ACELYRIN, INC. Announces Additional Phase 2 Data and Phase 3 Program Design for Lonigutamab in Thyroid Eye Disease

January 6, 2025

Totality of data observed with subcutaneous lonigutamab in Thyroid Eye Disease (TED) patients demonstrate potential for efficacy in line with standard of care and a more favorable safety profile

Conducted positive end of Phase 2 FDA meeting; Phase 3 program expected to be initiated in Q1 2025

Topline Phase 3 data expected in second half of 2026; cash runway expected through mid-2027

Conference call to review unmet need in TED, new Phase 2 data and Phase 3 program design to be held today, January 6, 2025, at 4:30 PM ET

LOS ANGELES, Jan. 06, 2025 (GLOBE NEWSWIRE) -- ACELYRIN, INC. (Nasdaq: SLRN), a late-stage clinical biopharma company focused on accelerating the development and delivery of transformative medicines in immunology, today announced additional Phase 2 data and the Phase 3 program design for lonigutamab in Thyroid Eye Disease (TED). The Company will host a virtual investor event today, Monday, January 6, 2025 at 4:30 PM ET. To register, click here.

"Lonigutamab, with its unique mechanism of action, is the first subcutaneous anti-IGF-1R to have demonstrated robust efficacy in TED patients comparable to the IV administered standard of care. We are further encouraged by its potential for a best-in-class safety profile with no reported cases of hearing impairment, hyperglycemia or menstrual disorders to date," said Mina Kim, Chief Executive Officer of ACELYRIN. "Our innovative dose exploration work in TED patients gives us confidence our Phase 3 dose has the potential to optimize patient benefit and risk and transform the TED treatment paradigm. Our registrational program is designed for real-world patients and focused on addressing the significant unmet needs in TED."

Additional Phase 2 data

In the newly announced data from the ongoing Phase 2 trial in TED, lonigutamab demonstrated:

- Clinically meaningful and competitive improvements across all manifestations of TED, including proptosis, Clinical Activity Score (CAS) and diplopia, as well as the Graves Ophthalmopathy-Quality of Life (GO-QoL) tool:
  - Significant proptosis response rate shown with a 50 mg loading and 25 mg weekly (QW) subcutaneous dose of lonigutamab
  - Efficacy achieved with lower levels of exposure than seen with IV-administered anti-IGF-1R agents
- No cases of hearing impairment as measured by audiogram, hyperglycemia or menstrual disorders in TED patients reported to date at any dose level
- 100 mg loading dose achieves target therapeutic concentration within days

Phase 3 LONGITUDE Program

ACELYRIN today also announced the design for its Phase 3 LONGITUDE program, which is informed by significant dose ranging evaluation of subcutaneous lonigutamab in TED patients. Initiation of the Phase 3 program is expected this quarter and topline data are expected in the second half of 2026.

LONGITUDE-1 and 2 will be conducted across ~350 patients in two global double-masked, placebo-controlled trials to evaluate the safety and efficacy of a subcutaneously delivered 100 mg loading dose of lonigutamab followed by 50 mg every two weeks. Patients will be randomized 2:1 to either lonigutamab or placebo arms during the first 24 weeks, and the primary endpoint in both trials will be proptosis response rate at 24 weeks. All patients will receive lonigutamab after 24 weeks through to 52 weeks of treatment, which is designed to potentially enable longer-term treatment.

Both LONGITUDE-1 and LONGITUDE-2 will evaluate "active" TED patients and "chronic" TED patients, with LONGITUDE-1 enrolling a minimum of 81 active patients. The primary endpoint for LONGITUDE-1 will be proptosis response rate at 24 weeks for active patients, with a secondary endpoint of proptosis response rate at 24 weeks for all enrolled patients. LONGITUDE-2 will recruit both active and chronic TED patients and have no minimum number of required active patients. The primary endpoint for LONGITUDE-2 will be proptosis response rate at 24 weeks for all patients. Secondary endpoints for both trials include CAS, diplopia response and GO-QoL at 24 weeks.

As previously announced, ACELYRIN held an End of Phase 2 (EOP2) meeting with the United States Food and Drug Administration (FDA) in Q3 2024 and gained alignment on the proposed LONGITUDE-1 and LONGITUDE-2 Phase 3 trial designs.

