Reviewer’s report

Title: Effects on mortality of a nutritional intervention for malnourished HIV-infected adults referred for antiretroviral therapy: a randomised controlled trial

Version: 1 Date: 8 November 2014

Reviewer: Sera Young

Reviewer’s report:

Thank you for the opportunity to read this well written manuscript based on a rigorous clinical study.

The low rate of adherence to supplement should be included in the abstract.

Do you have a sense of baseline micronutrient levels, in order to understand if there was a potential to benefit from micronutrient supplementation?

How long did the recruitment stage typically last?

The readers really need more information about adherence— how assessed, distribution of supplement consumption, how 75% was determined as cut-off for adherence/compliance. I assume predictors of adherence will be explored in a follow-on paper, but we really need to know more about the distribution. Further analyses would not be uncalled for either, e.g. did you see “dose response” in mortality, CD4 count when greater number of categories of supplement uptake were regarded (instead of just dichotomous)?

How was the caloric composition of the LNS determined?

Another potential impact of supplementation could be adherence to ART regimen. Was there any measurement of ART adherence, or even viral load?

The second paragraph of the introduction is very information dense— and quite informative. But dividing into several paragraphs with clear topic sentences for each would make it much more informative. In that same passage, a further explanatory sentence should come after the sentence ending in “: young children.”

Hypothesis should be stated at end of intro.

Insert comma on p 13 after “for the whole study cohort”

On Table 1, if the denominator is constant across rows, the n’s can be dropped in each column. It distracts from interpretation of results.

On Table 2, were there any significant differences? If not, indicate in a footnote.

Table 3, the n’s for women and men do not sum to 1815, as they do across other
sub-category analyses.

In Figure 3, include footnote about cutoffs.

Why was enrollment stopped early? (p 12)

In that same paragraph, it isn’t clear to me why the difficulties of following up very ill patients for long term care would contribute to low compliance with the supplement.

Was substitution of LNS for other foods that would have normally been consumed assessed? Were there any 24 h recall dietary data collected?

Was change in appetite during the study assessed?

1. Is the question posed by the authors new and well defined?
   *Yes.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
   *Yes.

3. Are the data sound and well controlled?
   *Yes.

4. Do the figures appear to be genuine, i.e. without evidence of manipulation?
   *Yes.

5. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   *Yes.

6. Are the discussion and conclusions well balanced and adequately supported by the data?
   *Yes.

7. Do the title and abstract accurately convey what has been found?
   *Yes.

8. Is the writing acceptable?
   *Yes.

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

None.