

Pieris Pharmaceuticals and AstraZeneca Collaborate to Develop and Commercialize Anticalin-Based Inhaled Treatments for Respiratory Diseases

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Pieris Pharmaceuticals, Inc. (NASDAQ: PIRS)

- Pieris to receive \$57.5 million USD in upfront and near-term milestone payments
- Pieris has the potential to receive development-dependent milestones and eventual commercial payments for all products not exceeding \$2.1 billion as well as tiered royalties
- For programs co-developed by Pieris, the Company will be entitled to receive increased royalties or a gross margin share on worldwide sales, dependent on the level of investment to which Pieris commits
- Pieris will host a conference call on Wednesday, May 3^d at 10am EDT to discuss the collaboration

Pieris today announced a strategic collaboration in respiratory diseases with AstraZeneca to develop novel inhaled drugs that leverage Pieris' Anticalin[®] platform, including its lead preclinical drug candidate, PRS-060.

Anticalin molecules are engineered proteins which can mimic antibodies by binding to sites either on other proteins or on small molecules. They are smaller than monoclonal antibodies, offering the potential of direct delivery to the lung.

Under the collaboration, Pieris will be responsible for advancing its preclinical lead candidate, PRS-060, into Phase 1 clinical trials in 2017. PRS-060 is an Anticalin against interleukin-4 receptor alpha (IL-4Ra) with potential in asthma. AstraZeneca will fund all clinical development and subsequent commercialization programs and Pieris has the option of co-development and co-commercialization in the US from Phase 2a onwards. In addition, the parties will collaborate to progress four additional novel Anticalins against undisclosed targets for respiratory diseases with Pieris having the option to co-develop and co-commercialize in the US two of these programs.

Mene Pangalos, Executive Vice President, Innovative Medicines and Early Development

Biotech Unit and Business Development, said: "At AstraZeneca, discovering and developing innovative new medicines to treat respiratory diseases is a key strategic priority. Our alliance with Pieris adds an important new modality to our respiratory portfolio and builds on our scientific expertise in inhaled formulation technologies. Pieris shares our passion for ground-breaking science and we look forward to working together to develop new, life-changing treatment options for patients."

Stephen Yoder, President and Chief Executive Officer of Pieris, said: "Our partnership with AstraZeneca accelerates the transformation of Pieris into a fully-integrated drug development and commercial organization, comprising two main pillars in immunology: respiratory diseases and immuno-oncology, each of which is now anchored by a major alliance. We recognize AstraZeneca's unparalleled expertise in the development of inhaled drugs, which will maximize the potential of PRS-060 and other inhaled Anticalin molecules to become valuable assets for both companies."

AstraZeneca will make an upfront and near term milestone payments to Pieris in the amount of \$57.5 million -- \$45 million USD of upfront payments and \$12.5 million USD for the initiation of the PRS-060 Phase 1 trial. Pieris has the potential to receive development-dependent milestones and eventual commercial payments for all products not exceeding \$2.1 billion as well as tiered royalties on the sales of any potential products commercialized by AstraZeneca. For programs co-developed by Pieris, the Company stands to receive increased royalties or a gross margin share on worldwide sales equal, dependent on the level of investment to which Pieris commits.

Louis Matis, M.D., Senior Vice President and Chief Development Officer of Pieris, said: "AstraZeneca, a leading innovator in respiratory diseases with considerable expertise in the development of inhaled products, is the ideal partner to exploit the potential of our platform in respiratory diseases. Based on the limitations of many types of biologic molecules, direct delivery to the lungs via inhalation has been challenging to date for other classes of therapeutic proteins. Anticalin proteins have unique properties, not least of which is their size and stability, and show considerable promise for this route of delivery."

The collaboration agreement is conditional upon the expiration or early termination of the applicable waiting period (and any extension thereof) under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

PRS-060, an Anticalin protein potently engaging IL-4Rα, is being developed for patients suffering from moderate to severe asthma, many of whom are not able to control their asthma well with currently available medications. In a large proportion of asthma patients, the Th2 pathway plays an important role. IL-4 and IL-13 are the main cytokines involved in Th2-mediated asthma. Both signal *via* IL-4Rα, making IL-4Rα a cornerstone intervention point. PRS-060 differentiates from antibody approaches through inhaled delivery directly into the lungs, potentially resulting in efficacy and safety benefits. The local delivery may allow for lower doses than systemically administered antibodies, potentially also resulting in a significant cost of goods advantage over those therapies. Pieris has demonstrated proof of concept in animals as well as feasibility for pulmonary delivery with PRS-060.

