Reviewer's report

Title: Pulmonary artery enlargement in schistosomiasis associated pulmonary arterial hypertension

Version: 3 Date: 4 May 2015

Reviewer: Ghazwan Butrous

Reviewer's report:

The manuscript “Pulmonary artery enlargement in Schistosomiasis associated pulmonary arterial hypertension” by Hoette, et al is of special interest. It provided an evidence of what previously suspected that Schistosomiasis induced pulmonary hypertension is more likely to induce pulmonary artery dilation.

Major Compulsory Revisions

1. In the “abstract “ line 42 of the manuscript and line 172 of the manuscript in the “Conclusion” section, It is advisable to change the word, “are a characteristic feature “ to ” more likely” as the authors have not provided Specificity and Selectivity analysis to be able they to claim word characteristic.

2. In the "Result" section the authors are advised to
   a. Add standard deviation the age group (line 93 of the manuscript).
   b. All haemodynamic data are repeated as it was mentioned in the table, so suggest removing that data from the results and referred to the table as it will be more readable. Also is in the table, please add cardiac output data, and remove the P value and change to “ns” in LPAD to be consistent with the result of the table

3. Line 103 –line 106 of the manuscript is an important part of the paper and the authors are encouraged to provide data to the reader, (by say provided a graph of mPAP vs MPAD). This will help to provide visual evidence to the reader.


Minor Essential Revisions

5. In the introduction and discussion, I notices that the authors have not referred to an important observation from northern Brazil by Ferreira RCS et al in “Prevalence of pulmonary hypertension in patients with schistosomal liver fibrosis “Annals of Tropical Medicine & Parasitology, Vol. 103, No. 2, 129–143 (2009)” where they documented clearly and in some details pulmonary artery dilatation in Schistosomiasis induced pulmonary hypertension.
6. In the limitation of the study, the authors have still to accept that the causality of Schistosomiasis to the patients labelled as Sch-PAH are based on empirical criteria (mentioned in line 70-72 of the manuscript) set by the authors, and although there is no accepted standard in the international guidelines that are evidence-based.

7. The authors attributed longer duration of illness in Sch-PAH as one of the possible cause of the pulmonary artery dilatation, although this is a plausible explanation, it will be useful to provide data in the manuscript for the duration of disease in the Sch-PAH (being a retrospective study) and probably a survival of the IPAH and Such PHT group to enhance this argument. (Also line 127-128, and line 139-146 of the manuscript).

8. Although the paragraph starts with line 147 of the manuscript regarding that inflammatory processes are accurate, it may be difficult to argue that it can be applied to the causation of pulmonary dilatation. The real difference of the inflammatory process has not yet fully characterized between IPAH and Sch-PAH to help to attribute the difference in causation. Furthermore, the endothelial system signalling of the main pulmonary arteries are different from that small vessel where the remodelling took place. Suggestion: remove this paragraph (line 147-162).

In summary, the paper is of interest to be published with some revision

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests