Rapid antigen tests for dengue virus serotypes and Zika virus in patient serum

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Fig. 1. NS1 protein alignment and linear epitope mapping of the 10 antibodies used to run the DENV serotype–specific NS1 rapid tests, pan-DENV NS1 test, and ZIKV NS1 test.
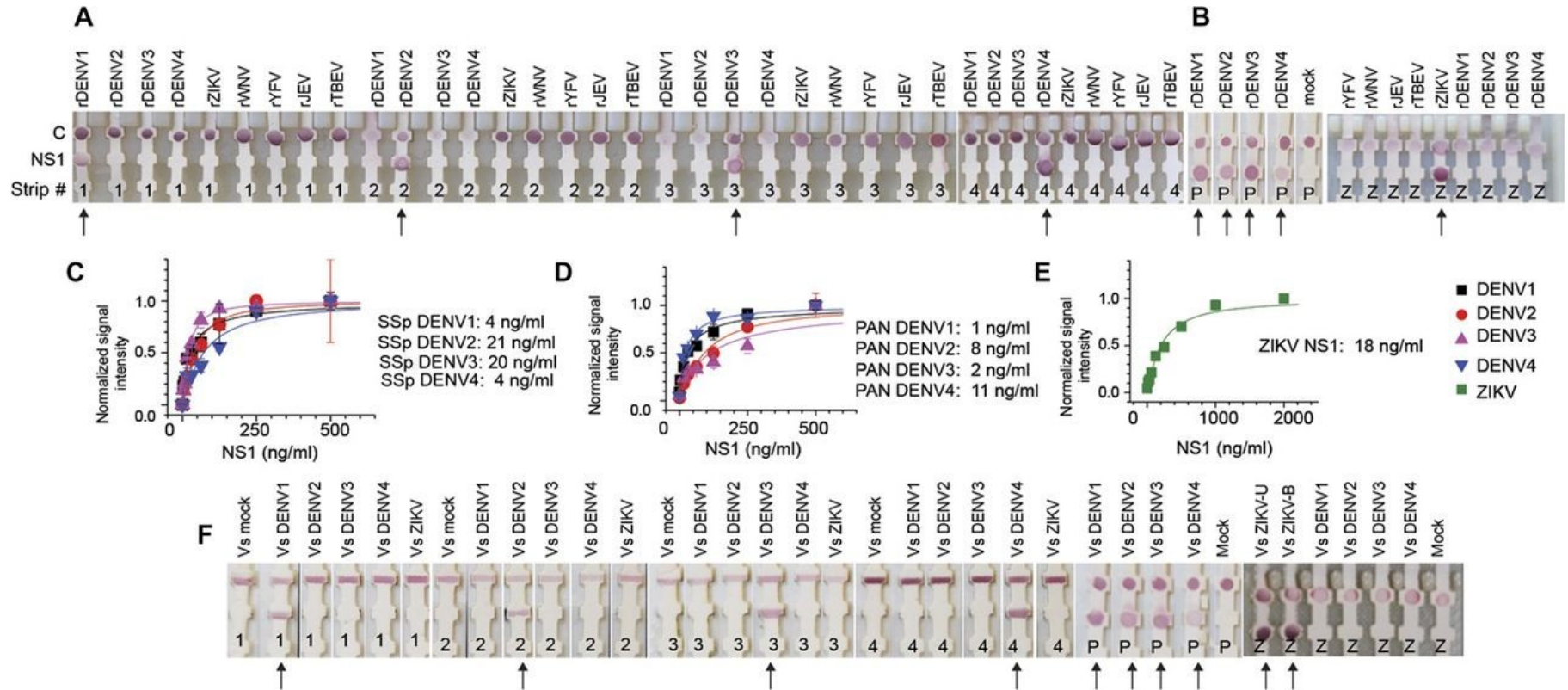

Irene Bosch et al., Sci Transl Med 2017;9:eaan1589

Fig. 2. Rapid immunochromatography for specific detection of DENV NS1 proteins (serotypes 1 to 4) and ZIKV NS1 protein.

