Reviewer’s report

Title: In vitro characterization of novel and functional regulatory SNPs in the promoter region of IL2 and IL2R alpha in a Gabonese population

Version: 4 Date: 29 October 2012

Reviewer: Katie A Smith

Reviewer’s report:

The authors have made appropriate changes and modifications to the manuscript, improving it measurably and making it acceptable for publication within BMC Medical Genetics.

I would just ask for a couple of minor revisions to be made:

In Background, paragraph 2 line 86-87; please could you re-word this sentence to clarify that SNPs within IL2R alpha are associated with disease, not infection, as the publications cited associate IL2RA SNPs with Graves’ disease, or Type 1 diabetes.

In the statistical analysis section, could you please clarify how data were normalized?

Thank you for the explanation provided in your rebuttal but please could you amend the sentence in the Discussion paragraph 2 line 251-253 containing the phrase "but this may be extraneous in the in situ state" for other readers?

Level of interest: An article of importance in its field

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