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Vascular Targeting Agent Effectively Inhibits Prostate Cancer Growth and Metastasis

Data Supporting Peregrine's Vascular Targeting Agent and Tumor Necrosis Therapy Platforms Presented at AACR

TUSTIN, Calif., April 19 /PRNewswire-FirstCall/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) announced that data will be presented today at the American Association for Cancer Research (AACR) Annual Meeting in Anaheim, California, showing that the vascular targeting agent VEGF121/rGel can effectively inhibit tumor growth and bone metastases in mouse models of metastatic prostate cancer. Cancer fighting agents such as VEGF121/rGel fall under Peregrine's Vascular Targeting Agent (VTA) technology platform that broadly includes agents that target tumor blood vessels and deliver a therapeutic or diagnostic agent.

Data were also presented from studies characterizing different types of Tumor Necrosis Therapy (TNT) antibodies and their potential for delivering therapeutic agents. The goal of the research is to identify TNT antibodies that may prove useful in the delivery of toxins and other effectors other than radioisotopes that are currently delivered in Peregrine's Cotara® product.

The VTA study describes a novel fusion protein known as VEGF121/rGel, which is composed of vascular endothelial growth factor-121 (VEGF121), a growth factor involved in the formation of new tumor blood vessels, and the plant toxin Gelonin (rGel), a potent inhibitor of cellular protein synthesis. When fused together, the VEGF121 portion of the fusion protein specifically targets the rGel toxin to the tumor vasculature, exerting cytotoxic effects on the tumor blood vessels resulting in anti-tumor effects without harming healthy tissues.

The study presented today tested the ability of VEGF121/rGel treatment to inhibit the growth of prostate cancer cells in a bone metastases model. Researchers found that VEGF121/rGel inhibited tumor growth and enhanced survival of mice by targeting the tumor vasculature as well as normalizing the number of mature osteoclasts found in bone. In the study 50% of the VEGF121/rGel-treated mice survived past day 140 without any sign of skeletal tumor lesions. All untreated mice developed significant metastatic lesions by day 67.

In the TNT study, researchers at Peregrine explored the characteristics of different monoclonal antibodies that target antigens similar to those targeted by its Cotara® product. The researchers found that although the antibodies targeted related structures they differed significantly in their ability to access their target. The focus of the research is to identify TNT antibodies that may prove useful in the delivery of therapeutic agents.

"A goal of our research program at Peregrine is to identify new agents for the treatment of cancer and other diseases based on our TNT platform," said Dr. Missag Parseghian, Peregrine's director of research and development. "Studies such as those presented at AACR are proving very informative as we continue to identify agents that will complement Cotara®."

Specifics of the AACR presentations include:

* "The vascular targeting agent VEGF121/rGel inhibits bone remodeling and skeletal metastases through a unique mechanism." (Abstract # 4624) can be viewed at the AACR annual meeting from 1:00 PM - 5:00 PM.

* "Location, Location, Location ... Cancer immunotherapeutics targeting histone tail epitopes differ in their accessibility to nuclear targets and can significantly differ in their tumor targeting abilities." (Abstract # 3744, April 19, 8:00 AM -12:00 PM) Peregrine scientists evaluated a panel of antibodies targeting intracellular antigens used in the company's Tumor Necrosis Therapy platform, and found significant differences in accessibility for various antibodies when comparing normal cells to tumorigenic ones. Importantly, they found that Peregrine's anti-DNA/Histone H1 antibodies chTNT-1 (Cotara®) and NHS76 recognize epitopes whose accessibility is not lost in tumorigenic cells, making them good potential tumor targeting reagents.

About Peregrine Pharmaceuticals

Peregrine Pharmaceuticals, Inc. is a biopharmaceutical company with a broad portfolio of products under development directed towards the treatment of cancer, viruses and other diseases. The company plans to initiate patient enrollment in two separate clinical trials for the treatment of all solid tumors using Tarvacin™ (under its Anti-Phospholipid Therapy platform) and for the treatment of brain cancer using Cotara® (under its Tumor Necrosis Therapy platform). Our agents in development for

oncology applications fall under several different proprietary platforms, including Anti-Phospholipid Therapy, Vascular Targeting Agents (VTAs), Tumor Necrosis Therapy (TNT), Anti-Angiogenesis, and Vasopermeation Enhancement Agents (VEAs). Our viral therapy approach is based on the fact that enveloped viruses and virally infected cells have phospholipids exposed on their surface and thus can be targeted using our Anti-Phospholipid Therapy agents.

Peregrine Pharmaceuticals also has in-house expertise to develop and manufacture antibodies and recombinant proteins through its wholly-owned subsidiary, Avid Bioservices, Inc., (http://www.avidbio.com). Avid is engaged in providing contract manufacturing services and development of biologics for biopharmaceutical and biotechnology companies, including Peregrine.

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

Statements in this press release which are not purely historical, including statements regarding Peregrine Pharmaceutical's intentions, hopes, beliefs, expectations, projections, plans or predictions of the future, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The forward-looking statements, which include statements with respect to the potential therapeutic benefits and successful development of drug candidates and the Company's ability to successfully identify new agents based on its TNT platform, involve risks and uncertainties including, but not limited to, the risks and uncertainties detailed from time to time in the Company's filings with the Securities and Exchanges Commission, including its Annual Report on Form 10-K for the year ended April 30, 2004, and its quarterly report on Form 10-Q for the quarter ended January 31, 2005. It is important to note that the Company's actual results could differ materially from those in any such forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to, uncertainties associated with completing pre-clinical and clinical trials for our technologies; the early stage of product development; the significant costs to develop our products as all of our products are currently in development, pre-clinical studies or clinical trials; our ability to obtain additional financing to support our operations and the development of our products; our ability to obtain regulatory approval for our technologies; the timing of regulatory filings and the potential success in gaining regulatory approval and complying with governmental regulations applicable to our business; and the Company's ability to obtain, maintain and enforce patent protection for its drug candidates. The Company cautions investors not to place undue reliance on the forward looking statements contained in this press release. Our business could be affected by all of the foregoing and a number of other factors, including the risk factors listed from time to time in the Company's SEC reports including, but not limited to, the annual report on Form 10-K for the year ended April 30, 2004, and the quarterly report on Form 10-Q for the quarter ended January 31, 2005. Peregrine Pharmaceuticals, Inc. disclaims any obligation, and does not undertake, to update or revise any forward-looking statements in this press release.

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