Southland





EXECUTIVE SUMMARY

The world is currently in dire need of a quick and easy COVID-19 test kit that provides a positive and reliable response based on exposure to the virus in minutes not days.

Existing laboratory and hospital PCR tests are slow, require manual input and manual labour and they are not always reliable.

Some of the media promoted Point of Contact (POC) rapid tests merely identify antibodies that may only show up in a patient many weeks after having the virus. These tests are not a front line strategy appropriate for fighting a pandemic. POC tests may not show antibodies in a positive infected carrier for many weeks, who after undergoing a clear POC Test are unaware and continue to mix in the community infecting others.

The Acu Corona 2.0 is the only Covid 19 test, that cuts down on human error by almost 60% by printing the primers, probes and controls directly onto the testing plates. It is an automatable and customisable Polymerase Chain Reaction (PCR) test ,that tests the viral RNA directly, in which the laboratory is able to determine the moment a patient is infected with the actual coronavirus (not just anti-bodies that will only show up weeks after they are sick).

The Acu-Corona 2.0 produces results in less than 1.5 hours, not days as many of the existing laboratory tests do.

Because of Acu-Corona's 2.0 unique technology false negatives and false positives are eliminated. Acu-Corona 2.0 offers a complete solution to the global Pandemic.



2 PROBLEM

The world was not properly prepared to provide testing for millions of people who are exposed to the Covid-19 virus. In addition, the tests that were available were either antiquated PCR (laboratory) technology that required manual input and manual labour leading to inefficiencies in time responses, additional staff costs and the unreliability of results, or POC rapid tests that tested only for the antibodies, only present weeks after a patient had been infected.

This means that many carriers undertaking PCR medical testing were delivered conclusions after many days and results were potentially showing a false negative or a false positive or they were delivered results by a POC rapid test showing they had no anti bodies present when they may in fact have had the coronavirus. These people all returned to the population and continued the spread of the virus unaware of their condition, mixing and spreading the virus.

Countries in Asia recognized the risk with using old technology and not testing appropriately or only testing for antibodies. They successfully began testing with PCR front line technology and testing more than 10,000 patients per day providing real results in a short amount of time. Vigorous testing and quarantine have been effective in these countries and new cases have begun to decline.



3 PROPOSED SOLUTION

Acu-Corona 2.0 is an in vitro qualitative diagnostic assay based on real-time reverse transcription and polymerase chain reaction (RT-PCR) and that detects SARS-Cov-2 RNA in RNA samples extracted from the patients. Responding to the Singaporean outbreak, the Acu-Corona 2.0 test was developed and it quickly and cheaply provided mass diagnoses with 46 samples per every 1.5-hr qRT-PCR run.

Testing in Europe, Japan, the United States and elsewhere have hit roadblocks for lack of test kits and reaching maximum throughput for their labs and using antiquated technology. However, Acu-Corona 2.0 provides the solution.

Additionally, Acu-Corona's 2.0 unique method for pre-printing RT-PCR DNA primers and probes into the 96 well array plates compared to traditional shipping methods that would place kits in cold tubes drastically reduces the chance for losses in perishables should the global supply chain be interrupted.

The Acu-Corona 2.0 is also versatile. The kits can be run on the four most widely available PCR systems: ABI7500 Fast, Roche LC480, Agilent and Bio-Rad CFX96.

Testing kits are available immediately. Kits are currently exempted by the Therapeutic Goods Administration (TGA) in Australia, CE Approved in Europe and also FDA Approved in the USA.

Full technical data specification can be found in Appendix A to include efficacy rates and all certificates and compliance. Appendix A also provides the brochures and explanations of the product.



4 QUICK FACTS

- It is universally accepted that a pandemic is more appropriately addressed through RT-PCR (the Acu-Corona 2.0 system) as this type of test actually identifies the presence of the coronavirus the moment it is present in a patient. The Point of Contact (POC) rapid testing that merely identifies anti-bodies in a patient has a place in the testing regime, but it is not appropriate for front end pandemic control due to the long delay of antibodies appearing in a patient.
- The Acu-Corona 2.0 testing processes are very robust and operator errors due to human input is cut down by automating the wells, through the Acu-Corona 2.0 technology of dried primers, probes, positive controls and internal controls, built into the test kit. Other test Kits require manually adding of primers, probes, positive controls and internal controls.
- The Acu-Corona 2.0 predisposes and applies robotics which are inbuilt to produce reproducible results. In this time of human infectivity, robotics assists in making test-kits which consistently give ACCURATE results, which is the cornerstone of addressing and stopping Pandemics.
- The automation of the Acu-Corona 2.0 processes provides stability, accuracy, consistency and reliability of test results with a 100% success rate in no false positives or negatives.
- The manual processes of other testing kits mean less stability, accuracy, consistency and reliability of test results.
- The manual processes of other testing kits require skilled staff, additional cost and supervision and dependent on the skills and experience of each microbiologist overseeing and interpreting the result. This can result in mistakes and inconsistencies.



