Vaxcyte Provides Positive Regulatory Updates on VAX-31 Pediatric and Adult Programs

November 12, 2024

-- VAX-31 Infant Indication: Investigational New Drug Application Cleared by FDA; Company Expects to Initiate VAX-31 Infant Phase 2 Study by the End of January 2025 --

-- VAX-31 Adult Indication: Breakthrough Therapy Designation Granted by FDA; Company Plans to Initiate Adult Phase 3 Pivotal, Non-Inferiority Study by Mid-2025 --

-- VAX-31, Designed to Cover Currently Circulating and Historically Prevalent Strains, is Being Studied for the Prevention of Invasive Pneumococcal Disease in the Pediatric and Adult Populations --

SAN CARLOS, Calif., Nov. 12, 2024 (GLOBE NEWSWIRE) -- Vaxcyte, Inc. (Nasdaq: PCVX), a clinical-stage vaccine innovation company engineering high-fidelity vaccines to protect humankind from the consequences of bacterial diseases, today announced positive regulatory updates, including the United States Food and Drug Administration (FDA) clearance of the VAX-31 infant Investigational New Drug (IND) application and the FDA granting Breakthrough Therapy designation (BTD) for VAX-31 for the prevention of invasive pneumococcal disease (IPD) in adults.

VAX-31, the broadest-spectrum PCV candidate in the clinic, is a potentially best-in-class investigational 31-valent pneumococcal conjugate vaccine (PCV) candidate being studied for the prevention of IPD in the adult and pediatric populations. VAX-31 is designed to cover approximately 94% of IPD in U.S. children under five and over 95% of IPD in U.S. adults today, with the potential to offer much greater coverage relative to the standard-of-care PCVs against both currently circulating and historically prevalent strains.

"Vaxcyte continues to maintain positive momentum with our PCV programs, and these regulatory milestones represent important steps in the development of VAX-31," said Grant Pickering, Chief Executive Officer and Co-founder of Vaxcyte. "The recent data from our adult Phase 1/2 study affirmed that VAX-31 has best-in-class potential, and we look forward to fully exploring its clinical utility in both the pediatric and adult populations. For the pediatric indication, we plan to initiate the VAX-31 infant Phase 2 study by the end of January 2025. For the adult indication, we look forward to moving VAX-31 into a Phase 3 program and plan to initiate the pivotal non-inferiority study by mid-2025."

"We are incredibly proud of the significant progress we continue to make with VAX-31, underscored by the clearance of the infant IND application and receipt of the Breakthrough Therapy designation for adults," said Jim Wassil, Executive Vice President and Chief Operating Officer of Vaxcyte. "The body of positive evidence generated by the VAX-31 and VAX-24 adult studies validates the potential of our site-specific, carrier-sparing platform to deliver best-in-class, broad-spectrum PCVs designed to provide protection against both currently circulating and historically prevalent serotypes while raising the bar for immunogenicity. As we advance our VAX-31 clinical programs, we are also encouraged by the ACIP's recent decision to expand its pneumococcal vaccination recommendation to all U.S. adults aged 50 and older, an important step toward facilitating broader disease protection in this population."

VAX-31 Infant IND Clearance and Phase 2 Study Initiation
The FDA clearance of the VAX-31 infant IND application, supported by the positive topline safety, tolerability and immunogenicity results from the VAX-31 adult Phase 1/2 study, enables the initiation of a VAX-31 pediatric study that proceeds directly into healthy infants. The VAX-31 infant Phase 2 study will be a randomized, double-blind, active-controlled, dose-finding clinical study that will include a primary immunization series consisting of three doses at two, four and six months of age followed by a subsequent booster dose at 12-15 months of age concomitantly with routine pediatric vaccines.

