QFT™
QuantiFERON-TB Gold

QFT™ streamlines the delivery of healthcare worker (HCW) TB control programs, eliminates doubt and costly follow-up examinations

QFT™ improves quality of HCW screening programs

QFT™ Advantages	Limitations of TST (Tuberculin Skin Test) Programs
Unprecedented accuracy in detecting TB infection. • Unaffected by BCG vaccination.[1] • Unaffected by most environmental non-tuberculous mycobacterium.[2]	TST accuracy adversely affected by previous BCG vaccination and non-tuberculous mycobacterial (NTM) infections. • A large number of hospital personnel are born in high TB prevalent countries where BCG vaccination is common.
Objective reproducible results.	Reading requires substantial training, however still is subjective.
Increased test accuracy provides confidence in initiating therapy and encourages therapy compliance.	Variable Isoniazid (INH) initiation rates amongst HCW indicated for INH therapy. • Initiation rates vary between 23-58%.[3,4] Variable compliance rates amongst HCW indicated for INH therapy. • Compliance amongst HCW varies between 8-60%.[5,6,7,8]

QFT™ improves productivity of HCW screening programs

QFT™ Advantages	Limitations of TST Programs
QFT™ is not subject to boosting, which eliminates the need for 2-step testing.[9]	Serial screening programs require 2-step testing (up to 4 contact visits). • Wastes time and resources.
Needs only one visit—which saves time and can improve test adherence.	Problems with testing logistics commonly affect adherence to TST programs.[10] • Follow-up visits for reading the TST are inefficient and pose a substantial operational challenge. • May require repeat testing of non-compliant individuals.

QFT™ represents a cost-effective alternative to the TST for hospital TB control programs

Contrary to popular belief TST programs ARE NOT cheap to maintain

- TST reagents represent less than 1.5% of the total cost of TST screening programs.[11]
- Personnel costs are the major cost component of a TST program.[11]
- False positive skin tests can lead to unnecessary investigations and treatment.

cellestis
www.cellestis.com

QFT™
QuantiFERON-TB Gold

Studies show that QFT™ can reduce the cost of maintaining HCW screening programs by up to 32%.[12]

Cost savings can be achieved by:

- Savings in personnel costs, follow-up and unnecessary TB therapy costs.
- QFT™ reduces costs associated with false positive skin tests, such as additional investigations (e.g. chest X-ray).

"67% of performed X-rays in HCW with a positive TST were unwarranted because the QFT was negative"
(Nienhaus et al 2007) [12]

Experience from the University of Illinois Medical Center (Chicago) health service with QFT™ [13]

Conducted 4643 QFT™ tests in 2006

- 4313 Negative (92.9%)
- 140 Positive (3.0%)
- 190 Indeterminate (4.1%)

Program analysis showed

- Cost savings, especially when the outreach lab did several thousand tests.
- 2,000 less visits in 2006 since the transition to QFT™.
- This did not account for lost time/dollars saved by reduced time away from work, faster hiring process (less visits for 2-step testing), and less x-rays required.

Ordering Information

Catalogue Number	Product Description
0590 0301	QuantiFERON®-TB Gold In-Tube (Nil, TB Antigen, Mitogen tubes) 100 each
0597 0201	QuantiFERON®-TB Gold In-Tube Single Patient Sampling Pack (10 ct)
0594 0201	QuantiFERON®-TB Gold ELISA only

References

1. Mori T, Sakatani M, Yamagishi F, et al. Specific detection of tuberculosis infection: an interferon-gamma-based assay using new antigens. *Am J Respir Crit Care Med. 2004; 170(1):59-64.*
2. Anderson P, Munk ME, Pollock JM, Doherty TM. Specific immune-based diagnosis of TB. *Lancet. 2000; 356: 1099-1104.*
3. Gershon AS, McGeer A, Bayoumi AM, Raboud J, Yang J. Health care workers and the initiation of treatment for latent tuberculosis infection. *Clin Infect Dis. 2004; 39(5):667-72.*
4. Driver CR, Stricof RL, Granville K, et al. Tuberculosis in health care workers during declining tuberculosis incidence in New York State. *Am J Infect Control. 2005; 3(9):519-26.*
5. Barrett-Connor E. The epidemiology of tuberculosis in physicians. *JAMA. 1979; 241:33–38*
6. Geiseler PJ, Nelson KE, Crispen RG. Tuberculosis in physicians: compliance with preventive measures. *Am Rev Respir Dis. 1987; 135:3–9.*
7. Ruben FL, Norden CW, Schuster N. Analysis of a community hospital employee tuberculosis screening program 31 months after its inception. *Am Rev Respir Dis. 1997; 115:23–28.*
8. Vogeler Douglas M, Burke JP. Tuberculosis screening for hospital employees: a five-year experience in a large community hospital. *Am Rev Respir Dis. 1978; 117:227–232.*
9. Leyten EM, Prins C, Bossink AW, Thijsen S, Ottenhoff TH, van Dissel JT, Arend SM. Effect of tuberculin skin testing on a Mycobacterium tuberculosis-specific IFN-gamma assay. *Eur Respir J. 2007; 29(6):1212-6.*
10. Joseph HA, Shrestha-Kuwahara R, Lowry D, Lambert LA, Panlilio AL, Raucher BG, Holcombe JM, Poujade J, Rasmussen DM, Wilce M. Factors influencing health care workers' adherence to work site tuberculosis screening and treatment policies. *Am J Infect Control. 2004; 32(8):456-61.*
11. Lambert L, Rajbhandary S, Qualls N, et.al. Costs of Implementing and Maintaining a Tuberculin Skin Test Program in Hospitals and Health Departments. *Infect Control Hosp Epidemiol. 2003; 24: 814-820.*
12. Nienhaus A, Schablon A, Le Bâcle C, Siano B, Diel R. Evaluation of the interferon - release assay in healthcare workers. *Int Arch Occup Environ Health. 2007; Jun 29: (Epub ahead of print).*
13. Marder D.C. Presented at First Global Symposium on Interferon-gamma assays. Vancouver, Canada, *Feb 21-22, 2007.*

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 Europe
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

M05995041A

cellestis
www.cellestis.com