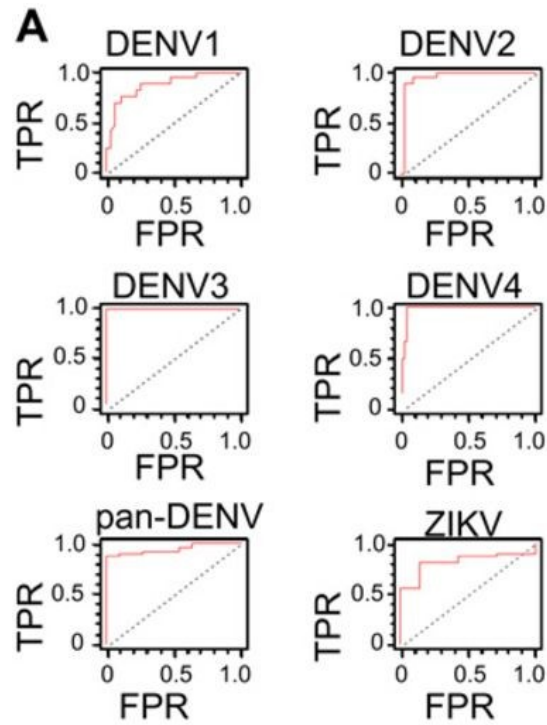# Fig. 3. Applying the rapid test to analyze human patient sera.
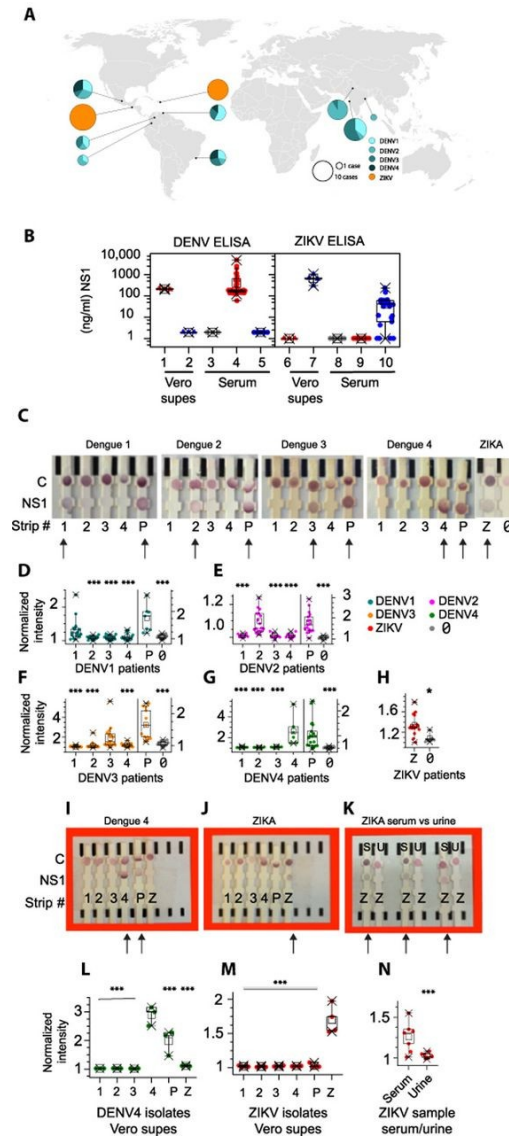
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Fig. 4. ROC analysis, sensitivity/specificity analysis, and 95% confidence intervals of the dengue and Zika tests.

	DENV1	DENV2	DENV3	DENV4	PAN-DENV	Zika
Area under the curve	0.88	0.96	1.00	0.98	0.95	0.82
95% Conf. int.	0.74–0.96	0.89–1.00	1.0–1.0	0.89–1.0	0.87–0.98	0.65–0.91
Cutoff	1.14	1.18	1.20	1.37	1.19	1.08
Sensitivity	0.76	0.89	1.00	1.00	0.88	0.81
Specificity	0.89	0.98	1.00	0.96	1.00	0.86
N positive	17	19	16	6	58	31
N negative	37	45	39	46	11	7

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