

# The New Effector T-Cell Based Blood Test for the Detection of Latent and Active M. tuberculosis

T-SPOT. TB is an indirect test for M. tuberculosis infection (including disease) and is intended for use in conjunction with risk assessment, radiography and other medical and diagnostic evaluations. The T-SPOT.TB test has been tested in some patient groups indicated for screening for TB infection according to current ATS/CDC Guidance<sup>1</sup>: such as, human immunodeficiency virus (HIV) positive persons, recent contacts of TB case patients, residents and employees of highrisk congregate settings, chronic renal failure, children younger than 4 yr of age or infants, children, and adolescents exposed to adults at high-risk and immunosuppressed patients.

#### THE NEW TB TEST FOR:

### **Immunosupressed Patients:**

- Rheumatoid arthritis/ TNF-alpha
- **End-stage renal disease**
- Children, elderly
- **Organ transplants**
- **Diabetes**

#### **High Risk for Transmission:**

- **Healthcare Workers**
- **Prisoners**
- **Immigrants**
- Military
- **TB Contacts**
- **Chronic Care Residents**

#### **TEST PERFORMANCE:**

1231 1211 01111/111021					
	True Sensitivity	Reported Sensitivity			
	Sensitivity	Sensitivity	Indeterminate excluded (n)	Indeterminate (%)	
T-SPOT.TB	92.1% (849/922)	92.8%	7	0.8%	
QFT –Gold	78.1% (985/1262)	82.2% (985/1199)	63	5.6%	
QFT-Gold In-Tube	76.4% (697/912)	81.0% (697/861)	51	8.2%	
TST / PPD* ≥5mm	81.0% (295/364)	NA	NA	NA	

Analysis based on all peer-reviewed articles published as of July 3, 2008 and 54 study data points, including results in 3096 patients

- 95.6% Sensitivity
- 97.1% Specificity<sup>2</sup>
- Results unaffected by BCG vaccination, age or immunosuppression<sup>3</sup>

# **SPECIMEN REQUIREMENTS:**

Age	Tube	Blood Volume (min.)
10 yr and older	Lithium or Sodium Heparin Tube	(1) 6 mL
2-9 yrs old	Same as above	(1) 4 mL
2 yrs and younger	Lithium Heparin Pediatric Tube	(1) 2 mL

# **TEST AVAILABILITY / RESULTS TAT:**

# SPECIMENS SHOULD BE KEPT AT ROOM TEMPERATURE \*\*\*\*\*\*

- Sample collection should be performed Monday Thursday.
- Specimen should be shipped Priority Overnight at Room Temperature

Results reported as "Positive", "Borderline", or "Negative" within 48 hours of receipt

#### REFERENCES:

- CDC. Targeted Tuberculin Testing and Treatment of Latent Tuberculosis. MMWR weekly, June 09, 2000; 49(RR06): 1-54.
- T-SPOT. TB Pivotal Clinical Trial. Sensitivity of 95.6%. Specificity of 97.1% (PI-TB-US-V1)
- T-SPOT. TB Pivotal Clinical Trial. T-SPOT. TB results were not associated with immunocompromised status or BCG vaccination. T-SPOT. TB was not impacted by age. (PI-TB-US-V1)

<sup>\*</sup> Quantitative summary of all head:head studies between T-SPOT or QFN and TST in active TB as of July 3,2008