Reviewer's report

Title: Genotype-independent association between profound vitamin D deficiency and delayed sputum smear conversion in pulmonary tuberculosis

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Reviewer: Aditya K Panda

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Junaid et al. in the present communication demonstrated profound vitamin D deficiency in TB patients sampled from Lahore, Pakistan. Further they have shown non-importance of VDR, CYP2R1 and DBP polymorphisms with baseline vitamin D status/response to intensive-phase treatment in those patients. The study was conducted appropriately and suitable statistical tests were employed to draw a firm conclusion. However, I have some minor queries which need to be address.

1. It would be a good idea to perform combine analysis of 25-OH vit D3 levels and VDR/CY2R1/DBP polymorphism with disease phenotype or response to treatment.

2. Describe the power calculation in details. It’s not clear whether authors performed pre/post power analysis. They may use a statistical tool for power analysis (G*3 power).

3. Based on 25-OH vit D levels patients should be grouped in a) sufficient, b) insufficient and c) deficient. (Mandal et al, http://arthritis-research.com/content/16/1/R49) and re-analyse the possible associations.

4. The manuscript may be corrected by a native English speaker.

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests