

March 17, 2016



Pieris Pharmaceuticals Announces Presentation of In Vivo Preclinical Data for Its Lead Bispecific Immuno-Oncology Drug Candidate, PRS-343, at the 2016 Annual Meeting of the American Association for Cancer Research (AACR)

BOSTON, MA -- (Marketwired) -- 03/17/16 -- **Pieris Pharmaceuticals, Inc.** (NASDAQ: PIRS), a biotechnology company advancing novel biotherapeutics through its proprietary [Anticalin](#)[®] technology platform, announced today that *in vivo* proof of concept data for anti-tumor activity of PRS-343, the Company's lead bispecific immuno-oncology drug candidate, will be highlighted in a poster session at the 2016 Annual Meeting of the American Association for Cancer Research (AACR) to be held in New Orleans, April 16-20, 2016. PRS-343 binds to CD137 (4-1BB) on T cells and HER2 on tumor cells, producing tumor-targeted immune activation.

In a humanized mouse model engrafted with a HER2-positive human tumor cell-line and human peripheral blood mononuclear cells, treatment with PRS-343 led to tumor growth inhibition superior to that observed with either an isotype control or a benchmark CD137-targeting antibody. The data to be presented, which includes phenotyping of peripheral and intra-tumoral lymphocytes, support the intended mode of action of tumor-localized costimulatory T cell activation with an enhanced therapeutic index compared to anti-CD137 antibody approaches.

Further details include:

Poster Number: 556

Title: Costimulatory T cell engagement by the HER2/CD137 bispecific PRS-343 leads to strong anti-tumor effect in humanized mouse model

Date and Time: Sunday Apr 17, 2016, 1:00 PM - 5:00 PM

Location: Convention Center, Halls G-J, Poster Section 26

About PRS-343

PRS-343 is a bivalent, bispecific fusion protein targeting CD137 (4-1BB) and HER2 comprising an agonistic CD137-targeting Anticalin genetically linked to a HER2-targeting antibody. CD137 is a key costimulatory immunoreceptor and a member of the TNF-receptor (TNFR) superfamily. While multiple lines of evidence show that CD137 is a highly promising therapeutic target in cancer, current mAb approaches are not designed to achieve a tumor-mediated activation and, therefore, may display toxicity and a limited therapeutic window due to peripheral T cell and NK cell activation. To overcome this limitation, we generated PRS-343, which is designed to promote CD137 clustering by bridging CD137-positive T cells with HER2-positive tumor cells, thereby providing a potent costimulatory signal to tumor antigen-specific T cells.

About Pieris Pharmaceuticals: Pieris 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 multi-specifics tailored for the tumor micro-environment, an inhaled Anticalin to treat uncontrolled asthma and a half-life-optimized Anticalin to treat anemia. Proprietary to Pieris, Anticalins are a novel class of protein therapeutics validated in the clinic and by partnerships with leading pharmaceutical companies. Anticalin[®], Anticalins[®] are registered trademarks of Pieris. For more information visit www.pieris.com.

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; our liquidity and ability to fund our future operations; 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, 2014 and the Company's Quarterly Reports on Form 10-Q.

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