



## Restarting Travel – COVID 19 Testing Solutions

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Dealing with COVID-19 and how do we restore travellers' trust and confidence to rebuild business.

The New Normal - Learning to live, travel, work and play despite Covid-19

18<sup>th</sup> March 2021

# Katalyst Laboratories offers rapid and highly accurate COVID-19 testing solutions ideal for airports

The coronavirus disease 2019 (COVID-19) pandemic continues to exact a huge toll on all areas of life but travel is particularly hard hit. Vaccinations do offer some hope but still raise many questions as they currently do not stop transmission and carrying of COVID-19 and many areas of the world will take several years to vaccinate their populations. Combined with new variants and groups who either will not or cannot be vaccinated, plus different vaccines with different approvals and sign off means testing will remain the only safe way of managing travel and allowing it to restart.

The impact on aviation has been substantial with the global reduction in passenger numbers and quarantines. Testing offers the potential to rebuild passenger confidence, ensure the safety of colleagues and protect the UK from infections imported from abroad

**Katalyst Laboratories (formerly known as GeneMe UK) is one of the leading COVID-19 testing companies in the UK.**

- Extensive experience of running point of care testing having helped reopen the UK's first theatre show in August 2020 by providing onsite testing of cast and crew so are one of the oldest testing companies in the UK.
- Very experienced in aviation working with Virgin Atlantic and having run testing at many UK airports including Heathrow, Manchester, London City and East Midlands. Testing partner at Prague Airport.
- Leading film and TV production testing company working with Sony Pictures, Amazon, BBC, ITV, Channel 4 amongst others.
- Extensive knowledge and experience within the team on both the science and medical side as well as the practicalities and logistics of testing including PCR, LAMP and Lateral Flow.

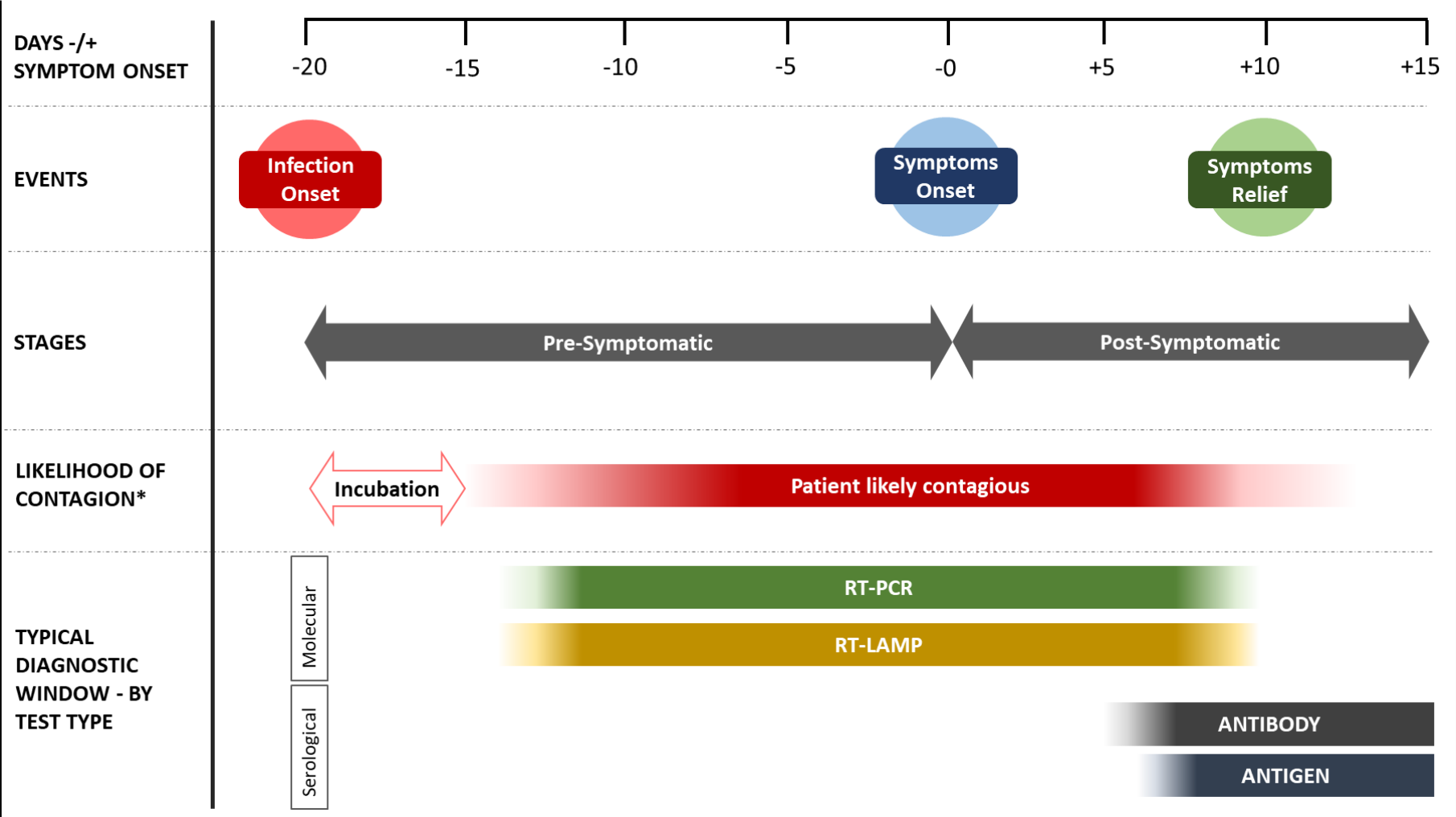
# What do we need and what is currently available?

