

Vaxart Announces Publication of a Peer-reviewed Journal Article Showing the Potential Clinical and Economic Value of a Norovirus Vaccine

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- A computational simulation model showed that a norovirus vaccine costing as much as \$1,300 can still be cost saving in children under 5
- The model also showed a norovirus vaccine costing \$100 can be cost saving in older adults

SOUTH SAN FRANCISCO, Calif., Jan. 27, 2021 (GLOBE NEWSWIRE) -- Vaxart, Inc., (NASDAQ: VXRT), a clinical-stage biotechnology company developing oral vaccines that are administered by tablet rather than by injection, including a Phase 2 ready norovirus program, announced today health care economic findings published in the *American Journal of Preventative Medicine*. Computational modeling simulating norovirus infection and transmission in a community setting showed that a potential norovirus vaccine can avert symptomatic cases and result in cost savings. The study found, among other things, that vaccination against the norovirus can reduce the economic burden of the virus and is cost effective even if priced at \$500 per course when vaccinating children under 5 and older adults, a much higher value than previously estimated. The manuscript titled, "Potential Clinical and Economic Value of Norovirus Vaccination in the Community Setting" can be accessed <u>here</u>.

"This study highlights the fact that norovirus is highly contagious and can lead to missed school and work, with productivity losses that can add up," said Bruce Y. Lee, MD, MBA, senior author of the study, Professor of Health Policy and Management at the City University of New York (CUNY), and executive director of the Public Health Informatics, Computational, and Operations Research (PHICOR). "The preschool-age population can be particularly vulnerable due to heavy social mixing leading to greater spread of the virus, and the older adult population can be susceptible to more severe disease and subsequently experience high rates of outpatient visits and hospitalizations."

The PHICOR team developed a computational simulation model of different segments of the US population and the spread of norovirus to better understand the value of vaccinating children <5 and adults \geq 65 years old against norovirus. The model simulated the spread of norovirus, subsequent clinical outcomes (e.g., symptoms, hospitalization, death) and associated costs (e.g., direct medical, productivity loss), as well as vaccination.

Key Findings:

- Even with a 25% vaccine efficacy and 10% vaccination coverage, a norovirus vaccine could decrease symptomatic cases in a community by a relative 7.7%.
- In preschool-aged children, the cost of vaccination could be as high as \$1,300 and still provide cost-savings and as high as \$1,600 and still be cost-effective.
- Vaccinating children <5 years old had a substantially higher benefit compared to vaccinating older adults as children under 5 contribute considerably to norovirus spread. However, vaccinating older adults can still be cost-effective or cost-saving.
- In older adults, the cost of vaccination could be as high as \$100 and still provide cost-savings and as high as \$165 and still be cost-effective.

| Cost Thresholds Based on Population Segment and Vaccine Efficacy | | | |
|--|----------|---------------------|-------------------|
| Vaccine Target | Vaccine | Cost-effective Cost | Cost-savings Cost |
| Population | Efficacy | (USD) | (USD) |
| <5 years old | 50% | \$1,190 | \$930 |
| | 75% | \$1,600 | \$1,300 |
| ≥65 years old | 50% | \$110 | \$64 |
| | 75% | \$165 | \$100 |
| <5 & ≥65 years old | 75% | \$575 | \$450 |
| Assuming 10% vaccine coverage | | | |

"These important findings confirm our view of the significant potential clinical and economic benefit of a norovirus vaccine," said Andrei Floroiu, chief executive officer of Vaxart. "The significantly higher cost levels from this analysis increase meaningfully our view of the value creation potential of our oral tablet norovirus vaccine. We are very excited to advance our norovirus program with the three clinical trials we expect to start in 2021 and look forward to confirming the efficacy and tolerability profile suggested by the very encouraging data from our previous Phase 1 studies."

Norovirus is the leading cause of acute viral gastroenteritis in all age groups in the United States. However, there are no approved vaccines for noroviruses. Each year, on average, norovirus causes 19 to 21 million cases of acute gastroenteritis and leads to 56,000 to 71,000 hospitalizations and 570 to 800 deaths, mostly among young children and older adults.

Vaxart, Inc. supported the PHICOR's research team.

About PHICOR

Since 2007, PHICOR's team of scientists and medical, public health, and communication experts have been researching and developing systems and computational approaches, methods (e.g., artificial intelligence (AI), machine learning, data science), models, and tools to help a wide range of decision makers address various health and public health issues. PHICOR helps local, state, and federal governments respond to infectious disease threats, ranging from the flu to Ebola to Zika to the current COVID-19 pandemic. For example, during the 2009 H1N1 flu pandemic, the PHICOR team was embedded in the U.S. Department of Health and Human Services (HHS) to help with the national response. This included working with the Department of Homeland Security (DHS) and the Centers for Disease Control and Prevention (CDC).

About Vaxart

Vaxart is a clinical-stage biotechnology company developing a range of oral recombinant vaccines based on its proprietary delivery platform. Vaxart investigational 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 preclinical 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 the potential clinical and economic value of a norovirus vaccine in a community setting; Vaxart's ability to develop and commercialize its vaccine candidates and preclinical or clinical results and trial data; Vaxart's expectations with respect to the advantages it believes its oral vaccine platform can offer over injectable alternatives; and Vaxart's expectations with respect to the effectiveness of its products or 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 or preclinical studies, 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 and preclinical study 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 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 forwardlooking statements, except as required by law.

References and links to websites have been provided for convenience, and the information contained on any such website is not a part of, or incorporated by reference into, this press release. Vaxart is not responsible for the contents of third-party websites.

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