New Data from Vaxart Oral COVID-19 Vaccine Phase I Study Suggests Broad Cross-Reactivity against Other Coronaviruses

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Vaxart oral vaccine induced higher CD8+ T-Cell responses than those seen with Moderna or Pfizer vaccines in comparative experiment conducted by the Company

IgA antibodies triggered in the mucosa, show broad cross-reactivity

SOUTH SAN FRANCISCO, Calif., May 03, 2021 (GLOBE NEWSWIRE) -- Vaxart, Inc. (Nasdaq: VXRT), a clinical-stage biotechnology company developing oral recombinant vaccines that are administered by tablet rather than by injection, announced today at Vaxart's key opinion leader event that new data obtained from its Phase I COVID-19 trial added to the evidence suggesting that VXA-CoV2-1, the company's first COVID-19 oral vaccine construct that triggers mucosal immunity and includes both the S and the N SARS-Cov-2 proteins, has broad cross-coronavirus activity.

"We have previously announced study data showing that our oral vaccine could be as protective as the leading injectable against flu, and that it does so by triggering a very different immune response. Data obtained from the Phase I study were compared to data from volunteers subsequently vaccinated with the Moderna or Pfizer mRNA vaccine distributed under emergency use authorizations (EUAs) and suggest that the same may be true against coronavirus. Our vaccine's immune response appears very different that that seen from the leading injectables: mucosal antibodies rather than serum antibodies, and more potent T-cell responses," said Andrei Floroiu, Vaxart's chief executive officer. "For our first oral COVID-19 vaccine candidate, we believe that these differences in immunogenicity profile may have a benefit in cross-reactive protection."

The Phase I open-label study is intended to evaluate the safety and immunogenicity of Vaxart's vaccine candidate. Data obtained from Vaxart's oral COVID-19 vaccine Phase I trial showed substantial $CD8^+$ T-cell responses, as measured by IFN-g and TNF-a induction. In a comparative experiment conducted by Vaxart, Phase I study data was compared to T-cell responses from volunteers subsequently vaccinated with the Moderna or Pfizer mRNA vaccine, indicating the mRNA vaccines induced fewer T-cell responses.

"We measured the T-cell responses in 9 volunteers vaccinated with the mRNA vaccines under EUAs and compared them in the same assays at the same timepoints to T-cell responses induced in subjects participating in our clinical trial (N=26 paired samples, or N=7 in the sub-study). Our vaccine appeared to produce $CD8^+$ T-cell responses of a higher magnitude," said Dr. Sean Tucker, chief scientific officer at Vaxart. "$CD8^+$ T-cells produced by our vaccine can recognize and are capable of destroying cells infected with the virus, including in the mucosa. If you are effective at killing the virus-infected cells in the upper respiratory tract, you may be more likely to recover quicker or have a very mild course of infection," he said. "The strength of T-cell responses against both S and N proteins, which we targeted, leads us to believe that VXA-CoV2-1 offers a promising solution to variants."

In his presentation, Dr. Tucker discussed:

- Vaxart's vaccine candidate showed higher $CD8^+$ T-cell responses than the Pfizer and Moderna vaccines
- Higher T-cell responses correlated to protection against COVID disease in a prospective Phase I study of first responders
- The Vaxart vaccine candidate elicited a T cell response against SARS-Cov-2, as well as showed cross-reactivity against diverse endemic coronaviruses such as 229E, NL63, HKU1, and OC43
- N protein responses to SARS-CoV-1 have been shown to last 17 years after infection and cross-react to SARS-CoV-2
- Vaxart's vaccine candidate triggered specific IgA antibodies in the mucosa. These mucosal IgA responses appeared to be cross-reactive against other coronaviruses such as SARS-CoV-1, MERS, and the endemic common cold viruses 229E, NL63, HKU1, and OC43

