

## NEW COVID-19 TEST COULD IDENTIFY INFECTIOUS PATIENTS IN REAL TIME

Microbio Pty Ltd, an Australian biotech company, has developed a new type of COVID-19 test that has the potential to determine not only if someone has the virus but could also indicate whether they are infectious.

Microbio today announced its ground-breaking InfectID-COVID-19-R test which has been independently validated to identify the presence of replication-competent SARS-CoV-2 virus in samples in 45 minutes (post RNA extraction).

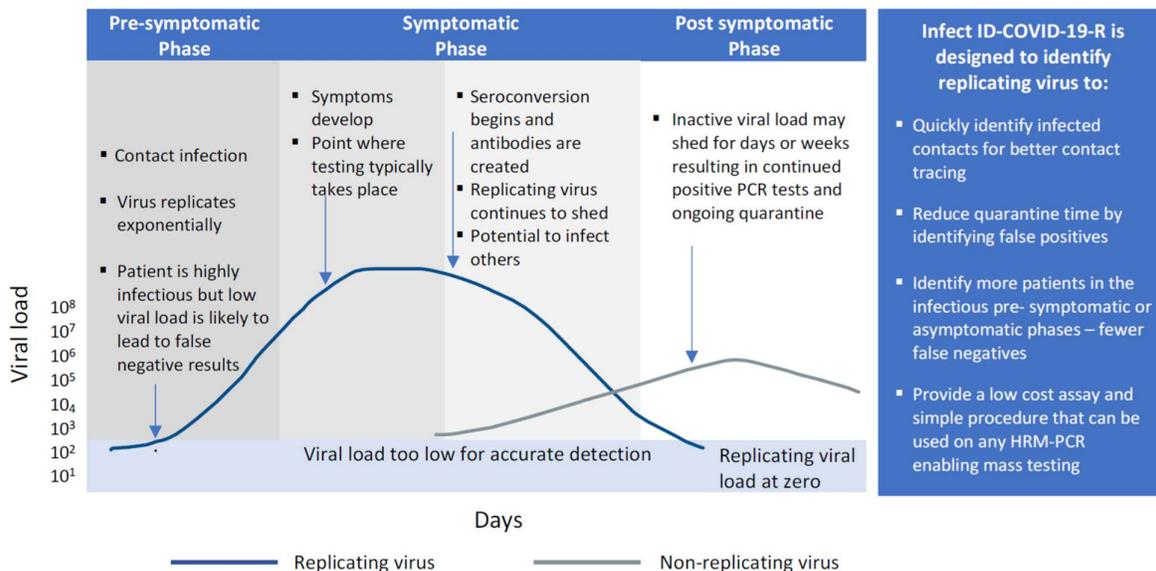
Microbio Chief Scientific Officer Dr Flavia Huygens said, “With current tests, the only way to know if a person is actually shedding replication-competent virus is to culture the virus, which can take several days.

“It’s just not feasible to do this for every patient, which is why we’re so excited about our new, rapid test.”

Dr Huygens said, “We know that one of the biggest limitations of current Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) based tests – is that they can’t tell if the virus they’re picking up is replicating or simply inactive pieces of the virus that the body sheds as it fights the virus.

“We believe this is why we have all seen multiple reports of people continuing to test positive for SARS-CoV-2 weeks or even months after their initial diagnosis.”

Paul Carboon, Microbio CEO said, “One of the many benefits of our test is that it is platform agnostic and will perform on many off the shelf PCR machines with melt curve capabilities, hence we expect many labs already have the equipment and skilled staff to take advantage of the InfectID-COVID-19-R assay.



“This is a potential breakthrough —as the world looks to open up safely, having accurate real-time testing is extremely important while we await the development and mass production of an effective vaccine,” Mr Carboon said.

“The company has the immediate capacity to provide kits to labs wanting to evaluate the test and is in the process of establishing manufacturing in Australia.

“We have had considerable international interest including from the United States.”

Validation testing was conducted by 360 biolabs, an Australian National Association of Testing Authorities (NATA) accredited clinical trial speciality laboratory.

The InfectID-COVID-19-R test has been developed in collaboration with DMTC’s Medical Countermeasures Initiative (MCMi), QUT (Queensland University of Technology) and Defence scientists. This project team have completed *in-vitro* and pre-clinical studies and the next step is to undertake clinical trials to complement the 360biolabs validation. The test is ready to be implemented in NATA-accredited laboratories.

Microbio is seeking partnerships, clinical trials, customers, investment and government support to attain domestic and international regulatory approval and establish onshore manufacturing.

For more information, visit [microbio.com.au/about](https://microbio.com.au/about).

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### **About Microbio**

Microbio Pty Ltd is an Australian biotech start-up company based in Brisbane. It was established and motivated by the desire to eliminate the clinical frustration, vast expense and immense human suffering that sepsis causes. The team at Microbio has brought together the latest advances in bioinformatics, genomics and molecular microbiology to develop a unique and revolutionary pathogen detection test, initially aimed at identifying blood stream infection and sepsis-causing pathogens. The team pivoted when COVID-19 emerged to develop a SARS-CoV-2 diagnostic test. The Microbio team is working tirelessly to deliver their game-changing new test to the millions of patients who will benefit from better pathogen diagnosis. Microbio is actively seeking partners worldwide, especially in population health and infectious diseases, who will integrate the new InfectID-COVID-19-R test into their proactive regional and corporate testing protocols. Additionally, Microbio are looking to work with pathology and laboratory partners who can help deliver the InfectID-COVID-19-R test widely, including to remote locations, to improve patient outcomes.

### **About InfectID®**

InfectID is designed to deliver real-time pathogen identification and antibiotic resistance profiling. Dr Flavia Huygens developed and validated a process that targets a pathogen's DNA 'fingerprint', found at a specific point in each pathogen's genetic code. By focusing on a small section of the genome rather than the whole genome, the process is fast, inexpensive, highly sensitive and can be adapted to target different pathogens. The test was refined and became the foundation of the InfectID suite of tests which uses real-time Polymerase Chain Reaction (PCR) to identify pathogen species directly from samples, including whole blood without the need for pre-culture. The process lends itself to being used to determine the presence of specific types of viruses, making it ideal for detecting SARS-CoV-2. InfectID tests make use of the melt curve capability of PCR machines. They do not use probes, making them less expensive than standard PCR tests, and not affected by the supply issues that have occurred in recent months.

### **Microbio Founders**

#### **Dr Flavia Huygens | Executive Director, Founder and Chief Scientific Officer**

Flavia's 30-year teaching and research career has focused on molecular microbiology, with a particular focus on human pathogens. Flavia's expertise and exceptional ability to bring together emerging technology in molecular microbiology, genomics, proteomics and bioinformatics have culminated in the creation of InfectID. Flavia recently received a DMTC Ltd 2020 Excellence Award in recognition of exemplary professional conduct in support of DMTC's objectives.

#### **Paul Carboon | Executive Director, Founder and Chief Executive Officer**

Paul has 25 years of commercialisation experience in the technology sector. Paul brings a deep understanding of commercial and product management as well as product development. Paul is a leader in biotechnology innovation. He currently serves on the AusMedtech national advisory group and is a founding adviser with the BridgeTech Program. Paul is also an Honorary Fellow of BioTechnology at Melbourne University and has been a judge for the prestigious Eureka awards.