It is vitally important to ensure that testing catches carriers with no symptoms and low viral loads. Many tests do not do this such as antibody tests that pick up antibodies in the blood in cases after having had COVID-19 and antigen tests that miss many positive cases and are only designed to aid medical use with symptomatic patients.

- Speed = tests results need to be available within minutes
- Accuracy = tests must be accurate to give people confidence

Antigen	RT - PCR	RT - LAMP
Do not require lab processing	Requires lab processing	Do not require lab processing
Not good at finding virus in people without symptoms	Good at finding virus in people without symptoms	Good at finding virus in people without symptoms
Less accurate	Accurate	Accurate
Best for: Population testing <b>with</b> regular testing	Best for: Virus screening programmes	Best for: Travel, schools, workplaces and population testing

# What we know about the virus and testing so far



Based on WHO Coronavirus disease 2019 (COVID-19) Situation Report – 73

**We need a solution will allow airports,  
airlines and travel hubs to rapidly test  
colleagues and passengers with  
accurate results being securely  
delivered to their mobile  
devices within 60 minutes and in a  
GDPR compliant manner**

**Katalyst**  
LABORATORIES




# Katalyst Laboratories offers rapid and highly accurate COVID-19 testing solutions

**Katalyst Laboratories (formerly known as GeneMe UK) is one of the leading COVID-19 testing companies in the UK and beyond.**

- We are an authorised distributor of molecular diagnostic test platforms, and an outsource provider of molecular diagnostic testing services to private healthcare and travel hubs, operating our own testing lab in central London.
- Extensive experience of running point of care testing having helped reopen the UK's first theatre show in August 2020 by providing onsite testing of cast and crew so are one of the oldest testing companies in the UK.
- Very experienced in aviation working with Virgin Atlantic and having run testing at many UK airports including Heathrow, Manchester, London City and East Midlands. Testing partner at Prague Airport.
- Leading film and TV production testing company working with Sony Pictures, Amazon, BBC, ITV and Channel 4 amongst others.
- Extensive knowledge and experience within the team on both the science and medical side as well as the practicalities and logistics of testing including RT-PCR, RT-LAMP and Lateral Flow.



