Table 1. Manufacturer-quoted information on molecular point-of-care diagnostics.

Product	Manufacturer/Location	Sample type	CE marked?	Emergency FDA approval ?	Hands-on prep time	Time to result	Throughput	Storage temperature	Type	Target	Performance evidence
Xpert SARS-CoV-2	Cepheid (US/World wide distribution)	Nasopharyngeal swab, nasal aspirate	?	Yes	5 mins	45mins - 1 hour	2-4 cartridges PoC, 4-16 laboratory	2-28*C	RT-PCR	SARS-CoV-2 RNA	Contrived nasopharyngeal swabs. 2xLoD 20/20 agreement. 3xLoD 5/5, 5xLoD 5/5. Negative 35/35 agreement.
VitaPCR COVID-19 assay	Credo (Singapore)	Nasopharyngeal or oropharyngeal swabs	Yes	"pending"	2 mins	20mins	1 sample per cartridge at a time	15-30*C	RT-PCR	SARS-CoV-2	Full length SARS-CoV-2 RNA (N gene) at known titre spiked into sample collection buffer. 2.73X10^0 found as LoD. 1xLoD 20/20 agreement, 2xLoD 20/20, 20xLoD 20/20. Additional 60 spiked oro/nasopharyngeal samples had 100% positive agreement and 100% negative agreement at 1.5xLoD, 3xLoD and 5xLoD. Zero cross-reactivity with influenza, coronavirus 229E and some other targets.
RapiPrep COVID-19	Microsens Dx (London)	Sputum or swabs	"pending"	April	8-10 mins	30mins	1 sample per cartridge per run	?	LAMP amplification technology	SARS-CoV-2	“Assessed for clinical performance using 12 patient samples from London care home”
ePlex SARS-CoV-2	GenMark Diagnostics (United States)	Nasopharyngeal swab	?	Yes	<2 mins	?	3 test bays. 36/day near-patient up to 288/day ePlex tower	2-8*C	RT-PCR	SARS-CoV-2 RNA	65 samples from symptomatic US patients validated against SARS-CoV-2 RT-PCR Diagnostic Panel for EUA
Accula SARS-CoV-2	Mesa Biotech (United States)	Throat and nasal swabs (in same collection tube)	?	Yes	5 mins	30 mins	1 cassette per sample	15-30*C	RT-PCR + lateral flow	SARS-CoV-2 RNA	LoD determined as 200 copies / reaction in human clinical matrices, used as testing LoD. In Accula SARS-CoV-2 buffer LoD was determined at 100 copies / reaction. 1xLoD 20/20 agreement. Clinical evaluation from contrived, spiked throat

											and nasal swabs: 2xLoD 20/20, 5xLoD 7/7, 10xLoD 2/2, 50x LoD 1/1, Negative 30/30 (100%). Testing also performed on interfering substances likely to be found in respiratory or throat samples: none found to interfere at concentrations tested.
ID NOW COVID-19	Abbott Diagnostics (Worldwide)	Throat, nasal, nasopharyngeal and oropharyngeal swabs	?	Yes	1-2 mins	13 mins	1 cartridge per run	15-30*C	Isothermal nucleic acid amplification	SARS-CoV-2 nucleic acid	Performance evaluated using contrived nasopharyngeal swabs from individuals with symptoms of respiratory illness. Swabs spiked with purified viral RNA at 2x and 5x LoD. 2xLoD 20/20 agreement, 5xLoD 10/10, Negative 30/30. LoD rated at 125 Genome Equivalents/mL (19/20 positive replicates).

LoD: limit of detection

Table 2. Manufacturer-quoted information on antibody point-of-care diagnostics.

Product	Manufacturer/Location	Sample type	CE marked?	Emergency FDA approval ?	Hands-on prep time	Time to result	Throughput	Storage temperature	Type	Target	Performance evidence
GT-100 SARS-CoV-2 IgG/IgM kit	Goldsite Diagnostics Inc. (China)	Human serum and plasma (20uL)	Yes	?	4-12 mins	12mins	1 sample per cartridge	?	Time-resolved fluorescence immunoassay	IgG / IgM	"Test validated by labs in Europe and China"
rapid POC kit	Assay Genie (Acro Biotech, Inc) (Ireland)	Blood, serum and plasma	Yes	?	2 mins	15mins	1 sample per test	2-30*C	Colloidal gold immunochromatography	IgG / IgM	Tested directly against PCR: IgG 20/20 positive, 49/50 negative, IgM 17/20 positive, 48/50 negative. No cross-reactivity with influenza A, B, RSV, Adenovirus, HBsAg, Syphilis, H.Pylori, HIV and HCV.
COVID-19 IgM-IgG Rapid Test	BioMedomics, BD (United States)	Finger prick / venous blood	Yes	?	1-2 mins	15mins	1 sample per test	Room temp	Lateral flow immunoassay	IgG / IgM	Validated using venous blood samples from COVID-19 patients, multiple hospital sites, China/Chinese CDC. 525 patient samples (397 positive clinically confirmed (including PCR test) SARS-CoV-2 infected, 128 negative). 352/397 tested positive and 116/128 tested negative. Information on disease stage not available. Limited case-control comparison (7 positive patients, 3 healthy controls) using sample types including fingerstick whole blood, serum and plasma, reported 100% consistency by sample type.
COVID-19 Rapid Test Cassette	SureScreen Diagnostics (England)	Finger prick	Yes	?	1-2mins	10-15mins	1 sample per test	2-30*C	Lateral flow immunoassay	IgG / IgM	Performance evaluated in Wuhan, China. Comparisons made against conventional laboratory assay which detected the presence of IgG and IgM in 902 blood samples. Quoted

											sensitivity >91% and specificity >99%.
VivaDiag COVID-19 IgG - IgM test	VivaChek (China)	10uL volume - finger prick / venous blood, plasma or serum	Yes	?	1-2mins	15mins	1 sample per test	2-30*C	Colloidal gold immunochromatography	IgG / IgM	Validated against 200 PCR samples. 81% agreement with PCR at 4-10 days infection. 100% coincidence after 11 days infection and 100% coincidence in healthy controls.

Table 3. Comparative diagnostic accuracy information.

	True positive	Total positive	% Sensitivity (95% CI)	True negative	Total negative	% Specificity (95% CI)
Data from clinical samples						
COVID-19 IgM-IgG Rapid Test	352	397	89% (85%, 92%)	116	128	91% (84%, 95%)
Data from laboratory samples						
Xpert SARS-CoV-2	30	30	100% (86%, 100%)	35	35	100% (88%, 100%)
VitaPCR COVID-19 assay	120	120	100% (96%, 100%)	60	60	100% (93%, 100%)
Accula SARS-CoV-2	50	50	100% (91%, 100%)	30	30	100% (86%, 100%)
ID NOW COVID-19	30	30	100% (86%, 100%)	30	30	100% (86%, 100%)
GT-100 SARS-CoV-2 IgG/IgM kit : using IgG	20	20	100% (80%, 100%)	49	50	98% (88%, 100%)
GT-100 SARS-CoV-2 IgG/IgM kit : using IgM	17	20	85% (61%, 96%)	48	50	96% (85%, 99%)

Only devices reporting absolute numbers suitable for estimating sensitivity and specificity are reported. For devices reporting laboratory samples at a range of limits of detection, data have been pooled. CI=95% confidence interval. For full details, refer to Tables 1 and 2.