



January 11, 2006

## **Newly Published Data Shows Potential of Peregrine's Tarvacin(TM) to Treat Primary and Metastatic Pancreatic Cancer**

**- Study in International Journal of Cancer Shows Tarvacin Equivalent in Combination with Gemcitabine Reduced Metastatic Disease by 80% at Principal Sites of Metastasis - - Results Expected to Provide Foundation for Pancreatic Cancer Trials -**

TUSTIN, Calif., Jan 11, 2006 /PRNewswire-FirstCall via COMTEX News Network/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM), a biopharmaceutical company with a portfolio of innovative, clinical-stage product candidates for viral diseases and cancer, today announced preclinical results showing that 3G4, the mouse equivalent of Tarvacin™ Anti-Cancer, was effective at controlling the growth and spread of pancreatic cancer as a single agent and had significantly enhanced efficacy when combined with the standard-of-care chemotherapy gemcitabine. Pancreatic cancer is very difficult to treat and has the lowest 5-year survival rate of all malignancies. In this study, the Tarvacin equivalent antibody demonstrated promising activity against the primary tumor itself as well as the metastases that actually cause most pancreatic cancer deaths. The study will be published in the International Journal of Cancer (volume 118, edition 10) and is currently available online (published online: 13 Dec 2005, DOI: 10.1002/ijc.21684.)

Tarvacin Anti-Cancer is in a multi-center Phase I trial for solid tumor cancers. It is a monoclonal antibody that binds to certain phospholipids, components of the cell structure that are usually located inside normal cells but which become exposed on the outside of the cells that line the blood vessels of tumors, creating a specific target for anti-cancer treatments. This study compared the Tarvacin equivalent antibody and gemcitabine as single agents and in combination in two realistic and clinically relevant mouse models of pancreatic cancer.

The Tarvacin equivalent antibody and gemcitabine each reduced the tumor and metastatic burden in these mice, but combination therapy with the two agents was significantly more effective than either agent alone. Combination therapy reduced primary tumor burden by 60% in both models. Furthermore, combination therapy reduced metastatic events by 80% at each of the principal sites of pancreatic metastasis and significantly reduced the number of mice with liver metastases in both models. This is of clinical importance since the liver is the major site of blood-borne metastases in pancreatic cancer, and metastatic liver tumors are the most common source of therapeutic failure in patients after surgical removal of the primary tumor.

"We are very encouraged by the results of this study and eager for the opportunity to study Tarvacin Anti-Cancer in pancreatic cancer patients," said Rolf Brekken, Ph.D., a cancer researcher at the University of Texas Southwestern Medical Center and senior author of the study. "While Tarvacin shows promising activity as a single anti-cancer agent, these study results suggest that the combination of Tarvacin with chemotherapy amplifies and increases the exposure of Tarvacin's target on the surface of the tumor blood vessels, creating an additive therapeutic effect with no discernable increase in toxicity of the chemotherapeutic agent."

Researchers at UT Southwestern Medical Center and Peregrine are collaborating on plans for a trial of Tarvacin Anti-Cancer in pancreatic cancer after completion of Peregrine's current Phase I cancer study.

"We now have a growing body of evidence demonstrating that Tarvacin Anti-Cancer has broad therapeutic potential against both primary tumors and tumor metastases in several major cancers, including cancers of the prostate, breast and pancreas," said Steven W. King, president and CEO of Peregrine. "Given its consistent record of promising efficacy in these preclinical studies, we plan to pursue multiple clinical trials for Tarvacin Anti-Cancer after we successfully complete the Phase I study now underway."

Similar to its mechanism of action in cancer, Tarvacin targets phospholipids exposed on viruses and virally infected cells, mobilizing the immune system to attack and destroy both the viruses and the infected cells. Tarvacin Anti-Viral is in Phase I clinical studies for hepatitis C infections and is in pre-clinical studies for potential use against influenza, HIV, cytomegalovirus and other life-threatening viruses.

The study, Combination of a monoclonal anti-phosphatidylserine antibody with gemcitabine strongly inhibits the growth and metastasis of orthotopic pancreatic tumors in mice, by Adam W. Beck, Troy A. Luster, Andrew F. Miller, Shane E. Holloway, Chris R. Conner, Carlton C. Barnett, Philip E. Thorpe, Jason B. Fleming and Rolf A. Brekken, was funded with grants from the National Institutes of Health, National Pancreas Foundation, American Cancer Society, Effie Marie Cain Scholarship in

Angiogenesis Research and The Gillson Longenbaugh Foundation.

## About Peregrine

Peregrine Pharmaceuticals, Inc. is a biopharmaceutical company with a portfolio of innovative product candidates in clinical trials for the treatment of cancer and viral diseases. The company is pursuing three separate clinical trials in cancer and anti-viral indications with its lead product candidates Tarvacin™ and Cotara®. Peregrine also has in-house manufacturing capabilities through its wholly-owned subsidiary Avid Bioservices, Inc. (<http://www.avidbio.com>), which provides development and bio-manufacturing services for both Peregrine and outside customers. Additional information about Peregrine can be found at <http://www.peregrineinc.com>.

## Safe Harbor Statement:

Safe Harbor Statement: 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 involve risks and uncertainties including, but not limited to, the risk that the results from further studies using Tarvacin in combination with chemotherapy agents may not be consistent with the results of our pre-clinical model of pancreatic cancer, the risk that the results will not support a future clinical trial with Tarvacin Anti-Cancer as a combination therapy agent, or the risk that safety and efficacy studies in the Phase I clinical cancer study may not correlate to safety and efficacy data generated from preclinical animal models. 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 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, 2005, and the quarterly report on Form 10-Q for the quarter ended October 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.

Investors - Brod & Schaffer, 1-800-987-8256, [ir@peregrineinc.com](mailto:ir@peregrineinc.com), Media - Stephen Gendel of GendelLindheim BioCom Partners, +1-212-918-4650