# Benefits of working with Katalyst Laboratories

- **Rapid processing.** Up to 30 PCR tests can be processed in 60 mins per PCR machine. 
- **Rapid RT-PCR Test.** RT-PCR tests are WHO Gold Standard and are a requirement for entry to most travel destinations and the most accurate method of picking up the SARS-CoV 2 virus in asymptomatic people.
- **Experienced team.** We have been involved in COVID-19 testing since the beginning of the pandemic and have extensive experience of running testing both on and off site and have a team of scientists to support our testing.
- **No laboratory required.** The rapid RT-PCR test we recommend uses patented technologies that do not require RNA extraction, hence no laboratory is required. 
- **Weekly monitoring of different virus strains.** The rapid RT-PCR test we recommend is evaluated weekly to make sure it can identify all known variants of the virus. 
- **Approved for use by the NHS.** The rapid RT-PCR test we use is currently in use with the NHS as a PCR test and approved by DHSC.
- **Secure delivery of results.** Our tests come pre-integrated with the award-winning Yoti digital identity app. Yoti enables test results to be handled according to GDPR and sent securely to people's phones with a paper free workflow.

# Example Testing Solution for Airports and Travel Hubs

## Providing a testing solution for Airports and surrounding areas

- Testing Hub set up on site either in a terminal, car park or using a mobile laboratory outside containing PCR machines and equipment required for testing.
- Passengers arrive and are greeted at reception where they are guided to the swabbing area. Swabbing takes Anterior nasal swabs are used so people will self swab under supervision. A drive through can operate with the erection of an awning by the car park office.
- Rapid PCR swabs are sent immediately to Hub where results will be issued within 2 hours.
- Standard PCR swabs are sent to the Hub periodically. Results are obtained within 24 hours for standard PCR tests.
- Lateral Flow swabbing done near Hub in main terminal in a specified area.
- Booking for PCR will be done using a booking app and LF will be walk up.



# Samples Process Roles and Flow at a travel testing hub

## Door Host



### Responsibilities

- Welcome
- Filter pax booked for test
- PPE check
- Queue management
- Passenger preparation

## Receptionist



### Responsibilities

- Greet customers
- Confirm for booking
- Confirm contact details
- Confirm YOTI, email, print out option
- Take payments

## Nurse



### Responsibilities

- Call forward pax
- Scan YOTI
- Administer or support sample taking
- Advise next steps

## Technician



### Responsibilities

- Run PCR machine
- Interpret results
- Upload to YOTI

## Site Manager



### Responsibilities

- Transport tests to Technician
- Supports Welcome Host / Technician roles
- Break cover and resource planning
- Query escalation management
- Customer recovery
- Directing management and press enquires

Team member: An Other (1)

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Supported by Katalyst

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# Example Test Area Layout and Flow

