Intellia Therapeutics Receives Authorization to Initiate Phase 1/2 Clinical Trial of NTLA-3001 for the Treatment of Alpha-1 Antitrypsin Deficiency

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- *NTLA-3001 is a potential one-time gene editing treatment that may normalize AAT protein levels and halt the progression of lung disease associated with alpha-1 antitrypsin deficiency (AATD)*
- *NTLA-3001 is Intellia's first wholly owned CRISPR-based* in vivo *targeted gene insertion candidate to advance into the clinic*
- *On track to dose the first patient in 2H 2024*

CAMBRIDGE, Mass., July 30, 2024 (GLOBE NEWSWIRE) -- Intellia Therapeutics, Inc. (NASDAQ:NTLA), a leading clinical-stage gene editing company focused on revolutionizing medicine with CRISPR-based therapies, today announced the authorization of its Clinical Trial Application (CTA) by the United Kingdom's Medicine and Healthcare products Regulatory Agency (MHRA) to initiate a Phase 1/2 study evaluating NTLA-3001 for the treatment of alpha-1 antitrypsin deficiency (AATD)-associated lung disease. AATD is a rare, genetic disease that most commonly manifests in lung dysfunction due to insufficient levels of alpha-1 antitrypsin (AAT) protein. NTLA-3001 is a systemically administered *in vivo* CRISPR/Cas9-based targeted gene insertion candidate. It is designed to precisely insert a healthy copy of the *SERPINA1* gene, which encodes the AAT protein, with the potential to restore permanent expression of functional AAT protein to therapeutic levels after a single dose. This approach seeks to improve patient outcomes, including eliminating the need for weekly intravenous infusions of AAT augmentation therapy or lung transplant in severe cases.

"NTLA-3001 is a groundbreaking *in vivo* CRISPR-based gene insertion candidate designed to durably produce functional AAT protein at normal levels after a one-time treatment. We are excited to receive regulatory authorization to begin this important first-in-human study of NTLA-3001 for people living with AATD," said Intellia President and Chief Executive Officer John Leonard, M.D. "In addition, this study serves to validate our modular gene insertion platform, which we plan to leverage to address numerous diseases caused by a missing or defective protein."

The Phase 1/2 study will be an international, multicenter, single-arm, open-label study of NTLA-3001 in adults with AATD-associated lung disease. The study will enroll up to 30 patients and consist of a dose-escalation phase, followed by a dose-expansion phase to confirm the recommended dose. The study will evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics of NTLA-3001. More information about the study may be found on clinicaltrials.gov when available.

Beyond its first application in the United Kingdom, Intellia is submitting additional regulatory applications in other countries as part of its ongoing, multi-national development strategy for NTLA-3001.

About NTLA-3001

NTLA-3001 is a wholly owned, first-in-class CRISPR-mediated *in vivo* targeted gene insertion development candidate for the treatment of AATD-associated lung disease. It is designed to precisely insert a copy of the *SERPINA1* gene, which encodes the alpha-1 antitrypsin (AAT) protein, with the potential to restore permanent expression of functional AAT protein to therapeutic levels after a single dose. This approach seeks to improve patient outcomes, including eliminating the need for weekly intravenous infusions of AAT augmentation therapy or lung transplant in severe cases.

About Alpha-1 Antitrypsin Deficiency

Alpha-1 antitrypsin deficiency (AATD) is an inherited condition that increases the risk of liver and lung disease. AATD is caused by changes in the *SERPINA1* gene that normally provides instructions for making alpha-1 antitrypsin (AAT) protein in the liver that is then secreted to protect the lungs. Mutations to the *SERPINA1* gene lead to the production of abnormal AAT protein that then accumulates in the liver. As a result, AAT protein levels in the blood and lungs are very low. The shortage of AAT in the blood and lungs places the lungs at risk for emphysema, a type of chronic obstructive pulmonary disease (COPD). AATD occurs in greater than 60,000 people in the U.S. and around 250,000 worldwide.

About Intellia Therapeutics

Intellia Therapeutics, Inc. (NASDAQ:NTLA) is a leading clinical-stage gene editing company focused on revolutionizing medicine with CRISPR-based therapies. The company's *in vivo* programs use CRISPR to enable precise editing of disease-causing genes directly inside the human body. Intellia's *ex vivo* programs use CRISPR to engineer human cells outside the body for the treatment of cancer and autoimmune diseases. Intellia's deep scientific, technical and clinical development experience, along with its people, is helping set the standard for a new class of medicine. To harness the full potential of gene editing, Intellia continues to expand the capabilities of its CRISPR-based platform with novel editing and delivery technologies. Learn more at intelliatx.com and follow us @intelliatx.

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 the safety, efficacy, success and advancement of NTLA-3001 for the treatment of alpha-1 antitrypsin deficiency ("AATD")-associated lung disease pursuant to its clinical trial applications ("CTA"), including its ability to dose the first patient in its Phase 1/2 study in the second half of 2024 and the submission of regulatory applications in other countries; the ability of NTLA-3001 to durably normalize AAT protein levels after a single dose, halt the progression of lung disease associated with AATD, and improve patient outcomes; and the modularity of its gene insertion platform, including its ability to address numerous diseases caused by a missing or defective protein.

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, including uncertainties related to regulatory approvals to conduct clinical trials; 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 clinical study results will not be positive. 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. 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.

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