Shep Mpofu, M.D., Chief Medical Officer at ACELYRIN, added, "We are excited about the data generated in our Phase 1/2 trial and the potential for lonigutamab to change the treatment paradigm for TED patients. We look forward to working closely with clinicians around the world to rapidly initiate and enroll the Phase 3 LONGITUDE program starting in Q1 2025 for the benefit of TED patients. Our Phase 3 study is designed to address the significant unmet needs of patients, and we believe lonigutamab has the potential to be a more effective, safer and more convenient alternative to the current standard of care."

Webcast and Conference Call Information

ACELYRIN will host a webcast today, January 6, 2025, at 4:30pm ET featuring Dr. Andrea Kossler of the Stanford University School of Medicine and Dr. Prem Subramanian of the University of Colorado School of Medicine who will join company management to discuss these new lonigutamab Phase 2 data and the planned design for the Phase 3 program for the treatment of TED. A live question and answer session will follow the formal presentations. The live webcast of the conference call can be accessed in the "Events & Presentations" section of ACELYRIN's website at www.acelyrin.com. A recording of the webcast will be available and archived on the Company's website for approximately 30 days.

About Thyroid Eye Disease
Thyroid Eye Disease (TED) is a vision-threatening autoimmune disease in which there is both inflammation and expansion of the tissues behind the eye, resulting in eye bulging, known as proptosis, and the subsequent inability to close the eyelids. Double vision, or diplopia, can occur, as well as the potential for compression of the optic nerve, which can lead to blindness. Thus, TED is a progressive, chronic inflammatory disease. More than 100,000 people in the United States are estimated to suffer from TED.

About Lonigutamab
Lonigutamab is a humanized IgG1 monoclonal antibody targeting the insulin-like growth factor 1 (IGF-1) receptor and is delivered subcutaneously. Relative to standard of care, lonigutamab binds to a distinct epitope, which results in internalization of the receptor within minutes. The characteristics of lonigutamab that enable subcutaneous delivery also enable the potential for longer-term, convenient dosing, which can potentially improve depth and durability of clinical response.

About ACELYRIN
ACELYRIN, INC. (Nasdaq: SLRN) is focused on providing patients life-changing new treatment options by identifying, acquiring, and accelerating the development and commercialization of transformative medicines. ACELYRIN's lead program, lonigutamab, is a subcutaneously delivered monoclonal antibody targeting IGF-1R being investigated for the treatment of thyroid eye disease (TED).

For more information about ACELYRIN, visit us at www.acelyrin.com or follow us on LinkedIn and X.

Forward Looking Statements
This press release contains forward-looking statements including, but not limited to, statements related to ACELYRIN's expectations regarding its anticipated development activities including the planned design and initiation of ACELYRIN's planned Phase 3 clinical trial of lonigutamab, the clinical data to be generated from ACELYRIN's Phase 3 clinical trial of lonigutamab and the timing of the availability of such data, the characteristics of lonigutamab, including its mechanism of action, its potential efficacy and safety profile (including as compared to other products and product candidates), ACELYRIN's interactions with regulatory authorities, ACELYRIN's expectations regarding its cash runway, and other statements that are not historical fact. These forward-looking statements are based on ACELYRIN's current plans, objectives and projections, and are inherently subject to risks and uncertainties that may cause ACELYRIN's actual results to materially differ from those anticipated in such forward-looking statements. Such risks and uncertainties include, without limitation, those associated with the successful completion of development and regulatory activities with respect to ACELYRIN's product candidates; maintaining and defending intellectual property protection; delays or failures to secure adequate supply of its product candidates; ACELYRIN's failure to realize the expected benefits of its acquisition of additional programs; legal proceedings, government investigations or other actions; macroeconomic conditions; market volatility; and other risks and uncertainties affecting ACELYRIN including those described from time to time under the caption "Risk Factors" and elsewhere in ACELYRIN's current and future reports filed with the Securities and Exchange Commission, including its Quarterly Report on Form 10-Q for the quarter ended September 30, 2024. Forward-looking statements contained in this press release are made as of this date, and ACELYRIN undertakes no duty to update such information except as required under applicable law.

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