March 31, 2015

Peregrine Pharmaceuticals Announces Promising Bavituximab Phase I Data Published in the Peer-Reviewed Journal Cancer Medicine in Advanced Metastatic Breast Cancer

- Combination of Bavituximab and Paclitaxel Achieved an 85% Objective Response-

- Design of Phase II Clinical Trial Underway -

TUSTIN, Calif., March 31, 2015 (GLOBE NEWSWIRE) -- Peregrine Pharmaceuticals (Nasdaq:PPHM) (Nasdaq:PPHMP), today announced the peer-reviewed publication of clinical data from a Phase I investigator-sponsored trial evaluating the company's lead investigational immunotherapy bavituximab plus paclitaxel therapy in patients with HER2-negative metastatic breast cancer. The manuscript details the results of the Phase I trial showing that the combination produced an objective tumor response in 85% of patients, including 15% of these patients achieving a complete response, measured in accordance with Response Evaluation Criteria In Solid Tumors (RECIST) criteria.

"The publication of these data marks an important milestone in the development of this novel therapeutic in a difficult to treat patient population," said Alison Stopeck, M.D., the principal investigator on the trial and Professor, Department of Medicine and Associate Director for Translational Research at the Stony Brook Cancer Center in Stony Brook, New York. "The regimen was very well tolerated and the clinical responses were encouraging. The data also suggest bavituximab may uniquely affect the coagulation system in a beneficial way for cancer patients. It is my belief that the combination of bavituximab with weekly paclitaxel is a feasible regimen that is associated with a promising response rate in patients with metastatic breast cancer and warrants further clinical exploration."

In the online released manuscript, researchers at the University of Arizona Medical Center led by Alison Stopeck, M.D. enrolled 14 patients with metastatic breast cancer (MBC) and while all were evaluable for toxicity, 13 were evaluable for response and progression free survival (PFS). These patients with HER2-negative MBC were treated with paclitaxel (80 mg/m2) weekly for three weeks of each four-week cycle and bavituximab (3 mg/kg) administered weekly beginning on day 15 after two weekly doses of paclitaxel. Results from 13 evaluable patients showed that 11 patients (85%) achieved an objective response, including two patients (15%) that achieved a complete response (CR), 9 patients with partial responses (PR) and 2 patients with progressive disease (PD). Median PFS for the combination of bavituximab with weekly paclitaxel was 7.3 months. In addition, the combination of bavituximab and paclitaxel was safe and well-tolerated with the majority of grade 1 or 2 adverse events being paclitaxel related. Approximately half of these patients were classified as "triple negative," a traditionally difficult-to-treat patient population. In addition, treatment with bavituximab reduced circulating PS-expressing microparticles (exosomes) which are immunosuppressive.

"These compelling results in a very difficult to treat patient population provide the foundation to move with confidence into a later stage trial," said Joseph Shan, vice president of clinical and regulatory affairs at Peregrine Pharmaceuticals. "These data build upon our historical clinical experience in the area of breast cancer and when combined with recent preclinical data demonstrating bavituximab's ability to promote antitumor immune activity, increase our understanding of the immune-stimulatory aspects of bavituximab."

These results appear in the March issue of the peer-reviewed journal, *Cancer Medicine*, in a manuscript titled: "A Phase I Clinical Trial of Bavituximab and Paclitaxel in Patients with HER-2 Negative Metastatic Breast Cancer."

The online article is available at: http://onlinelibrary.wiley.com/doi/10.1002/cam4.447/full

About Peregrine Pharmaceuticals, Inc.

Peregrine Pharmaceuticals, Inc. is a biopharmaceutical company with a pipeline of novel drug candidates in clinical trials for the treatment and diagnosis of cancer. The company's lead immunotherapy candidate, bavituximab is in Phase III development for the treatment of second-line non-small lung cancer (the "SUNRISE trial") along with several investigator-sponsored trials evaluating other treatment combinations and additional oncology indications. The company is also advancing a molecular imaging agent, 124I-PGN650, in an exploratory clinical trial for the imaging of multiple solid tumor types. Peregrine also has in-house cGMP manufacturing capabilities through its wholly-owned subsidiary Avid Bioservices, Inc. (www.avidbio.com), which provides development and biomanufacturing services for both Peregrine and third-party customers. Additional information about Peregrine can be found at 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 may not have or raise adequate financial resources to initiate a later stage breast cancer clinical trial and the risk that the results of a later stage breast cancer clinical trial will not be consistent with the results from this Phase I breast cancer trial. 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 our reports filed with the Securities and Exchange Commission including, but not limited to, our annual report on Form 10-K for the fiscal year ended April 30, 2014 as well as any updates to these risk factors filed from time to time in the company's other filings with the Securities and Exchange Commission. 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.

CONTACT: Christopher Keenan

Peregrine Pharmaceuticals, Inc.

(800) 987-8256

info@peregrineinc.com

Source: Peregrine Pharmaceuticals, Inc.

News Provided by Acquire Media