

aTyr Pharma Announces Poster Presentation at ASCO-SITC Clinical Immuno-Oncology Symposium

December 21, 2017

aTyr's ORCA program on-track to enter the clinic in 2019

SAN DIEGO, Dec. 21, 2017 (GLOBE NEWSWIRE) -- aTyr Pharma, Inc. (Nasdaq:LIFE), a biotherapeutics company engaged in the discovery and development of immuno-modulatory protein therapeutics to treat patients suffering from rare, severe, immune-mediated diseases, as well as various cancers, will present data from the company's ORCA program highlighting the potential importance of Resokine in immuno-oncology at the ASCO-SITC clinical immuno-oncology symposium. The ORCA program seeks to develop antibodies to extracellular histidyl-tRNA synthetase (HARS), known as the Resokine pathway, as a potential new therapy in immuno-oncology. aTyr has selected and is developing a panel of antibodies in IND-enabling activities with patient trials to commence as early as 2019.

Poster Session: Thursday, January 25, 2018 from 11:30 am - 1:00 pm (PT) and 5:30 pm - 6:30 pm (PT)

- Abstract Title: Identification of Novel Liquid Biopsy Biomarker for Monitoring the Immune Set Point in Both Solid Tumor and Hematological Malignancy Patients
- Author: David King, Ph.D., aTyr Pharma, Inc., San Diego, CA
 Location: San Francisco Marriott Marquis, San Francisco, CA

About ORCA

ORCA is a preclinical research program that targets a novel, proprietary immuno-oncology pathway using antibodies to change levels of extracellular histidyl-tRNA synthetase (HARS), known as the Resokine pathway, in tumor settings. aTyr believes tumors, across multiple tumor types, utilize the Resokine pathway to evade immune system responses. aTyr has evaluated the therapeutic potential of targeting this novel pathway in multiple *in-vitro* and *in-vivo* tumor models, in comparison to and in combination with incumbent check-point modulators. Based on the tumor model data, the company believes that targeting this pathway may reduce or, in some cases, reverse tumor growth either as a monotherapy or in combination therapy.

About aTyr Pharma

aTyr Pharma is engaged in the discovery and development of innovative medicines for patients using its knowledge of Physiocrine biology, a newly discovered set of immunological and physiological pathways. To date, aTyr has generated three innovative and unique development programs based on its knowledge of extracellular histidyl-tRNA synthetase (HARS), known as the Resokine pathway. aTyr is developing potential therapeutic applications based on the Resokine pathway to treat patients suffering from rare, severe, immune-mediated diseases, as well as various cancers. aTyr's two clinical-stage programs, ATYR1940 (Resolaris) and ATYR1923 (iMod.Fc), are agonists of the Resokine pathway designed to temper immune engagement in diseases characterized by excessive immune cell involvement in muscle and lung. aTyr's third program, ORCA, represents a pre-clinical research program that targets a novel, proprietary immuno-oncology pathway using antibodies to enhance the immune response in tumor settings. aTyr has built an intellectual property estate, to protect its pipeline, comprising over 220 issued patents or allowed patent applications that are owned or exclusively licensed, including over 300 potential Physiocrine-based protein compositions. 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 Litigation Reform Act. 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, including statements regarding the potential and potential therapeutic benefits of ATYR1940 (Resolaris), ATYR1923 (iMod.Fc), or potential product candidates from our ORCA program, the ability of the Company to successfully advance our pipeline or product candidates, undertake certain development activities (such as clinical trial enrollment and the conduct of clinical trials) and accomplish certain development goals and the timing of such activities and development goals, the timing of our clinical trials, our ability to receive regulatory approvals for, and commercialize, our product candidates and of reporting results from our clinical trials, and the scope and strength of our intellectual property portfolio, 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 those forward-looking statements are reasonable, we can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. Furthermore, actual results may differ materially from those described in the forward-looking statements and will be affected by a variety of risks and factors that are beyond our control including, without limitation, risks associated with the discovery

future product candidates for a variety of reasons (including difficulties or delays in patient enrollment in planned clinical trials), 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 set forth in our most recent Annual Report on Form 10-K for the year ended December 31, 2016 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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Primary Logo

Source: aTyr Pharma, Inc.