About Vaxart

Vaxart is a clinical-stage biotechnology company developing a range of oral recombinant vaccines based on its proprietary delivery platform. Vaxart vaccines are designed to be administered using tablets that can be stored and shipped without refrigeration and eliminate the risk of needle-stick injury. Vaxart believes that its proprietary tablet vaccine delivery platform is suitable to deliver recombinant vaccines, positioning the company to develop oral versions of currently marketed vaccines and to design recombinant vaccines for new indications. Its development programs currently include tablet vaccines designed to protect against coronavirus, norovirus, seasonal influenza, and respiratory syncytial virus (RSV), as well as a therapeutic vaccine for human papillomavirus (HPV), Vaxart's first immuno-oncology indication. Vaxart has filed broad domestic and international patents covering its proprietary technology and creations for oral vaccination using adenovirus and TLR3 agonists.

Note Regarding Forward-Looking Statements

This press release contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this press release regarding Vaxart's strategy, prospects, plans, and objectives, results from pre-clinical and clinical trials, commercialization agreements and licenses, beliefs and expectations of management are forward-looking statements. These forward-looking statements may be accompanied by such words as "should," "believe," "could," "potential," "will," "expected," "plan," and other words and terms of similar meaning. Examples of such statements include, but are not limited to, statements relating to Vaxart's ability to develop and commercialize its product candidates and clinical results and trial data (including plans with respect to the COVID-19 vaccine product candidates); expectations relating to Vaxart's relationship with Emergent BioSolutions, Inc., Kindred Biosciences and Attwill Medical Solutions Sterilflow, LP, including their ability to produce cGMP vaccines and the timing thereof; Vaxart's expectations with respect to the important advantages it believes its oral vaccine platform can offer over injectable alternatives, particularly for coronaviruses such as SARS, MERS and SARS-CoV-2; expectations regarding Vaxart's ability to develop effective vaccines against new and emerging variant strains; expectations regarding the timing and nature of future developments and

announcements, including those related to trials and studies; the potential applicability of results seen in our preclinical studies or trials to those that may be seen in humans or clinical trials; the expected role of mucosal immunity in blocking transmission of COVID-19; and Vaxart's expectations with respect to the effectiveness of its product candidates, including Vaxart's potential role in mitigating the impact of COVID-19. Vaxart may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in the forward-looking statements, and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions, expectations, and projections disclosed in the forward-looking statements. Various important factors could cause actual results or events to differ materially from the forward-looking statements that Vaxart makes, including uncertainties inherent in research and development, including the ability to meet anticipated clinical endpoints, commencement and/or completion dates for clinical , regulatory submission dates, regulatory approval dates and/or launch dates, as well as the possibility of unfavorable new clinical data and further analyses of existing clinical data; the risk that clinical trial data are subject to differing interpretations and assessments by regulatory authorities; whether regulatory authorities will be satisfied with the design of and results from the clinical studies; decisions by regulatory authorities impacting labeling, manufacturing processes, and safety that could affect the availability or commercial potential of any product candidate, including the possibility that Vaxart's product candidates may not be approved by the FDA or non- U.S. regulatory authorities; that, even if approved by the FDA or non-U.S. regulatory authorities, Vaxart's product candidates may not achieve broad market acceptance; that a Vaxart collaborator may not attain development and commercial milestones; that Vaxart or its partners may experience manufacturing issues and delays due to events within, or outside of, Vaxart's or its partners' control, including the recent outbreak of COVID-19; difficulties in production, particularly in scaling up initial production, including difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, shortages of qualified personnel or key raw materials, and compliance with strictly enforced federal, state, and foreign regulations; that Vaxart may not be able to obtain, maintain and enforce necessary patent and other intellectual property protection; that Vaxart's capital resources may be inadequate; Vaxart's ability to resolve pending legal matters; Vaxart's ability to obtain sufficient capital to fund its operations on terms acceptable to Vaxart, if at all; the impact of government healthcare proposals and policies; competitive factors; and other risks described in the "Risk Factors" sections of Vaxart's Quarterly and Annual Reports filed with the SEC. Vaxart does not assume any obligation to update any forward-looking statements, except as required by law.

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