

Supplemental Table 1. Sensitivity, specificity and accuracy of the Standard Diagnostic Duo Rapid Test during a DENV-1 outbreak in Angola (n=46)

Test comparisons	Sensitivity (CI95)	Specificity (CI95)	Accuracy
RDT vs. InBios IgM	91.7 (61.5-99.8)	85.3 (68.9-95.1)	87
RDT vs. RT-PCR (NS1)	92.9 (76.5-99.1)	22 (6.4-47.6)	65.2
Combined NS1+IgM	94.6 (81.8-99.3)	22 (2.8-60)	80.4

Supplemental Table 2. Sensitivity, specificity and accuracy of the Standard Diagnostic Duo Rapid test during a DENV-4 outbreak in Republic of Marshall Islands (n=796)

Test Comparisons	Sensitivity (CI95)	Specificity (CI95)	Accuracy
RDT IgM vs. IgM	80 (61.4-92.3)	92 (88.9-94.8)	91
RDT NS1 vs. CDC RT PCR	66 (61.9-71.3)	80 (74.5-84.7)	72
Combined IgM+NS1	66.1 (61.7-70.3)	79.1(74-83.5)	71

Supplemental Table 3. Sensitivity, specificity and accuracy of the Standard Diagnostic Duo Rapid Test NS1 compared to the reference tests CDC rRT-PCR during a DENV-4 outbreak in Republic of Marshall Islands by days post onset of illness (DPO).

DPO	Sensitivity	Specificity	Accuracy
0	53.5 (43.3-63.5)	84.8 (73.9-92.5)	65.9
1	63.6 (54.6-71.9)	91 (81.7-96.2)	73.5
2	69 (59.5-79)	86 (73.3-94.2)	75.5
3	71.4 (57.8-82.7)	64 (42.5-82)	69.1
4	67.5 (50.9-81.4)	77.3 (62.2-88.5)	72.6
5	50 (18.7-81.3)	58.8(33-81.6)	55.6

Supplemental Table 4. Sensitivity, specificity and accuracy of the Standard Diagnostic Duo Rapid Test anti-DENV IgM during a DENV-4 outbreak in Republic of Marshall Islands by days post onset of illness (DPO).

DPO	Sensitivity	Specificity	Accuracy
0	0 (0)	97.8 (93.7-99.5)	96.4
1	28.6 (3.7-71)	98.1 (94.5-99.6)	95.1
2	37.5 (8.5-75.5)	98.2 (93.6-99.8)	94.1
3	75 (19.4-99.4)	93.9 (85.2-98.2)	92.9
4	33 (0.8-90.6)	88 (77.8-94.7)	85.7
5	83.3 (35.9-99.6)	85 (62.1-96.8)	84.6
>5	47.1 (23-72.2)	89.7 (75.8-97.1)	76.8

Supplemental Table 5. Sensitivity, specificity and accuracy of the Standard Diagnostic Duo Rapid test anti-DENV IgM and NS1 during a DENV-3 outbreak in Fiji.

Analyte	Sensitivity (CI95)	Specificity (CI95)	Accuracy (%)
Anti-DENV IgM	55 (38.3-71.4)	98.5 (96.2-99.6)	93
DENV3	84.4 (75.3-91.2)	78 (71.8-83.7)	80.1
Combined IgM +NS1	85.5 (78.3-91)	79 (72.1-84.8)	82

Supplemental Table 6. Sensitivity, specificity and accuracy of the Standard Diagnostic Duo Rapid Test Anti-DENV IgM compared to anti-DENV IgM ELISA and NS1 compared to CDC rRT-PCR during a DENV-2 outbreak in Federated States of Micronesia on the island of Yap

Analyte	Sensitivity (CI95)	Specificity (CI95)	Accuracy (%)
Anti-DENV IgM	56.6 (42.3-70.2)	93.1 (91.4-95.9)	90.2
Anti-DENV IgM DPO>5 (n=140)	56.4 (39.6-72.2)	90.1 (82.5-95.2)	80.7
NS1	49.7 (42-57.4)	89 (84.2-92.7)	72
Combined NS1+IgM	56.4 (49.3-63.3)	80.3 (74.8-85.1)	69

Supplemental Table 7. Sensitivity, specificity and accuracy of Standard Diagnostic Duo Rapid test NS1 compared to CDC rRT-PCR during a DENV-2 outbreak in Yap by DPO.

DPO	Sensitivity (CI95)	Specificity (CI95)	Accuracy
0 (n=93)	53.5(38-68)	88 (75.7-95.8)	72
1 (n=128)	48.4 (36-60)	92 (82.4-97.4)	70.1
2 (n=59)	55.6 (36-74)	84 (67.2-94.7)	71.2
3 (n=57)	53 (29-77)	85 (70.2-94.3)	75.4
4 (n=29)	43 (6-80)	90 (70.8-98.9)	77.2
5 (n=22)	42 (6-80)	93 (68-99.8)	77.3