

Title QuantiFERON®-TB Gold

**Agency** HTA Malaysia, Health Technology Assessment Section,

Medical Development Division, Ministry of Health Malaysia

Level 4, Block E1, Parcel E, Presint 1,

Federal Government Administrative Center, 62590 Putrajaya, Malaysia

Tel: +603 88831229, Fax: +603 88831230; htamalaysia@moh.gov.my, www.moh.gov.my

**Reference** Technology Review Report – 0013/2013, online:

http://www.moh.gov.my/index.php/database stores/store view page/30/216

### Aim

To review evidence on the efficacy, safety and costeffectiveness of QuantiFERON\*-TB Gold as diagnostic tools for detection of patient with LTBI and active TB

### **Conclusions and results**

QuantiFERON®-TB Gold appeared to have numerous advantages over TST such as higher specificity, PPV and NPV in adult population in low TB prevalence countries, better relationship with *M. tuberculosis* exposure, and lower cross-reaction rates with BCG vaccination and NTM. There was also evidence to suggest that QFT-alone was likely to be more costly but more effective than TST in Japan and United States.

### Recommendations

Overall, due to its higher specificity and lower cross-reaction rates with BCG vaccination and NTM, whole blood-based QuantiFERON®-TB (QFT) can be used as an alternative to TST for detection of patient with LTBI.

# Methods

Electronic databases were searched, which included PubMed, Medline, Journal @ Ovid full text via OVID, OVID EBM Reviews - Cochrane central register of controlled trials, EBM Reviews - Cochrane database of systematic review, Horizon scanning databases - Centre, Birmingham, Australia and New Zealand Horizon Scanning (ANZHSN), FDA website, MHRA website and from non scientific database - Google search engine. In addition, a cross-referencing of the articles retrieved was also carried out accordingly to the topic. Relevant articles were critically appraised and evidence graded using US/Canadian Preventive Services Task Force.

## Further research/reviews required

Analyzing cost-effectiveness is more complex because the results vary with many factors including the population being tested.

## Written by

Syful AMF, MaHTAS, Malaysia