Vaxart Announces Publication in Vaccines of Non-Human Primate Preclinical Data Demonstrating Its Next-Generation Vaccine Candidates Elicit Mucosal and Systemic Immunogenicity and Reduce Viral Shedding after SARS-CoV-2 Challenge

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— *Data served as foundation for current vaccine candidate for planned Phase 2 research*

— *Vaxart vaccine candidates elicited strong antigen-specific serum IgG and IgA with neutralizing activity against multiple variants of concern*

— *Vaccination reduced SARS-CoV-2 shedding following infectious challenge in both the upper and lower airway of non-human primates*

SOUTH SAN FRANCISCO, Calif., Feb. 05, 2024 (GLOBE NEWSWIRE) -- Vaxart, Inc. (Nasdaq: VXRT) today announced the publication of preclinical non-human primate data demonstrating the potential of its COVID-19 vaccine to protect against multiple SARS-CoV-2 variants of concern (VOC)s. The data, which were previously presented at the International Congress of Mucosal Immunology 2022, are reported in the current issue of *Vaccines*.

"Our preclinical and clinical research laid the foundation for our next steps in testing our SARS-CoV-2 vaccine platform against emerging viral variants," said Dr. Sean Tucker, Vaxart's Founder and Chief Scientific Officer. "The data published in *Vaccines* support the potential of our vaccine platform to stimulate potent mucosal cross-reactive IgA responses to multiple VOCs and reduce viral transmission. We believe this platform has the potential to transform the landscape not only for COVID-19 vaccines, but for other infectious diseases that present significant global public health challenges, such as norovirus and influenza."

The data included in this publication add to the body of evidence that has guided the clinical development of Vaxart's COVID-19 oral vaccine program. Vaxart's preparation for a Phase 2b trial of its COVID-19 XBB vaccine candidate is supported by a recent grant awarded by the United States Biomedical Advanced Research and Development Authority (BARDA).

In the study published in *Vaccines*, non-human primates were prime-boost immunized 29 days apart with vaccine candidates either expressing the parental spike protein alone (Wuhan-S), spike plus nucleocapsid (Wuhan-S+N), or the spike protein from the beta variant (beta-S) of SARS-CoV-2. Key findings from the study include:

- All three vaccines elicited strong cross-reactive systemic immunity as evidenced by increases in serum IgG and IgA responses.
- All three vaccines elicited robust cross-reactive nasal and lung IgA following mucosal vaccination.
- All three vaccines induced neutralizing antibodies in both the peripheral and mucosal compartments, which was enhanced with a boost immunization.
- Mucosal administration of the vaccines elicited antigen-specific T-cells.
- Viral replication and infectious particle shedding were significantly reduced in immunized animals after challenge with beta variant SARS-CoV-2.

These results suggest that delivering rAd5 vaccines to a mucosal surface is an alternative immunization approach that may generate both serum and mucosal responses, while protecting against infection and reducing shedding. Vaxart believes these data support the potential for its vaccines to enhance mucosal responses and reduce community transmission, in addition to preventing severe disease. Vaxart has previously shown its room-temperature stable mucosal vaccines are easy to administer, store and distribute, which could support vaccine equity and the effectiveness of global public health responses to the continually evolving COVID-19 pandemic.

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 pills that can be stored and shipped without refrigeration and eliminate the risk of needle-stick injury. Vaxart believes that its proprietary pill 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. Vaxart's development programs currently include pill 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 immune-oncology indication. Vaxart has filed broad domestic and international patent applications 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 preclinical and clinical trials and the timing of such results, vaccine efficacy and safety, commercialization agreements and licenses, and 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," "anticipate," "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, including its vaccine booster products; Vaxart's expectations regarding clinical results and trial data, and the timing of receiving and reporting such clinical results and trial data; and Vaxart's expectations with respect to the effectiveness of its product candidates. 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 trials, 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; 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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