**Reviewer's report**

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

**Version:** 2 **Date:** 17 May 2013

**Reviewer:** Carlos Ros

**Reviewer's report:**

In their manuscript entitled "Co-infection of human parvovirus B19 with Plasmodium falciparum contributes to malaria disease severity in Gabonese patients", Toan and co-authors report on the relationship of malaria and B19V infection in Gabon, a malaria endemic region. By studying a group of 282 children with (197) or without (85) malaria, the authors report an increased prevalence of B19V in the malaria infected group, an increased severity of malaria disease when B19V was also present and a higher prevalence of B19V genotype 2 in severe malaria.

That B19V co-infection represents a risk and that can eventually contribute to the severity of malaria is not new. However, the present studies provide evidence that malaria and B19V co-infection is not a rare event in malaria endemic regions and that B19V co-infection should be considered in severe cases or when hemoglobin levels do not recover following effective antimalarial treatments. However, the higher prevalence of genotype 2 of B19V in severe cases is most probably due to a particular temporal or geographical distribution.

**Major Compulsory Revisions**

Since the results presented do not clearly show an influence of the B19V genotype in the course of malaria, this observation should not appear in the conclusion section of the abstract as a fact but as a possibility.

**Minor Essential Revisions**

Clarify whether the duplicates in the PCR assay included or not the DNA extraction step.

**Minor issues not for publication**

Background, third paragraph: Erythrovirus (not cursive) instead of Erythroviruses
Background, fourth paragraph: …have shown… instead of …have been shown…
Methods, Polymerase chain reaction: Use a comma after the sentence: In order to prevent assay contamination,
Methods, DNA sequence analysis: …using primers as described previously [25].
Methods, Ethical approvals: approved instead of approval
Results, first paragraph: Change the position of the dot … (Table 1) [21-23].

Results, under “B19V-loads, parasitemia, and anemia in patients with P. falciparum malaria”, third paragraph: Remove the word significant.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**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