Reviewer's report

Title: In vivo expression of innate immunity markers in patients with mycobacterium tuberculosis infection

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Reviewer: Zahra Toossi

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This manuscript describes expression of molecules of human innate immune response in RNA extracted from whole blood of patients with active or latent M. tuberculosis (MTB) infection and 2 control group

A. Major Compulsory Revisions

1. While parts of the manuscript are well written (e.g. Introduction), other parts are not only poorly written (e.g the Discussion), but also contain inaccuracies. In the Discussion the authors attribute increased expression of Corononin-1 to a possibility that PBMC carry live MTB bacilli (page11). This is extremely flawed, as there is no evidence (other than in cases of AIDS associated TB) that during TB bacilli are disseminated. The occurrence of lymphohematogenous spread (as shown in animal models of acute MTB infection) relates to primary stages of MTB infection. In cases of reactivation TB (as in 14/22 patients here with cavitary TB) is localized to pulmonary tissue. This explanation is even more flawed considering subjects with latent MTB infection.

2. The marking of the groups on the X axis of Figure 1 is very difficult to distinguish. It is not clear why the sequence of the groups is not in order (close contact [B] is after C). The figure legend is also not accurate and adds to the confusion.

3. The fact that TLR-2, Coronin-1 and Sp110 correlate is very interesting, however, the Discussion again does not address these findings properly with regard to the populations studied.

4. The heterogeneity of the subjects studied coupled with the limitation of the data to mRNA expression of molecules alone, does not allow interpretations on disease/infection pathogenesis as the authors include in the manuscript.

B. Minor Essential Revisions

1. There are both grammatical and spelling errors throughout the manuscript.

2. Some sentences are particularly vague (page 12 top part), and bottom of first paragraph on page 14.

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