- Besides positive and negative controls built into the Acu-Corona 2.0 test kits there
 are internal controls to ascertain the functionality of the reaction mix for correct
 amplification of the pathogen target.
- The Acu-Corona 2.0 automation and in-built control process and technology means a reduced time to produce results of 1.5 hours.
- The Acu-Corona 2.0 test kits are also designed to be used in conjunction with existing laboratories PCR machines, this leads to less cost and better integration into current operations and available infrastructure. The most used PCR machines all integrating with the Acu-Corona 2.0 test kits are:

ABI 7500 Bio-Rad CFX96

Roche LC 480 Agilent

- The nearest competitor is Cepheid's automated product Xpert Xpress Sars-Cov-2, but it requires the purchase of Cepheid's own proprietary testing machine versus the Acu-Corona 2.0 which runs on the above common machines. Purchasing and installing new PCR testing machines in all laboratories and hospitals is a logistical, practical, timing and financial major impediment.
- The Acu-Corona 2.0 technology is the only testing kit in the market that uses its proprietary unique technology and its own intellectual property to have dried and embed primers, probes, positive and internal controls to the bottom of the well plate, and it is precisely this technology that gives rise to the stability, consistency, accuracy and reliability of the final patient test results not obtainable to the same standard with other testing systems. There is in reality no real competitor to the Acu-Corona 2.0 test kit because the other systems use antiquated manual input and manual labor in their testing systems that often result in instability and inconsistency in accuracy and reliability of patient testing results.



- The Acu-Corona 2.0 system is a unique state of the art new front line PCR testing technology set up for immediate application world-wide as a one stop shop for the current pandemic, delivering swabs and preservation fluid for the front line and in the field collecting patient samples, followed by automated RNA extraction in the laboratory or hospital (using optimal German technology not used by any other test system) with full adaptability to all popular, regularly used, and already installed PCR machines in the majority of hospitals and laboratories internationally. It will produce 100% no false positives and no false negatives.
- Acu-Corona 2.0 is also positioned to be immediately customized to address different gene detections should the virus mutate or there are different strains and pandemic shift studies are required.
- Acu-Corona 2.0 has been developed and is owned by Acumen Research Laboratories Pte Ltd (Acumen) (Refer: (www.acumen-research.com) which has from day one, tracked the virus when it hit the shores of Singapore. Singapore was the second city after China to be hit. Acumen is a Singaporean company with offices and manufacturing in Singapore and a wide network of partners spanning the globe. Acumen is at the forefront of new health technologies, including developing diagnostic tests, manufacturing diagnostic tests, selling and managing tests in their clinical laboratory. The RT PCR Acu Corona 2.0 is manufactured in Singapore. Singapore has some of the highest international quality assurance standards. The Acu-Corona 2.0 test kits have achieved full compliance, and the highest levels of certification. It has been applied and used as the benchmark testing system extensively in Singapore, Malaysia and Indonesia.
- Acumen has existing infrastructure and raw material stockpiles for the product and they are geared for immediate large-scale new manufacturing output to meet the immediate international demand for this benchmark coronavirus PCR testing technology.



5 CONCLUSION

Acu-Corona 2.0 provides a fast and cheap method for testing patients now. When purchased each kit provides 276 patients. The Acu-Corona 2.0 is already a proven test with success in Asia and now Germany and with availability to ship to anywhere in the world quickly.

6 POINT OF CONTACT

Southland Corporation Pty Ltd, part of the Ventigo Group (www.ventigo.com.au) is the International Distributor and Marketing Agent of the Acu-Corona 2.0 Technology with on the ground teams in Australia, USA, Africa, South Asia (India), the Middle East and the UK. Southland is a business partner of Nevcare and has appointed Nevcare as a sub distributor and marketing agent.

For inquiries of Nevcare please contact:

Nev Hyman Chairman Nevcare Limited

Ph: +61 411 466 697 | Email: nev@nevcare.com.au

Brian Usher Director Nevcare Limited

Ph: +61 412 910 857 | Email: brian@nevcare.com.au



ATTACHMENTS:

Technical Data Package and Marketing Package

Drop Box Link Technical Data:

https://www.dropbox.com/sh/2zk2xdvm73lc8cz/AAB0tiErTWQ0fl0dsjb9kH0Ua?dl=0

Drop Box Link Marketing Package:

https://www.dropbox.com/sh/rbcxy8fmx6mf1z4/AACHupCboNr1kN3yrhnzQbQMa?dl=0

Drop Box Link Profile of the Developer and Manufacturer Acumen:

https://www.dropbox.com/sh/auva947b5sigv90/AADLhS8cGFj-IN1IPJ1r2DSMa?dl=0