Reviewer's report

Title: Evaluation of Microscopic Observation Drug Susceptibility assay for diagnosis of multidrug-resistant tuberculosis in Viet Nam

Version: 3 Date: 8 December 2011

Reviewer: Lucia Barrera

Reviewer's report:

Major compulsory revisions
Recommendation #3 and 12 made by reviewer 3 should be followed

Abstract
1. Conclusion is not correct. MODS specificity for M. tuberculosis detection (92.3%) is low. MODS sensitivity to detect INH and RIF resistant isolates reported (72%) is not acceptable according to international standards

Introduction
2. Line 81 Direct DST by liquid culture systems are not standardized nor included in WHO guidelines
3. Line 91 NRA can be performed directly on specimens

Results
4. Line 273-280. M. fortuitum and M. chelonae were erroneously identified as M tuberculosis by biochemical tests? It is not understandable
5. Table 1 is unnecessary
6. Tables 2 and 3 are poorly presented.
   In table 2, specific mutations (results of sequencing) required by reviewers 2 and 3 were not presented. No detection of mutation does not mean that the isolate is “susceptible”, particularly to INH

Discussion
7. Line 473. The plates must be opened for M tuberculosis identification; otherwise results of DST should not be reported.

Minor Essential Revisions
Line 273 . M. chelonae

Discussion
The authors do not comment that LJ were inoculated with 0.1 ml of processed
samples while MODS control wells were inoculated with 0.5 ml of this material each. This might contribute to difference in M. tuberculosis detection rates

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

**Declaration of competing interests:**

I have no competing interests