

COVID-19 TECH NEWS



COBRA BIOLOGICS

VACCINE MANUFACTURE

Cobra Biologics, an international CDMO for biologics and pharmaceuticals, has signed a supply agreement with AstraZeneca.

This is to provide GMP manufacture of the adenovirus vector-based COVID-19 vaccine candidate AZD1222, previously known as ChAdOx1 n-CoV-19.

The production agreement is part of AstraZeneca's recently announced in-licensed programme with the University of Oxford to ensure broad and equitable supply of the vaccine throughout the world, at no profit during the COVID-19 pandemic.

→ cocrabio.com

PCR BIOSYSTEMS

PCR KIT TO BOOST SENSITIVITY

PCR Biosystems has launched qPCRBIO Probe 1-Step Virus Detect – a high-concentration 4x RT-qPCR kit designed specifically for ultra-sensitive, high-throughput detection of viral RNA sequences, including SARS-CoV-2.

The new kit, which marks the latest addition to PCR Biosystems' specialised RT-qPCR offering, enables users to add more sample to their reactions to boost analytical sensitivity.

PCR Biosystems has validated the new qPCRBIO Probe 1-Step Virus Detect kit for qualitative detection of the SARS-CoV-2 nucleic acid.

It is suited to high-throughput testing of COVID-19 clinical samples, with laboratory-developed assays or as a component of diagnostic testing kits.

→ pcrbio.com

ICENI DIAGNOSTICS

POCT DIAGNOSTICS

A new diagnostic tool being developed by the University of Warwick and Icen Diagnostics may allow on-the-spot detection of coronavirus infection, without facilities, using a simple disposal device.

The new diagnostic tool uses glycans (sugars) to detect the virus, with a tool very similar to a home pregnancy test.

The diagnostic proof of principle has been demonstrated in initial



studies, but the partnership is now searching for investment or philanthropic donors to take the concept forward.

Professor Robert Field, Co-Founder and CEO of Icen Diagnostics, said: "Combining our expertise has enabled us to move this project along rapidly – including initial clinical evaluation."

→ icenediagnostics.com



INTEGRA BIOSCIENCES

ASPIRATION SYSTEM

The pandemic has led to the development of a number of novel RT-PCR based tests to detect the SARS-CoV-2 virus in patients.

As the situation has progressed, there is now a need for serology tests to evaluate the immune response of patients, as well as to assess immunity in the general population.

Most serological tests are based on sandwich ELISA techniques to detect antibodies against the virus in patients who have recovered from COVID-19.

The protocols for these ELISAs require several aspiration steps to remove buffers after incubation and washing, and the safest way to perform this is using an instrument such as INTEGRA Biosciences' VACUSIP portable aspiration system.

The compact design of the VACUSIP system means it can fit on any bench or into any safety cabinet, offering the flexibility to be used wherever needed.

With a hydrophobic filter to protect against contamination, and a fully autoclavable liquid path for easy decontamination, the VACUSIP is the ideal aspiration system for laboratories working with SARS-CoV-2 samples.

→ integra-biosciences.com

STABILITECH BIOPHARMA

ORAL VACCINE

Stabilitech Biopharma has announced Auckland-based BioCell Corporation as the manufacturer for its COVID-19 vaccine, Ora-Pro-COVID-19.

This represents a crucial next step in the race for a vaccine, bringing the company's vision for an orally administered, double-immunity vaccine ever closer.

BioCell has over 30 years' experience in manufacturing viral vaccines and the signed agreement represents a great opportunity for New Zealand to play a part in the race for a vaccine and showcase its world-leading scientific research credentials.

Human trials for Ora-Pro-COVID-19 are now scheduled to begin in August, with a viable vaccine that could be distributed to millions in the post potentially ready by the end of 2020.

→ stabilitech.com

TREVENA

NEW MOLECULE

A new drug for preventing lung damage and blood clots in people with COVID-19 is being trialled in UK hospitals with support from researchers at the British Heart Foundation Centre of Research Excellence at Imperial College London.

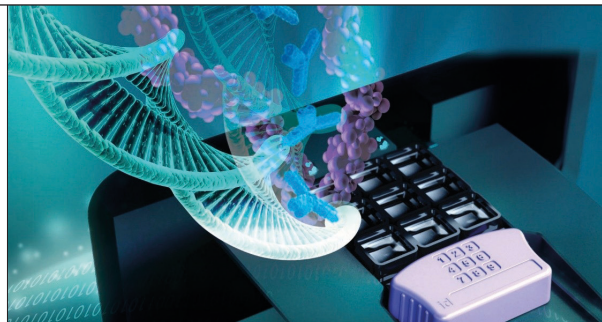
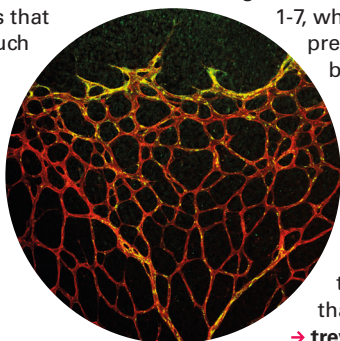
The researchers say the drug, a molecule known as TRV027, could put a brake on many of the dangerous processes that occur in COVID-19, such as lung damage and blood clots. The cell pathways targeted by the drug are thought to be major drivers of severe illness in COVID-19.

The pilot trial will involve 60 patients with confirmed or suspected COVID-19.

The study will follow patients for eight days, during the critical period where some patients' symptoms worsen significantly requiring treatment in ICU and sometimes ventilation.

The molecule, which has been developed by Trevena, aims to restore the balance between two hormones, angiotensin II and angiotensin 1-7, which control blood pressure and affect blood vessels. Usually this balance is maintained by ACE-2, which sits on cell surfaces and is also the entry point for SARS-CoV-2, the coronavirus that causes COVID-19.

→ trevena.com



RANDOX

CYTOKINE TESTING

An innovative method of monitoring treatment efficacy and recovery of COVID-19 has been unveiled by global diagnostics company Randox Laboratories.

The test, which looks for the presence of cytokines (a type of small protein), is performed on Randox's patented Biochip Technology – this can simultaneously detect multiple analytes from a single patient sample.

Cytokines play a vital role in the immune system and are known to be involved in the body's response to a variety of inflammatory and infectious disease, such as COVID-19.

Designed to make cost, time and resource savings for a range of diagnostic laboratories, Randox Cytokine Biochips can detect up to 12 cytokines and growth factors from a single patient sample.

→ randox.com

Trace elements



Black Country Pathology Services

ASSAY	PRICE	TURNROUND
Bromide	£80	3 working days
Chromium blood	£15	1-2 working days
Chromium urine	£20	2-5 working days
Cobalt blood	£15	2-5 working days
Cobalt urine	£20	2-5 working days
Chromium & Cobalt	£28	1-2 working days
Copper urine	£18	2-3 working days
Lead	£18	2-3 working days
Selenium, Copper & Zinc (serum)	£11 each or £25 all three	1-2 working days

Quality service
at affordable
prices

@ rajvindergarcha@nhs.net

www.bcpathology.org.uk

0121 507 5348

Clinical Biochemistry, City Hospital
Dudley Road, Birmingham B18 7QH

@BCPathology BCPPathology

Black Country Pathology TV News

