Reviewer’s report

Title: Independent risk factors and long-term outcomes for acute kidney injury in pediatric patients undergoing hematopoietic stem cell transplantation: a retrospective cohort study

Version: 0 Date: 10 Jun 2020

Reviewer's report:

Hirano et al. conducted a retrospective cohort study to examine the incidence of AKI and the risk factor for AKI and the progression to CKD among HSCT patients. There are several major concerns that should be addressed first.
1. If the authors included patients till March 2019, then how can the author observe 2-year outcomes for AKI? I believe your title is so confusing. You mentioned 2-year time frame many times but I have not found any part of the method section mentioning about the time frame. This will create selection bias since not everyone has a chance to develop 2-year outcomes.
2. I believe this is a small sample size study. Did you calculate sample size before conducting the study? What does it mean by incomplete data in your diagram?
3. What are your possible confounding factors? Any overfitting problems?
4. Could you stratify the data on dose of TBI?
5. What are the baseline serum creatinine/kidney function? Should we adjust for this as well?
6. What are the causes of AKI? Side effect from medications vs infection vs dehydration etc.
7. Is it possible that 2 year is not enough to capture CKD in your cohort? I still doubt that why most of CKD cases develop within first 6 months. What are the causes of CKD? What is the CKD definition in pediatric population that the authors used?

Minor concerns
1. Spell out every acronym if you used for the first time including the abstract part
2. Language correction is needed

Please confirm that you have included your review in the ‘Comments to Author’ box?

As a minimum standard, please include a few sentences that outline what you think are the authors’ hypothesis/objectives, their main results, and the conclusions drawn. Your report should constructively instruct authors on how they can strengthen their paper to the point where it may be acceptable for publication, or provide detailed reasons as to why the manuscript does not fulfill our criteria for consideration. Please supply appropriate evidence using examples from the manuscript to substantiate your comments. Please break your comments into two bulleted or numbered sections: major and minor comments.

Please note that we may not be able to use your review if no comments are provided.
Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included as text in the ‘Comments to Author’ box.

Yes

**Are the methods appropriate and well described to allow independent reproduction of experiments?**

Please state in the ‘Comments to Authors’ box below what you think are the strengths and weaknesses of the methods (study design, data collection, and data analysis), and what is required, if anything, to improve the quality of reporting.

Yes

**Does the work include the necessary controls?**

If not, please explain in the ‘Comments to Author’ box below.

Yes

**Are you able to assess the statistics?**

- Are the statistical test(s) used in this study appropriate and well described?

- Is the exact sample size (n) reported for each experimental group/condition (as a number, not a range)?

- Are the description of any error bars and probability values appropriate?

- Are all error bars defined in the corresponding figure legends?

- Has a sample size calculation been included, or a description and rationale about how sample sizes were chosen?

Please can you confirm which of the following statements apply to your statistical assessment of the manuscript (Please include details of what the authors need to address in the ‘Comments to Author’ box):

I have been able to assess all of the statistics in this manuscript (please refer to checklist above)
Are the conclusions drawn adequately supported by the data shown?

If not, please explain in the ‘Comments to Author’ box below.

Yes

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

Not suitable for publication unless extensively edited

Should the manuscript be highlighted for promotional activity?

Articles that are deemed of interest to a broad audience can be promoted in a variety of ways. This could be through email updates, postings on the BioMed Central homepage, social media, blogs and/or press releases. Please indicate in the text box below whether you think this manuscript should be considered for promotional activity, indicating your reasons why (e.g. what is the most newsworthy aspect of the research).

No

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

**Reviewer Publication Consent.** 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](http://creativecommons.org/licenses/by/4.0)) if this manuscript is accepted for publication. Any comments that I do not wish to be included in the published report have been included as confidential comments to the editor, which will not be published. If you are not happy for us to publish this report, please contact the editorial office before completing the review. If you wish, you can include your name in your published report. Please note you must decide whether to include your name at the start of the process and confirm this decision whenever prompted. If you change your decision later, we will not be able to publish your name.

I agree to the terms of the CC-BY 4.0 license; please **do not** publish my name with my report.

(default)