**Reviewer’s report**

**Title:** Value-based evaluation of dialysis versus conservative care in older patients with advanced chronic kidney disease: a cohort study

**Version:** 0  **Date:** 23 Jul 2018

**Reviewer:** Bjorn Meijers

**Reviewer’s report:**

The authors performed an observational single-center cohort study. Was this a prospective or retrospective study. Please clarify also in the materials and methods section.

"However, this significant survival advantage of the dialysis group disappeared in patients aged ≥80 years" (page 8, results) and "The survival advantage of the dialysis group was also lost in patients aged ≥70 years with Davies comorbidity scores ≥3 (severe comorbidity) (Figure 2D+2E; median survival: 2.9 [1.5-5.2] versus 2.1 [1.3-3.6] years, P=0.07)." (page 8, results). These are subgroup analyses. As such, patient number is relatively low. Given the fact that P values approach significance (at least for comorbidities, P = 0.07), the adagio "absence of significance does not equal evidence of absence of effect" might be the most correct interpretation of the data. Please tune down your conclusions and refer to this in the conclusion section.

As referred to by the authors, finding the optimal timeframe for performing such analysis is difficult. The authors have chosen "time of treatment decision" as their starting point. Surprisingly, eGFR at time of treatment decision is significantly lower for patients in the interventional group than for patients opting for conservative care. The mean eGFR difference (2.3 mL/min) translates into a 6-12 months lead time bias in favor of the conservative care group. This should be addressed in the discussion section as a major caveat. Also, the authors should provide data on loss of eGFR per time for the individual groups.

The authors seem to be aware of this, as they performed additional analysis at fixed eGFR levels. These data however are supplementary data. I would recommend to bring at least part of these data into the original text.

Figure 1 is asymmetrical and lacks the logic flow of events. For patients opting for dialysis, some are still in the 'pre-dialysis care'. Part of these die waiting for dialysis. Some 'progress' to dialysis (if that by any means should be called progression). This chain of events should be represented in the graph. For those opting for conservative care, data on drop-out (including due to death) should be added.

Figure 2 graphic quality is low. Please add graphs at least 300x300 DPI.

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.

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

**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