Door Host

Receptionist

Nurse

Technician

Site Manager

Nuffield Health

Nuffield Health

Nuffield Health

Nuffield Health

Nuffield Health

Passenger

Signage

Print out collection

Printer

Desks

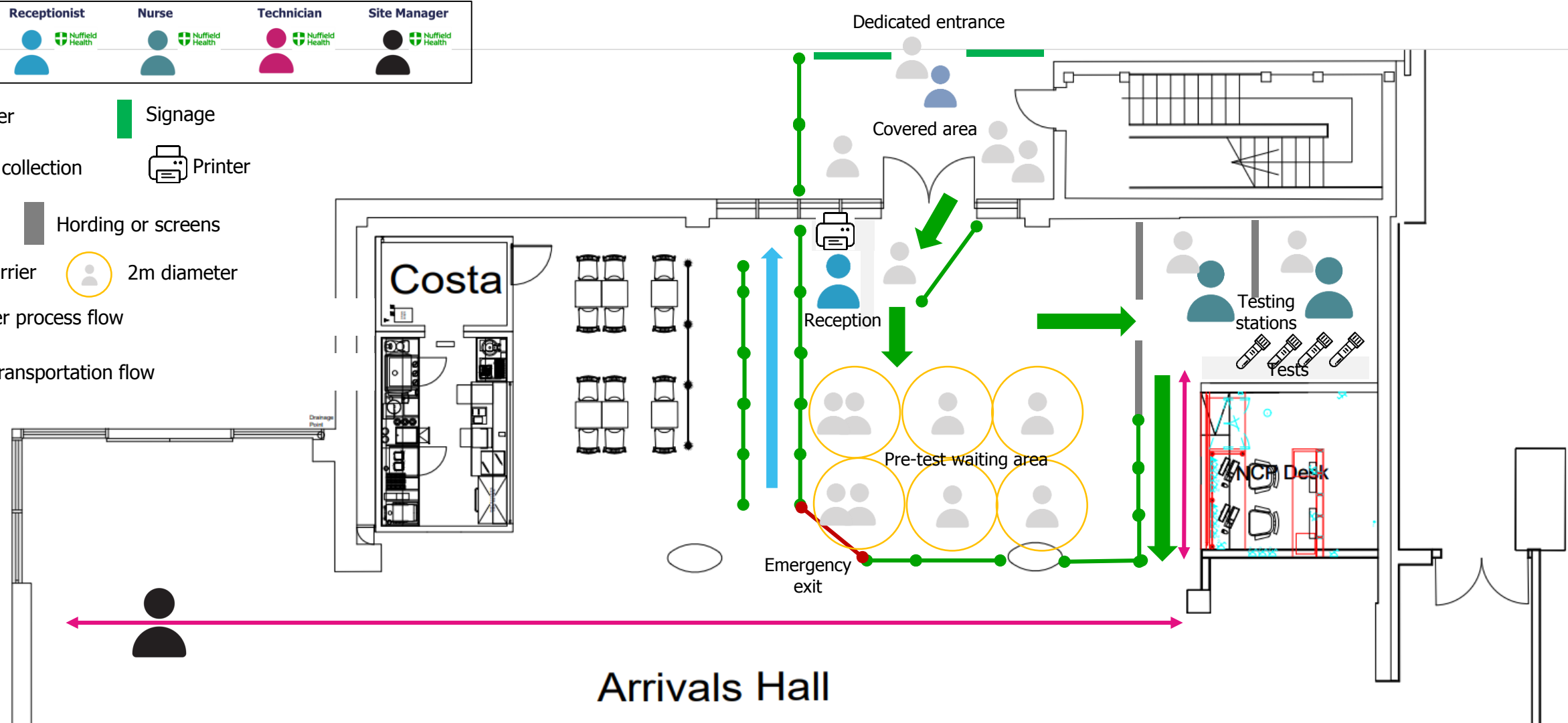
Hording or screens

Tensa barrier

2m diameter

Passenger process flow

Sample transportation flow



# A rapid PCR test ideal for mass screening in airports

**PROmate™ COVID-19 is an RT-qPCR test for on-site screening as used in the NHS and is one of the first rapid PCR tests available changing the nature of point of care testing**

PROmate has been developed with the NHS to provide fast and cost-effective point-of-care testing for COVID-19.

PROmate is manufactured in the UK. It uses patented technology to streamline the testing process, making it quicker, simpler than standard laboratory based RT-PCR tests. This streamlined process ensures that testing may be performed on-site by any suitably qualified personnel. Katalyst Laboratories is the first private company to offer PROmate globally.

