Intellia Therapeutics Receives U.S. FDA Orphan Drug Designation for NTLA-2001, an Investigational CRISPR Therapy for the Treatment of Transthyretin (ATTR) Amyloidosis

October 21, 2021

CAMBRIDGE, Mass., Oct. 21, 2021 (GLOBE NEWSWIRE) -- Intellia Therapeutics, Inc. (NASDAQ:NTLA), a leading clinical-stage genome editing company focused on developing curative therapeutics using CRISPR/Cas9 technology both *in vivo* and *ex vivo*, announced today that the U.S. Food and Drug Administration (FDA) has granted orphan drug designation to NTLA-2001 for the treatment of transthyretin (ATTR) amyloidosis. This investigational therapy is the first CRISPR therapy to be administered systemically to edit a disease-causing gene inside the human body. NTLA-2001 has the potential to be the first single-dose treatment for ATTR amyloidosis as it may be able to halt and reverse the devastating complications of this disease. ATTR amyloidosis is a rare condition that can impact a number of organs and tissues within the body through the accumulation of misfolded transthyretin (TTR) protein deposits.

"Orphan drug designation underscores the FDA's recognition of NTLA-2001's potential promise as a single-dose, novel therapy for the treatment of ATTR amyloidosis," said Intellia President and Chief Executive Officer John Leonard, M.D. "At Intellia, we are committed to advancing our modular genome editing platform to develop potentially curative treatment options for life-threatening diseases, and we look forward to working with the ATTR amyloidosis community and the FDA to bring a much-needed treatment option to patients."

NTLA-2001 is currently being studied in a Phase 1 trial in adults with hereditary ATTR amyloidosis with polyneuropathy (ATTRv-PN). In June 2021, Intellia and its collaborator Regeneron announced positive interim clinical results from the first two cohorts of this study. These results, which were published in the *New England Journal of Medicine*, represented the first-ever clinical data supporting the safety and efficacy of *in vivo* CRISPR genome editing in humans.

The FDA's Orphan Drug Designation program provides orphan status to drugs defined as those intended for the treatment, diagnosis or prevention of rare diseases that affect fewer than 200,000 people in the United States. Orphan drug designation qualifies the sponsor of the drug for certain development incentives, including tax credits for qualified clinical testing, prescription drug user fee exemptions and seven-year marketing exclusivity upon FDA approval. The decision by the FDA follows a March 2021 decision by the European Commission (EC) to also grant NTLA-2001 orphan drug designation for the treatment of ATTR amyloidosis.

About Transthyretin (ATTR) Amyloidosis
Transthyretin amyloidosis, or ATTR amyloidosis, is a rare, progressive and fatal disease. Hereditary ATTR (ATTRv) amyloidosis occurs when a person is born with mutations in the *TTR* gene, which causes the liver to produce structurally abnormal transthyretin (TTR) protein with a propensity to misfold. These damaged proteins build up as amyloid deposits in the body, causing serious complications in multiple tissues, including the heart, nerves and digestive system. ATTRv amyloidosis predominantly manifests as polyneuropathy (ATTRv-PN), which can lead to nerve damage, or cardiomyopathy (ATTRv-CM), which can lead to heart failure. Some individuals without any genetic mutation produce non-mutated, or wild-type TTR proteins that become unstable over time, misfolding and aggregating in disease-causing amyloid deposits. This condition, called wild-type ATTR (ATTRwt) amyloidosis, primarily affects the heart.

