Identification and Characterization of a Potential Therapeutic COVID-19 Antibody by Vir Biotechnology Published in Nature

May 18, 2020

- Human antibody potently neutralizes SARS-CoV-2 and related viruses, suggesting high barrier to resistance
- Clinical testing expected to begin this summer in collaboration with GSK

SAN FRANCISCO, May 18, 2020 (GLOBE NEWSWIRE) -- Vir Biotechnology, Inc. (Nasdaq: VIR) today announced the publication of research findings from the company's efforts to develop therapeutics for COVID-19 in the May 18, 2020 issue of the journal Nature. The paper, entitled "Cross-neutralization of SARS-CoV and SARS-CoV2 by a human monoclonal antibody" (Pinto, et al., Nature), details the identification and characterization of S309, an antibody isolated from a patient who recovered from severe acute respiratory syndrome (SARS) in 2003, which has been shown to prevent SARS-CoV-2 live virus infection of cells. Vir is advancing two clinical development candidates based on the S309 antibody as potential therapeutics for COVID-19, VIR-7831 and VIR-7832, in collaboration with GlaxoSmithKline plc (LSE/NYSE: GSK).

"Remarkably, we believe S309 likely covers the entire family of related coronaviruses, which suggests that, even as SARS-CoV-2 continues to evolve, it may be quite challenging for it to become resistant to the neutralizing activity of S309," said Herbert "Skip" Virgin, M.D., Ph.D., Chief Scientific Officer, Vir. "In addition, S309 exhibits potent effector function in vitro, potentially allowing the antibody to engage and recruit the rest of the immune system to kill off already infected cells. We have seen in animal models of other respiratory infections, such as influenza, that effector function significantly enhances the activity of antibodies that are already potently neutralizing."

"Potency, coupled with a high barrier to resistance, are hallmarks of a superior antiviral," said Phillip S. Pang, M.D., Ph.D., Chief Medical Officer, Vir. "We have seen this with mAb114, a single, potent monoclonal antibody that has been shown in a Phase 2/3 trial in the Democratic Republic of Congo to markedly reduce mortality from Ebola."

mAb114 is a monoclonal antibody that was isolated by Vir scientists in collaboration with the National Institutes of Health (NIH) and other government agencies using the same approach used to discover and develop S309. mAb114 is being developed by Ridgeback Biotherapeutics LP and the NIH.

The paper can be accessed on the Nature website here. To learn more about Vir's efforts to develop therapies for COVID-19, visit https://investors.vir.bio/press-releases.

About VIR-7831

VIR-7831 is a monoclonal antibody that has demonstrated the ability to neutralize SARS-CoV-2 live virus in vitro. The antibody binds to an epitope on SARS-CoV-2 that is shared with SARS-CoV-1 (also known as SARS), indicating that the epitope is highly conserved, which may make it more difficult for escape mutants to develop. VIR-7831 has been engineered to have an extended half-life.

About VIR-7832

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About Vir’s Antibody Platform

Vir has a robust method for capitalizing on unusually successful immune responses naturally occurring in people who are protected from, or have recovered from, infectious diseases. The platform is used to identify rare antibodies from survivors that have the potential to treat and prevent rapidly evolving and/or previously untreatable pathogens via direct pathogen neutralization and immune system stimulation. Vir engineers the fully human antibodies that it discovers to enhance their therapeutic potential. This platform has been used to identify and develop antibodies for pathogens including Ebola (mAb114, currently in use in the Democratic Republic of Congo), hepatitis B virus, influenza A, malaria, and others.

About Vir Biotechnology

Vir Biotechnology is a clinical-stage immunology company focused on combining immunologic insights with cutting-edge technologies to treat and prevent serious infectious diseases. Vir has assembled four technology platforms that are designed to stimulate and enhance the immune system by exploiting critical observations of natural immune processes. Its current development pipeline consists of product candidates targeting hepatitis B virus, influenza A, SARS-CoV-2, human immunodeficiency virus and tuberculosis. For more information, please visit www.vir.bio.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "could," "expect," "plan," "anticipate," "believe," "estimate," "goal," "intend," "potential," "candidate," "continuing," "developing" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on Vir's expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties. Actual results may differ materially from these forward-looking statements. Forward-looking statements contained in this press release include statements regarding the timing of commencement of clinical trials of the company's antibodies to treat and prevent COVID-19, the ability of the company's antibodies to neutralize the SARS-CoV-2 virus, the company's efforts to identify additional antibodies, the ability of S309 to cover the entire family of related coronaviruses or S309's ability to recruit the rest of the immune system to...
kill off already infected cells, as well as statements about the highly conserved nature of VIR-7831 and VIR-7832 making it more difficult for escape mutants to develop. Many factors may cause differences between current expectations and actual results including unexpected safety or efficacy data observed during preclinical or clinical studies, challenges in neutralizing SARS-CoV-2, difficulty in collaborating with other companies or government agencies, and challenges in accessing manufacturing capacity. Other factors that may cause actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in Vir’s filings with the U.S. Securities and Exchange Commission, including the section titled “Risk Factors” contained therein. Except as required by law, Vir assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

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