Despite the effectiveness of current vaccines, IPD remains a significant threat during the first years of life. Approximately 300,000 children under the age of five worldwide die every year due to *Streptococcus pneumoniae* which is the leading cause of vaccine-preventable fatalities in this age group. The burden of disease in the pediatric population underscores the need for a broader-spectrum vaccine. VAX-31 was designed to cover approximately 94% of IPD and approximately 86% of acute otitis media in children under five years of age in the United States.

VAX-31 Adult Breakthrough Therapy Designation
The FDA's decision to grant BTD to VAX-31 in the adult population for the prevention of IPD was informed by the positive topline results from the VAX-31 Phase 1/2 study in adults. Based on the strength of these study results, the Company selected VAX-31 to exclusively advance to an adult Phase 3 program.

The FDA's BTD process is designed to expedite the development and review of drugs that are intended to treat serious or life-threatening conditions. The designation is based upon preliminary clinical evidence indicating that the drug or vaccine may demonstrate substantial improvement over available therapies on one or more clinically significant endpoints. With BTD, Vaxcyte will have access to all the elements of the FDA's Fast Track program, as well as the ability to receive guidance and support from the FDA on an efficient drug development program and an organizational commitment from senior managers within the FDA.

Key Anticipated PCV Franchise Milestones
Vaxcyte is advancing the clinical development of its PCV programs with several anticipated key milestones, including:

PCV Franchise Adult Indication:

VAX-31

- Following an FDA End-of-Phase 2 meeting, initiate a Phase 3 pivotal, non-inferiority study by mid-2025 and announce topline safety, tolerability and immunogenicity data in 2026.
- Initiate remaining Phase 3 studies in 2025 and 2026.

PCV Franchise Infant Indication:

VAX-24

- Announce topline safety, tolerability and immunogenicity data from the primary three-dose immunization series of the Phase 2 study, which is fully enrolled with 802 healthy infants, by the end of the first quarter of 2025, followed by topline data from the booster dose by the end of 2025.

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- Initiate Phase 2 study by the end of January 2025.
- Announce topline safety, tolerability and immunogenicity data from the VAX-31 infant Phase 2 study primary three-dose immunization series in mid-2026, followed by topline data from the booster dose approximately nine months later.

About Pneumococcal Disease
Pneumococcal disease (PD) is an infection caused by *Streptococcus pneumoniae* bacteria. It can result in invasive pneumococcal disease (IPD), including meningitis and bacteremia, and non-invasive PD, including pneumonia, otitis media and sinusitis. In the United States, pneumococcal pneumonia is estimated to result in approximately 150,000 hospitalizations each year. *Streptococcus pneumoniae* is among the World Health Organization's top antibiotic-resistant pathogens to be urgently addressed, and the U.S. CDC lists drug-resistant *Streptococcus pneumoniae* as a "serious threat." In children under five, *Streptococcus pneumoniae* is the leading cause of vaccine-preventable deaths globally. Pneumococci also cause over 50% of all cases of bacterial meningitis in the United States. Antibiotics are used to treat PD, but some strains of the bacteria have developed resistance to treatments. The morbidity and mortality due to PD are significant, particularly for young children and older adults, underscoring the need for a broader-spectrum vaccine.

About VAX-31
VAX-31, a 31-valent PCV candidate advancing to a Phase 3 adult clinical program and a Phase 2 infant clinical program, is designed to prevent IPD, which is especially serious in infants, young children, older adults and those with immune deficiencies or certain chronic health conditions. IPD is associated with high case-fatality rates, antibiotic resistance and meningitis. VAX-31 is the broadest-spectrum PCV in the clinic and has the potential to provide protection against both currently circulating and historically prevalent serotypes. VAX-31 was designed to increase coverage, in a single vaccine, to more than 95% of IPD circulating in adults in the United States aged 50 and older, with the potential to provide an incremental 12-40% of coverage over current standard-of-care adult PCVs. In infants, it was designed to cover approximately 94% of IPD and approximately 86% of acute otitis media in children under five years of age in the United States.

