Celldex Reports 80% Complete Response Rate in Interim Data Update from Phase 1b study of CDX-0159 in Chronic Inducible Urticaria

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--CDX-0159 generally well tolerated to date--
--Conference call to be held at 7:45 a.m. ET today--

HAMPTON, N.J., March 29, 2021 (GLOBE NEWSWIRE) -- Celldex Therapeutics, Inc. (NASDAQ:CLDX) today reported interim data from the Company's ongoing, open label clinical trial of CDX-0159 in patients with antihistamine refractory cold contact urticaria (ColdU) and symptomatic dermographism (SD), the two most common forms of chronic inducible urticaria (CIndU). In all patients treated and assessed for at least 15 days after treatment (n=10), 8 of 10 patients (80%) experienced a complete response (CR) to provocation testing post-treatment and one patient experienced a partial response (PR). CDX-0159 was generally well tolerated. CDX-0159 is a humanized monoclonal antibody developed by Celldex that binds the KIT receptor with high specificity and potently inhibits its activity. The KIT receptor tyrosine kinase is expressed in a variety of cells, including mast cells, which mediate inflammatory responses such as hypersensitivity and allergic reactions. Enrollment is currently being completed in the ColdU and SD cohorts (10 per cohort; 20 total). Based on these compelling results, the study will be expanded to also include 10 patients with cholinergic urticaria. The Company will host a conference call at 7:45 am ET today to discuss results and will be joined by Dr. Marcus Maurer, Professor of Dermatology and Allergy at Charité - Universitätsmedizin in Berlin, who is conducting the study.

"CDX-0159 is having a profound, beneficial impact for patients in this study, all of whom entered with significant disease which was refractory to antihistamines," said Dr. Maurer. "As a physician, it is exciting to see such high complete response rates, which are made even more noteworthy by the fact that the responses are developing rapidly after treatment and are coupled with a well-tolerated safety profile to date. Inducible urticarias can significantly impact a patient's quality of life, and this is especially true for cold contact urticaria and symptomatic dermographism, as avoiding the triggers for these diseases is extremely difficult. CDX-0159 through its unique ability to impact mast cells is demonstrating great potential and could be a much-needed addition to the treatment landscape."

Data Summary:
Fifteen out of 20 planned patients with antihistamine refractory CIndU have received a single intravenous infusion of CDX-0159 at 3 mg/kg, including nine patients with cold contact urticaria (ColdU) and six patients with symptomatic dermographism (SD). Safety results are reported for all 15 patients; activity results are reported for all patients assessed for at least 15 days/2 weeks after treatment (n=10; 7 ColdU and 3 SD). Patients had high disease activity as assessed by provocation threshold testing. In ColdU and SD pts, baseline critical temperature thresholds were 18.7 +/- 2.7 °C (range: 5-27°C) and FricTest® thresholds were 3.7 +/- 0.3 (range: 3-4) of 4.

- Eight of 10 patients (7 ColdU; 1 SD) experienced a complete response (CR) as assessed by provocation threshold testing through their latest assessment. The remaining two patients (both with SD) were recently treated and have been followed for two weeks. One patient experienced a partial response (PR) thus far, and one patient has reported symptomatic improvement (decreased itching). All patients will continue to be assessed for response through week 12.
- Patient global assessment (Pat-GA) and physician global assessment (Phy-GA) results are consistent with provocation testing results.
- Measurements of serum tryptase levels are available for only the first six patients evaluated for activity, all with ColdU. The mean baseline was 3.3 +/- 0.2 ng/ml and levels on day 15 after treatment were at or below the limit of detection. These patients all experienced complete responses.
- CDX-0159 was generally well tolerated. Six of 15 patients had mild infusion reactions, generally areas of localized redness and itching, which resolved rapidly. A single severe infusion reaction was observed (brief loss of consciousness, followed by shaking and sweating). The patient was treated with antihistamines and steroids; no epinephrine was administered. The patient rapidly recovered and was hospitalized for observation with no further manifestations of this event. Importantly, there was no evidence of mast cell activation as measured by decreases in serum tryptase levels shortly after the infusion and further at a later time point.
- Through day 15, three patients had transient, mild decreases in hemoglobin, and no patients had meaningful declines in white blood cells.

"The interim results reported today further reinforce our enthusiasm for CDX-0159," said Anthony S. Marucci, President and Chief Executive Officer of Celldex Therapeutics. "We look forward to the completion of the cold contact and symptomatic dermographism cohorts over the coming weeks and plan to report on the balance of these patients and longer term follow up that will further characterize the magnitude and duration of treatment effects, most likely at a medical meeting this summer. We also hope to see cholinergic patients begin to enter the study in May. Looking beyond inducible urticaria, manufacturing activities are also progressing as planned to support the introduction of the subcutaneous formulation into the clinical program in the third quarter. We also anticipate results from the ongoing Phase 1b study in chronic spontaneous urticaria by the end of this year and are on track to initiate a third study in prurigo nodularis in the fourth quarter."

