Reviewer’s report

Title: Zinc for Infection Prevention in Sickle Cell Anemia (ZIPS): Study Protocol for a Randomized Placebo-Controlled Trial in Ugandan children with Sickle Cell Anemia

Version: 0 Date: 01 Jul 2019

Reviewer: Patrick Harris

Reviewer's report:

This trial protocol describes a RCT to compare oral zinc supplementation with placebo in children with sickle cell anaemia in Uganda, in order to prevent severe infections. This is a well-written protocol and the details of the study are clearly articulated. The authors have written the protocol in accordance with the SPIRIT guidelines, and have provided the relevant checklist. The study addresses an important topic, with potential significant benefit for patients. Overall there were no major concerns that I identified and any comments are brief and relatively minor

1. The study will use blood cultures to identify severe invasive infections / bacteraemia and and Biofire panel for viral / atypical bacterial respiratory infections - it was not 100% clear if these were being performed at site (ie in Uganda) and used for patient treatment in real time, or were being shipped back for testing in the US laboratories, or tested at local research facility or within the hospital's own laboratories? This level of sophisticated lab testing seems unusual for a hospital in regional Uganda

2. Stool samples were planned to be collected for possible future 'microbiome testing' - any details of at which time points these might be collected? Also at baseline at 12 months? I presume these will then be frozen?

3. Line 253: "Chlamydophila pneumoniae or Mycoplasma pneumoniae" species should be italicised

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

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

Acceptable
Quality of figures
All images and figures within the manuscript should be genuine i.e. without evidence of manipulation. No specific feature within an image may be enhanced, obscured, moved, removed, or introduced. If you have concerns about the veracity of the figures you should choose the first option below.

Statistical review
Is it essential that this manuscript is seen by an expert statistician? If so, please give your reasons in your report.

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

Were you mentored through this peer review?

No