Palvella Therapeutics Completes Enrollment in Phase 2 TOIVA Trial of QTORIN™ Rapamycin for Cutaneous Venous Malformations

September 15, 2025

Phase 2 TOIVA trial successfully met recruitment target, enrolling 16 subjects at leading vascular anomaly centers; top-line data expected in mid-December 2025

Venous malformations are the most common type of vascular malformation, with skin involvement impacting an estimated approximately 50-80% of patients, which can result in bleeding, thrombosis, ulceration, disfigurement, and proliferation

QTORIN™ rapamycin has the potential to be the first approved therapy in the U.S. for more than an estimated 75,000 U.S. patients with cutaneous VMs

WAYNE, Pa., Sept. 15, 2025 (GLOBE NEWSWIRE) -- (Nasdaq: PVLA) Palvella Therapeutics, Inc. (Palvella), a clinical-stage biopharmaceutical company focused on developing and commercializing novel therapies to treat patients suffering from serious, rare genetic skin diseases for which there are no U.S. Food and Drug Administration (FDA)-approved therapies, today announced the successful completion of TOIVA, a Phase 2 trial of QTORIN™ 3.9% rapamycin anhydrous gel (QTORIN™ rapamycin) for the treatment of cutaneous venous malformations (cutaneous VMs). The Phase 2 trial enrolled 16 subjects at leading vascular anomaly centers, meeting the original recruitment target of approximately 15 subjects.

“Cutaneous venous malformations can have a severe impact on quality of life, leading to substantial morbidity and functional impairment of the skin, and yet there are currently no FDA-approved therapies to address this high unmet need,” said Dr. Megha Tollefson, pediatric dermatologist at the Mayo Clinic in Rochester, Minnesota and Principal Investigator of TOIVA. “We are excited to see the results from TOIVA, and to better understand the potential benefit of QTORIN™ rapamycin for patients with cutaneous VMs.”

Cutaneous VMs are a serious, rare genetic disease caused by mutations in genes that cause overactivation of the PI3K/mTOR signaling pathway, leading to dysfunctional veins within the skin. The Phase 2 TOIVA study is a single-arm, open-label, baseline-controlled clinical trial of QTORIN™ rapamycin, a novel, patented 3.9% rapamycin anhydrous gel which aims to harness the potential therapeutic benefits of rapamycin, an mTOR inhibitor, while minimizing systemic exposure of rapamycin and potential adverse reactions associated with systemic therapy. In the TOIVA trial, QTORIN™ rapamycin is administered topically once daily. Safety and tolerability will be assessed based on the incidence and severity of adverse events. The proof-of-concept study also includes multiple measures of efficacy, including change from baseline to week 12 in clinician and patient global impression assessments as well as assessments of specific individual clinical manifestations which contribute to disease burden.

"An urgent need exists for an FDA-approved, targeted, localized therapy to treat cutaneous VMs," said Wes Kaupinen, Founder and Chief Executive Officer of Palvella. "The insights gained from this Phase 2 proof-of-concept study will be critical in guiding the design of future clinical trials and advancing Palvella’s mission to bring the first FDA-approved therapy to the estimated more than 75,000 U.S. patients living with cutaneous VMs."

Top-line results from TOIVA are expected in mid-December 2025.

About Palvella Therapeutics
Founded and led by rare disease drug development veterans, Palvella Therapeutics, Inc. (Nasdaq: PVLA) is a clinical-stage biopharmaceutical company focused on developing and commercializing novel therapies to treat patients suffering from serious, rare genetic skin diseases for which there are no FDA-approved therapies. Palvella is developing a broad pipeline of product candidates based on its patented QTORIN™ platform, with an initial focus on serious, rare genetic skin diseases, many of which are lifelong in nature. Palvella’s lead product candidate, QTORIN™ 3.9% rapamycin anhydrous gel (QTORIN™ rapamycin), is currently being evaluated in the Phase 3 SELVA clinical trial in microcystic lymphatic malformations and the Phase 2 TOIVA clinical trial in cutaneous venous malformations. For more information, please visit www.palvellatx.com or follow Palvella on LinkedIn or X (formerly known as Twitter).

QTORIN™ rapamycin is for investigational use only and has not been approved or cleared by the FDA or by any other regulatory agency for any indication.

Forward-Looking Statements
This press release contains forward-looking statements (including within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended (Securities Act)). These statements may

discuss goals, intentions, and expectations as to future plans, trends, events, results of operations or financial condition, or otherwise, based on current beliefs of the management of Palvella, as well as assumptions made by, and information currently available to, the management of Palvella. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "should," "would," "expect," "anticipate," "plan," "likely," "believe," "estimate," "project," "intend," and other similar expressions or the negative or plural of these words, or other similar expressions that are predictions or indicate future events or prospects, although not all forward-looking statements contain these words. Statements that are not historical facts are forward-looking statements. Forward-looking statements include, but are not limited to, statements regarding the expected timing of the presentation of data from ongoing clinical trials, Palvella's clinical development plans and related anticipated development milestones, Palvella's cash and financial resources and expected cash runway, and the potential of, and expectations regarding, Palvella's programs, including QTORIN™ rapamycin, and its research-stage opportunities, including its expected therapeutic potential and market opportunity. Forward-looking statements are based on current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors, including, without limitation: the ability to raise additional capital to finance operations; the ability to advance product candidates through preclinical and clinical development; the ability to obtain regulatory approval for, and ultimately commercialize, Palvella's product candidates, including QTORIN™ rapamycin; the outcome of early clinical trials for Palvella's product candidates, including the ability of those trials to satisfy relevant governmental or regulatory requirements; the fact that data and results from clinical studies may not necessarily be indicative of future results; Palvella's limited experience in designing clinical trials and lack of experience in conducting clinical trials; the ability to identify and pivot to other programs, product candidates, or indications that may be more profitable or successful than Palvella's current product candidates; the substantial competition Palvella faces in discovering, developing, or commercializing products; the negative impacts of global events on operations, including ongoing and planned clinical trials and ongoing and planned preclinical studies; the ability to attract, hire, and retain skilled executive officers and employees; the ability of Palvella to protect its intellectual property and proprietary technologies; reliance on third parties, contract manufacturers, and contract research organizations; and the risks and uncertainties described in the filings made by Palvella with the Securities and Exchange Commission (SEC), including the annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, filed with or furnished to the SEC and available at www.sec.gov. The events and circumstances reflected in our forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties that Palvella may face. Except as required by applicable law, Palvella does not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. This press release contains hyperlinks to information that is not deemed to be incorporated by reference into this press release.

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