Orally available NX-5948 is a potent selective degrader of Bruton’s Tyrosine Kinase (BTK) without IMiD activity

Data were presented at the European Alliance of Associations for Rheumatology (EULAR) 2021 Virtual Congress

SAN FRANCISCO, June 02, 2021 (GLOBE NEWSWIRE) -- Nurix Therapeutics, Inc. (Nasdaq: NRIX), a biopharmaceutical company developing targeted protein modulation drugs, today announced the presentation of preclinical data from its NX-5948 program, demonstrating that daily oral dosing of NX-5948 resulted in a robust resolution of symptoms and inflammation in an animal model of arthritis. The data, which support further investigation of NX-5948 for clinical development as a potential treatment for autoimmune disorders, were presented at the EULAR 2021 Virtual Congress which is being held June 2–5, 2021.

“NX-5948 demonstrates highly selective, complete and durable BTK degradation activity resulting in profound reduction in inflammation in models of severe arthritis,” said Robert J. Brown, M.D., Nurix’s senior vice president of clinical development. “We remain on track to initiate clinical trials of NX-5948 in B cell malignancies in the second half of this year and, based on our recent findings, will consider the potential for future expansion of indications into selected autoimmune diseases in 2022.”

“The data presented at this year’s EULAR congress highlight the power of Nurix’s DELigase platform to generate differentiated products that have the potential to address challenging diseases such as autoimmune disorders,” said Arthur T. Sands, M.D., Ph.D., Nurix’s chief executive officer. “The unique activities of NX-5948 include its ability to cross the blood-brain barrier in animal models. We plan to further explore this property in models of multiple sclerosis and other central nervous system diseases.”

Aberrant activation of B cells and autoantibody-mediated tissue damage are hallmarks of autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus. In B cells and myeloid cells, BTK transduces signals downstream of the B cell receptor (BCR), toll-like receptors, and Fc receptors and its overexpression in B cells leads to hyperactive BCR signaling, plasma cell generation, and autoantibody secretion. This makes degradation of BTK a potentially powerful therapeutic strategy to address autoimmune disease.

The data presented at the EULAR Congress demonstrate that NX-5948 is a highly selective and potent degrader of BTK in primary human B cells (DC50= 0.034nm) resulting in robust inhibition of anti-IgM- and TLR7-mediated B cell activation. Previous data have demonstrated that NX-5948 lacks IMiD activity with no Cereblon neo-substrate Aiolos degradation at clinically relevant concentrations (DC50=10 micromolar). In vivo studies in both mice and non-human primates (NHPs) demonstrated that a single oral dose of NX-5948 resulted in rapid, dose-dependent, and durable BTK degradation in B cells with BTK levels remaining fully suppressed 24 hours post a single oral dose in NHPs. Importantly, data obtained from a mouse model of collagen-induced arthritis (CIA) demonstrated that in mice treated with NX-5948, symptoms of arthritis improved, with a significant reduction in arthritis clinical score, superior disease-related symptom control relative to ibrutinib, and similar activity to that of dexamethasone. Treatment with NX-5948 also resulted in a reduction in anti-type II collagen titer and serum levels of the pro-inflammatory cytokine, IL-6. Treatment with NX-5948 was well-tolerated and, unlike dexamethasone, did not lead to body weight loss.

A copy of the poster can be found on the Investor page of the Nurix website under Scientific Presentations.

About NX-5948

NX-5948 is an investigational, orally bioavailable, small molecule degrader of BTK that has been designed to lack IMiD activity for potential applications in indications where sparing IMiD activity may be beneficial. NX-5948 has demonstrated the ability to cross the blood brain barrier in animal models, suggesting potential utility in both autoimmune diseases and B-cell malignancies that involve the central nervous system. Nurix is investigating development of NX-5948 for the potential treatment of certain autoimmune diseases as well as certain B-cell malignancies.

About Nurix Therapeutics, Inc.

Nurix Therapeutics is a biopharmaceutical company focused on the discovery, development, and commercialization of small molecule therapies designed to modulate cellular protein levels as a novel treatment approach for cancer and other challenging diseases. Leveraging Nurix’s extensive expertise in E3 ligases together with its proprietary DNA-encoded libraries, Nurix has built DELigase, an integrated discovery platform to identify and advance novel drug candidates targeting E3 ligases, a broad class of enzymes that can modulate proteins within the cell. Nurix’s drug discovery approach is to either harness or inhibit the natural function of E3 ligases within the ubiquitin proteasome system to selectively decrease or increase cellular protein levels. Nurix’s wholly owned pipeline comprises targeted protein degraders of Bruton’s tyrosine kinase, a B-cell signaling protein, and inhibitors of Casitas B-lineage lymphoma proto-oncogene B, an E3 ligase that regulates T cell activation. Nurix is headquartered in San Francisco, California. For more information, please visit http://www.nurix.com.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements reflect the current beliefs and expectations of management. All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including, without limitation, statements concerning Nurix’s future plans and prospects, the planned timing of Nurix’s clinical trial programs for its drug candidates and the expansion of Nurix’s DELigase™ platform. Although Nurix believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such
expectations will prove to be correct. Forward-looking statements are subject to risks and uncertainties that may cause Nurix’s actual activities or results to differ significantly from those expressed in any forward-looking statement, including the risks and uncertainties described under the heading “Risk Factors” in documents Nurix files from time to time with the Securities and Exchange Commission (SEC) including Nurix’s Annual Report on Form 10-K filed with the SEC on February 16, 2021, Nurix’s Quarterly Report on Form 10-Q filed with the SEC on April 13, 2021, and other SEC filings. These forward-looking statements speak only as of the date of this press release, and Nurix undertakes no obligation to revise or update any forward-looking statements to reflect events or circumstances after the date hereof, except as required by applicable law.

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