Reviewer's report

**Title:** Fiberoptic bronchoscopy for the rapid diagnosis of smear-negative pulmonary tuberculosis

**Version:** 1  **Date:** 15 February 2012

**Reviewer:** Pyng Lee

**Reviewer's report:**

Major compulsory revisions:
writing should be clear and succinct for METHODS e.g. inclusion criteria: patients more than 18 years of age with clinical and radiographic suspicion of active pulmonary tuberculosis were recruited. How many sputum specimens performed? any sputum induction? Sputum smear negative patients are recruited for FOB, HRCT? were some treated empirically without FOB/HRCT?

I don't understand diagnostic definition: did all patients with sputum AFB negative undergo FOB or some underwent TTNA? If so, how many, and should these be included in the table?

I require FOB protocol if all patients underwent bronchial washing/BAL of the affected lung, followed by TBLB for histology/ TB culture.

Also in table 1: Quantiferon test (QT) was performed for all patients? This information is not clearly written in methods. Also TST results would be important comparing immunocompetent vs immunocompromised.

Under immunocompromised, it would be helpful for the readers to know the yield of FOB, HRCT, QT and TST if results were similar to those of immunocompetent patients even though n=11 (how many chemo/HIV/DM/transplant).

A section of healthcare precautions is necessary even though sputum smear was negative as some did not provide sputum ie bronchoscopy was performed with precautions against respiratory droplets using N95 mask, negative pressure ventilation room, and bronchoscope processing compatible with manufacture's guidelines plus scope surveillance.

Statistical analysis
TB: younger age (p=0.002), CXR, QT useful. HRCT: tree in bud, previous TB history/ hemoptysis less likely, these should be mentioned under results.

FOB bronchial aspirate with positive mycobacterial culture> biopsy in table 1 but in table 4 the converse is true.

Utility of MTB PCR for bronchial aspirate and culture when smear is negative? Table 4 is confusing.
Discussion: more discussion on the yield for available tests for TB and how these compare against bronchoscopy to support its use.

Conclusion, the authors should propose an algorithm with results obtained, and when to perform bronchoscopy since it is an invasive procedure with public health considerations even though the high yield is high, and where QT and TST are reflected in the algorithm.

**Level of interest:** An article of limited interest

**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 declare that I have no competing interests’