Reviewer’s report

Title: Altered Serum miRNAs as Biomarkers for the Early Diagnosis of Tuberculosis Infection

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Reviewer: Daniela M Cirillo

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The topic addressed by the authors is highly relevant: biomarkers for TB diagnosis are needed and miRNAs have some potential. Unfortunately only TB patients and controls are compared and only one pool each is used to select the miRNAs differentially expressed.

Major revisions:

Introduction: Very disorganized not addressing the relevant points, not functional to the paper, it needs to be fully revised

Selection of patients: matching of males and females in pool is crucial in order to compare the two pools, it is not clear from the text. Other factors such smoking habit, drinking, etc are not mentioned. Was latent TB excluded by IGRAs/TST? It is mentioned that TB patients were not previously infected by MTB. What do the Authors exactly mean?

In the last sentence of the text the authors state that the selected combination of miRNAs "represent a suitable biomarker differentiating TB infections from other microbial infections": no other microbial infections are considered in the paper.

Analysis is based on the comparison on only one pool of 20 control and one of 20 TB patients. The sentence should be changed or data from sera collected from patients with other pulmonary infections should be added

Fig 1: is the legend correct?

A very relevant reference is omitted: Fu et al circulating microRNAs in patients with active PTB JCM2011. The miRNAs identified by Fu et al are different, their results should be included in the discussion.

Relevant TB biomarkers papers should also be included

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests' below.