THE LANCET
Infectious Diseases

Supplementary appendix 3

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Appendix

Table S1: Mean Ct values in PCR-positive participants by clinical presentation and antigen-based RDT results.

	SDAg +	SDAg-	p-values
Symptomatic	23.65	29.30	<0.001
Asymptomatic	25.79	31.76	<0.001
Delay from start of symptom to positive PCR <14 days	22.94	29.06	<0.001
Delay from start of symptom to positive PCR ≥ 14 days	26.86	30.71	0.03

Table S2. Performance of each antibody test compared to ELISA (Biomereux, mini VIDAS)

	Kappa	Sensitivity (95% CI)	Specificity (95% CI)
RunKun	0.43	0.76 (0.58, 0.89)	0.69 (0.53, 0.82)
Innovita	0.47	0.93 (0.88, 0.96)	0.49 (0.38, 0.60)
SD Biosensor	0.60	0.94 (0.80, 0.99)	0.69 (0.53, 0.82)
Wondfo	0.76	0.98 (0.92, 1.00)	0.75 (0.60, 0.86)

Table S3. Cohen's Kappa agreement scores between serological tests.

Tests	Innovita (*n=928*)	Wondfo (*n=400*)	Biosensor (*n=100*)	Runkun (*n=100*)	ELISA (*n=200*)
Innovita		0.76	0.57	0.43	0.47
Wondfo			0.72	0.56	0.76
Biosensor				0.69	0.60
Runkun					0.43

Table S4 : Distribution of participants per type of test

	Number of participants per test
3 test modalities (PCR, Antibody, Antigen)	736
PCR	1140
Antigen SD Biosensor	958
Antibody SD Biosensor	87
Antibody Innovita	952
Antibody Wondfo	277
Antibody Runkun	87
Biomerieux Immunoassay	185

Number of participants between two tests							
	PCR	Antigen SD Biosensor	Antibody SD Biosensor	Antibody Innovita	Antibody Wondfo	Antibody Runkun	Biomerieux Immunoassays
PCR		915	85	914	216	85	179
Antigen SD Biosensor			77	765	192	76	156
Antibody SD Biosensor				87	79	85	79
Antibody Innovita					215	86	183
Antibody Wondfo						79	90
Antibody Runkun							78
Biomerieux Immunoassays							

