



aTyr Pharma to Present Findings from its tRNA Synthetase Platform at the International 28th tRNA Conference

June 13, 2022

Conference hosted by The Ohio State University's Center for RNA Biology to showcase latest advancements in tRNA biology

SAN DIEGO, June 13, 2022 (GLOBE NEWSWIRE) -- aTyr Pharma, Inc. (Nasdaq: LIFE), a biotherapeutics company engaged in the discovery and development of first-in-class medicines from its proprietary tRNA synthetase biology platform, today announced that Leslie A. Nangle, Ph.D., Vice President, Research at aTyr, will present at the [International 28th tRNA Conference](#), which is scheduled to take place June 12 – 16, 2022, at The Ohio State University in Columbus, OH.

Extracellular tRNA synthetases represent a class of proteins that may play important roles in regulating cellular responses to certain disease states, in particular, cellular stress and imbalances in tissue homeostasis. aTyr is focused on elucidating novel pathways mediated through extracellular tRNA synthetases and creating new biologics to modulate these pathways, by either developing protein therapies based on extracellular tRNA synthetase fragments or generating monoclonal antibodies to target the pathway.

Dr. Nangle will participate in a panel with other tRNA focused companies to discuss emerging opportunities in tRNA therapeutics. Additionally, she will present on aTyr's tRNA synthetase platform, including clinical proof-of-concept data from its lead tRNA synthetase derived candidate efzofitimid, which is entering Phase 3 clinical development for the treatment of pulmonary sarcoidosis, a major form of interstitial lung disease.

Details of the panel and presentation appear below.

Title: Emerging Opportunities in tRNA Therapeutics

Panelist: Leslie A. Nangle, aTyr Pharma

Date: Monday, June 13, 2022

Time: 4:45PM – 6:15PM EDT

Title: Efzofitimid, a Novel Therapeutic Based on Histidyl-tRNA Synthetase for Treatment of Interstitial Lung Diseases **Presenter:** Leslie A. Nangle, aTyr Pharma

Date: Thursday, June 16, 2022

Time: 1:20PM – 1:40PM EDT

"I am delighted to participate in this conference to showcase the pioneering work that aTyr has accomplished in the area of tRNA biology," said Dr. Nangle. "Notably, I am pleased to present the progress we have made in advancing the first tRNA synthetase derived candidate, efzofitimid, from discovery to clinical proof-of-concept. Recent signals of efficacy in pulmonary sarcoidosis shown by efzofitimid, which is derived from a fragment of histidyl-tRNA synthetase (HARS), support the concept that modulating extracellular tRNA synthetase pathways has disease modifying therapeutic potential. These findings validate our platform as one that can generate new therapeutic candidates, not only from HARS but potentially from fragments derived from the additional 19 tRNA synthetase gene families covered by our intellectual property portfolio, potentially representing a new class of medicines."

About Efzofitimid

aTyr is developing efzofitimid as a potential therapeutic for patients with fibrotic lung disease. Efzofitimid, a fusion protein comprised of the immunomodulatory domain of histidyl-tRNA synthetase fused to the FC region of a human antibody, is a selective modulator of neuropilin-2 that downregulates innate and adaptive immune response in inflammatory disease states. aTyr's lead indication for efzofitimid is pulmonary sarcoidosis, a major form of interstitial lung disease. Clinical proof-of-concept for efzofitimid was recently established in a Phase 1b/2a multiple-ascending dose, placebo-controlled study of efzofitimid in patients with pulmonary sarcoidosis, which demonstrated safety and a consistent dose response and trends of benefit of efzofitimid compared to placebo on key efficacy endpoints, including steroid reduction, lung function, clinical symptoms and inflammatory biomarkers. aTyr intends to initiate EFZO-FIT TM, a Phase 3 study of efzofitimid in pulmonary sarcoidosis patients, in the third quarter of 2022.

About aTyr

aTyr is a biotherapeutics company engaged in the discovery and development of first-in-class medicines from its proprietary tRNA synthetase biology platform. aTyr's research and development efforts are concentrated on a newly discovered area of biology, the extracellular functionality and signaling pathways of tRNA synthetases. aTyr has built a global intellectual property estate directed to a potential pipeline of protein compositions derived from 20 tRNA synthetase genes and their extracellular targets. aTyr's primary focus is efzofitimid, a clinical-stage product candidate which binds to the neuropilin-2 receptor and is designed to downregulate immune engagement in fibrotic lung disease. For more information, please visit www.atyrpharma.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are usually identified by the use of words such as "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "seeks," "should," "will," and variations of such words or similar expressions. We intend these forward-looking statements to be covered by such safe harbor provisions for forward-looking statements and are making this statement for purposes of complying with those safe harbor provisions. These

forward-looking statements include statements regarding potential therapeutic benefits and applications of efzofitimod; timelines and plans with respect to certain development activities (such as the timing of clinical trials); and certain development goals. These forward-looking statements also reflect our current views about our plans, intentions, expectations, strategies and prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions, expectations, strategies and prospects, as reflected in or suggested by these forward-looking statements, are reasonable, we can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. All forward-looking statements are based on estimates and assumptions by our management that, although we believe to be reasonable, are inherently uncertain. Furthermore, actual results may differ materially from those described in these forward-looking statements and will be affected by a variety of risks and factors that are beyond our control including, without limitation, uncertainty regarding the COVID-19 pandemic, risks associated with the discovery, development and regulation of our product candidates, the risk that we or our partners may cease or delay preclinical or clinical development activities for any of our existing or future product candidates for a variety of reasons (including difficulties or delays in patient enrollment in planned clinical trials), the possibility that existing collaborations could be terminated early, and the risk that we may not be able to raise the additional funding required for our business and product development plans, as well as those risks set forth in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 filed with the SEC on May 10, 2022 and in our other SEC filings. Except as required by law, we assume no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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Source: aTyr Pharma, Inc.