CIndUs are forms of urticaria that have an attributable cause or trigger associated with them, typically resulting in wheals (hives) or angioedema. Approximately 0.5% of the total population suffers from CIndUs. Celldex is exploring the three most common forms of CIndU, cold-induced,

dermographism (scratch-induced) and cholinergic (exercise/sweat-induced). People afflicted with ColdU experience symptoms like itching, burning wheals and angioedema when their skin is exposed to temperatures below skin temperature. Symptomatic dermographism is characterized by the development of a wheal and flare reaction in response to stroking, scratching or rubbing of the skin and usually occurs within minutes of the inciting stimulus. Cholinergic urticaria is triggered by the body's sweating response to active or passive body warming, and is characterized by small (1–4 mm) wheals surrounded by bright red flares. Common triggers include exercise, hot baths/showers, fever, occlusive dressings, eating spicy foods and emotional stress. For these diseases, mast cell activation leading to release of soluble mediators is thought to be the driving mechanism leading to the wheals and other symptoms. There are currently no approved therapies for CIndUs other than antihistamines and patients attempt to manage symptoms associated with their disease through avoidance of triggers. Celldex believes that CDX-0159 has significant potential to directly ablate and/or inhibit mast cells and this, in turn, could benefit patients with CIndU or other mast cell-driven diseases.

Phase 1b CIndU Study Design

The Phase 1b study (NCT04548869) is an open label clinical trial designed to evaluate the safety of a single dose of CDX-0159 in up to 20 patients with cold contact urticaria (n=10) or symptomatic dermographism (n=10) who are refractory to antihistamines. The study has been amended to also add a cohort of 10 patients with cholinergic urticaria. Patients' symptoms are induced via provocation testing that resembles real life triggering situations. Secondary and exploratory objectives include pharmacokinetic and pharmacodynamic assessments, including changes from baseline provocation thresholds, measurement of tryptase and stem cell factor levels, clinical activity outcomes (impact on urticaria symptoms, disease control, clinical response), quality of life assessments and measurement of tissue mast cells through skin biopsies. CDX-0159 is administered intravenously (3.0 mg/kg) as add on treatment to H1-antihistamines and patients are followed for 12 weeks after dosing.

Webcast and Conference Call
Celldex executives will host a conference call/webcast along with Dr. Marcus Maurer to discuss the results at 7:45 a.m. ET today. The event will be webcast live over the internet and can be accessed by going to the "Events & Presentations" page under the "Investors & Media" section of the Celldex Therapeutics website at www.celldex.com. The call can also be accessed by dialing 1-760-298-5103 (within the United States) or 1-866-743-9666 (outside the United States). The conference ID is 5399769. A replay of the call will be archived on the Company's website or can be accessed by dialing 1-404-537-3406 (within the United States) or 1-855-859-2056 (outside the United States). The conference ID is 5399769.

About CDX-0159
CDX-0159 is a humanized monoclonal antibody developed by Celldex that binds the KIT receptor with high specificity and potently inhibits its activity. The KIT receptor tyrosine kinase is expressed in a variety of cells, including mast cells, which mediate inflammatory responses such as hypersensitivity and allergic reactions. KIT signaling controls the differentiation, tissue recruitment, survival and activity of mast cells. In a Phase 1a single dose, healthy volunteer study, CDX-0159 demonstrated a favorable safety profile as well as profound and durable reductions of plasma tryptase, indicative of systemic mast cell ablation or suppression. Based on these data, Celldex has initiated two Phase 1b studies in the mast cell-driven disease chronic spontaneous urticaria (CSU) and the three most common forms of chronic inducible urticaria (CIndU)—cold contact urticaria, symptomatic dermographism and cholinergic urticaria. The Company is also planning a third study in prurigo nodularis (PN), where mast cells through their interactions with sensory neurons and other immune cells are believed to play an important role in amplifying chronic itch and neurogenic inflammation.

About Celldex Therapeutics, Inc.
Celldex is a clinical stage biotechnology company dedicated to developing monoclonal and bispecific antibodies that address devastating diseases for which available treatments are inadequate. Our pipeline includes antibody-based therapeutics which have the ability to engage the human immune system and/or directly affect critical pathways to improve the lives of patients with inflammatory diseases and many forms of cancer. Visit www.celldex.com.

Forward Looking Statement
This release contains "forward-looking statements" made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are typically preceded by words such as "believes," "expects," "anticipates," "intends," "will," "may," "should," or similar expressions. These forward-looking statements reflect management's current knowledge, assumptions, judgment and expectations regarding future performance or events. Although management believes that the expectations reflected in such statements are reasonable, they give no assurance that such expectations will prove to be correct or that those goals will be achieved, and you should be aware that actual results could differ materially from those contained in the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties, including, but not limited to, our ability to successfully complete research and further development and commercialization of Company drug candidates; the effects of the outbreak of COVID-19 on our business and results of operations; the uncertainties inherent in clinical testing and accruing patients for clinical trials; our limited experience in bringing programs through Phase 3 clinical trials; our ability to manage and successfully complete multiple clinical trials and the research and development efforts for our multiple products at varying stages of development; the availability, cost, delivery and quality of clinical materials produced by our own manufacturing facility or supplied by contract manufacturers, who may be our sole source of supply; the timing, cost and uncertainty of obtaining regulatory approvals; the failure of the market for the Company's programs to continue to develop; our ability to protect the Company's intellectual property; the loss of any executive officers or key personnel or consultants; competition; changes in the regulatory landscape or the imposition of regulations that affect the Company's products; our ability to continue to obtain capital to meet our long-term liquidity needs on acceptable terms, or at all, including the additional capital which will be necessary to complete the clinical trials that we have initiated or plan to initiate; and other factors listed under "Risk Factors" in our annual report on Form 10-K and quarterly reports on Form 10-Q.

All forward-looking statements are expressly qualified in their entirety by this cautionary notice. You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this release. We have no obligation, and expressly disclaim any obligation, to update, revise or correct any of the forward-looking statements, whether as a result of new information, future events or otherwise.

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