Reviewer's report

Title: The PTPN22 C1858T gene variant is associated with changes in residual beta-cell function in new-onset type 1 diabetes

Version: 1 Date: 24 December 2010

Reviewer: Raffaella Buzzetti

Reviewer's report:

In the present study the Authors investigated the association of the C1858T variant with residual beta-cell function, glycemic control, daily insulin requirements, diabetic ketoacidosis (DKA) and diabetes-related autoantibodies (IA-2A, GADA, ICA, ZnT8Ab) in children during the first year after diagnosis of type 1 diabetes.

Major compulsory revisions:
1) The prevalence of ZNT8 autoantibodies in type 1 diabetes patients should be reported.
2) In Table 1, the Authors should specify whether the clinical characteristics described were at clinical diagnosis.
3) In Table 1: low, moderate and high risk HLA genotypes should be specified.
4) In Research Design and Methods they reported that 84% of patients were white Caucasians. The Authors should specify the other populations of patients analyzed.
5) The BMI values should be reported as SDS-BMI.
6) In Discussion section, they should report a possible pathophysiological explanation of the association between T allele of C1858T and high levels of proinsulin.

Minor revisions:
1) In the Figures 1A and 1B, the Authors should add the p values.
2) In Discussion section they reported: “The discrepancies in significant/non-significant findings on C-peptide levels between the two studies mentioned above may relate to the use of fasting contra stimulated C-peptide”. The number of references of the two mentioned studies should be reported.

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' below. If your reply is yes to any, please give details below.