

TABLE I  
False negative and true positive result distribution for the rapid test SD Bioeasy Dengue Duo among categories defined by the result composition from the reference standard tests (MAC-ELISA IgM, virus isolation, and real-time polymerase chain reaction (RT-qPCR), Federal District (FD), 2014

Reference standard (composition)	False negative n (%)	True positive n (%)
Mac IgM + / Isolation - / qPCR -	33 (67.34)	84 (40.77)
Mac IgM - / Isolation + / qPCR -	1 (2.04)	1 (< 1)
Mac IgM - / Isolation - / qPCR +	4 (8.16)	14 (6.79)
Mac IgM + / Isolation + / qPCR -	0	0
Mac IgM + / Isolation - / qPCR +	5 (10.24)	50 (24.27)
Mac IgM - / Isolation + / qPCR +	6 (12.24)	48 (23.30)
Mac IgM + / Isolation + / qPCR +	0	9 (4.36)
Total	49 (100)	206 (100)

TABLE II  
Comparison between the rapid test SD Bioeasy Dengue Duo and the standard reference methodologies [MAC-ELISA, real-time polymerase chain reaction (RT-qPCR, and virus isolation)], Federal District (FD), 2014

Positive categories	Number (n)	Sample number with positive test (%)			
		SD IgM	SD NS1	SD IgG	SD NS1/IgM
MAC-ELISA	143	72 (50.34)	90 (62.93)	50 (34.96)	105 (73.42)
RT-qPCR	121	30 (24.79)	101 (83.47)	16 (13.22)	106 (87.60)
Virus isolation	58	3 (5.17)	57 (87.93)	1 (1.72)	51 (87.93)

TABLE III  
Reliability of the rapid test 'SD Bioeasy Dengue Duo' in both acute and convalescent infection scenario, Federal District (FD), 2014

Infection category	Number (n)	Sensitivity (%) [CI 95%]			Specificity (%) [CI 95%]		
		SD IgM	SD NS1	SD IgM/NS1	SD IgM	SD NS1	SD IgM/NS1
Acute (≤ 7 days)	362	34.73 (58/167) [28.1 to 39.8]	68.86 (115/167) [62.1 to 73.8]	78.44 (131/167) [72.1 to 83.8]	99.48 (194/195) [97.6 to 100]	98.97 (193/195) [96 to 99.9]	98.46 (192/195) [96 to 99.9]
Convalescent (> 7 days)	47	50 (13/26) [32.2 to 67.6]	53.84 (14/26) [35.3 to 70.6]	57.69 (15/26) [39.3 to 74.6]	95.23 (20/21) [87.1 to 100]	100 (21/21) [21 to 100]	95.23 (20/21) [87.1 to 100]

TABLE IV

Sensitivity of the rapid test 'SD Bioeasy Dengue Duo' for cases with or without history of dengue infection, Federal District (FD), 2014

History of dengue infection	Number (n)	Sensitivity [CI 95%]			
		SD IgM	SD IgG	SD NSI	SD NSI/IgM/IgG
No	148	37.83 (56/148) [31.1 to 42.8]	24.32 (36/148) [18.1 to 29.8]	70.27 (104/148) [64.1 to 75.8]	77.70 (115/148) [71.1 to 82.8]
Yes	21	38.09 (8/21) [18.4 to 57.6]	33.33 (7/21) [13.4 to 52.6]	38.09 (8/21) [18.4 to 57.6]	66.66 (14/21) [64 to 67.9]

TABLE V

Crude agreement, prevalence index, and Kappa value for each component of the rapid test 'SD Bioeasy Dengue Duo'. Federal District (FD), 2014

	Crude agreement (%)	Prevalence index	Kappa value (CI <sub>95%</sub> )
Component NSI	98 (395/401)	0.59	0.93 (0.89 to 0.96)
Component IgM	98 (395/401)	0.96	0.50 (0.15 to 0.84)
Component IgG	99 (398/401)	0.96	0.75 (0.50 to 0.99)
Acute infection NSI/IgM	98 (394/401)	0.57	0.94 (0.90 to 0.97)