Reviewer's report

Title: Differential expression of M. tuberculosis-induced Suppressor of Cytokine signaling (SOCS) 1 and 3 and FoxP3 molecules linked with variable cytokine profiles is associated with clinical severity of tuberculosis

Version: 1 Date: 10 October 2012

Reviewer: Andres Floto

Reviewer's report:

This study describes changes in transcription of IFNg, SOCS genes and FoxP3 in PBMCs from patients with a variety of MTB infection and controls together with cytokine measurements before and after cytokine stimulation.

The results are interesting and support a dysregulation of host immune responses to TB infection.

The paper is not particularly well written (eg page 5 line one '...levels of down-modulatory IL10') and the data is poorly presented (see below).

Minor revisions:

1. The authors need to state how many of the individuals in each of their disease groups had neither microscopy/AFBculture nor suggestive histology and therefore potentially did not have MTB infection.

2. table 2 and 3 The tables should include the mean difference following stimulation and need to show the actual p value for each comparison as a separate column. The data should also be graphed (to make clear which results have been statistically compared. The individual patient data should also shown to see the differences in response to MTB exposure)

3. The authors must comment on how changes in the contribution of different leukocytes to the total PMBC number could influence cytokine/SOCS levels. Have the patients had differential white cell counts at the time of PBMC?

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: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests