**Reviewer’s report**

**Title:** The effects of add-on corticosteroids on renal outcomes in patients with biopsy proven HIV associated Nephropathy: A single centre study from South Africa.

**Version:** 1  **Date:** 24 Sep 2018

**Reviewer:** Frank Post

**Reviewer's report:**

The paper by Wearne and colleagues describes the results of a small clinical trial of high dose corticosteroids in patients with HIV-associated nephropathy in South Africa. The study reports improved eGFR and interstitial inflammation but no change in proteinuria and a higher mortality with adjunctive corticosteroids which is important information to guide clinical management and design of future studies.

I have a few suggestions to improve the manuscript and a few points which the authors should address:

1. Was the trial registered on a database such as clinicaltrials.gov? This should be stated and relevant details provided in the methods.

2. The methods state that patients had to be "ART naïve for at least 2 week prior to renal biopsy". ART naïve typically means NO prior ART exposure so please clarify/correct.

3. The methods state that ACE-I/ARB’s "was also commended" - in everybody?

4. Was baseline eGFR and proteinuria included as a factor in the linear regression models? As baseline eGFR differed between the study arms, I would have thought this important.

5. What were the study hypothesis, the power, and the assumption(s) on which the power calculation was based?

6. A brief explanatory note on the choice of steroid dosing schedule would be interesting.

7. The methods should state how missing data were handled: was the last observation carried forward?
8. Figure 1 suggests that 38 of the 40 patients who met the inclusion criteria agreed to participate in the trial - is that correct? Had the patient who moved provinces commenced corticosteroids (if so, he shouldn't be removed from the denominator)?

9. I find Figure 2 difficult to interpret and note that by 24 months about 1/3 of patients in each arm are no longer in the trial. I suggest raw eGFR data (median/IQR) are provided for both arms at each of the first six months of follow up (in a Figure or Table), and that a further regression analysis is performed using data up to this time point. If the findings are confirmed I feel more confident about the results of the study.

10. Were changes in eGFR adjusted for changes in CD4 count and HIV (non)suppression?

11. Was the effect of rifampicin (potentially halving the corticosteroid exposures) assessed?

12. It would appear that no patients in either arm of the study developed ESKD (eGFR <15) which is unusual - can the authors comment on this?

13. Table 5 benefits from additional columns describing and comparing the abnormalities at baseline and six months in each arm.

14. Is there any information available on the causes of death? The discussion refers to sepsis - is this supported by any data?

15. Was adherence to steroids assessed (pill count or other)?

Comment: it looks like the supplementary file "final full dataset" contains names and ID numbers of the participants - these should be removed.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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.

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