

aTyr Pharma Announces Poster Presentations at the American Association for Cancer Research (AACR) Annual Meeting

March 11, 2021

SAN DIEGO, March 11, 2021 (GLOBE NEWSWIRE) -- aTyr Pharma, Inc. (Nasdaq: LIFE), a biotherapeutics company engaged in the discovery and development of innovative medicines based on novel biological pathways, today announced that the company will present two posters at the upcoming American Association for Cancer Research (AACR) Annual Meeting, which is being held virtually April 10 – 15 and May 17 – 21.

Details of the poster presentations are as follows:

Title: The Neuropilin-2 targeting antibody ATYR2810 inhibits non-small cell lung cancer tumor growth in monotherapy and combination therapy Authors: Alison G. Barber, Zhiwen Xu, Justin Rahman, Hira Lal Goel, Arthur M. Mercurio, Christoph Burkart, Leslie A. Nangle. aTyr Pharma, San

Diego, CA, UMass Medical School, Boston, MA.

Abstract Number: 5247

Session Category: Tumor Biology

Session Title: Human-in-Mouse Models of Human Cancer

Poster Number: LB234

Permanent Abstract Number: LB234

Date and Time: April 10 – 15 and May 17 – 21 (9:00AM – 6:00PM ET)

Title: A domain-specific antibody to NRP2 down-regulated epithelial-mesenchymal transition genes and enhanced efficacy of standard-of-care

therapeutics for aggressive breast cancer

Authors: Zhiwen Xu, Christoph Burkart, Hira Lal Goel, Justin Rahman, Clara Polizzi, Matt Seikkula, Luke Burman, Arthur M. Mercurio, Leslie A.

Nangle. aTyr Pharma, San Diego, CA, UMass Medical School, Boston, MA.

Abstract Number: 5316

Session Category: Experimental and Molecular Therapeutics

Session Title: Biological Therapeutic Agents

Poster Number: LB095

Permanent Abstract Number: LB095

Date and Time: April 10 - 15 and May 17 - 21 (9:00AM - 6:00PM ET)

About NRP2

Neuropilin-2 (NRP2) is a cell surface receptor that plays a key role in lymphatic development and in regulating inflammatory responses. In many forms of cancer, high NRP2 expression is associated with worse outcomes. NRP2 can interact with multiple ligands and co-receptors through distinct domains to influence their functional roles, making it a potential drug target with multiple distinct therapeutic applications. NRP2 interacts with type 3 semaphorins and plexins to impact inflammation and with forms of vascular endothelial growth factor (VEGF) and their receptors, to impact lymphangiogenesis. In addition, NRP2 modulates interactions between CCL21 and CCR7 potentially impacting homing of dendritic cells to lymphoid organs. aTyr is currently investigating NRP2 receptor biology, both internally and in collaboration with key academic thought leaders, as a novel target for new product candidates for a variety of diseases, including cancer and inflammation.

About aTyr

aTyr is a biotherapeutics company engaged in the discovery and development of innovative medicines based on novel biological pathways. 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 ATYR1923, a clinical-stage product candidate which binds to the Neuropilin-2 receptor and is designed to down-regulate immune engagement in inflammatory lung diseases. 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 "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 the potential therapeutic benefits and applications of NRP2 antibodies, including ATYR2810; timelines and plans with respect to certain development activities; 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 (incl

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 Reports on Form 10-Q 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.