April 14, 2008

Preclinical Study Presented at AACR Annual Meeting Shows Broad Anti-Cancer Potential of Peregrine's anti-PS Vascular Targeting Antibodies

-Combination of a Bavituximab Equivalent and an Agent that Re-Activates the Tumor Suppressor P53 Inhibited Tumor Growth Synergistically in Preclinical Breast Cancer Models-

SAN DIEGO and TUSTIN, Calif., April 14, 2008 /PRNewswire-FirstCall via COMTEX News Network/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) announced today that a preclinical study being presented by an independent team of investigators at the 2008 Annual Meeting of the American Association for Cancer Research (AACR) further illustrates the broad anti-tumor potential of its anti-phosphatidylserine (anti-PS) vascular targeting antibodies. The study by Dr. Yayun Liang, Dr. Salman Hyder and colleagues at the University of Missouri describes promising anti-cancer activity observed when a mouse equivalent to the company's Phase II anti-PS antibody bavituximab was combined with an investigational agent that re-activates the tumor suppressor p53, which is turned off in many tumors. Bavituximab is a monoclonal antibody that is believed to work by selectively destroying the blood vessels supporting tumor growth and spread and by reversing the ability of tumors to suppress the body's natural immune response.

"This study highlights the broad anti-cancer potential of our anti-PS vascular targeting platform," said Steven W. King, president and CEO of Peregrine. "Numerous preclinical studies have shown the potential efficacy of our anti-PS antibodies in combination with both existing and novel therapies for the treatment of cancer. This new study further illustrates the potential versatility of our anti-PS antibodies in combination cancer therapy. We look forward to future clinical studies of bavituximab and other anti-PS antibodies in a broad range of anti-cancer regimens."

Dr. Liang and her colleagues reported on their study of a bavituximab equivalent antibody, 2aG4, in combination with a clinical stage small molecule agent, PRIMA-1. PRIMA-1 restores the normal function of mutant forms of the tumor suppressor p53, enabling it to induce tumor cell death. The combination therapy resulted in additive and synergistic anti-tumor effects in two mouse models of advanced breast cancer, enhancing tumor regression and elimination, while also reducing the incidence of lymph node metastases in some subjects.

Dr. Liang noted, "These results indicate that PRIMA-1 plus 2aG4 combination therapy has a complementary and potent anti-tumor activity and could define a new strategy for suppression of advanced breast cancers."

Bavituximab is a monoclonal antibody that binds to a phospholipid called phosphatidylserine that is usually located inside normal cells, but which becomes exposed on the outside of the cells that line the blood vessels of tumors, creating a specific target for anti-cancer treatments. Bavituximab helps mobilize the body's immune system to destroy the blood vessels needed for tumor growth and spread. In a Phase Ib pilot trial in advanced cancer patients, bavituximab plus chemotherapy appeared to have a safety profile consistent with chemotherapy alone and showed positive signs of clinical activity, achieving objective response or disease stabilization in 50% of the evaluable patients. Peregrine has received regulatory approval to conduct three Phase II trials to study the anti-tumor effects of bavituximab in combination with chemotherapy. These include two breast cancer protocols and a non-small cell lung cancer protocol. One of the bavituximab breast cancer trials is currently enrolling and dosing patients and the two other trials are expected to begin shortly. Bavituximab is in clinical trials in the U.S. in patients with advanced solid tumors and in patients co-infected with HCV and HIV.

No. 2341: Yayun Liang, Salman M. Hyder, Cynthia L. Besch Williford, Indira Benakanakere, Sandra L. Brandt, Philip E. Thorpe. Targeting mutant p53 protein and tumor vasculature: An effective combination therapy for advanced breast tumors, Univ. of Missouri, Columbia, MO, Simmons Cancer Center, University of Texas Southwestern, Dallas, TX, April 14, 2008, 8:00 AM - 12:00 PM PDT

About Peregrine Pharmaceuticals

Peregrine Pharmaceuticals, Inc. is a biopharmaceutical company with a portfolio of innovative product candidates in clinical trials for the treatment of cancer and hepatitis C virus (HCV) infection. The company is pursuing three separate clinical programs in cancer and HCV infection with its lead product candidates bavituximab and Cotara(R). 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: Statements in this press release which are not purely historical, including statements regarding Peregrine Pharmaceuticals' 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 company will experience delays or difficulties in enrolling patients in the study, the risk that results from future preclinical studies and clinical trials will not correlate with the results of these preclinical studies and the risk that bavituximab will not provide comparable results in combination with other cancer therapies. 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 preclinical 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, preclinical 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 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, 2007 and the quarterly report on Form 10-Q for the quarter ended January 31, 2008. 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.

Contacts:
GendeLLindheim BioCom Partners

Investors	Media
info@peregrineinc.com	Barbara Lindheim
(800) 987-8256	(212) 918-4650

SOURCE Peregrine Pharmaceuticals, Inc.

http://www.peregrineinc.com