Not novel. AKI and mortality has been extensively researched. There is a significant amount of data in this manuscript that deals with this outcome at varied time points and appears repetitive.

- Only novelty I saw was that this was looking at readmissions in AKI at UK medical center while majority of the studies have been from other countries previously. Additionally, the authors probably are not aware of a recent publication in BMC nephrology (Jan 2017) from UK that explored AKI and readmissions. (1)

- I would have liked to see the authors make a stronger case for and the potential AKI specific interventions to be applied following discharge to reduce hospitalizations.

- While many studies have the limitations of providing limited follow up results, I think there are too many similar tables in the manuscript. Mortality at 30,90 and post 90 with similar findings probably need not all be in the main manuscript. There are very few reasons why we would expect the trends to be any different given the underlying biological explanation for increased mortality with AKI.

- Although crp is included and 'stressed' as an important predictor variable, not much background info is provided as to where the field stands on this and what is implication of understanding the significance of crp in AKI, over and above its association with SIRS/SEPSIS.
- Why was only malignancy chosen as a specific subgroup for analysis when other diagnoses such as sepsis or heart failure have higher risk of AKI and reported readmission rates?

- Details regarding follow up and medical care following hospital discharge are not described. What happened to these patients in terms of follow up with either specialists or general practitioners? The authors describe the relevance of cancer diagnosis and ongoing palliative care services. However additional details of the specifics of post hospital discharge and ongoing care would have been useful.

- Similarly, causes of readmission are not provided. The Scottish study suggested increased readmissions due to pulmonary oedema.

- It would be helpful if the authors can contrast their study findings to the findings from other previous studies that have suggested higher hospital admission rates.

In Summary, I would suggest the following:

- Make a stronger case for studying role of crp in AKI mortality, and for studying potential intervention opportunities for AKI post discharge.

- Make the result tables more compact/less number if possible.

- Would shift focus of the manuscript from AKI and mortality to factors related to readmissions (since the former is well studied)

- Incorporate additional variables regarding post hospital discharge management while analyzing readmission issues.

- Incorporate pre specified subgroups for looking at AKI readmission rates (that can be a strength since it might corroborate many previous studies that looked at one disease specific cause at a time)

- Expand discussion section to include how the study findings differ or agree with previously published research.

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.

Yes

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
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal