Reviewer’s report

Title: Cardiac valve calcification and risk of cardiovascular or all-cause mortality in dialysis patients: A meta-analysis

Version: 3 Date: 27 Aug 2017

Reviewer: Sagar Nigwekar

Reviewer’s report:

Authors report a meta-analysis conducted to evaluate the association between the CVC and cardiovascular or all-cause mortality in dialysis patients. Following concerns should be addressed:

1. Dialysis vintage (duration between dialysis initiation to assessment) can be a significant confounder. Per Table 1, only two studies adjusted for this confounder. Provide a sensitivity analysis that includes studies with vintage adjustment.

2. Page 6: provide number of studies and patients included in each of the subgroup and sensitivity analyses.

3. Although statistical tests for publication bias are not significant, the visual suggests small negative studies were likely not published. This should be discussed as a limitation.

4. Discussion section is not rich. Instead of rewriting the results section, highlight the most important findings and discuss underlying pathogenesis and implications for clinical care and research.

5. Comment on observations related to Asian vs. non-Asian populations, peritoneal vs. hemodialysis patients.

6. Overall, the prevalence of valvular calcification in Chinese studies is lower than in other populations. Please comment.

7. Recent KDIGO CKD-MBD guidelines 2017 mention caution regarding use of calcium and vitamin D in dialysis patients. Please comment on these in the context of observed associations between valvular calcification and mortality.

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.
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:

Needs some language corrections before being published

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.

None

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