

CAMBRIDGE COMPANIES PARTNER ON GAME-CHANGING PLATFORM FOR LATERAL FLOW TESTING

- **Unique lateral flow (LF) technology, relevant to COVID-19 testing has been submitted for UK patent protection by Coronex Limited ('Coronex').**
- **The technology has been demonstrated to detect SARS-CoV-2 antibodies specifically and sensitively and can be adapted rapidly to detect antibodies to new SARS-CoV-2 viral mutations that arise.**
- **The technology has the ability to inform the need for repeat vaccinations over time.**
- **Coronex brings together Cambridge-based biotechnology companies Activotec and Excivion, with Scottish partners and NHS Scotland.**
- **Coronex is now seeking an investment partner to support further development and validation, to bring this innovative test into early clinical use and extend the technology to other diagnostic areas.**

11 January 2021: Two Cambridge-based biotechnology companies have been instrumental in the development of a game-changing platform for lateral flow (LF) tests that could be vital in the fight against COVID-19.

Excivion Ltd and Activotec Ltd have formed a forward-thinking collaboration with several Scottish partners to develop the unique technology which has now been submitted for UK patent protection by Coronex Limited ('Coronex').

Accurate repeat testing, such as that provided by the new Coronex LF technology, will enable monitoring of antibody responses to vaccination over time, and inform the need for repeat immunisation over the coming months and years.

This proprietary platform technology has been used to develop highly optimised LF tests for SARS-Cov-2 antibodies. The technology also allows the LF tests to be adapted easily and rapidly to detect antibodies to newly isolated variants when mutations arise.

LF tests are used to process samples at the point of care, without the need for specialist laboratory equipment or sample storage. The accuracy and specificity of such tests, and the ability to rapidly adapt to, and detect, viral mutations is critical when faced with the rapid spread of new coronavirus variants.

Coronex's technological advancements optimise the mechanism by which the COVID-19 antibodies are detected in the LF test, thereby minimising ambiguous or inaccurate results whilst also allowing the target antigen to be easily changed. This means the test kits offer clearer, more accurate results, are easily altered to adapt to virus mutations and are cheaper to manufacture. The technology has been developed and tested over six months on a cohort of COVID-19 samples.

Large-scale COVID-19 antibody screenings with high specificity and sensitivity could provide public health authorities with reliable data to monitor the impact of regional and national lockdown restrictions and provide evidence of antibody generation after vaccine immunisations.

Coronex was set up in April 2020 to address unmet needs in LF antibody testing. Partners in the Coronex collaboration are Cambridge based Excivion Ltd and Activotec Ltd, alongside Scottish Health Innovations Ltd (representing NHS Greater Glasgow & Clyde), Scottish industry partners – Lateral Dx Ltd, The Antibody Company Ltd - and investment partner Axon Healthcare Investments Ltd.

The Coronex team believes the new technology also has application beyond the current pandemic, thanks to the platform being readily adaptable to a wide range of disease areas where antibody testing is critical. This includes other infectious diseases and autoimmune diseases.

Coronex is now seeking an investment partner that can support further development and validation, bring this innovative test into early clinical use, and extend the technology to other diagnostic areas.

Chris Littlewood, CEO of Activotec Ltd, based in Cambridge comments:

“We are in no doubt that the Coronex platform has re-engineered and revolutionised lateral flow technology. The adaptability of the technology is vitally important when we see the rapid spread of the new coronavirus variants; and whilst our primary focus has been on SARS-CoV-2, the same core technology could have applications for other infectious agents, or in detecting auto-antibodies in autoimmune disorders or monitoring therapeutic antibodies used as drug treatments. We have proven the technology works and with further investment can accelerate translation into widespread clinical use.”

Graham Watson, Executive Chairman of Scottish Health Innovations Ltd (SHIL) comments:

“The rapid research and development efforts of a homegrown team of experts, combined with the regulatory and commercial expertise of Scottish Health Innovations Ltd (SHIL), has brought Coronex to the stage of patent application. It is a vital breakthrough that we are immensely proud to be part of.

“Whilst the COVID-19 pandemic motivated these efforts, the application of the unique LF technology in other infectious disease areas represents an attractive prospect for investment and acceleration at an incredibly important time.”

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Notes to editor:

- The NHSGGC Biorepository is an invaluable resource for clinical research, providing access to a wide range of fully-consented human tissue samples, including surplus materials from diagnostic and surgical procedures.

- Scottish Health Innovations Limited (SHIL) work in partnership with NHS Scotland to identify, protect, develop and commercialise healthcare innovations to improve patient care.
- Excivion Limited is a biotechnology company developing solutions to the present and emerging healthcare needs of society that are sustainable and affordable by healthcare systems in the face of competing priorities imposed by an ageing population and the emergence of pandemic diseases.
- Lateral Dx Limited provides contract services to businesses operating in the area of Lateral Flow.
- Activotec Limited is a chemical synthesis company providing high technology products and services for chemistry and biochemistry applications. Activotec provides a complete range of synthesizers, chemicals and services for peptide and organic synthesis; and offers scientists a single point of expertise and assistance in research, design and manufacture of new, innovative and practical solutions.
- The Antibody Company Limited is a specialist contract manufacturing company with expertise in the development, production, downstream processing and conjugation of monoclonal antibodies. De-risk promising early-stage technology by using TAC's integrated research and production facilities and over 20 years' experience in developing diagnostics and therapeutics.
- Axon Healthcare Investments Limited is a Glasgow based investment company that seeks to invest in innovative life sciences companies and partner with companies that improve healthcare.