Supplementary tables

Table 1. Sample panel used to validate the performance of the ELISA/Liaison and the antibody RDT assays for SARS-CoV-2

Sensitivity				
Country	**Sample source**	**Infection**	**No. samples Liaison/ELISA (RDT*)**	**Post symptom onset range**
Netherlands	RT-PCR confirmed SARS-CoV-2	Mild	15/15 (15)	1-24
		Severe	78/78 (78)	1-43
Specificity				
Netherlands	Healthy blood donors	NA	20/20 (11)	NA
Netherlands	Non-CoV respiratory infections*	Adeno virus	6/6 (1)	2-4weeks
		HMPV	9/9 (3)	2-4weeks
		Flu A	13/13 (4)	2-4weeks
		Flu B	6/6 (4)	2-4weeks
		RSV A	5/5 (4)	2-4weeks
		RSV B	4/4 (4)	2-4weeks
		CMV	5/5 (2)	2-4weeks
		EBV	7/7 (3)	2-4weeks
		M.pneumoniae	1/1 (1)	2-4weeks
		Rhinovirus	9/9 (2)	2-4weeks
		Bocavirus	2/2 (0)	2-4weeks
		Parainfluenza 1/3	8/8 (0)	2-4weeks
		Enterovirus	2/2 (0)	2-4weeks
Netherlands	hCoV infections	HCoV 229E	19/19 (6)	2-4weeks
		HCoV-NL63	17/17 (7)	2-4weeks
		HCoV-OC43	39/39 (9)	2-4weeks
Soudan/Qatar		MERS	8/8 (3)	2-4weeks

* numbers were limited due to RDT kit availability

Table 2. A summary of the performance characteristics of the Wantai Ig and IgM ELISA, Euroimmun IgG and IgA ELISA and DiaSorin Liason platform.

			Wantai Ig	Wantai IgM	Euroimmun IgG*	Euroimmun IgA*	Liaison
	Specificity	n/N	149/150	148/150	160/161	151/161	68/69
		Value	0.9933	0.9867	0.9938	0.9379	0.9855
		(95% CI)	(0.9632 - 0.9997)	(0.9527 - 0.9976)	(0.9657 - 0.9997)	(0.8895 - 0.9659)	(0.9224 - 0.9993)
Overall	**Sensitivity**	n/N	75/76	68/76	62/76	74/76	39/53
		Value	0.9868	0.8947	0.8158	0.9737	0.7358
		(95% CI)	(0.9292 - 0.9993)	(0.8058 - 0.9457)	(0.7142 - 0.8870)	(0.9090 - 0.9953)	(0.6042 - 0.8356)
	Positive Predictive Value	Value	0.9868	0.9714	0.9841	0.881	0.975
		(95% CI)	(0.9292 - 0.9993)	(0.9017 - 0.9949)	(0.9154 - 0.9992)	(0.7946 - 0.9340)	(0.8712 - 0.9987)
	Negative Predictive Value	Value	0.9933	0.9487	0.9195	0.9869	0.8293
		(95% CI)	(0.9632 - 0.9997)	(0.9021 - 0.9738)	(0.8695 - 0.9515)	(0.9536 - 0.9977)	(0.7336 - 0.8955)
	Likelihood Ratio		148	67.11	131.3	15.68	50.77
>14 dps	**Sensitivity**	n/N	26/26	19/26	25/26	26/26	17/18
		Value	1	0.7308	0.9615	1	0.9444
		(95% CI)	(0.8713 - 1.000)	(0.5392 - 0.8630)	(0.8111 - 0.9980)	(0.8713 - 1.000)	(0.7424 - 0.9972)
	Positive Predictive Value	Value	0.963	0.9048	0.9615	0.7222	0.9444
		(95% CI)	(0.8172 - 0.9981)	(0.7109 - 0.9831)	(0.8111 - 0.9980)	(0.5601 - 0.8415)	(0.7424 - 0.9972)
	Negative Predictive Value	Value	1	0.9548	0.9938	1	0.9855
		(95% CI)	(0.9749 - 1.000)	(0.9097 - 0.9780)	(0.9657 - 0.9997)	(0.9752 - 1.000)	(0.9224 - 0.9993)
	Likelihood Ratio		150	54.81	154.8	16.1	65.17

Table 3. Sensitivity and specificity of the three tested RDTs (CI 95%) compared to PRNT50 positivity: whole sample set and samples >14 days post symptom onset (borderline PRNT50 values counted as positive).						
	Cellex (n=93)		InTec (n=93)		Orient gene (n=90)	
	IgM	**IgG**	**IgM**	**IgG**	**IgM**	**IgG**
Compared to PRNT50 positivity						
Sensitivity-overall	**87.36%** (78.50% to 93.52%)	**84.44%** (75.28% to 91.23%)	**88.37%** (79.65% to 94.28%)	**95.00%** (87.69% to 98.62%)	**89.41%** (80.85% to 95.04%)	**91.57%** (83.39% to 96.54%)
Sensitivity >14 DPO (n=25)	**96.15%** (80.36% to 99.90%)	**96.15%** (80.36% to 99.90%)	**88.37%** (79.65% to 94.28%)	**96.15%** (80.36% to 99.90%)	**80.65%** (62.53% to 92.55%)	**100.00%** (86.28% to 100.00%)
	IgM and IgG		**IgM and IgG**		**IgM and IgG**	
	96.15% (80.36% to 99.90%)		96.15% (80.36% to 99.90%)		100.00% (86.28% to 100.00%)	
Specificity - overall*	**80.95%** (58.09% to 94.55%)	**85.00%** (62.11% to 96.79%)	**73.91%** (51.59% to 89.77%)	**77.27%** (54.63% to 92.18%)	**100.00%** (80.49% to 100.00%)	**100.00%** (80.49% to 100.00%)

* number of sera tested for specificity based on availability of test kit; n=44, 64 and 9 respective of Cellex, inTec and Orient Gene

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