Reviewer's report

Title: Polymorphisms of interleukin-21 and interleukin-21-receptor genes confer risk for autoimmune thyroid diseases

Version: 5 Date: 22 April 2013

Reviewer: Matt Simmonds

Reviewer's report:

The authors have generally made a good effort to address my points. My one major concern that still remains is that the authors only decided to genotype two 2 SNPs within IL-21R rather than screening all 13 Tag SNPs within this region. Whilst the authors have tried to justify this approach by saying that they only screened two Tag SNPs in IL-21R previously associated within a Caucasian SLE population this is not ideal as the location of associations within a given genes can vary both between different autoimmune diseases and different ethnicities. Ideally the authors need to screen all 13 Tag SNPs in IL-21R to make this study truly informative. As a compromise I would like the authors to add a section to the discussion to this effect and to state that they also need to screen the rest of the common variation within IL-21R in the Oriental population to exclude association of this gene with autoimmune thyroid disease.

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests