**Author's response to reviews**

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

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**Author's response to reviews:** see over
To: Ms Eloisa Nolasco, The BioMed Central Editorial Team

From: Jin-An Zhang

Re: 1525384091852. Response to review of “Polymorphisms of interleukin-21 and interleukin-21-receptor genes confer risk for autoimmune thyroid diseases”

Date: June 15, 2013

I am very grateful for the comments from the reviewers. And the following revisions have made based on their suggestions. The modified parts were expressed by red font sections in the manuscript.

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.

Response: ‘3) 13 tag-SNPs in the HapMap-CHB population and 17 in the HapMap-CEU population covered a 49.8kb on 16p11, where IL-21R gene located. And we just explored the association between the two tag-SNPs of them and AITD in Chinese cohort.’ and ‘screening the rest common variations in IL21R gene’ was added in Discussion section 3 and section 5 respectively.