



## **aTyr Pharma to Highlight Advancements in tRNA Synthetase Biology Research at the 13th International Symposium of Aminoacyl-tRNA Synthetases (AARS 2023)**

June 6, 2023

*Conference hosted by the International Union of Biochemistry and Molecular Biology (IUBMB) to feature leading research in tRNA synthetase biology.*

*Presentations showcase company's progress in generating new therapeutics from tRNA synthetase platform.*

SAN DIEGO, June 06, 2023 (GLOBE NEWSWIRE) -- aTyr Pharma, Inc. (Nasdaq: LIFE), a clinical stage biotherapeutics company engaged in the discovery and development of first-in-class medicines from its proprietary tRNA synthetase platform, today announced multiple presentations at the International Union of Biochemistry and Molecular Biology's [13<sup>th</sup> International Symposium of Aminoacyl-tRNA Synthetases](#) (AARS 2023), which is scheduled to take place June 4 – 9 in Ontario, Canada.

"As a leader in the field of tRNA biology, we look forward to highlighting some of the recent findings from our platform at AARS 2023," said Leslie A. Nangle, Ph.D., Vice President, Research at aTyr. "In these presentations we describe the process from concept to clinical proof-of-concept for efzofitimid, our lead tRNA synthetase-derived candidate in development for interstitial lung disease, and how we have applied that same process to identify extracellular targets for two additional tRNA synthetase candidates from our platform. Furthermore, we present exciting findings that solidify a connection between patients with certain genetic conditions and lower circulating levels of the tRNA synthetase HARS, which forms the active portion of efzofitimid. As these patients exhibit dysregulated respiratory immune responses, this data provides rationale for a link between human extracellular HARS deficiency and diseases with respiratory symptoms."

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 developing protein therapies based on extracellular tRNA synthetase fragments.

Details of the presentations appear below. The posters will be available on the aTyr website once presented.

**Title:** Clinical Proof-of-Concept for a Novel Therapeutic Based on Histidyl-tRNA Synthetase for Treatment of Interstitial Lung Diseases

**Format:** Presentation

**Presenter:** Leslie A. Nangle, Ph.D.

**Date and Time:** Tuesday, June 6, 2023, at 3:30 p.m.

**Title:** Identification of Key Fibrotic Extracellular Targets for Alanyl- and Aspartyl-tRNA Synthetases

**Format:** Poster Presentation

**Date and Time:** Tuesday, June 6, 2023, at 8:10 p.m.

**Title:** Circulating His-tRNA Synthetase is Reduced in Patients Harboring the Usher Syndrome Type 3B-Linked Mutation Y454S

**Format:** Poster Presentation

**Date and Time:** Tuesday, June 6, 2023, at 8:10 p.m.

**Title:** tRNA Biology Industry Panel

**Format:** Panel

**Panelist:** Leslie A. Nangle, Ph.D.

**Date and Time:** Wednesday, June 7, 2023, at 11:40 a.m.

### **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 is currently conducting EFZO-FIT™, a global pivotal Phase 3 study of efzofitimid in pulmonary sarcoidosis.

### **About aTyr**

aTyr is a biotherapeutics company engaged in the discovery and development of first-in-class medicines from its proprietary tRNA synthetase 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 <http://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 "believes," "expects," "intends," "may," "plans," "forward," "potential," "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, among others, statements regarding potential therapeutic benefits and applications of efzofitimod and research and development activities related to future tRNA synthetase candidates. 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 geopolitical and macroeconomic events, 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 most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q and in our subsequent 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.

**Contact:**

Ashlee Dunston  
Director, Investor Relations and Corporate Communications  
[adunston@atyrpharma.com](mailto:adunston@atyrpharma.com)

Source: aTyr Pharma, Inc.