



aTyr Pharma and its Hong Kong Subsidiary, Pangu BioPharma, Announce Government Grant to Fund Bispecific Antibody Development Platform

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Grant awarded by the Hong Kong Government's Innovation and Technology Commission under the Partnership Research Program

Two-year project will initially focus on development of new bi-specific antibodies targeting NRP2

SAN DIEGO, March 24, 2020 (GLOBE NEWSWIRE) -- aTyr Pharma, Inc. (Nasdaq: LIFE), a biotherapeutics company engaged in the discovery and development of innovative medicines based on novel immunological pathways, today announced that the company's Hong Kong subsidiary, Pangu BioPharma Limited (Pangu), together with the Hong Kong University of Science and Technology (HKUST), has been awarded a grant of approximately \$750,000 to build a high-throughput platform for the development of bi-specific antibodies. Initially the research focus will be on diseases, including cancer, in which Neuropilin-2 (NRP2) overexpression is strongly implicated. The two-year project is being funded by the Hong Kong Government's Innovation and Technology Commission (ITC) under the Partnership Research Program (PRP). The PRP aims to support research and development projects undertaken by companies in collaboration with local universities and public research institutions. The grant will fund approximately 50% of the total estimated project cost, with aTyr contributing the remaining 50%.

"Partnering with leading research institutions, such as HKUST, remains a key component of our long-term growth strategy, and we are optimistic that this collaboration, with important financial assistance from ITC, could eventually lead to breakthroughs in the treatment of cancer and other serious diseases where improved treatment options are needed," said Sanjay S. Shukla, M.D., M.S., president and chief executive officer of aTyr. "We would like to thank the ITC for this grant to help fund development of a platform that we believe can yield new bi-specific antibody candidates. As we continue to advance our understanding of the role of NRP2 in immunology and cancer, we believe therapeutics selectively targeting NRP2 pathways have the potential to become a new class of therapies. The fact that NRP2 interacts with various co-receptor molecules makes it a prime target for bi-specific antibodies that can target both receptors simultaneously."

Dr. Mingjie Zhang, Chair Professor of the Division of Life Science and Kerry Holdings Professor of Science at HKUST and project coordinator of the Pangu collaboration, commented, "We are excited to expand the collaboration between Pangu and HKUST to establish cutting-edge antibody discovery and engineering capabilities. This project has the potential to further solidify the role that Hong Kong's translational science and early discovery capabilities can play in the development of potentially life-changing therapies."

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 immunological 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 interstitial lung diseases. For more information, please visit www.atyrpharma.com.

About The Hong Kong University of Science and Technology

The Hong Kong University of Science and Technology (HKUST) (www.ust.hk) is a world-class research university that focuses on science, technology and business as well as humanities and social science. HKUST offers an international campus, and a holistic and interdisciplinary pedagogy to nurture well-rounded graduates with global vision, a strong entrepreneurial spirit and innovative thinking. HKUST attained the highest proportion of internationally excellent research work in the Research Assessment Exercise 2014 of Hong Kong's University Grants Committee, and is ranked as the world's best young university in Times Higher Education's Young University Rankings 2018. Its graduates were ranked 16th worldwide and top in Greater China in Global Employability University Survey 2018.

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, include statements regarding the potential therapeutic benefits and applications of our product candidates and research programs; our ability to successfully advance our product candidates, undertake certain development activities (such as developing a high-throughput platform for the development of bi-specific antibodies) and accomplish certain development goals, and the timing of such events; the potential benefits of our research project with HKUST; and the anticipated funding of our research project with HKUST. 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, risks associated with the discovery, development and regulation of our product candidates, the risk that we may cease or delay research and development activities for any of our existing or future programs for a variety of reasons, the fact that our research project with HKUST is subject to implementation of the ITC grant, the possibility of unexpected expenses or other demands on our cash resources, 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.

IMMEDIATE RELEASE

Contact:

Joyce Allaire

Managing Director, LifeSci Advisors, LLC

jallaire@lifesciadvisors.com

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