New partnership aims to advance vaccine against MERS coronavirus

Dec 21, 2023

- CEPI to invest funding of up to $34.8 million to Barinthus Bio in addition to funds previously committed to the University of Oxford to develop and stockpile a ready reserve of emergency MERS vaccine candidate, VTP-500.
- VTP-500 project with Barinthus Bio and University of Oxford uses tested ChAdOx1 platform.
- If successful in Phase II trials, this will progress VTP-500 significantly towards regulatory approval and doses could be rapidly deployed in a clinical trial setting in response to a substantial outbreak.

OXFORD, United Kingdom, Dec. 21, 2023 (GLOBE NEWSWIRE) -- Barinthus Biotherapeutics plc (NASDAQ: BRNS), formerly Vaccitech plc, today announced a project with the Coalition for Epidemic Preparedness Innovations (CEPI) and the University of Oxford, aiming to fast-track the development of a vaccine candidate known as VTP-500 for the prevention of Middle East Respiratory Syndrome (MERS), the often fatal disease caused by the MERS coronavirus. Barinthus Bio is a clinical-stage biopharmaceutical company developing novel T cell immunotherapeutic candidates designed to guide the immune system to overcome chronic infectious diseases, autoimmunity, and cancer.

The project will see CEPI, Barinthus Bio, an Oxfordshire-based clinical-stage biopharmaceutical company, and the University of Oxford together take a MERS vaccine from early development through Phase II clinical trials and, if the Phase II clinical trials are successful, on into the development of an investigational ready reserve[1] of 100,000 doses to be rapidly deployed in a clinical trial setting in the event of a substantial outbreak.

“Coronaviruses are one of the most urgent infectious disease threats the world faces, so it’s vital that we get on with developing medical defences against this particularly deadly one – MERS,” said Dr Richard Hatchett, CEPI’s Chief Executive Officer. “With this project, we will both advance scientific understanding of the coronavirus family as a whole, and at the same time bolster humanity’s ability to respond to an ever-present epidemic threat.”

“The COVID-19 pandemic showed us the critical importance of vaccines in saving millions of lives around the world,” said Professor Dame Sarah Gilbert, Pandemic Sciences Institute, University of Oxford. “We had a head-start in our development of the Oxford/AstraZeneca COVID-19 vaccine, thanks to the many years already spent researching a vaccine for another coronavirus, MERS. This new partnership will help ensure the world is better prepared with vaccines for future outbreaks.”

“We are thrilled to be working with the University of Oxford and CEPI on the development of this important vaccine candidate,” said Bill Enright, Barinthus Bio’s Chief Executive Officer. “There is an active need for a MERS vaccine for at-risk populations and travellers in the Middle East. As we observed during the COVID-19 pandemic, it is critical to ensure we have the necessary countermeasures in place to protect people around the world from deadly pathogens such as MERS which have the potential for future outbreaks.”

The three-way partnership, which awards up to $34.8 million to Barinthus Bio in addition to funds previously committed to the University of Oxford, builds on the early-stage development of VTP-500, which is based on the same viral vector platform technology as the licensed Oxford-AstraZeneca COVID-19 vaccine, Vaxzevria. VTP-500 has already completed Phase I clinical trials in Britain and Saudi Arabia, and the University of Oxford is now conducting a CEPI-funded extension to the Phase I trial in the UK to assess vaccination of older adults, the age group most in need of this vaccine. The VTP-500 programme was awarded PRIME designation earlier in December by the European Medicines Agency (EMA).

MERS is a severe respiratory infection caused by MERS-CoV, a coronavirus that was first identified in 2012 in Saudi Arabia. It has caused more than 2,600 human infections in at least 27 countries since it first emerged, and it has a case-fatality rate of more than 35 percent. There are as yet no licensed vaccines or treatments for MERS.

Enabling equitable access to VTP-500

CEPI, the University of Oxford and Barinthus Bio are committed to enabling equitable access to VTP-500 in line with CEPI’s Equitable Access Policy so the vaccine is first available to populations when and where it is needed to end an outbreak or curtail an epidemic, regardless of ability to pay. If the vaccine is successful in Phase II trials, CEPI will support production of an investigational ready reserve of 100,000 doses which can be rapidly deployed in a clinical trial setting in response to an outbreak of MERS. CEPI also has the ability to support technology transfer to an additional appropriate regional manufacturer to enable supply for low- and middle-income countries. The vaccine will be made available to low- and middle-income countries at a price no higher than the cost of manufacturing plus 10 percent.

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[1] An investigational ready reserve is an agreed quantity of investigational doses for potential use in a clinical trial.

Notes to Editors

EMA PRIME Designation

Due to VTP-500’s potential in significantly addressing the unmet need for MERS, the EMA has confirmed support for the program through the PRIME designation. PRIME enhances support for the development of medicines that target an unmet medical need, offering early and proactive support to medicine developers to optimise the generation of robust data on a medicine's benefits and risks and enable accelerated assessment of medicines applications.

