

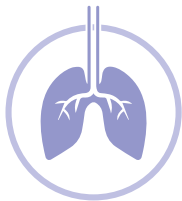
T-SPOT[®] TB

Reduce the risk of TB
reactivation in HIV patients

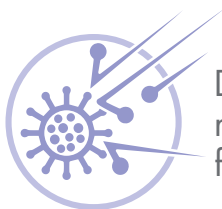


Reliable
Reproducible
Recommended

The risk of TB is 26-31 x greater in individuals with HIV infection compared to those without¹



TB is the leading killer of people with HIV (35% of HIV deaths are due to TB).



Delayed diagnosis increases risk of multi drug resistant (MDR) and extensively drug resistant (EDR) forms of TB².



Missing LTBI in HIV patients can put them at risk from active TB. Use the T-SPOT[®].TB test to confidently detect TB infection in your high risk patients.

Choose the T-SPOT.TB test for a TB test that is:



Reliable



Reproducible



Recommended

Reliable

Not all IGRAs can be relied upon to show the same sensitivity as T-SPOT.TB in HIV patients. The highest sensitivity of any IGRA is achieved with T-SPOT.TB as shown in direct, head to head analysis with an IGRA which uses ELISA technology.

Publication	Sensitivity % (n/N)	
	T-SPOT.TB	Multi-tube ELISA
Chee <i>et al.</i> 2008 ³	100 (7/7)	57 (4/7)
Dheda <i>et al.</i> 2009 ⁴	100 (5/5)	20 (1/5)
Markova <i>et al.</i> 2009 ⁵	62 (8/13) ^a	92 (12/13)
Leidl <i>et al.</i> 2010 ⁶	89 (17/19)	68 (13/19)
Ling <i>et al.</i> 2011 ⁷	81 (35/43)	67 (29/43)
Overall sensitivity	83 (72/87)	68 (59/87)

Table 1, Meta-analysis comparison of IGRA sensitivity in HIV patients⁸ (a 4/13 patients with invalid T-SPOT.TB test results included in this calculation).

The high sensitivity achieved by the T-SPOT.TB test ensures reliable detection of LTBI throughout all stages of HIV. The sensitivity of the T-SPOT.TB test remains high in HIV patients, regardless of CD4 count⁹ (Table 2).

Patient Group	No.	Sensitivity	Specificity
All HIV with Active/Probable TB	30	90.3%	100%
CD4 T Cell Count < 300 Cells/ μ l	22	95.4%	100%
CD4 T Cell Count < 200 Cells/ μ l	14	92.9%	100%
CD4 T Cell Count < 100 Cells/ μ l	8	87.5%	100%

Table 2, High sensitivity of the T-SPOT.TB test is maintained in HIV patients with low T cell counts.

High sensitivity by definition means negative results are highly likely to be true negatives. This means you can be confident in the high negative predictive value of the T-SPOT.TB test – if the test is negative there is likely to be no TB.¹⁰

Reproducible

Give your patients results they can trust. T-SPOT.TB is reliable when multiple testing of a single individual is required, as shown in serial TB testing of health care workers (Table 3). Conversion rates (a negative result changing to a positive result on second testing) are less than one percent and reversion (a positive result becoming negative on second testing) rates are also low.

Study	Setting	IGRA Used	Number Tested	Conversion Rate	Reversion Rate
King et al ¹¹	19 US hospitals	T-SPOT.TB	19,630	0.8%	17.6%
Fong et al ¹²	Cleveland Clinic, OH	Multi-tube ELISA	1,857	2.8%	80.0%
Zwerling et al ¹³	McGill University Health Centre, Montreal, Canada	Multi-tube ELISA	258	5.3%	61.5%
Joshi et al ¹⁴	Central Arkansas Veterans Healthcare System	Multi-tube ELISA	2,303	3.2%	45.0%
Slater et al ¹⁵	Stanford University Medical Center, Palo Alto, CA	Multi-tube ELISA	9,153	4.4%	38.7%

Table 3, Conversion and reversion rates from serial IGRA testing of health care workers.

Recommended

Individuals living with HIV/AIDS have up to a 50% chance of developing active TB within two years of initial TB infection¹⁶. It is therefore vital to use a test recommended for detecting LTBI in HIV patients. IGRAs are recommended for TB testing of HIV patients in country guidelines from UK, France, and Germany and throughout the EU. Not only this, but in the UK the British HIV Association suggests T-SPOT.TB may have an advantage for TB diagnosis in HIV patients.

“The T-SPOT.TB test may have an advantage ... as the number of lymphocytes used in the test is standardized. ”
(British HIV Association guidelines for the treatment of TB/HIV coinfection¹⁷).

The ELISPOT technology advantage: high performance by design



Simple Blood Draw

Easy handling increases safety when working with HIV infected blood and prevents introduction of user error which could affect test results.



Cell Counting

Standardised testing irrespective of your patients T cell counts.

Cell Washing

Removal of any serum factors that may influence your patients result.



T-SPOT® TB



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