QFT™
QuantiFERON-TB Gold

Tuberculosis Testing in Travel Medicine

The risk of *M. tuberculosis* (TB) infection for travellers to highly endemic countries is substantial, and of similar magnitude to the average risk for the local population. The risk of TB infection increases with length of travel, the extent of exposure to the local population and for those working in healthcare settings, refugee camps and prisons.[6]

What testing methods are available?

Despite its limitations, the Mantoux, or tuberculin skin test (TST), has been the only test for latent TB infection for > 100 years. QuantiFERON®-TB Gold (QFT™) is a simple blood test that overcomes the limitations of the TST.

Limitations of the TST	Advantages of QFT
Requires two visits Results available in 2–3 days	Requires only one visit Results available the next day
Affected by previous BCG vaccination BCG can cause false positive TST responses in up to 20–40% of cases[1]	Unaffected by BCG vaccination[2]
False positive responses due to non-tuberculous mycobacterial infections	Unaffected by most non-tuberculous mycobacterial infections[3]
Testing reading is subjective Large discrepancies between readers, different cut-off employed depending on perceived risk, induration difficult to measure[4]	Objective result Eliminates inter-reader variability in interpretation of results

About QFT

QFT measures cellular immune responses to TB-specific antigens (ESAT-6, CFP-10, and TB7.7(p4)) that are absent from the BCG vaccine, and most non-tuberculous mycobacteria (except *M. kansasii*, *M. marinum* and *M. szulgai*). As a result, QFT has a specificity of ~99% and is unaffected by BCG.

QFT has been shown in numerous studies (> 130 publications) to be at least as sensitive as the TST in all population groups including the immunosuppressed and children.[5]

Guidelines/recommendations supporting QFT exist in:

- USA – *CDC, National Institutes of Health*
- Japan
- Switzerland
- Germany
- Italy
- UK – *National Institute for Health and Clinical Excellence*
- France
- Korea
- Canada
- Czech Republic
- Slovak Republic
- Netherlands
- Norway

QFT is approved by the US FDA and is recommended by the CDC as an alternative to the TST in all situations, including travel medicine.[6]

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Who should be tested for TB and when?[6,7]

- **Corporate travellers/Expatriates** travelling to endemic regions for >3 months.
- **Healthcare Workers (including students)** working/volunteering in high TB prevalence areas.
- **Individuals working in high-risk situations** (e.g. refugee and transit camps).
- **Travel-related TB Exposure** (e.g. known exposure on commercial aircraft).
- **Long stay tourists/travellers** (>3 months) – in regions with a high prevalence of TB.

A baseline test is advisable before travel and then 8 to 10 weeks after return. Annual screening should be considered for regular travellers.[6,7]

Other Travel Medicine testing for TB

- **TB Testing of International Students.** Including international high-school exchange programs and university students. Many schools/Universities require international students to have a TB test as part of their entry requirements.
- **International visa requirements.** Many countries require testing for immigrants, refugees and asylum seekers.

Ordering QFT

QFT is available in most countries. To locate a testing facility near you, please visit **www.quantiferon.com**.

References

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For more information, please contact the Cellestis office nearest you or visit **www.cellestis.com**.

North America / South America
Cellestis Inc.
Email: customer.service@cellestis.com
Fax: +1 661 775 7479
Tel: +1 661 775 7480 (outside USA)
Toll free: 800 519 4627 (USA only)

Europe / Middle East / Africa
Cellestis GmbH
Email: europe@cellestis.com
Fax: +49 6151 428 59 110
Tel: +49 6151 428 59 0

Asia / Oceania
Cellestis International
Email: quantiferon@cellestis.com
Fax: +61 3 9571 3544
Tel: +61 3 9571 3500

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www.cellestis.com