Reviewer's report

Title: Susceptibility to Type 1 Diabetes conferred by the PTPN22 C1857T Polymorphism in the Spanish population

Version: Date: 9 April 2007

Reviewer: Janelle Noble

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

Comments to authors

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The manuscript by Santiago et al. addressed the genetic association of the PTPN22 C1858T polymorphism with type 1 diabetes (T1D) in a population from Spain. This association has been clearly established in a number of populations, and the data from Santiago et al. will add to the available literature on the subject. The study also addresses the gender-bias observed in some studies and finds that this effect is seen when the data are stratified by age of onset. The manuscript is generally well written.

I would make the following suggestions for improvement of the manuscript:

The methods section states that the age of onset for T1D patients ranged from 1 to 55 years old. Although the manuscript states that ADA criteria were used in the diagnosis, the advanced age of 55 for diagnosis is surprising. Were there multiple patients with such an advanced age of diagnosis, or was this subject an outlier? Might this subject have had type 2 diabetes (T2D) prior to the onset of autoimmunity. Is the Spanish population significantly different, with respect to age of onset, than populations from the US, UK, or Scandinavia that have been extensively studied?

The results might be clearer and easier to follow if more of the data were put into table format. Specifically, the age stratification for the gender bias analysis, which is a major point of the manuscript, and the HLA data, which are referred to but could be shown in greater detail. The authors compared DR3/DR3 to DR3/DR4 to other patients but did not state how many subjects were in each group

What next?: Accept after discretionary revisions

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

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