aTyr Pharma to Host Breakout Session at the 6th Annual World Orphan Drug Congress

November 10, 2015

SAN DIEGO, Nov. 10, 2015 /PRNewswire/ -- aTyr Pharma (Nasdaq: LIFE), a biotherapeutics company engaged in the discovery and development of Physiocrine-based therapeutics to address rare diseases, today announced the Company's participation at the 6th Annual World Orphan Drug Congress in Geneva, Switzerland.

John McKew, Ph.D., Vice President of Research, will present a talk during a clinical development breakout session at the conference beginning at 5:35pm GMT on Thursday, November 12. The talk, entitled Innovative Drug Development Process for Rare Myopathies with an Immune Component, will focus on pipeline development in the rare disease space. Specifically during the session, Dr. McKew will speak about the potential of developing disease-modifying treatments that focus on common pathophysiological processes in muscle disease with diverse genetic causes. He will discuss how these treatments hold the potential to address multiple orphan indications, as well as how to structure a clinical development program to study a single investigational product across multiple diseases.

The World Orphan Drug Congress aims to connect the key global stakeholders in the rare disease and orphan drug communities to address the most pressing issues related to treatment options in the space. This group of representatives from the industry, regulating bodies, academia and patient advocacy will focus on topics such as the pricing/reimbursement debate, challenges in commercialization and patient engagement throughout the R&D process. The three-day event offers a variety of roundtables, workshops, networking events, partnering meetings and breakout sessions to enable the development of global strategies to encourage innovation in rare diseases.

About Physiocrines
Physiocrines comprise naturally occurring proteins that aTyr believes promote homeostasis, a fundamental process of restoring stressed or diseased tissue to a healthier state. Physiocrines are extracellular signaling regions of tRNA synthetases, an ancient family of enzymes that catalyze a key step in protein synthesis. aTyr is currently focused on Physiocrines that act as endogenous modulators of the immune system. Physiocrines offer the opportunity for modulating biological pathways through newly discovered, naturally occurring mechanisms, many of which may provide advantages over engineered immuno-modulatory therapeutics, including the potential for improved patient outcomes and reduced side effect profiles.

About aTyr Pharma
aTyr Pharma engages in the discovery and clinical development of innovative medicines for patients suffering from severe rare diseases using its knowledge of Physiocrine biology, a newly discovered set of physiological modulators. The Company's lead candidate, Resolaris™, is a first-in-class intravenous protein therapeutic for the treatment of rare myopathies with an immune component (RMIC). Resolaris is currently in a Phase 1b/2 clinical trial in adult patients with FSHD; a Phase 1b/2 trial in adult patients with LGMD2B or FSHD; and a Phase 1b/2 trial in patients with an early onset form of FSHD. Trials are planned in additional RMIC indications as well as an initial trial in rare pulmonary diseases with an immune component (RPIC) in patients with interstitial lung disease (ILD). To protect this pipeline, aTyr built an intellectual property estate comprising 45 issued or allowed patents and over 240 pending patent applications that are solely owned or exclusively licensed by aTyr. aTyr's key programs are currently focused on severe, rare diseases characterized by immune dysregulation for which there are currently limited or no treatment options. For more information, please visit http://www.atyrpharma.com.

Forward-Looking Statements
Statements we make in this press release may include statements which are not historical facts and are considered forward-looking within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act, which 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 the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Securities Exchange Act and are making this statement for purposes of complying with those safe harbor provisions. These forward-looking statements, including statements regarding the potential of Resolaris, the ability of the Company to undertake certain development activities (such as clinical trial enrollment and the conduct of clinical trials) and accomplish certain development goals, and the timing of initiation of additional clinical trials and of reporting results from our clinical trials 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, development and regulation of our Physiocrine-based product candidates, as well as those set forth in the prospectus for our recent offering of common stock and our most recent Quarterly Report on Form 10-Q. 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.

SOURCE aTyr Pharma

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