Reviewer's report

Title: Rapid screening of MDR-TB using molecular Line Probe Assay is feasible in Uganda

Version: 1 Date: 21 January 2010

Reviewer: Thomas Shinnick

Reviewer's report:

In this well-written manuscript, the authors describe the results of a validation study that compares the performance of a commercially available line-probe assay (LPA) with that of liquid culture-based drug susceptibility testing in a University laboratory and a well-equipped and staffed reference laboratory. The study design is scientifically sound. There are many publications that describe the performance of LPAs. The new information in this report is the performance in this particular population, which is important information for understanding the local utility of the test as well as the general performance of test in different regions of the world. The report could be improved by including a description of other possibly novel informative aspects of the study such as describing training requirements, if performance improved with experience over time, if there is a need for supervision by an experienced molecular biologist, costs, infrastructure needs, etc.

Minor essential revisions

Page 6 lines 13-15 and Page 7 lines 10-11. Please clarify the difference between these two sentences. Was the ZN microscopy (direct or concentrated?) done in a different laboratory or at a different time than the fluorescence microscopy?

Page 7, line 9. Please clarify if sputum specimens or processed sediments were pooled.

Page 7, line 11. It should be ‘fluorescence’ microscope; not fluorescent microscope.

Page 7, line 14. DST (drug susceptibility testing) testing is redundant.

Page 8, lines 6-7 and lines 13-14. These lines are redundant.

Page 8, lines 13-14. Please clarify which sample was provided to the University lab, e.g., raw sputum, processed sediment, or DNA lysate?

Page 9, line 7. Please clarify if these were 118 individual sputum specimens from 118 patients or 118 pooled sputum specimens from 118 patients.

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