



QuantiFERON®-TB Gold A Major Advance in Tuberculosis Diagnosis

QuantiFERON®-TB Gold (QFT) is a simple blood test that accurately identifies people infected with *Mycobacterium tuberculosis*, the causative agent of Tuberculosis (TB). QFT is a modern alternative to the 110 year old Tuberculin Skin Test (TST), also known as the Mantoux.

As a **modern alternative** to the TST:

- **QFT is six times** more precise than TST in identifying people who will progress to active TB disease.
- **QFT is significantly more sensitive**, nearly halving the number of infected people missed by TST.
- **QFT is >99 percent specific**, indicating that positive readings represents true infection; the very high specificity value (99.2%) means QFT virtually eliminates false-positive readings (false positives by TST range from 3 percent to 65 percent of all persons tested, dependent upon the population).

QFT: Better for Healthcare; Better for the Public

- QFT is a controlled laboratory test, with results showing that an individual *is* or *is not* infected with the TB bacterium with a high degree of accuracy. In contrast, the TST is a very subjective procedure, which can lead to incorrect diagnosis.
- QFT improves risk management with quick, accurate results. In comparison, TST must be read 48 to 72 hours after injection. Many people do not return for this second clinical exam.
- QFT is highly specific for diagnosis of infection with the bacteria responsible for tuberculosis, *Mycobacterium tuberculosis*. It is unaffected by vaccinations (such as the Bacillus Calmette-Guérin vaccination) and most environmental bacteria that adversely affect TST results.
- QFT is cost-efficient:
 - QFT requires only one patient visit. Results may be available from the lab within 24 hours.
 - QFT reduces unnecessary work-up or treatment (i.e., chest X-rays, prophylactic treatment, medical visits) because of its low false-positive rate.
 - QFT can help reduce the healthcare burden of TB on society with lowered healthcare costs and reduced risk of epidemics.

Tuberculin Skin Test: Healthcare Deserves an Upgrade

- TST was developed more than 100 years ago. Healthcare is in need of a better solution to prevent impending TB outbreaks.
- TST results are not objective; results are subjectively read which can lead to incorrect diagnosis.
- TST may result in frequent false-positives (studies have shown as many as 65 percent false-positive) often due to cross-reactivity with BCG vaccination or responses to environmental mycobacteria. These false-positives could lead to excessive retesting, radiology exams and unnecessary precautionary treatment including antibiotics for as long as 9 months.
- TST may result in false-negatives, which can occur due to incorrect test administration or result interpretation, viral illness or recent TB infection.
- TST is made up of a multitude of bacterial proteins, most of which are present in the tuberculosis vaccine (BCG vaccine). The BCG vaccine is commonly used world-wide and very often causes inaccurate TST results. Even in countries where BCG is not used, a significant percentage of the migrant population to that country will have received the BCG vaccine.

Enabling a Switch to Better Healthcare

QFT is available for use in all clinical settings in which TST is commonly used including:

- Regular employee testing, particularly for healthcare workers
- Screening programs for populations such as immigrants, prisoners or other specific groups
- All persons who are in contact with potentially infected people

QFT[®] is sold directly in the U.S. by Cellestis Inc.; in Europe by Cellestis GmbH (Germany); and in Australia and Asia by Cellestis International Pty. Ltd. (Australia). QFT is also available through Cellestis Commercial Partners in Japan, Europe, the Middle East and other countries worldwide.

Cellestis Limited
Manufacturer of QuantiFERON[®]-TB Gold

Cellestis Limited, a listed Australian biotechnology company founded in 2000 in Melbourne, Australia, develops and manufactures the QuantiFERON[®]-TB Gold (QFT) test, a breakthrough blood test for the detection and control of tuberculosis. The QuantiFERON technology is a patented method for detecting cell mediated immune (CMI) responses of T-cell lymphocytes using whole blood samples. In comparison to existing methods of measuring CMI, this unique technology provides accuracy and sensitivity along with major savings in operator time, labour and reagents. Using its patented QuantiFERON technology, Cellestis develops diagnostics tests that measure immune function for diseases with an unmet medical need.

Cellestis is proud to be exploring opportunities to enhance the global effort to eliminate TB. Cellestis is an industry partner of FIND (the Foundation for Innovative New Diagnostics) and the Stop-TB Partnership.

For more information, please visit www.cellestis.com

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