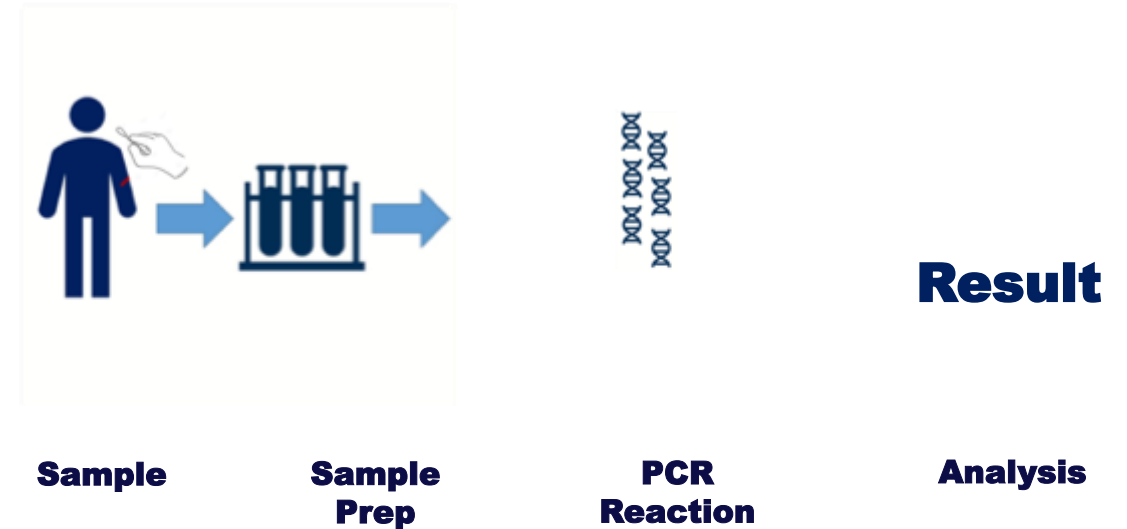
- Evaluated and approved for use by the NHS by the DHSC.
- No RNA extraction enabling a processing time of 60 minutes.
- Weekly updates to validate detection of all known variants of SARS-CoV-2 RNA.
- Uses anterior nasal swabbing that can be self-administered under medical supervision that significantly increases throughput and reduces costs.
- Integration with the Yoti GDPR compliant digital identify app means the testing process is streamlined, secure and paper-free. Results are sent automatically to passenger's phone.

# PROmate™ Rapid PCR Test

## Why PROmate?

PROmate brings rapid COVID-19 PCR testing onsite to travel hubs and workplaces. Onsite testing is vital for industries where people are in close proximity, such as ports, airports, manufacturing facilities and film and TV production.

Unlike most PCR tests, PROmate's innovative technology means that the test processing time is only one hour. In addition, the Katalyst Laboratories GDPR compliant streamlined workflow means that results are sent automatically to people's mobile phones.



As a RT-PCR test PROmate is considered to be a WHO Gold Standard test and is accepted for entry into other countries.

## Clinical Trial Data

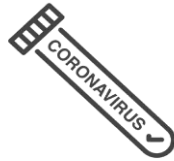
PROmate is a DHSC approved test used by the NHS.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/957995/TVG\\_Report-PROmate.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957995/TVG_Report-PROmate.pdf)

# Our high-level test process is suitable for both colleagues and passengers



Everyone entering the airport may be tested (colleagues, departing passengers and arriving passengers)



A trained person tests individuals using a viral swab. PCR machines process the test on airport (no laboratory is needed)



Test results are securely sent to the individual's phone via Yoti within 60 minutes

*Alternatively, an email can be used to send the result.*



Individuals may present the test result to airport, airline or government representatives as required