Emergency Use
The agreement refers to supply in Outbreaks defined as a Public Health Emergency of International Concern declared by WHO, or a public health emergency on a national or regional scale declared by one or more public health agencies.

About CEPI

CEPI is an innovative partnership between public, private, philanthropic, and civil organisations, launched at Davos in 2017. Its mission is to accelerate the development of vaccines and other biologic countermeasures against epidemic and pandemic threats so they can be accessible to all people in need.

CEPI has supported the development of over 30 vaccine candidates against its priority pathogens—Chikungunya virus, Ebola Virus Disease, Lassa virus, Middle East Respiratory Syndrome coronavirus, Nipah virus, Rift Valley Fever virus and SARS-CoV-2—and is a leading funder of research into broadly protective coronavirus vaccines, which could protect against future variants of COVID-19 as well as other coronaviruses with epidemic and pandemic potential. The organization has also invested in the development of rapid response platforms to develop vaccines against Disease X (the threat of an unknown virus).

CEPI has contributed to a number of scientific breakthroughs, including the first Phase 3 trial of a Chikungunya vaccine and the advancement of the first ever Nipah and Lassa vaccines into Phase I trials. The organization played a central role in the global response to COVID-19, supporting the development of one of the world's largest portfolios of vaccines against SARS-CoV-2, seven of which have been approved for domestic or global use. It also co-led COVAX, the global initiative to deliver fair and equitable access to COVID-19 vaccines, which has delivered approximately 2 billion doses of vaccine to 146 countries around the world.

CEPI's five-year plan for 2022-2026 aims to dramatically reduce or even eliminate the future risk of pandemics and epidemics. Central to the plan is CEPI's goal to compress the time taken to develop safe, effective, globally accessible vaccines against new threats to just 100 days. Achieving this '100 Days Mission', which has been embraced by the G7 and G20, would give the world a fighting chance of containing a future outbreak before it can spread to become a global pandemic.

Visit our news page for the latest updates. Follow us via @CEPIvaccines, @DrRHatchett, LinkedIn, and Facebook.

About Barinthus Biotherapeutics

Barinthus Bio is a clinical-stage biopharmaceutical company developing novel T cell immunotherapeutic candidates designed to guide the immune system to overcome chronic infectious diseases, autoimmunity, and cancer. Helping people living with serious diseases and their families is the guiding principle at the heart of Barinthus Bio. With a broad pipeline, built around three proprietary platform technologies: ChAdOx, MVA and SNAP; Barinthus Bio is advancing a pipeline of five product candidates across a diverse range of therapeutic areas, including: VTP-300, an immunotherapeutic candidate designed as a potential component of a functional cure for chronic HBV infection; VTP-200, a non-surgical product candidate for persistent high-risk human papillomavirus (HPV); VTP-1000, an autoimmune candidate designed to utilize the SNAP-Tolerance Immunotherapy (TI) platform to treat patients with celiac disease; VTP-850, a second-generation immunotherapeutic candidate designed to treat recurrent prostate cancer; and VTP-1100, a preclinical cancer candidate designed to utilize the SNAP-Cancer Immunotherapy (CI) platform to treat patients with HPV-related cancer. Barinthus Bio's proven scientific expertise, diverse portfolio and focus on pipeline development uniquely positions the company to navigate towards delivering treatments for people with infectious diseases, autoimmunity and cancers that have a significant impact on their everyday lives. For more information, visit www.barinthusbio.com.

Barinthus Bio Forward-Looking Statements

This press release contains forward-looking statements regarding Barinthus Bio within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, which can generally be identified as such by use of the words "may," "will," "plan," "forward," "encouraging," "believe," "potential," and similar expressions, although not all forward-looking statements contain these identifying words. These forward-looking statements include, without limitation, express or implied statements regarding the Company's future expectations, plans and prospects, including the potential benefits of VTP-500 for the treatment of MERS. Any forward-looking statements in this press release are based on Barinthus Bio management's current expectations and beliefs and are subject to numerous risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks and uncertainties related to the success, cost and timing of Barinthus Bio's pipeline development activities and planned and ongoing clinical trials, Barinthus Bio's ability to execute on its strategy, regulatory developments, the risk that Barinthus Bio may not realize the benefits related to its rebranding and name change, Barinthus Bio's ability to fund its operations and access capital, global economic uncertainty, including disruptions in the banking industry, the conflict in Ukraine, and the conflict in Israel and Gaza, and other risks identified in Barinthus Bio's filings with the Securities and Exchange Commission (the "SEC"), including its Annual Report on Form 10-K for the year ended December 31, 2022, its Quarterly Reports on Form 10-Q and subsequent filings with the SEC. Barinthus Bio cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. Barinthus Bio expressly disclaims any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

About Pandemic Science Institute, University of Oxford

The Pandemic Sciences Institute at the University of Oxford is a research institute with a mission to discover, create and enable practical solutions to infectious disease threats worldwide. The Institute is hosted by the University's Nuffield Department of Medicine. Visit our website and Follow us on X (formerly Twitter).

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