Reviewer's report

Title: The limitations of sputum microscopy for the diagnosis of HIV-associated pulmonary tuberculosis in Tanzania

Version: 1 Date: 7 December 2007

Reviewer: Ruth McNerney

Reviewer's report:

This article discusses the utility of sputum microscopy for diagnosing HIV associated TB. It is a topical issue and one of public health importance.

The article is generally well written and clearly presented.

Major Compulsory Revisions

The article would be greatly strengthened by reference to (and discussion of) the recent STAG recommendations to amend WHO policy regarding the smear microscopy in areas with high incidence of co-infection with HIV and the current debate about expanding culture facilities.

Statistical analysis should include CI. Is the difference in yield of 2nd and 3rd smear statistically significant?

Greater clarity is required in the text regarding which of the samples/subjects had their cultures tested by Accuprobe. Explanation should be provided as to why all samples were not tested.

Reference should be made to the systematic review published in The Lancet Infectious Diseases on specimen processing for smear microscopy.

Discretionary Revisions

The section on laboratory methods contains more detail than is necessary regarding the staining techniques and could be shortened.

The use of SC and SM to signify sputum culture and microscopy is unnecessary and a little confusing.

That the sensitivity is higher where there are greater numbers of bacteria in the sputum is self evident and should not be presented as new knowledge.

Minor revisions

Reference 9 â## the authors should not be in bold font.

The use of (PPV) and (NPP) in the abstract is not necessary as the phrase has been spelt in full.
**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**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 declare that I have no competing interests