Athira Pharma Presents Preclinical Data Highlighting Fosgonimeton's Neuroprotective Effects Against Amyloid-β-Induced Pathological Alterations and Neuroinflammation in Models of Alzheimer's Disease

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Data presented at Society for Neuroscience Annual Meeting 2023

BOTHELL, Wash., Nov. 15, 2023 (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, presented new preclinical data supporting the potential therapeutic benefit of fosgonimeton for the treatment of Alzheimer's disease (AD) and other neurodegenerative diseases at the Society for Neuroscience (SfN) Annual Meeting 2023, being held in Washington, D.C. from November 11 – 15, 2023. Fosgonimeton is a potentially first-in-class, small-molecule, brain-penetrant positive modulator of the neurotrophic hepatocyte growth factor (HGF) system with the potential to protect and repair neuronal networks.

"We continue to build the body of preclinical evidence supporting the continued development of fosgonimeton to treat AD and other debilitating neurodegenerative diseases," said Kevin Church, Ph.D., Chief Scientific Officer, Athira Pharma. "Our latest data demonstrate consistent neuroprotective effects of fosgonimeton and provide insights into the mechanisms by which it preserves neurons from degeneration and reduces neuroinflammation. In vitro, fosgonimeton protected neurons from toxic amyloid-beta (Aβ) and decreased tau phosphorylation. In an Aβ model of AD in vivo, fosgonimeton improved cognitive performance and reduced hippocampal neuron loss. These data further support our approach of targeting the neurotrophic HGF system in to treat AD and other neurodegenerative diseases."

Oral Presentation (#NAN076.02): *Fosgonimeton, a Small-Molecule Positive Modulator of the Neurotrophic HGF System, Protects Against Amyloid beta-induced Pathological Alterations in Alzheimer's Disease Models In Vitro and In Vivo*

Sharay Setti, Ph.D., Senior Scientist, Athira Pharma, presented preclinical findings demonstrating fosgonimeton's neurotrophic and neuroprotective activity in Aβ models of AD.

- In vitro, the active metabolite of fosgonimeton reduced Aβ-induced neurite degeneration, tau phosphorylation, mitochondrial stress, and neuronal death.
- In an Aβ mouse model of AD, fosgonimeton improved cognitive performance in both Y-maze and Morris water maze trials, protected hippocampal neurons from degeneration, and promoted cell proliferation in the subgranular zone, showing potential to support adult neurogenesis.

Poster Presentation (#PSTR 203.06): *Fosgonimeton, a small-molecule positive modulator of the neurotrophic hepatocyte growth factor system, inhibits LPS-mediated neuroinflammation in BV2 microglia.*

Wei Wu, Ph.D., Senior Scientist II, Athira Pharma, presented preclinical research demonstrating the cellular mechanisms by which fosgonimeton induces anti-inflammatory effects in BV2 microglia cells.

- In vitro, the active metabolite of fosgonimeton inhibited the expression of pro-inflammatory mediators, reduced mitochondrial dysfunction, and decreased oxidative stress in LPS-stimulated microglia.
- The anti-inflammatory effects of fosgonimeton demonstrated in these models suggest it may have the potential to help reduce neuroinflammation, a key pathological feature of several neurodegenerative diseases.

The presentations are available on the Scientific Publications & Presentations page of the company's website at www.athira.com.

About Fosgonimeton
Fosgonimeton is a small molecule designed to enhance the activity of the neurotrophic hepatocyte growth factor signaling system, an endogenous repair mechanism for a healthy nervous system. The function of the neurotrophic HGF system may be impaired in conditions of neurodegeneration. Targeting the protection and repair of neuronal networks, fosgonimeton has disease-modifying potential to address a broad range of neurodegenerative diseases, including Alzheimer's disease, Parkinson's disease, and Dementia with Lewy bodies.

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 targeting the neurotrophic HGF system for Alzheimer's and Parkinson's disease, Dementia with Lewy bodies, and amyotrophic lateral sclerosis. 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 Alzheimer's disease, Parkinson's disease, Dementia

with Lewy bodies, and other neurodegenerative diseases, such as amyotrophic lateral sclerosis; 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 other similar expressions, among others. 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 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.

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