About Vaxcyte
Vaxcyte is a vaccine innovation company engineering high-fidelity vaccines to protect humankind from the consequences of bacterial diseases. The Company is developing broad-spectrum conjugate and novel protein vaccines to prevent or treat bacterial infectious diseases. VAX-31 is a Phase 3-ready 31-valent, carrier-sparing PCV being developed for the prevention of IPD in adults and infants and is the broadest-spectrum PCV candidate in the clinic today. VAX-24, the Company's 24-valent PCV candidate, is designed to cover more serotypes than any infant PCV on-market and is currently being evaluated in a Phase 2 infant study. Both VAX-31 and VAX-24 are designed to improve upon the standard-of-care PCVs by covering the serotypes in circulation that are responsible for a significant portion of IPD and are associated with high case-fatality rates, antibiotic resistance and meningitis, while maintaining coverage of previously circulating strains that are currently contained through continued vaccination practice. Vaxcyte is re-engineering the way highly complex vaccines are made through modern synthetic techniques, including advanced chemistry and the XpressCF™ cell-free protein synthesis platform, exclusively licensed from Sutro Biopharma, Inc. Unlike conventional cell-based approaches, the Company's system for producing difficult-to-make proteins and antigens is intended to accelerate its ability to efficiently create and deliver high-fidelity vaccines with enhanced immunological benefits. Vaxcyte's pipeline also includes VAX-A1, a prophylactic vaccine candidate designed to prevent Group A Strep infections; VAX-PG, a therapeutic vaccine candidate designed to slow or stop the progression of periodontal disease; and VAX-GI, a vaccine candidate designed to prevent Shigella. Vaxcyte is driven to eradicate or treat invasive bacterial infections, which have serious and costly health consequences when left unchecked. For more information, visit www.vaxcyte.com.

Forward-Looking Statements
This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. These statements include, but are not limited to, statements related to the potential benefits of VAX-24 and VAX-31, including breadth of coverage, the ability to deliver potentially best-in-class PCVs, and improve upon the standard-of-care and set a new standard for immunogenicity; the process and timing of anticipated future development of Vaxcyte's vaccine candidates; the initiation of VAX-31 adult Phase 3 studies and an infant Phase 2 study, and the timing of such studies and their data readouts; the design of the VAX-31 infant Phase 2 study; the ability to maintain continued positive momentum across the PCV franchise; the potential of the Company's site-specific, carrier-sparing platform; the demand for Vaxcyte's vaccine candidates; and other statements that are not historical fact. The words "anticipate," "believe," "could," "expect," "intend," "may," "on track," "potential," "should," "would" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) convey uncertainty of future events or outcomes and are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements are based on Vaxcyte's current expectations and actual results and timing of events could differ materially from those anticipated in such forward-looking statements as a result of risks and uncertainties, including, without limitation, risks related to Vaxcyte's product development programs, including development timelines, success and timing of chemistry, manufacturing and controls and related manufacturing activities, potential delays or inability to obtain and maintain required regulatory approvals for its vaccine candidates, and the risks and uncertainties inherent with preclinical and clinical development processes; the success, cost and timing of all development activities and clinical trials;

and sufficiency of cash and other funding to support Vaxcyte's development programs and other operating expenses. These and other risks are described more fully in Vaxcyte's filings with the Securities and Exchange Commission (SEC), including its Quarterly Report on Form 10-Q filed with the SEC on November 5, 2024 or in other documents Vaxcyte subsequently files with or furnishes to the SEC. All forward-looking statements contained in this press release speak only as of the date on which they were made and are based on management's assumptions and estimates as of such date, and readers should not rely upon the information in this press release as current or accurate after its publication date. Vaxcyte undertakes no duty or obligation to update any forward-looking statements contained in this release as a result of new information, future events or changes in its expectations. Readers should not rely upon the information in this press release as current or accurate after its publication date.

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