# Secure, tamper proof, non-transferable test results



## Yoti COVID-19 test result credentials

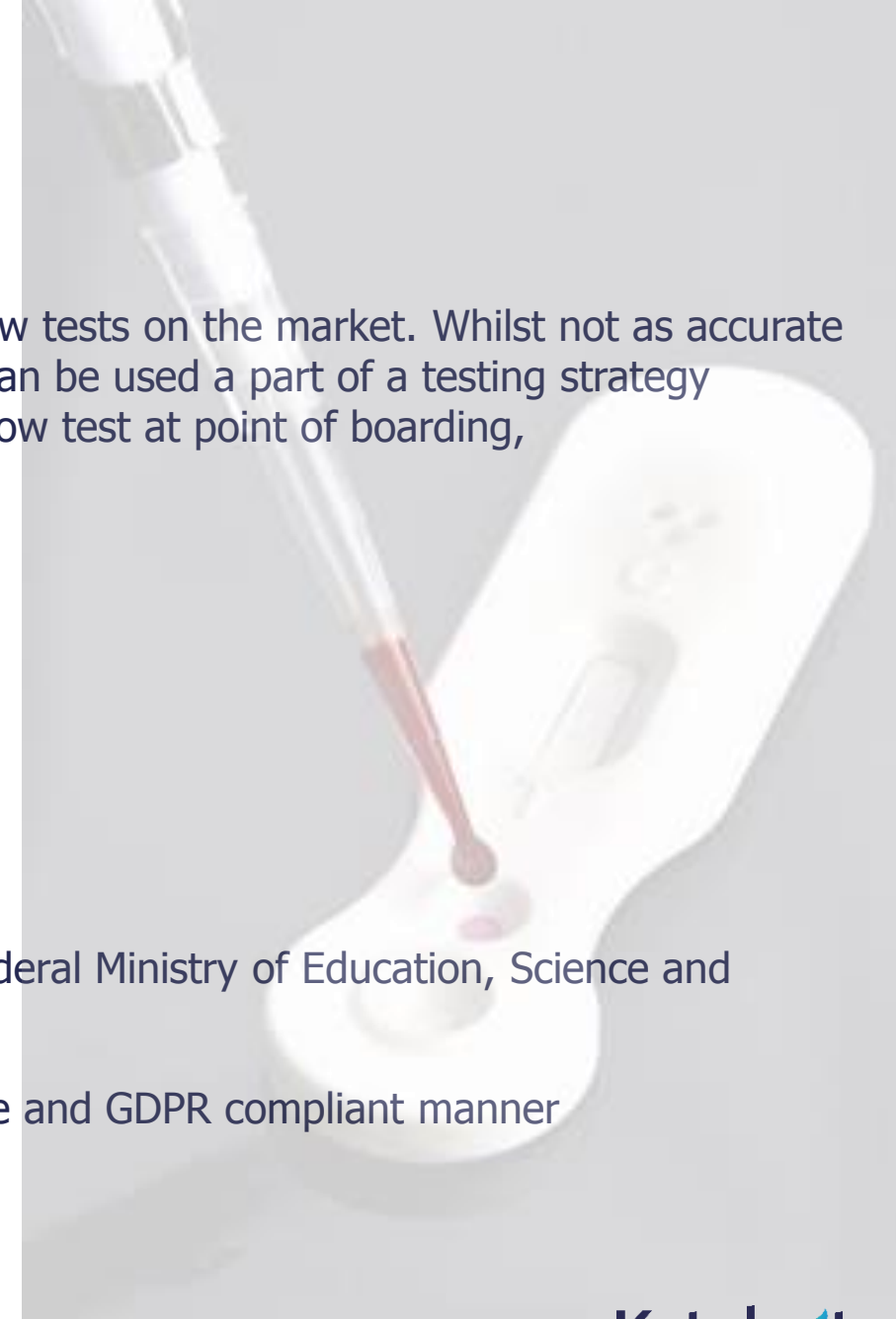
- The test results are issued directly to the users phone as a verifiable test credential.
- Credential issued within 60 minutes.
- Designed for privacy and data protection.
- The individual can share their test result receipt with organisations and businesses as trusted proof of a verified test result.

# Lateral Flow Testing

Katalyst Laboratories supplies several of the most accurate antigen or lateral flow tests on the market. Whilst not as accurate as PCR and unsuitable for testing as a stand alone solution, Lateral Flow tests can be used as a part of a testing strategy involving PCR testing between 72-24 hrs before departure and then a Lateral Flow test at point of boarding,

## **Anterior Nasal Swab Antigen Test CE-IVD**

- Some of the best Limits of Detection for antigen tests at 200 TCID 50/ml
- Sensitivity: 92-96.7%, Specificity 99.26%
- Uses anterior nasal swabs as less invasive
- CE IVD and MHRA registered
- Official supplier to various governments including the UK MHRA, Austrian Federal Ministry of Education, Science and Research for use in schools and Federal German Government
- Integration with the Yoti Biometric ID app giving record of results in a secure and GDPR compliant manner







## Contact

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