May 16, 2005

Data Published in Cancer Research Shows That Tarvacin(TM) Equivalent Plus Docetaxel Inhibits Breast Tumor Growth by 93%

Combination Therapy Also Inhibits Tumor Colonies in the Lung by 93% Without Added Toxicity

TUSTIN, Calif., May 16 /PRNewswire-FirstCall/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM), today announced that a research article titled "A Monoclonal Antibody that Binds Anionic Phospholipids on Tumor Blood Vessels Enhances the Antitumor Effect of Docetaxel on Human Breast Tumors in Mice" was published in the May 15 issue of Cancer Research. The published report shows that 3G4 (a murine equivalent of the company's Tarvacin™ monoclonal antibody) in combination with docetaxel results in a 93% inhibition of human breast cancer growth in mouse models. The researchers found that docetaxel increases the exposure of the 3G4 target on tumor blood vessels but not healthy tissue. Patient enrollment in a Tarvacin™ Phase 1 clinical trial for the treatment of all solid tumors, including breast cancer, is expected to commence this month at three clinical sites.

"Our results suggest that Tarvacin™ holds promise to be a therapeutic agent that can significantly improve current breast cancer therapy," said Dr. Xianming Huang, the lead author of the report. "While docetaxel is the most important cytotoxic drug currently available for breast cancer, its maximum dose is limited by its toxicity, leaving a pressing need for combination therapies that improve its efficacy without exacerbating its toxicity."

Dr. Huang is an assistant professor of pharmacology in Dr. Philip Thorpe's laboratory at the University of Texas Southwestern Medical Center at Dallas. Further pre-clinical studies studying the potential of Tarvacin™ in the treatment of drug-resistant breast cancer and in breast cancer metastasis are ongoing at UT Southwestern under a grant by the Susan G. Komen Breast Cancer Foundation and a sponsored research agreement with Peregrine Pharmaceuticals.

In the study, treatment of mice with 3G4 plus docetaxel inhibited tumor growth by 93% as compared with 50% and 70% for 3G4 and docetaxel, respectively, when used as single agents. Furthermore, treatment of mice bearing disseminated breast cancer with the same combination reduced the average number of tumor colonies in the lungs by 93% and half of the animals did not develop tumors at all. Docetaxel and 3G4 inhibited lung colonization by 78% and 82% respectively when given as single agents. In both models, the combination therapy was no more toxic to the mice than docetaxel alone.

About Tarvacin™

Tarvacin™ is part of Peregrine Pharmaceutical's Anti-Phospholipid Therapy platform, which binds directly to tumor blood vessels to inhibit tumor growth and development. Tarvacin™ is a chimeric monoclonal antibody that binds to the phospholipid phosphatidylserine. Tarvacin™ was initially discovered by researchers at UT Southwestern Medical Center at Dallas, who hav worked closely with Peregrine to explore the potential activity and safety of Tarvacin™ as a treatment for cancer. Peregrine h a sponsored research agreement with researchers at UT Southwestern to study the use of Tarvacin™ and its parent antibod for the treatment of cancer and viral diseases.

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 is in the process of initiating patient enrollment in a Tarvacin™ clinical trial for the treatment of all solid cancers and in a Cotara® clinical trial for the treatment of brain cance In addition, the company has submitted an IND application to initiate a Tarvacin™ clinical trial for the treatment of Hepatitis C virus infection. Peregrine Pharmaceuticals is also developing Vascular Targeting Agents, Anti-Angiogenesis, and Vasopermeation Enhancement Agents (VEAs) for the treatment of cancer and other diseases.

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, representations, 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, involve risks and uncertainties including, but not limited to, the uncertainties of tumor inhibition rates in future animal models, the risk that pre-clinical animal model results will not correlate to efficacy studies in human clinical trial and the uncertainty of the timing of patient enrollment under the Phase I study using Tarvacin™ for cancer. 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; obtaining additional financing to support our operations and the development of our products; obtaining regulatory approval for our technologies; anticipated timing of regulatory filings and the potential success in gaining regulatory approval and complying with governmental regulations applicable to our business. 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. The Company cautions investors not to place undue reliance on the forward looking statements contained in this press release. Peregrine Pharmaceuticals, Inc. disclaims any obligation, and does not undertake, to update or revise any forward-looking statements in this press release.

SOURCE Peregrine Pharmaceuticals, Inc.
05/16/2005
CONTACT: Investors, Frank Hawkins or Ken AuYeung, both of Hawk Associates, Inc., +1-800-987-8256, info@hawkassociates.com; or Media, Rachel Martin of Edelman, +1-323-202-1031, or +1-323-893-9047, Rachel.Martin@edelman.com, both for Peregrine Pharmaceuticals, Inc.
Web site: http://www.avidbio.com
Web site: http://www.peregrineinc.com