Athira Pharma Announces Publication in Frontiers in Neuroscience Highlighting Therapeutic Potential of ATH-1105 in Amyotrophic Lateral Sclerosis (ALS)

February 8, 2024

Results demonstrate ATH-1105 is neuroprotective, preserves motor and nerve function and extends survival in preclinical models of ALS

BOTHELL, Wash., Feb. 08, 2024 (GLOBE NEWSWIRE) -- Athira Pharma, Inc. (NASDAQ: ATHA), a late clinical-stage biopharmaceutical company focused on developing small molecules to restore neuronal health and slow neurodegeneration, today announced publication of research highlighting the neuroprotective and anti-inflammatory effects of ATH-1105 in preclinical models of amyotrophic lateral sclerosis (ALS). The original research article, "ATH-1105, a small-molecule positive modulator of the neurotrophic HGF system, is neuroprotective, preserves neuromotor function, and extends survival in preclinical models of ALS," authored by Berthiaume, A., and Reda, S., et al., was published in the peer-reviewed journal, *Frontiers in Neuroscience.* ATH-1105 is a next-generation, orally administered small molecule drug candidate designed to enhance the neurotrophic hepatocyte growth factor (HGF) system.

"These data demonstrate that ATH-1105 treatment results in significant, consistent beneficial effects both in cell culture and in vivo models of ALS. Through enhancement of the neurotrophic HGF system, ATH-1105 protects spinal motor neurons from ALS-relevant insults in vitro and in animal models of ALS, prevents the progressive decline of motor and nerve function, reduces inflammation, preserves body weight and extends survival. Also, the significant reduction in plasma neurofilament light chain (NfL) levels, an established biomarker of neurodegeneration in ALS, is highly encouraging," said Kevin Church, Ph.D., Chief Scientific Officer of Athira. "These studies further support the therapeutic potential and continued development of ATH-1105, which is targeted to advance into first-in-human studies this year."

Key findings highlighted in the publication include:

- ATH-1105 enhances neurotrophic HGF system signaling and protects primary neuron cultures from various insults relevant to ALS.
- ATH-1105 treatment reduced astrocyte reactivity in spinal motor neuron-astrocyte co-cultures and preserved neuromuscular junction integrity in spinal motor neuron-muscle co-cultures following exposure to toxic levels of glutamate, believed to be a key driver of ALS pathology.
- In a TDP-43 mouse model of ALS, ATH-1105 treatment significantly preserved body weight, reduced motor and nerve function decline over time, decreased plasma biomarkers of inflammation and neurodegeneration, prevented axonal degeneration and TDP-43 pathology in peripheral nerves, and ultimately extended survival.

"There is an urgent need for new ALS treatment options, particularly those aimed at slowing or stopping neurodegeneration," said Mark Litton, Ph.D., President and Chief Executive Officer of Athira. "The results reported in this peer-reviewed publication suggest that ATH-1105 demonstrated consistent translation of neuroprotective and anti-inflammatory effects from in vitro to in vivo models, which led to improved motor function and survival in an ALS animal model. These findings further support our plans to progress ATH-1105 into first-in-human studies in the first half of 2024."

The article is available on the *Frontiers in Neuroscience* website and from the Scientific Publications & Presentations page of the company's website at www.athira.com.

About ATH-1105
ATH-1105 is an orally administered small molecule designed to positively modulate the neurotrophic hepatocyte growth factor (HGF) system, which plays a critical role in nervous system maintenance and repair, including stimulation of cell survival, increase in neuronal outgrowth and modulation of neuronal network repair. In preclinical models of amyotrophic lateral sclerosis (ALS), ATH-1105 has been shown to significantly increase survival, enhance motor and nerve function, reduce peripheral nerve demyelination and axon degeneration, and improve neurodegeneration and inflammation.

About Athira Pharma, Inc.
Athira Pharma, Inc., headquartered in the Seattle, Washington area, is a late clinical-stage biopharmaceutical company focused on developing small molecules to restore neuronal health and slow neurodegeneration. Athira aims to alter the course of neurological diseases by advancing its pipeline of therapeutic candidates that modulate the neurotrophic HGF system, including fosgonimeton (ATH-1017), which is being evaluated for the potential treatment of mild-to-moderate Alzheimer's disease in the Phase 2/3 LIFT-AD trial that is targeted to report topline data in the second half of 2024. For more information, visit www.athira.com. You can also follow Athira on Facebook, LinkedIn, X (formerly known as Twitter) and Instagram.

Forward-Looking Statements
This communication contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. These forward-looking statements are not based on historical fact and include statements regarding: product candidates as a potential treatment for amyotrophic lateral sclerosis, Alzheimer's disease and other neurodegenerative diseases; future development plans; the anticipated reporting of data; expectations regarding the potential efficacy and commercial potential of Athira's product candidates; and Athira's ability to advance its product candidates into later stages of development. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "should," "on track," "would," "expect," "plan," "believe," "intend," "pursue," "continue," "suggest," "potential," and similar expressions. Any forward-looking statements are based on management's current expectations 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, the data from preclinical and clinical trials may not support the safety, efficacy and tolerability of Athira's product candidates; development of product candidates may cease or be delayed; regulatory authorities could object to protocols, amendments and other submissions; future potential regulatory milestones for product candidates, including those related to current and planned clinical studies, may be insufficient to support regulatory submissions or approval; Athira may not be able to recruit sufficient patients for its clinical trials; the outcome of legal proceedings that have been or may in the future be instituted against Athira, its directors and officers; possible negative interactions of Athira's product candidates with other treatments; Athira's assumptions regarding its financial condition and the sufficiency of its cash, cash equivalents and investments to fund its planned operations may be incorrect; adverse conditions in the general domestic and global economic markets; the impact of competition; regulatory agencies may be delayed in reviewing, commenting on or approving any of Athira's clinical development plans as a result of pandemics or health epidemics, which could further delay development timelines; the impact of expanded product development and clinical activities on operating expenses; the impact of new or changing laws and regulations; as well as the other risks detailed in Athira's filings with the Securities and Exchange Commission from time to time. These forward-looking statements speak only as of the date hereof and Athira undertakes no obligation to update forward-looking statements. Athira may not actually achieve the plans, intentions, or expectations disclosed in its forward-looking statements, and you should not place undue reliance on the forward-looking statements.

Investor & Media Contact:

Julie Rathbun
Athira Pharma
Julie.rathbun@athira.com
206-769-9219