Supplementary material

AJTMH-20-0937, The performance of dried blood spots compared with serum samples for measuring dengue seroprevalence in a cohort of children in Cebu, Philippines by Daag, Jedas; Ylade, Michelle; Jadi, Ramesh; Adams, Cameron; Cuachin, Anna; Alpay , Riacarl ; Aportadera, Emma ; Yoon, In-Kyu; de Silva, Aravinda; Lopez, Anna; Deen, Jacqueline

Table S1. Studies evaluating dried serum or blood on filter paper compared with serum samples for detection of anti-DENV antibodies

Reference	Country	Dengue antibody detection	Participants	Serologic assay	Specimens compared*	Sensitivity of DBS/DSS versus sera	Specificity of DBS/DSS versus sera
Kuno, 1991 [1]	Puerto Rico	IgM and IgG	patients with suspected acute dengue infection	In-house enzyme-linked immunosorbent assay (ELISA)	• Sera • DBS	97 IgM 96 IgG	97 IgM 91 IgG
Ruangturakit, 1994 [2]	Thailand	IgM and IgG	**133** patients with suspected acute dengue infection	In-house ELISA	• Sera • DBS • DSS	N/A	N/A
1996 [3]	Costa Rica, Nicaragua and Cuba	IgM	**118** patients with suspected acute dengue infection	Dengue IgM kit (Institute of Tropical Medicine, Cuba).	• Sera • DBS	98.1%	98.5%
de la C. Herrera, 2006 [4]	Cuba	IgM	**189** patients with suspected acute dengue infection	Dengue IgM Ultramicro ELISA (UMELISA)	• Sera • DBS	92.1%	98.6%
Tran, 2006 [5]	Vietnam	IgM and IgG	**781** febrile patients provided acute and convalescent sera	Dengue IgM capture ELISA (Focus diagnostics, Cypress, CA, USA) and indirect IgG ELISA (Focus diagnostics, Cypress, CA, USA)	• Sera • DBS	N/A	N/A
Matheus, 2008	French	IgM	**130** patients with	In-house ELISA	• Sera	81.6%	74.9%

6	Guiana		suspected acute dengue infection (93 samples were collected 1-4 days after the onset of fever and 37 samples after 4th day)		• DBS		
Balmaseda, 2008 [7]	Nicaragua	IgA, IgM and IgG	**356** febrile patients provided acute and convalescent sera **322** participants provided pre- and post-dengue season samples to assess incidence	In-house ELISA	• Sera • DBS	95.6%-IgM for diagnosis 59.2%-IgM for incidence 86.0%-IgG for incidence	88.9%-IgM for diagnosis 81.1%-IgM for incidence 92.4%-IgG for incidence
Anders, 2012 [8]	Vietnam	IgM and IgG	**44** patients with NS1 positive acute dengue infection	Capture IgM and IgG (MAC/GAC) ELISA	• Sera • DBS	100%	100%
Chakravarti, 2013 [9]	India	IgM	104 suspected cases of dengue fever	N/A	• Sera • DBS	N/A	N/A
Maldonado-Rodríguez, 2017 [10]	Mexico	IgG (IgM**)	**66** patients with suspected acute dengue infection (blood was collected about 4 days after the onset of fever)	Dengue Virus IgG kit (DRG International, Inc., USA)	• Sera • DSS	94.2%	93.3%

 * DBS – dried blood spots; DSS - dried serum spots

** Only four samples were positive for IgM in the serum assay and only one of these was also positive in the DSS assay.

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