Conference Call

Pieris will host an investor conference call on Wednesday, May 3, 2017 at 10:00 AM

(EDT) to discuss the collaboration. To access the call, participants may dial 1-877-407-8920 (US & Canada) or 1-412-902-1010 (International) at least 10 minutes prior to the start of the call.

An archived replay of the call will be available by dialing 1-877-660-6853 (US & Canada) or 1-201-612-7415 (International) and providing the Conference ID #13661472.

About Pieris Pharmaceuticals

Pieris Pharmaceuticals (NASDAQ: PIRS) is a clinical-stage biotechnology company that discovers and develops Anticalin-based drugs to target validated disease pathways in a unique and transformative way. Our pipeline includes immuno-oncology multispecifics tailored for the tumor micro-environment, an inhaled Anticalin® protein to treat uncontrolled asthma and a half-life-optimized Anticalin protein to treat anemia. Proprietary to Pieris, Anticalin® proteins are a novel class of protein therapeutics validated in the clinic and by partnerships with leading pharmaceutical companies. Anticalin® is a registered trademark of Pieris. Pieris has partnerships with Servier, ASKA, Roche, Sanofi, Daiichi Sankyo and Zydus. For more information visit www.pieris.com.

About AstraZeneca in Respiratory Disease

Respiratory disease is one of AstraZeneca's main therapy areas, and we have a growing portfolio of medicines that reached more than 17 million patients in 2015. Our aim is to transform asthma and COPD treatment through inhaled combinations at the core of care, biologics for the unmet needs of specific patient populations, and scientific advancements in disease modification. We are building on a 40-year heritage in respiratory disease, and our capability in inhalation technology spans both pressurized metered-dose inhalers (pMDIs) and dry powder inhalers (DPIs), as well as our innovative Co-SuspensionTM Delivery Technology. Our research is focused on four key biological pathways: eosinophilic disease, Th2-driven disease, epithelial-driven pathobiology and autoimmunity.

About AstraZeneca

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines, primarily for the treatment of diseases in three main therapy areas -- Oncology, Cardiovascular & Metabolic Diseases and Respiratory. The Company also is selectively active in the areas of autoimmunity, neuroscience and infection. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide. For more information, please visit www.AstraZeneca.com and follow us on Twitter @AstraZeneca.

Forward Looking Statements

This press release contains forward-looking statements as that term is defined in Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Statements in this press release that are not purely historical are forward-looking statements. Such forward-looking statements include, among other things, references to novel technologies and methods; our business and product development plans and timelines; the timing and progress of our studies and development of therapeutic programs; ability to receive research funding; our liquidity and ability to fund our future operations; our investments in our programs, including co-developed or co-commercialized programs; our ability to achieve certain milestones and receive future

milestone or royalty payments; current or future partnerships; the potential benefits of our therapies; or market information. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others. our ability to raise the additional funding we will need to continue to pursue our business and product development plans; the inherent uncertainties associated with developing new products or technologies and operating as a development stage company; our ability to develop, complete clinical trials for, obtain approvals for and commercialize any of our product candidates; competition in the industry in which we operate and market conditions. These forward-looking statements are made as of the date of this press release, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements, except as required by law. Investors should consult all of the information set forth herein and should also refer to the risk factor disclosure set forth in the reports and other documents we file with the SEC available at www.sec.gov, including without limitation the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and the Company's Quarterly Reports on Form 10-Q.

Contacts at Pieris:
Company Contact:
Pieris Pharmaceuticals, Inc.
Lance Thibault
Acting Chief Financial Officer
+1-857-246-8998
thibault@pieris.com

Investor Relations Contact: The Trout Group Thomas Hoffmann +1-646-378-2931 thoffmann@troutgroup.com

Media Inquiries:
Mario Brkulj
+49 175 5010575
mbrkulj@macbiocom.com

Cammy Doung +1-781-591-3443 cduong@macbiocom.com

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