Author’s response to reviews

Title: Modulation of innate immune responses at birth by prenatal malaria exposure and association with malaria risk during the first year of life

Authors:

Hamtandi Magloire Natama (natamagloire@yahoo.fr; natamagloire@gmail.com)

Gemma Moncunill (gemma.moncunill@isglobal.org)

Eduard Rovira-Vallbona (erovira@itg.be)

Héctor Sanz (hector.sanz@isglobal.org)

Hermann Sorgho (hsorgho@hotmail.com)

Ruth Aguilar (ruth.aguilar@isglobal.org)

Maminata Coulibaly-Traoré (traore_maminata@yahoo.fr)

M. Athanase Somé (athanasesome@yahoo.fr)

Susana Scott (Susana.Scott@lshtm.ac.uk)

Innocent Valéa (innocentvalex@yahoo.fr)

Petra F. Mens (p.f.mens@amc.nl)

Henk D.F.H Schallig (h.d.schallig@amc.uva.nl)

Luk Kestens (lkestens@itg.be)

Halidou Tinto (halidoutinto@gmail.com)

Carlota Dobaño (carlota.dobano@isglobal.org)

Anna Rosanas-Urgell (arosanas@itg.be)

Version: 3 Date: 30 Aug 2018

Author’s response to reviews:

Response to Reviewer 2 comments:
We thank the Reviewer#2 and the BMC Medicine editorial member for carefully evaluating our revised manuscript. Please see below our point-by-point response to each point raised.

Reviewer #2: In this revised manuscript, Natama and colleagues address many of the issues raised in the previous review. In response to the prior round of review, the discussion has been edited and is clearer. However, though this reviewer continues to be concerned that the discussion remains a bit too long and could benefit from some additional organizational changes to allow the authors' main points to come through more clearly.

Some suggestions below:

Discussion paragraph 2: The paragraph leads with the following, "To our knowledge, this study reports for the first time the effect of these categories of PME on TLR-mediated innate immune responses, as previous studies have focused on the overall effect of PM and/or other types of PME on PRR-mediated cytokines responses." Suggest that the authors move the first sentence of the next paragraph (line 416) to follow: "It has been previously shown that malaria pigment in the placenta is associated with maturation of cord blood myeloid and plasmacytoid DCs .... which may explain why ....". Then, the authors could follow with the sentences regarding cellular admixture or "innate immune memory" as potential explanations. The authors could then remove the remainder of paragraph 3 (not sure this adds a lot, especially the last sentence of paragraph 3 (line 426-430).

RESPONSE: We have re-organized and condensed the discussion of paragraph 2 and 3 following this reviewer suggestions. Changes can be found from line 401 to 418.

Discussion Paragraph 4 should be shortened. The last sentence (line 455-459) is an excellent summary.

RESPONSE: We have now shortened the paragraph following this reviewer advice. The new paragraph can be found from line 420 to 432.

Discussion paragraph 6 (line 472-506): also too long, would condense.

RESPONSE: We have now condensed the paragraph; changes can be found from line 445 to 472.