Table 1: Demographics

Cohort	N	Age range	Sex		
			Female	Male	Unknown
Pre-pandemic samples	259				
Adult patients	21	25-71	15	6	0
Child patients	50	1-11	24	26	0
CMV	10	Unknown	0	0	10
EBV	10	Unknown	0	0	10
Pertussis	16	<18	0	0	16
ILI	52	>60	0	0	52
Blood Donors	100	18-79	0	0	100
PCR-confirmed COVID-19 patients	269				
<14 days	92	24-88	22	59	11
≥14 days	177	24-91	44	77	56
Severity					
Asymptomatic	3	57-71	0	3	0
Mild	92	24-91	29	31	32
Severe	87	42-88	24	49	14
Died	54	56-87	8	29	17
unknown	33	37-83	5	24	4

Table 2: Specificity

Category	Total (n)	20% Cut-off			30% Cut-off		
		Positive (%)	Negative (%)	Specificity (95% CI)	Positive (%)	Negative (%)	Specificity (95% CI)
Pre-pandemic adult patients	21	0 (0)	21 (100)	100 (80.8-100)	0 (0)	21 (100)	100 (80.8-100)
Pre-pandemic child patients	50	0 (0)	50 (100)	100 (91.1-100)	0 (0)	50 (100)	100 (91.1-100)
CMV	10	0 (0)	10 (100)	100 (65.5-100)	0 (0)	10 (100)	100 (65.5-100)
EBV	10	0 (0)	10 (100)	100 (65.5-100)	0 (0)	10 (100)	100 (65.5-100)
Pertussis	16	0 (0)	16 (100)	100 (75.9-100)	0 (0)	16 (100)	100 (75.9-100)
ILI	52	1 (1.9)	51 (98.1)	98.1 (88.4-99.9)	0 (0)	52 (100)	100 (91.4-100)
Blood Donors	100	1 (1.0)	99 (99.0)	99.0 (93.8-99.9)	1 (1.0)	99 (99.0)	99.0 (93.8-99.9)
Total	259	2 (0.8)	257 (99.2)	99.2 (96.9-99.9)	1 (0.4)	257 (99.6)	99.6 (97.-99.9)

CMV, cytomegalovirus; EBV, Epstein-barr virus; ILI, influenza like illness

Table 3: Sensitivity

Category	Total	20% Cut-off			30% Cut-off		
		Positive (%)	Negative (%)	Sensitivity % (95% CI)	Positive (%)	Negative (%)	Sensitivity % (95% CI)
All	269	216 (80.3)	53 (19.7)	80.3 (74.9-84.8)	207 (77.0)	62 (23.0)	77.0 (71.4-81.8)
DPOS/DPD							
<14 days	92	69 (75.0)	23 (25.0)	75.0 (64.7-83.2)	68 (73.9)	24 (26.1)	73.9 (63.5-82.3)
≥14 days	177	147 (83.1)	30 (16.9)	83.1 (76.5-88.1)	139 (78.5)	38 (21.5)	78.5 (71.6-84.2)
P-NT50/VNT50							
<10	50	9 (18.0)	41 (82.0)	18.0 (9.0-31.9)	6 (12.0)	44 (88.0)	12.0 (5.0-25.0)
≥10 to <40	35	26 (74.3)	9 (25.7)	74.3 (56.4-86.9)	24 (68.6)	11 (31.4)	68.6 (50.6-82.6)
≥40 to <160	57	56 (98.2)	1 (1.8)	98.2 (89.4-99.9)	55 (96.3)	2 (3.7)	96.3 (86.2-99.4)
≥160	116	116 (100)	0 (	(10)(2e)	(99.1)	1 (0.9)	99.1 (94.6-100)
unknown	11	9 (81.8)	2 (18.2)	81.8 (47.8-96.8)	7 (63.6)	4 (36.4)	63.6 (31.6-87.6)
Severity <14 DPOS/DPD							
Mild	19	9 (47.4)	10 (52.6)	47.4 (25.2-70.5)	9 (47.4)	10 (52.6)	47.4 (25.2-70.5)
Severe	41	29 (70.7)	12 (29.3)	70.7 (54.3-83.4)	29 (70.7)	12 (29.3)	70.7 (54.3-83.4)
Died	20	20 (100)	0 (0)	100 (80.0-100)	20 (100)	0 (0)	100 (80.0-100)
unknown	12	11 (91.7)	1 (8.3)	91.7 (59.8-99.6)	10 (83.3)	2 (16.7)	83.3 (50.9-97.1)
Severity ≥14 DPOS/DPD							
Asymptomatic	3	2 (66.7)	1 (33.3)	66.7 (12.5-98.2)	2 (66.7)	1 (33.3)	66.7 (12.5-98.2)
Mild	73	55 (75.3)	18 (24.7)	75.3 (63.6-84.4)	50 (68.5)	23 (31.5)	68.5 (56.4-78.6)
Severe	46	42 (91.3)	4 (8.7)	91.3 (78.3-97.2)	41 (89.1)	5 (10.9)	89.1 (75.6-95.9)
Died	34	30 (88.2)	4 (11.8)	88.2 (71.6-96.2)	30 (88.2)	4 (11.8)	88.2 (71.6-96.2)
unknown	21	18 (85.7)	3 (14.3)	85.7 (62.6-96.2)	16 (76.2)	5 (23.8)	76.2 (52.5-90.9)

DPOS, days post onset of symptoms; DPD days post diagnosis; P-NT50 pseudovirus neutralization test 50% inhibition titer; VNT50 virus neutralization test 50% inhibition titer

Table 4: Interassay variance

	UNIGE					RIVM				
Sample	No. of repeats	Mean % reduction	SD	% CV	Sample	No. of repeats	Mean % reduction	SD	% CV
49_neg_2018	5	7.70	5.18	67.33					
30193717	5	30.21	3.14	10.39					
30189617	5	57.29	2.03	3.55					
30175147	5	96.30	0.21	0.22					

SD, standard deviation; CV, coefficient of variation