Reviewer's report

Title: Infection with pulmonary nontuberculous mycobacteria affects performance of tuberculosis lipoarabinomannan point-of-care test: Experiences from the Danish Cystic Fibrosis Cohort Study

Version: 1 Date: 8 August 2014

Reviewer: Keertan Dheda

Reviewer's report:

In this paper the authors have tested the accuracy and performance outcomes of the urine LAM test in patients with NTM infection. This is a useful study because the specificity of the LAM test has been questioned in several countries potentially due to infections due to NTM.

Comments- major and compulsory

1. It seems that at the grade 2 cut-off the specificity was very good but the sensitivity was only 9%. However, the authors' conclusions may be inappropriate.

2. Before I move to the conclusions, it's important for the authors to take into account another point. The latest version of the LAM point of care test uses revised cut points. This is based on the paper by Peter J et al, ERJ, 2012 where they showed that inter-reader variability, a common problem with lateral flow assays, could be minimised by using the grade 2 cut point (this also corresponded to ELISA). This should therefore be the designated and correct cut point to use (manufacturer designated now). The authors need to discuss this and for the purposes of their analysis use the grade 2 cut point.

3. In light of this, the conclusions need complete revision. In fact, what the authors are showing is that the specificity is quite good at the now designed cut point, but the sensitivity is very poor. I would conclude that LAM is not a useful test to detect NTM infections in this particular context. Something about specificity vs M.tb is relevant as in different studies in Southern Africa, specificity varies and we wonder about NTM. I would couch the results in this context.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

None