

# **Modified TPPA Combined with Western Blotting Facilitates Syphilis Diagnosis in Isolated Reactive Treponemal Chemiluminescence Immunoassay Sera: A Prospective Cohort Study**

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**Supplemental Table S1. Clinical and serological characteristics of individuals with discordant TPPA (titer, 1:80) and WB results**

Sample No.	Gender	Age	CIA S/CO	TPPA (titer, 1:80)	WB	RPR	Modified TPPA (titer, 1:20)	Prior serological result(s)	Subsequent serological result(s)	History of prior syphilis	Treatment for syphilis	Diagnosis for syphilis
1	F	49 y	3.47	Reactive	Indeterminate	Nonreactive	Reactive	CIA reactive, TPPA reactive, RPR nonreactive (2 mo), CIA reactive, TPPA reactive, RPR nonreactive (13 mo)	CIA reactive, TPPA reactive, RPR nonreactive (19 mo)	Yes	None	Yes
2	F	81 y	12.7	Reactive	Indeterminate	Reactive	Reactive	CIA reactive, TPPA reactive, RPR reactive (2 mo)	CIA reactive, TPPA reactive, RPR reactive (34 mo)	Yes	None	Yes
3	F	44 y	3.46	Reactive	Indeterminate	Nonreactive	Reactive	None	CIA reactive, TPPA reactive, RPR nonreactive (15 mo)	None	None	Yes
4	F	29 y	8.14	Reactive	Indeterminate	Nonreactive	Reactive	None	None	None	None	Yes
5	M	55 y	4.59	Reactive	Indeterminate	Nonreactive	Reactive	None	None	None	None	Yes
6	M	46 y	2.25	Reactive	Indeterminate	Nonreactive	Reactive	None	None	None	None	Yes
7	F	38 y	7.99	Reactive	Indeterminate	Nonreactive	Reactive	None	None	None	None	Yes
8	F	2 m	3.61	Reactive	Indeterminate	Nonreactive	Reactive	CIA reactive, TPPA reactive, RPR nonreactive (1mo)	CIA nonreactive (17 mo)	Yes	None	Yes
9	M	57 y	3.45	Reactive	Indeterminate	Nonreactive	Reactive	None	CIA reactive, TPPA reactive, RPR nonreactive (28 mo), CIA reactive, TPPA reactive, RPR nonreactive (57 mo)	None	None	Yes
10	F	38 y	1.65	Reactive	Indeterminate	Nonreactive	Reactive	None	None	None	None	Yes
11	M	37 y	1.03	Reactive	Indeterminate	Nonreactive	Reactive	None	None	None	None	Yes
12	M	26 y	9.64	Reactive	Nonreactive	Nonreactive	Reactive	None	None	None	None	Yes
13	F	62 y	6.2	Reactive	Nonreactive	Nonreactive	Reactive	None	None	None	None	Yes
14	M	60 y	1.32	Reactive	Nonreactive	Nonreactive	Reactive	None	None	None	None	Yes
15	F	57 y	8.07	Reactive	Nonreactive	Nonreactive	Reactive	None	None	None	Yes	Yes
16	M	60 y	2.79	Reactive	Nonreactive	Nonreactive	Reactive	None	CIA reactive, TPPA reactive, RPR nonreactive (18 mo)	None	None	Yes
17	M	13 d	1.24	Reactive	Nonreactive	Nonreactive	Reactive	None	None	None	None	Yes
18	F	39 y	1.42	Reactive	Nonreactive	Nonreactive	Reactive	CIA reactive, TPPA reactive, RPR nonreactive (1 mo)	None	Yes	None	Yes
19	M	49 y	1.31	Reactive	Nonreactive	Nonreactive	Reactive	None	None	None	None	Yes
20	M	1 y	1.77	Reactive	Nonreactive	Nonreactive	Reactive	None	None	None	None	Yes
21	M	29 y	3.19	Nonreactive	Reactive	Nonreactive	Reactive	None	None	None	None	Yes
22	F	60 y	17.3	Nonreactive	Reactive	Nonreactive	Nonreactive	Isolated reactive CIA (29 mo)	None	None	None	Yes
23	F	27 y	3.97	Nonreactive	Reactive	Nonreactive	Nonreactive	None	Isolated reactive CIA (4 mo)	None	None	Yes
24	F	62 y	5.2	Nonreactive	Reactive	Reactive	Reactive	CIA reactive, reactive TPPA, RPR reactive (2 mo); CIA reactive, TPPA reactive, RPR	CIA reactive, TPPA nonreactive, RPR reactive (17 mo)	Yes	None	Yes

								reactive (1 mo)				
25	F	74 y	34.4	Nonreactive	Reactive	Reactive	Nonreactive	None	None	None	None	Yes
26	M	61 y	11.6	Nonreactive	Reactive	Nonreactive	Reactive	CIA reactive, TPPA reactive, RPR nonreactive (2 mo)	None	Yes	None	Yes
27	M	62 y	1.33	Nonreactive	Indeterminate	Nonreactive	Reactive	None	None	None	None	None
28	M	92 y	5.06	Nonreactive	Indeterminate	Nonreactive	Reactive	CIA reactive, TPPA reactive, RPR nonreactive (54 mo); CIA reactive, TPPA indeterminate, RPR nonreactive (25 mo); CIA reactive, TPPA reactive, RPR nonreactive (13 mo)	CIA reactive, TPPA indeterminate, RPR nonreactive (12 mo), CIA reactive, TPPA nonreactive, RPR nonreactive (23 mo)	Yes	None	Yes
29	F	27 y	3.67	Nonreactive	Indeterminate	Nonreactive	Nonreactive	None	Isolated reactive CIA (6 mo), isolated reactive CIA (30 mo)	None	None	None
30	F	45y	6.28	Nonreactive	Indeterminate	Nonreactive	Nonreactive	None	None	None	None	None
31	F	44 y	3.33	Nonreactive	Indeterminate	Nonreactive	Nonreactive	None	Isolated reactive CIA (1 mo), isolated reactive CIA (6 mo)	None	None	None
32	F	25 y	4.19	Nonreactive	Indeterminate	Nonreactive	Nonreactive	Isolated reactive CIA (6 mo)	None	None	None	None
33	M	29 y	4.58	Nonreactive	Indeterminate	Nonreactive	Nonreactive	None	None	None	None	None
34	F	51 y	5.67	Nonreactive	Indeterminate	Nonreactive	Nonreactive	None	None	None	None	None

Abbreviations: CIA, chemiluminescent immunoassay; S/CO, signal-to-cutoff ratio; TPPA, *Treponema pallidum* particle agglutination assay; RPR, rapid plasma reagin test; WB, western blotting.