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                    ┌──────────┐
                    │   1195   │
                    └─────┬────┘                    ┌─────────────────┐
         ┌────────────────┤                         │       V1        │
         │                │                         │ PCR: 1104       │
   ┌─────┴────┐           │                         │ Innovita: 76    │
   │   899    │           └──────────────────────▶ │ Elisa: 81       │
   └──────────┘                                     │ Runkun: 76      │
                                                    │ SD Ab: 81       │
                                                    │ SD Ag: 959      │
                                                    │ Wondfo: 81      │
                                                    └─────────────────┘
                    ┌──────────┐
                    │   296    │
                    └─────┬────┘                    ┌─────────────────┐
         ┌────────────────┤                         │       V2        │
         │                │                         │ PCR: 277        │
   ┌─────┴────┐           │                         │ Innovita: 233   │
   │    99    │           └──────────────────────▶ │ Elisa: 17       │
   └──────────┘                                     │ Runkun: 01      │
                                                    │ SD Ab: 01       │
                                                    │ SD Ag: 98       │
                                                    │ Wondfo: 65      │
                                                    └─────────────────┘
                    ┌──────────┐
                    │   197    │
                    └─────┬────┘                    ┌─────────────────┐
         ┌────────────────┤                         │       V3        │
         │                │                         │ PCR: 181        │
   ┌─────┴────┐           │                         │ Innovita: 164   │
   │   176    │           └──────────────────────▶ │ Elisa: 13       │
   └──────────┘                                     │ Runkun: 01      │
                                                    │ SD Ab: 00       │
                                                    │ SD Ag: 103      │
                                                    │ Wondfo: 47      │
                                                    └─────────────────┘
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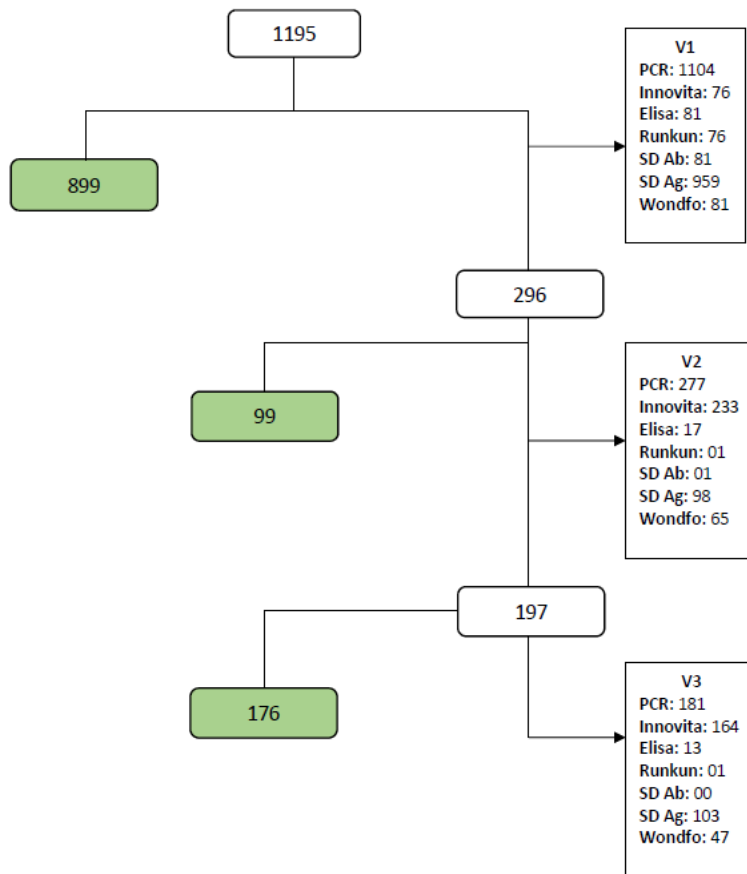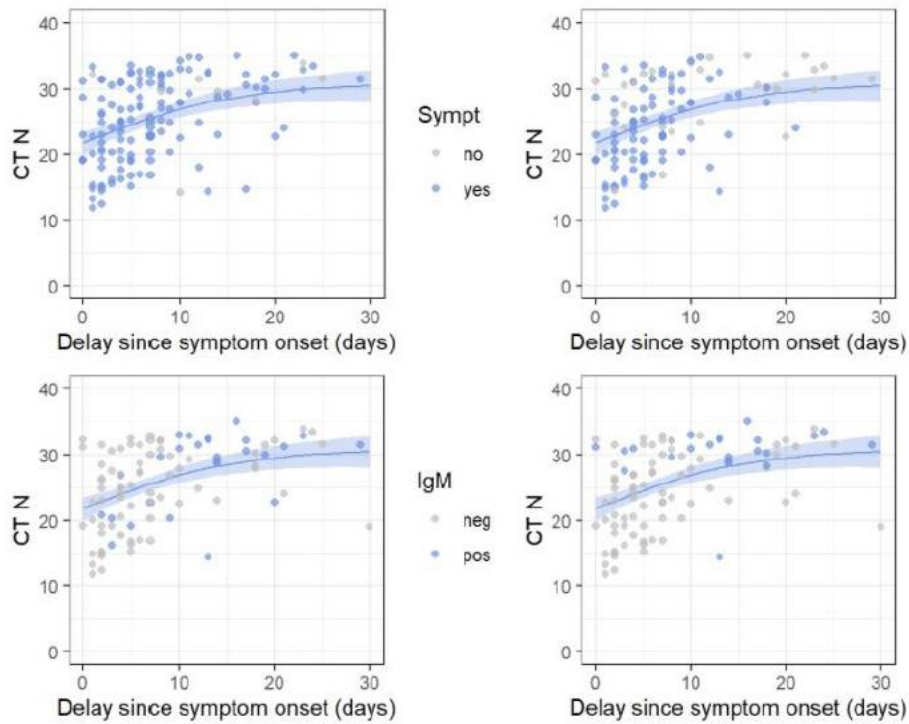
Figure S1: Flow chart of participants screening, enrolment and testing.

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50 **Figure S2: Change in SARS-CoV-2 PCR cycle threshold (Ct) values over time and Ct value compared to**
51 **antigen and antibody test positivity over days since symptom onset. Days since symptom onset are**
52 **presented on the x-axis, Ct values are presented on the lefthand y-axis, and the rapid diagnostic test (RDT)**
53 **test positivity is presented on the righthand y-axis with each dot representing an individual positive or**
54 **negative RDT. Shading represents the 95% confidence interval around the correlation between Ct values**
55 **and test positivity for each specific RDT. IgM and IgG testing reflect Innovita antibody rapid diagnostic**
56 **test (RDT) results. Ag reflects antigen RDT, and PCR reflects gold-standard SARS-CoV-2 PCR.**
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