diagnostics.ai

COVID-19 Approach

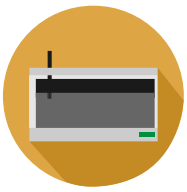
COVID-19 diagnostic tests are done using the qPCR technique

qPCR (often referred to as PCR) is a technique to identify pathogens (bacteria, viruses, fungi) and other diseases by looking for known DNA (or RNA) sequences in samples.

It is the only method for reliably identifying COVID-19 and so is used in all reliable test kits (including those supplied by the USA's CDC, UK's PHE and other government agencies).

How do COVID-19 tests work today?

1. Sample arrives at the lab.



2. An 'Extraction' machine cleans the sample and extracts any DNA/RNA.

3. qPCR thermocycler amplifies any COVID-19 RNA present in the sample.

4. Thermocycler output analysed by specialists to determine if COVID-19 detected.

5. Results sent back to hospital/ doctor/patient.

pcr.ai (by diagnostics.ai) analyses qPCR data automatically, removing the need for specialists and ensuring standardisation, accuracy and quality-control.*

Current limitations of testing by qPCR

SPECIALISTS REQUIRED TO ANALYSE DATA

- Lower throughput.
- Cannot run tests without specialists.
- Higher costs.
- Lengthy test time.

LACK OF STANDARDISATION

- Same patient can get a different result.
- Difficult to track diseases between labs and nationally.

pcr.ai by diagnostics.ai

Proven and reliable accuracy.*

Proven time and resource savings.*

Built-in standardisation of results.

Inherent tracking capabilities.

MANUAL ANALYSIS ALLOWS ERRORS

- Inaccurate tests lead to medical errors.
- False positives have high impact (contact tracing, increased workload for medical staff).
- False negatives have high impact (patient spreads disease).

NO REAL-TIME TRACKING

- Reporting to central authority by phone or email is slow and can be error prone.
- Current pen-and-paper based reporting methods can lead to delays.

*__22,200 test prospective clinical study by NHS Glasgow__ A.R. MacLean, R. Gunson (Nov 2019) *Automation and standardisation of clinical molecular testing using PCR.Ai – A comparative performance study* Journal of Clinical Virology, Volume 120

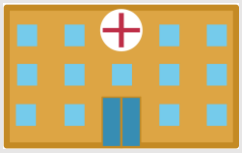
diagnostics.ai work on Covid-19 and related pathogens to date

Automated the analysis of more than a quarter of a million tests including various strains of the Corona virus (which was also included in the clinical study referenced).

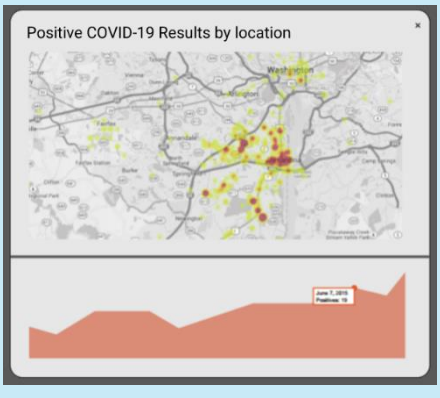
- **King's College Hospital** NHS London, UK using pcr.ai for managing the resulting process and overseeing the quality control checks. Since the start of the pandemic, Kings have been forced to switch Covid kits a number of times to keep up with supply issues, using pcr.ai has allowed them to do this with a minimum of disruption.

- **Viracor-Eurofins** one of the largest patient (CLIA) testing labs in the USA are pcr.ai clients, they are developing their approach now to Coronavirus in line with new govt regulations, will use pcr.ai in coming months to ensure they can meet demand.

Timely opportunities

	Sales Opportunity	Details
	Increased sales to central laboratories	UK plans to test thousands per day and for other countries this is even higher – meaning increased efficiency is urgently required to meet need and labs increasingly will struggle. Expenditures required to achieve sales from this opportunity include: advertising, PR, and by running conferences/webinars with leading experts to aid labs with testing difficulties.
 	Sales to small labs & clinics	Develop near-patient testing using standard off-the-shelf equipment combined with pcr.ai to allow testing without specialists, enabling samples to be tested nearer doctors and patients. Company plans to bring forward investment and development plans to capitalise on need, and so plan to have this offering available in the coming months.

Covid-19 tracking



Planned launch of Covid-19 online tracking site (subject to ethics & privacy considerations).

Will allow hospitals, governments and patients to track incidences by area.

Raises awareness of diagnostics.ai capabilities, as well as providing beneficial service to users.