Applied Therapeutics to Present Data on AT-007 Treatment in SORD Deficiency at the 2022 Annual Meeting of the Peripheral Nerve Society

May 5, 2022

- *Sorbitol correlates with disease severity in patients with SORD Deficiency*
- *AT-007 treatment substantially reduced sorbitol levels in a pilot study in SORD Deficiency*
- *Sorbitol elevation results in mitochondrial dysfunction, neuronal loss, and climbing defects in a drosophila model of SORD Deficiency; AT-007 treatment in drosophila prevents all aspects of the SORD Deficiency phenotype by reducing sorbitol production*

NEW YORK, May 05, 2022 (GLOBE NEWSWIRE) -- Applied Therapeutics, Inc. (Nasdaq: APLT), a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular targets in indications of high unmet medical need, today announced presentations at the 2022 Annual Meeting of the Peripheral Nerve Society, May 14 - 17 in Miami, Florida.

“The data presented at PNS represents a comprehensive understanding of the role of toxic sorbitol in disease pathogenesis in SORD Deficiency, as well as ability to reduce sorbitol levels and prevent disease progression with AT-007 treatment,” said Riccardo Perfetti MD, PhD, Chief Medical Officer of Applied Therapeutics. “In a pilot study in patients with SORD Deficiency, sorbitol level correlated with disease severity, and AT-007 treatment substantially reduced sorbitol levels. In a Drosophila model of disease, elevated sorbitol resulted in neuronal damage and decline in mobility, and AT-007 treatment prevented the disease phenotype by inhibiting sorbitol production. Taken together, this data significantly advances our understanding of the disease and potential for treatment with AT-007.”

Presentation Details

Oral Presentation: Aldose Reductase Inhibitor AT-007 Prevents Mitochondrial Dysfunction and Neurodegeneration in Sorbitol Dehydrogenase Deficiency-Induced Neuropathy
Yi Zhu, MD, PhD, Amanda Lobato, Adriana Rebelo, PhD, Tijana Canic, Sheyum Syed, PhD, MS, Riccardo Perfetti, MD, PhD, Shoshana Shendelman, PhD, Stephan Züchner, MD, PhD, and Grace Zhai, PhD
Oral Presentation Date and Time: Monday, May 16, 2022, 4:30 PM EDT
Poster Date and Time: Sunday, May 15, 2022, 12:00 – 2:00 PM EDT
In-Person Poster Number: 152; **E-Poster Number:** 1354

Poster: Circulating Sorbitol Levels Correlate with Severity of Disease in Patients with Sorbitol Dehydrogenase (SORD) Deficiency
Riccardo Perfetti, MD, PhD, and Shoshana Shendelman, PhD
Date and Time: Poster Session II, Tuesday, May 17, 2022, 12:00 – 2:00 PM EDT
In-Person Poster Number: 162; **E-Poster Number**: 1383

Poster: AT-007 Significantly Lowers Blood Sorbitol Levels in Patients with Hereditary Neuropathy Resulting from Sorbitol Dehydrogenase (SORD) Deficiency
Riccardo Perfetti MD, PhD, Jahannaz Dastgir, DO, and Shoshana Shendelman, PhD
Date and Time: Poster Session II, Tuesday, May 17, 2022, 12:00 – 2:00 PM EDT
In-Person Poster Number: 53; **E-Poster Number**: 1203

About Sorbitol Dehydrogenase (SORD) Deficiency

Sorbitol Dehydrogenase Deficiency (SORD Deficiency) is a rare, progressive, debilitating hereditary neuropathy that affects peripheral nerves and motor neurons. SORD Deficiency is one of the most common forms of recessive hereditary neuropathy and affects approximately 3,300 patients in the U.S. and 4,000 patients in Europe. The disease is caused by a lack of the enzyme sorbitol dehydrogenase, responsible for the metabolism of sorbitol, which causes sorbitol to accumulate at high levels and become toxic to the body. Intracellular sorbitol accumulation results in significant disability, loss of sensory function, neuromuscular dysfunction, and decreased mobility.

About AT-007

AT-007 is a central nervous system (CNS) penetrant Aldose Reductase inhibitor (ARI) in development for the treatment of several rare neurological diseases, including Galactosemia, SORD Deficiency, and PMM2-CDG. In clinical trials, AT-007 significantly reduced plasma galactitol levels vs. placebo in adults and children with Galactosemia. AT-007 is currently being studied in a Phase 3 clinical outcomes trial (ACTION-Galactosemia Kids) in children ages 2-17 with Galactosemia, as well as a long-term open-label study in adults with Galactosemia. In a pilot study, AT-007 significantly reduced blood sorbitol levels in adults with SORD Deficiency. AT-007 is currently being studied in a Phase 3 trial (INSPIRE) investigating biomarker efficacy, clinical outcomes, and significantly reduced blood sorbitol levels in adults with SORD Deficiency. AT-007 has received both Orphan Drug and Pediatric Rare Disease designations from the U.S. Food and Drug Administration (FDA) for the treatment of Galactosemia and PMM2-CDG, and Fast Track designation for Galactosemia.

About Applied Therapeutics

Applied Therapeutics is a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular

targets in indications of high unmet medical need. The Company's lead drug candidate, AT-007, is a novel central nervous system penetrant Aldose Reductase Inhibitor (ARI) for the treatment of CNS rare metabolic diseases, including Galactosemia, SORD Deficiency, and PMM2-CDG. The Company is also developing AT-001, a novel potent ARI, for the treatment of Diabetic Cardiomyopathy, or DbCM, a fatal fibrosis of the heart. The preclinical pipeline also includes AT-003, an ARI designed to cross through the back of the eye when dosed orally, for the treatment of Diabetic retinopathy, as well as novel dual PI3k inhibitors in preclinical development for orphan oncology indications.

To learn more, please visit www.appliedtherapeutics.com and follow the company on Twitter @Applied_Tx.

Forward-Looking Statements

This press release contains "forward-looking statements" that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. Any statements, other than statements of historical fact, included in this press release regarding strategy, future operations, prospects, plans and objectives of management, including words such as "may," "will," "expect," "anticipate," "plan," "intend," and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are forward-looking statements. Forward-looking statements in this release involve substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by the forward-looking statements, and we, therefore cannot assure you that our plans, intentions, expectations, or strategies will be attained or achieved.

Such risks and uncertainties include, without limitation, factors that may cause actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in our filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" contained therein. Except as otherwise required by law, we disclaim any intention or obligation to update or revise any forward-looking statements, which speak only as of the date they were made, whether as a result of new information, future events or circumstances or otherwise.

Contacts

Investors:

Maghan Meyers
(212) 600-1902
appliedtherapeutics@argotpartners.com

Media:

media@appliedtherapeutics.com

Applied Therapeutics, Inc.