



Vir Biotechnology Announces New Preclinical Research Demonstrating VIR-7831 Maintains Neutralizing Activity Against the SARS-CoV-2 California Variant

April 5, 2021

- Data add to growing body of pre-clinical evidence demonstrating that VIR-7831 maintains activity against all known circulating variants of concern –
- Plasma from vaccinated individuals and several therapeutic monoclonal antibodies showed a reduction in neutralization potency against the California variant –

SAN FRANCISCO, April 05, 2021 (GLOBE NEWSWIRE) -- Vir Biotechnology, Inc. (Nasdaq: VIR) today announced new preclinical research demonstrating the ability of VIR-7831, the company's investigational SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus-2) monoclonal antibody (mAb), to maintain its neutralizing activity against a mutation in the receptor binding domain (RBD) of SARS-CoV-2, called L452R, which is found in the California variant (B.1.427/B.1.429). Study results also demonstrate that the L452R mutation reduced both the neutralization potency of plasma from vaccinated and convalescent donors and the neutralization activity of 14 RBD-specific and 10 N-terminal domain (NTD)-specific monoclonal antibodies, including three clinical-stage mAbs. Data were published on April 1, 2021 on [bioRxiv](https://www.biorxiv.org/), and have been submitted to a peer-reviewed journal for future print publication.

In this new study, researchers at Vir and the University of Washington, report the rapid and exponentially increasing spread of the California variant throughout all 50 states and in 29 additional countries worldwide, and characterize the impact of its three mutations: S13I and W152C in the NTD and L452R in the RBD.

Data from 43 vaccinated donors and nine convalescent donors demonstrated that, in a pseudotyped virus system, the S13I, W152C and L452R mutations reduced the neutralization potency of plasma by three-to-six-fold. In addition, the L452R mutation reduced the neutralization activity of 14 out of 35 RBD-specific mAbs, including three clinical-stage antibodies. Researchers also observed a complete loss of neutralization by all NTD-specific mAbs that is mediated by an unconventional escape mechanism. VIR-7831, which targets a non-receptor binding motif (RBM) epitope, was unaffected by the L452R mutation.

"The rapid increase in frequency of this variant in California and neighboring states and its ability to confer some degree of resistance to vaccines and antibody therapies is concerning," said David Veesler, Ph.D., associate professor of biochemistry, University of Washington in Seattle. "The reduced sensitivity of this variant to plasma antibodies results from three individual spike mutations that mediate evasion from both RBD (partial) and NTD (total) specific antibodies. Together, these data demonstrate that if we are to combat current and anticipated future variants, there is a critical need for monoclonal antibodies that target invariant regions of the spike protein with the potential for a high barrier to resistance."

"These data add to the growing body of evidence supporting our rationale for targeting a non-RBM epitope and the potential of VIR-7831 to combat the current variants of concern, including the evasive California variant, either as monotherapy or as a foundational therapy for future combinations," said George Scangos, Ph.D., chief executive officer of Vir Biotechnology. "We believe VIR-7831 could significantly impact both the trajectory of the pandemic and the outcomes of patients facing the more dire consequences of COVID-19. We look forward to continuing to work with global regulatory authorities to bring VIR-7831 to patients as quickly as possible."

VIR-7831 is an investigational compound, not approved by the U.S. Food and Drug Administration or any other regulatory authority.

About VIR-7831

VIR-7831 is an investigational dual-action SARS-CoV-2 monoclonal antibody. Preclinical data suggest it has the potential to both block viral entry into healthy cells and clear infected cells. The antibody binds to an epitope on SARS-CoV-2 that is shared with SARS-CoV-1 (the virus that causes SARS), indicating that the epitope is highly conserved, which may make it more difficult for resistance to develop. VIR-7831, which incorporates Xencor's Xtend™ technology, also has been designed to achieve high concentration in the lungs to ensure optimal penetration into airway tissues affected by SARS-CoV-2 and to have an extended half-life.

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 COVID-19, hepatitis B virus, influenza A and human immunodeficiency virus. 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," "plan," "potential," "aim," "promising" 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. Forward-looking statements contained in this press release include, but are not limited to, statements regarding the timing of availability of program updates and data disclosures related to VIR-7831, the ability of VIR-7831 to treat and/or prevent COVID-19, the ability of VIR-7831 to neutralize the SARS-CoV-2 live virus and the ability of VIR-7831 to maintain activity against variant strains of the virus. 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 the treatment of hospitalized patients, difficulties in collaborating with other companies or government agencies, challenges in accessing manufacturing capacity, successful development and/or commercialization of alternative product candidates by Vir's competitors, changes in expected or existing competition, delays in or disruptions to Vir's business or clinical trials due to the

COVID-19 pandemic, geopolitical changes or other external factors, and unexpected litigation or other disputes. 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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