Reviewer’s report

**Title:** Fetal ERAP2 variation is associated with preeclampsia in African Americans in a case-control study

**Version:** 1  Date: 7 March 2011

**Reviewer:** Sara Sedano-Balbas

**Reviewer’s report:**

**Major Compulsory Revisions**

Why did the authors use those specific three genes to establish the genetic similarity between samples from both hospitals? Could the author include in the text a reason due to they have chosen those genes?

The results of this study support a relationship between fetal rs2549782 G allele in the ERAP2 gene and preeclampsia. No maternal rs2549782 G allele was however associated in neither of the populations investigated in this study. The results can be more completed if an example of other study where fetal genes are accounting for the development of pregnancy outcomes was included in the discussion?

**Minor Essential Revisions**

In Abstract Conclusions; What do the author mean by maternal associations? Do the author mean preeclampsia association? or any other women adverse condition during pregnancy?

In results; what BMI stands for has to be included in the text.

In results; Clinical Characteristics of the study population; Last sentence Significant differences en fetal sex have been reported in the literature, but results are “mixed”. What does the author mean by mixed? Contradictory?

In discussion; In the sentence Preeclampsia is associated with...."What Th1 and HLA stands for should be included on the text”.

In discussion; can it be clarified what ethnic group is referred to by white women?

In discussion; what MHC stands for in “Finally two haplotypes of ERAR2…”

In Conclusions; Include reference ; …of a previous study “by Johnson et al.” that found an association …. Norwegian population.

What next?

Examination of maternal and fetal samples for variations in the ERAP2 gene
from subjects with preeclampsia including a wider range of samples and from different ethnics backgrounds.

**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