Reviewer’s report

Title: Novel missense mutation in PTPN22 in a Chinese pedigree with Hashimoto’s thyroiditis

Version: 2 Date: 25 Aug 2018

Reviewer: Jin Zhang

Reviewer’s report:

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The study by Gong et al. reported a novel missense mutation in PTPN22 in a Chinese pedigree with HT. Four affected HT cases were analyzed with whole-exome sequencing, and the selected mutation was further identified through Sanger sequencing. The finding adds new evidence for the crucial role of PTPN22 in HT.

Several comments are as follows:

1) Though the authors stated that HT was diagnosed by increased TPOAb or TGAb, TGAb was not determined among those subjects. TGAb should be further tested in those subjects because some HT patients are only with TGAb positivity.

2) The immune background of HT together with the role of PTPN22 in regulating immunity need to be elaborated in more details.

3) How Asn26Ser exerts its roles on PTPN22 and HT should be explored or discussed.

4) Though some references had been shown, some important references were lost in some parts of either Introduction or Discussion.

5) The language need to be improved by an English native speaker.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
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Yes

**Are the conclusions drawn adequately supported by the data shown?**
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Yes

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I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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