Reviewer's report

**Title:** Use of the GenoType(R) MTBDRplus assay to assess anti-TB drug resistance levels and patterns among Mycobacterium tuberculosis isolates from TB patients in rural Uganda

**Version:** 2 **Date:** 8 April 2010

**Reviewer:** Zeaur Rahim

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Use of GenoType MTBDRplus assay to assess anti-TB drug resistance levels and patterns among M. tuberculosis isolates from TB patients in rural Uganda by Bazira J et al.

**General Reviewers' Comments**

The authors conducted a cross-sectional study for a survey of anti-TB drug susceptibility testing (DST) using GenoTypeMTBDRplus rapid assay. The authors included 167 consecutive TB suspects aged >18 years with and without co-infection of HIV. Using the rapid kit, the authors reported 3.2% MDR. The authors concluded usefulness of MTBDRplus for surveillance of MDR.

Abstract: Adequate

Introduction: Adequate

Methods: Adequate

Results: Adequate

Discussion: Adequate

Reference: Adequate

Declaration: No conflict of interest

Specific comments: Rapid tests are usually run parallel with conventional test for validation. One of the major drawbacks of this study is that DST was performed by the MTBDRplus assay, but without proportion susceptibility testing (PST) (a conventional method of DST). PST must be run parallel with rapid assay for validation of rapid test.

In the discussion section, authors mentioned discrepancies between the DST of the present study and previous National DST surveillance data. The difference might be partly due to time difference of experiment and also due experimental problem of the new tests. However, it creates doubt about the validity of the data generated in the present study using MTBDRDplus rapid kit. Data generated by the rapid tests must be validated by parallel testing of at least half of the strains.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have no competing interest.