

INTERPRETATION OF SYPHILIS SEROLOGY: SUPPLEMENTARY TABLES

<http://thischangedmypractice.com/interpretation-of-syphilis-serology/>

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Syphilis test characteristics

Test type	Treponemal	Non-treponemal
Examples	EIA TP-PA	RPR VDRL
Detects	Syphilis-specific antibodies	Antibodies to cellular components released due to syphilis infection
Reported as	Reactive or nonreactive	Quantitative titre (1:2, 1:4, etc.) with higher titres indicating stronger positive results
Change over time	Remain positive over time in most cases	Decline over time (decline faster with treatment)
Uses	- New diagnosis of syphilis - Sensitive screening test	- Monitoring response to treatment - Distinguishing re-infection vs. resolved infection in individuals with positive treponemal test

Syphilis serology interpretation

Serologic pattern			Possible interpretations
EIA	RPR	TP-PA	
Reactive	Reactive	Reactive	- Syphilis infection - If patient has been treated for syphilis and RPR titre is declining, this may be consistent with treated syphilis
Reactive	Reactive	Non-reactive	- Treponemal tests do not agree, which may indicate:
Reactive	Non-reactive	Non-reactive	- Early infection (TP-PA not yet positive) - Prior syphilis (treated or untreated) - False positive EIA - <i>Repeat testing in 2 weeks</i>
Reactive	Non-reactive	Reactive	- Previously treated syphilis - Early syphilis (RPR not yet positive)
Nonreactive	-	-	- Not consistent with syphilis; if concern for primary syphilis (chancre), should treat and repeat testing in 2 weeks