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: April 2, 2013

We appreciate the thoughtful comments from the reviewers and have made the following revisions based on their suggestions. And the modified parts were expressed by red font sections.

Response 8, Can the authors please add the justification of why they only screened 2 out of 13 Tag SNPs in the IL-21R gene into the main text of the manuscript

Response: “rs3093301 and rs2285452 which were only two tag-SNPs of IL-21R gene confirmed to be associated with SLE in European-derived cohort” was added to Materials and methods 2.2 Genotyping paragraph 2

Response 9, The authors stated that the Hardy Weinberg Equilibrium (HWE) for GD and HT patients were different from the control group and that unfortunately the HWE values for HT and GD were more than 0.05. Can I confirm that your GD and HT samples were not in HWE? This is a really important point when interpreting your data and as such can the authors please add comment on this in their manuscript and create a supplementary table with the HWE scores for your GD, HT and Controls for each SNP.

Response: Our GD, HT and Control samples are all in HWE. The HWE p values of the six SNPs in the three groups were added in Table 2.

Response 13, The authors created a power calculation based on a variant with a minor allele frequency (MAF) of 0.2. Can the authors justify why this MAF was used? Was it the average MAF of all your SNPs?
Response:

Response: My sincere apology for 0.271 mistakenly written as 0.2 which is the average MAF of the six SNPs. And it was corrected.
Abstract results- For consistency across the abstract can the authors state if the GD IL-21 SNP rs2221903 also showed a genotype effect. Also for the association of HT with IL-21 rs2221903 can you add ORs and 95% CI as you have for the GD result.

Response: They were added