

Syphilis screening?

LIAISON® Treponema screen is the solution

Confidence in Your Results

Clinical background

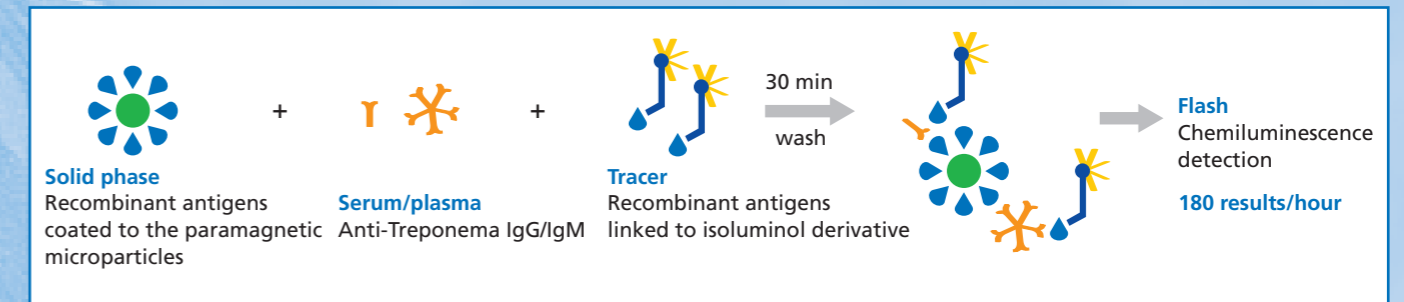
Syphilis is a chronic infectious disease caused by sexual or congenital transmission of the *Treponema pallidum* spirochete. The disease progresses through distinct stages of infection characterised by diverse clinical symptoms. The appearance of a sore or chancre at the site of infection (primary stage) is followed by a generalised skin rash (secondary stage). After a variable interval of latency the infection may progress to cardiovascular problems or neurosyphilis (tertiary stage). Serological testing is essential in the detection and control of syphilis infection. The WHO guidelines for syphilis serological diagnosis

suggest the use of two combined types of serological tests for syphilis: 1) non-treponemal tests like the Venereal Diseases Research Laboratories test (VDRL) or Rapid Plasma Reagin (RPR) and 2) treponemal tests like the Fluorescent Treponema Antibody Absorption test (FTA-ABS) or *T. pallidum* hemagglutination test (TPHA). New European recommendations¹ extended the WHO guidelines suggesting the treponemal antigen based enzyme immunoassays as an appropriate alternative to the use of combined VDRL/RPR and TPHA screen. An excellent solution to the screening of total antibodies is the LIAISON® Treponema Screen, a fully automated chemiluminescent based test.

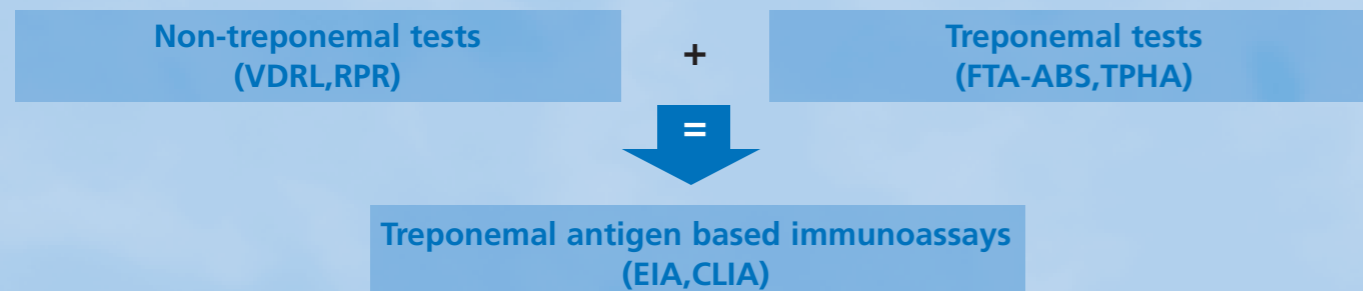
A unique selection of raw materials

Use of recombinant antigens excludes cross-reactions with other spirochete bacteria

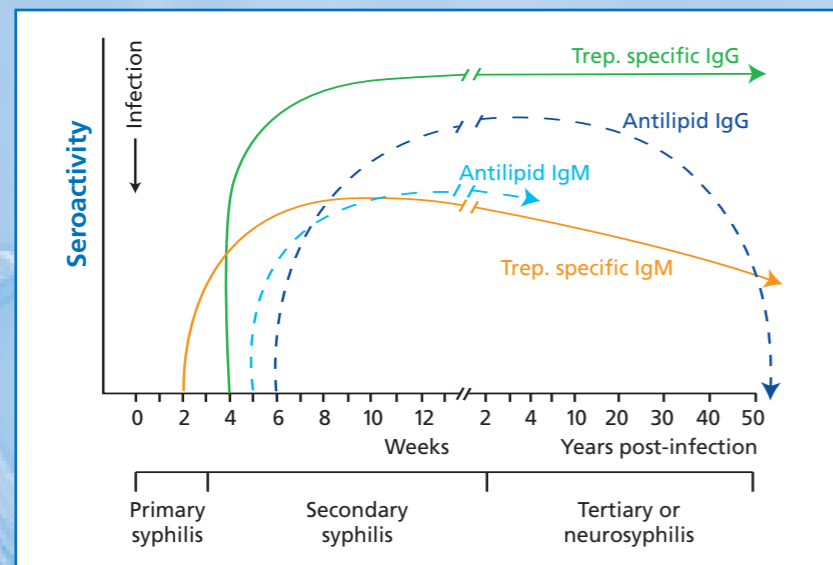
Direct sandwich assay ensures reliable results with high throughput



Syphilis screening



Antibody patterns during treponemal infection²



Excellent diagnostic sensitivity and specificity

Sensitivity and specificity were determined by testing specimen from different selected populations. The specimen were tested by several comparison methods and consensus between them and the clinical/serological data provide the following results:

		Blood donors			
		ELISA + TPHA Reference			
		pos	eqv	neg	
LIAISON®	pos	0	0	2	2
	eqv	0	0	1	1
	neg	0	0	2491	2491
		0	0	2494	2494
		Specificity 99.92%			

		Clinically defined sera (n=131)			
		ELISA	CLIA LIAISON®	TPHA	WB
Stage of syphilis					
Primary (n=7)		4	7	3	7
Secondary (n=31)		31	31	31	31
Latent (n=77)		74	76	74	77
Tertiary (cardiovascular) (n=5)		5	5	5	5
Tertiary (neurosyphilis) (n=6)		6	6	6	6
Congenital syphilis (n=5)		5	5	5	5
Total number of reactive samples by method		125	130	124	131

Ease of use

- * Full automation
- * Two-point recalibration stable for 2 weeks
- * Controlled reagent cooling and incubation conditions
- * Calibrators included
- * Ready-to-use reagent cartridge

Flexibility enables quick results

- * High throughput: 180 results/hour
- * Time to first result: 40 min
- * Stored master curve

1. Egglestone SI et al. PHLS Syphilis Serology Working Group. Commun. Dis. Public Health 2000; 3(3):158-62
 2. Müller F, Hagedorn HJ. Syphilis in: Clinical Laboratory Diagnostics, Thomas L; TH Books Frankfurt 1998;1203-12

T r e p o n e m a