Reviewer's report

Title: Co-infection of human parvovirus B19 with Plasmodium falciparum contributes to malaria disease severity in Gabonese patients

Version: 2 Date: 2 May 2013

Reviewer: Quique Bassat

Reviewer's report:

This is a well written relevant report on the potential impact of Parvovirus co-infection on the outcome and severity of malarial co-infections, particularly severe anemia. I believe this manuscript deserves to be published, but I do have a few minor comments to mention that would need to be addressed before accepting the manuscript for publication.

Methods: It is not 100% clear whether the study was designed as a "classic" case-control study, or whether it wasn't. Moreover, there seems to be two comparisons, those severe vs mild cases, and those infected with P. falciparum vs non infected. I believe a better description in the methods section of the study design and the comparison groups is needed.

Nowhere in the methods section it is explained that IgM and IgG against Parvovirus were included as part of the study. This needs to be explained.

Results: There are some sections (definitions of severe or mild malaria) that would better be only included in the methods (not results) section.

It would be good to clarify whether any of the healthy controls were parasitemic. I believe this is a critical piece of information that is not mentioned, and all HC should have malaria parasites ruled out.

Page 9, "...hematocrit levels were slightly significant lower...": Please rephrase this sentence which is not very clear.


Tables: Please include more details about what you are showing in your tables (Mean/Median, geometric mean/% etc...)

Table 2 seems unnecessary, as main results are provided in figure 2, and the remaining could easily be presented as text.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests