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Peregrine Pharmaceuticals Announces Successful Completion of its Antibody Humanization Project with AERES Biomedical

TUSTIN, Calif., October 18 /PRNewswire-FirstCall/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) announced today that AERES Biomedical Ltd. (London, UK) had successfully completed the humanization of its 3G4 antibody that recognizes the phospholipid, phosphatidylserine. The 3G4 antibody is part of Peregrine's Anti-Phospholipid Therapy(APT) platform technology. Human or humanized monoclonal antibodies are ideal components of drugs that may be administered multiple times to individual patients because they are expected to not be recognized as foreign by the patient's immune system.

"The humanized version of the 3G4 antibody is an important addition to Peregrine's VTA and APT platform technologies," said Steve King, Peregrine's president and chief executive officer. "We will begin preparing the humanized 3G4 antibody for cGMP manufacturing and evaluate the antibody for the treatment of cancer and viral diseases. The humanized antibody will also be evaluated as a carrier for therapeutic agents for vascular targeting applications."

Dr. Tarran Jones, chief executive officer of AERES, said, "We are delighted to have been able to provide Peregrine with a humanized version of its 3G4 antibody. The project was completed on schedule and the resulting antibody retained all desired binding characteristics. This collaborative project marks the 25th monoclonal antibody that we have successfully humanized using our proprietary humanization technology."

About Humanized Antibodies

Monoclonal antibody humanization is important for drugs that are to be administered multiple times to individual patients. Research antibodies are typically made in mice and are called murine antibodies. Murine antibodies are not ideal for human clinical use because the patient can potentially recognize the murine antibody as foreign and may generate a Human Anti-Mouse Antibody (HAMA) immune response in an attempt to destroy the murine antibody. Monoclonal antibody humanization is a technique where specific regions of the mouse antibody not involved in target binding are replaced with human antibody building blocks, resulting in a final drug candidate that is approximately 93% human. The result is an antibody that has the targeting characteristics of the original mouse antibody but does not have enough of a mouse structure to be recognized by the human body as foreign. Therefore, humanized antibodies reduce or eliminate the HAMA response during treatment, making multiple treatments possible.

About AERES Biomedical, Ltd.

AERES Biomedical Ltd. is a privately owned drug development company which has been active in the development and exploitation of antibody humanization since 1988. AERES is now applying its expertise to the development of humanized therapeutic antibodies, both in-house and with its collaborative partners. Over the past 16 years, AERES scientists have radically improved this technology and developed a portfolio of related antibody engineering skills. With nearly 30 successful collaborative R&D programs with the biopharmaceutical industry, which has enabled at least 7 humanized antibodies to enter clinical trials, AERES has established a world-wide reputation for its expertise in antibody humanization. In addition, AERES has a significant track record of success in maximizing the expression of antibody genes in mammalian cells. As a consequence, AERES is able to provide its commercial collaborators with drug candidates that move rapidly through clinical development with an increased probability of reaching the market.

About Peregrine Pharmaceuticals, Inc.

Peregrine Pharmaceuticals is a biopharmaceutical company primarily engaged in the research, development, manufacture and commercialization of cancer therapeutics and diagnostics through a series of proprietary platform technologies. The company is primarily focused on discovering and developing products that affect blood vessels and blood flow in cancer and other diseases. Peregrine's vascular research programs fall under several different proprietary platforms, including Anti-Phospholipid Therapy(APT), Vascular Targeting Agents(VTAs), Anti-Angiogenesis and Vasopermeation Enhancement Agents(VEAs).

Peregrine's most clinically advanced therapeutic program is known as Tumor Necrosis Therapy(TNT) and targets dead or dying tumor cells that are common to the majority of different tumor types. The company is developing a radio- labeled TNT agent that it has trademarked Cotara® for the treatment of cancer. Peregrine has completed enrollment in a Phase I Cotara® clinical trial for the treatment of colorectal carcinoma at Stanford University Medical Center and has received

approval from the U.S. Food and Drug Administration ("FDA") to initiate a product registration clinical trial using Cotara® to treat brain cancer. In addition, a TNT-based agent similar to Cotara® was developed under a licensing agreement in China and has received marketing approval for the treatment of advanced lung cancer.

The company's wholly owned subsidiary, Avid Bioservices, Inc. (http://www.avidbio.com), develops and manufactures monoclonal antibodies and recombinant proteins to support Phase I through Phase III clinical trials for biotechnology companies, including Peregrine.

Copies of Peregrine press releases, SEC filings, current price quotes and other valuable information for investors may be found at http://www.peregrineinc.com.

Safe Harbor Statement: This release may contain certain forward-looking statements that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Except for historical information presented herein, matters discussed in this release contain certain forward- looking statements. The inclusion of forward-looking statements should not be regarded as a representation by us, or any other person, that the objectives or plans will be achieved. The words "may," "should," "plans," "believe," "anticipate," "estimate," "expect," their opposites and similar expressions are intended to identify forward-looking statements. We caution readers that such statements are not guarantees of future performance or events and are subject to a number of factors that may tend to influence the accuracy of the statements, including but not limited to, risk factors discussed in Peregrine's report on Form 10-K for the year ended April 30, 2004 and subsequent quarterly reports on Form 10-Q. Peregrine disclaims any obligation and does not undertake to update or revise the forward-looking statements discussed in this press release.

SOURCE Peregrine Pharmaceuticals, Inc.
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