About NTLA-2001
Based on Nobel Prize-winning CRISPR/Cas9 technology, NTLA-2001 could potentially be the first curative treatment for ATTR amyloidosis. NTLA-2001 is the first investigational CRISPR therapy candidate to be administered systemically, or intravenously, to edit genes inside the human body. Intellia's proprietary non-viral platform deploys lipid nanoparticles to deliver to the liver a two-part genome editing system: guide RNA specific to the disease-causing gene and messenger RNA that encodes the Cas9 enzyme, which carries out the precision editing. Robust preclinical data, showing deep and long-lasting transthyretin (TTR) reduction following *in vivo* inactivation of the target gene, supports NTLA-2001's potential as a single-administration therapeutic. Interim Phase 1 clinical data released in June 2021 confirm substantial, dose-dependent reduction of TTR protein following a single dose of NTLA-2001. Intellia leads development and commercialization of NTLA-2001 as part of a multi-target discovery, development and commercialization collaboration with Regeneron.

About Intellia Therapeutics
Intellia Therapeutics, a leading clinical-stage genome editing company, is developing novel, potentially curative therapeutics using CRISPR/Cas9 technology. To fully realize the transformative potential of CRISPR/Cas9, Intellia is pursuing two primary approaches. The company's *in vivo* programs use intravenously administered CRISPR as the therapy, in which proprietary delivery technology enables highly precise editing of disease-causing genes directly within specific target tissues. Intellia's *ex vivo* programs use CRISPR to create the therapy by using engineered human cells to treat cancer and autoimmune diseases. Intellia's deep scientific, technical and clinical development experience, along with its robust intellectual property portfolio, have enabled the company to take a leadership role in harnessing the full potential of CRISPR/Cas9 to create new classes of genetic medicine. Learn more at intelliatx.com. Follow us on Twitter @intelliatweets.

Forward-Looking Statements
This press release contains "forward-looking statements" of Intellia Therapeutics, Inc. ("Intellia" or the "Company") within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, express or implied statements regarding Intellia's beliefs and expectations regarding its: being able to complete clinical studies for NTLA-2001 for the treatment of transthyretin ("ATTR") amyloidosis pursuant to its clinical trial applications ("CTA"), including submitting additional regulatory applications in other countries; ability to demonstrate effectiveness of NTLA-2001 in treating or reversing ATTR amyloidosis in patients; advancement and expansion of its CRISPR/Cas9 technology to develop human therapeutic products, as well as its ability to maintain and expand its related intellectual property portfolio; expectations

of the potential impact of the coronavirus disease 2019 pandemic on strategy, future operations and timing of its clinical trials or IND submissions; ability to optimize the impact of its collaborations on its development programs, including but not limited to its collaborations with Regeneron, including its co-development programs for ATTR amyloidosis; and statements regarding the timing of regulatory filings regarding its development programs.

Any forward-looking statements in this press release are based on management's current expectations and beliefs of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: risks related to Intellia's ability to protect and maintain its intellectual property position; risks related to Intellia's relationship with third parties, including its licensors and licensees; risks related to the ability of its licensors to protect and maintain their intellectual property position; uncertainties related to the authorization, initiation and conduct of studies and other development requirements for its product candidates; the risk that any one or more of Intellia's product candidates will not be successfully developed and commercialized; the risk that the results of preclinical studies or clinical studies will not be predictive of future results in connection with future studies; and the risk that Intellia's collaborations with Regeneron or its other collaborations will not continue or will not be successful. For a discussion of these and other risks and uncertainties, and other important factors, any of which could cause Intellia's actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in Intellia's most recent annual report on Form 10-K as well as discussions of potential risks, uncertainties, and other important factors in Intellia's other filings with the Securities and Exchange Commission ("SEC"). All information in this press release is as of the date of the release, and Intellia undertakes no duty to update this information unless required by law.

Intellia Contacts:

Investors:
Ian Karp
Senior Vice President, Investor Relations and Corporate Communications
+1-857-449-4175
ian.karp@intelliatx.com

Lina Li
Director, Investor Relations
+1-857-706-1612
lina.li@intelliatx.com

Media:
Lisa Qu
Ten Bridge Communications
+1-678-662-9166
media@intelliatx.com
lqu@tenbridgecommunications.com

Source: Intellia Therapeutics, Inc.