June 1, 2015

Peregrine Pharmaceuticals Provides Update on Planned Expansion of Bavituximab Clinical Program

- Phase II Trial to Evaluate Combination of Bavituximab and Opdivo® (Nivolumab) in Non-Small Cell Lung Cancer -

- Phase II/III Combination Trial to Advance Bavituximab with Chemotherapy Combinations in HER2 Negative Breast Cancer -

- New Studies Expected to be Underway as Phase III SUNRISE Trial in Lung Cancer Completes Enrollment by Calendar Year-End -

TUSTIN, Calif., June 1, 2015 (GLOBE NEWSWIRE) -- Peregrine Pharmaceuticals, Inc. (Nasdaq:PPHM) (Nasdaq:PPHMP), a biopharmaceutical company focused on oncology and the treatment of lung and breast cancers through the development of bavituximab, a novel immunotherapy currently in Phase III, today provided a corporate update on its immuno-oncology pipeline, its wholly-owned contract manufacturing business, Avid Bioservices, as well as anticipated upcoming milestones. This update outlines the expansion of the bavituximab clinical pipeline with a focus on exploring expanded indications and combinations in lung and breast cancers. These new trials build on recently published clinical data of bavituximab in combination with paclitaxel in HER2 negative breast cancer and clinical translational and preclinical data presented at the 2015 American Society of Clinical Oncology (ASCO) Annual Meeting that support the potential combination of bavituximab with the anti-PD-1 checkpoint inhibitor, nivolumab (marketed as Opdivo®). These clinical trials are expected to begin enrollment later this year.

"With many exciting near-term opportunities for Peregrine and Avid, we are pleased to share several strategic decisions aimed at expanding the potential clinical indications for bavituximab. These new trials represent large market opportunities for the bavituximab clinical program that can add significant value," said Steven King, president and chief executive officer of Peregrine. "As we near completion of enrollment in the SUNRISE pivotal Phase III trial by year-end, we are looking to expand bavituximab's market potential and market position in key indications that are supported by strong clinical, translational, and preclinical data. Taken together with the research collaboration we announced last week, we believe we are setting the stage for many significant value driving events throughout 2015 and into 2016."

SUNRISE Phase III Pivotal Trial

The company's Phase III SUNRISE (Stimulating ImmUne RespoNse thRough BavItuximab in a PhaSE III Lung Cancer Study) is an approximately 600 patient trial that continues to enroll at over 150 sites worldwide. Completion of enrollment is anticipated by calendar year-end. This Phase III, randomized, double-blind, placebo-controlled clinical trial is designed to evaluate the safety, tolerability and efficacy of bavituximab as a second-line treatment in patients with non-squamous, non-small cell lung cancer (NSCLC). Enrollment is proceeding according to plan with two planned interim efficacy analyses which will be reviewed by the trial's Independent Data Monitoring Committee (IDMC). The first interim analysis, which will be conducted when 33% of the targeted overall survival events are reached, is for futility and the second interim analysis, for futility or superiority, will be conducted at 50% of events. As these analyses are event driven, the exact timing of each is unknown, however the company plans to provide updates as these events are reached. For additional information about the SUNRISE trial, please visit www.sunrisetrial.com or ClinicalTrials.gov using the Identifier NCT01999673.

Beyond SUNRISE: Exploring Checkpoint Inhibitor Combinations in Lung Cancer

Joe Shan said: "Following recent encouraging preclinical data supporting the combination of bavituximab with immune checkpoint inhibitors, today we are supplementing our strategy in lung cancer with the second clinical trial to emerge from our Immuno-Oncology Development Program, a combination trial of bavituximab with nivolumab, an immune checkpoint inhibitor of PD-1. Specifically, recent preclinical data show that the addition of bavituximab could result in turning patients that do not respond to monotherapy into patient responders. This supports our long held knowledge of the synergistic properties of the combination of bavituximab and chemotherapies, thus making this new trial the next logical step."

The company plans to initiate an open-label multi-center, randomized Phase II trial of the anti-PD-1 monoclonal antibody nivolumab (marketed as Opdivo®) versus nivolumab plus bavituximab in patients with previously treated locally advanced or metastatic NSCLC. Enrollment will include patients with squamous and non-squamous NSCLC who have not received a prior PD-L1 or PD-1 inhibitor. The primary endpoint of this trial will be overall response rate (ORR) with secondary endpoints including tumor response and duration, progression free survival, overall survival (OS) and safety. The trial is in the final stages

of design and the details of which will be made available once details are completed. Trial initiation is anticipated in the second half of 2015.

Leveraging Positive Data in Breast Cancer

"Today we are pleased to be detailing our strategy in breast cancer which is built upon very promising data which were recently published in the peer-reviewed journal *Cancer Medicine,*" said Joseph Shan, vice president of clinical and regulatory affairs at Peregrine Pharmaceuticals. "The clinical development pathway that we are outlining today is based upon the strong clinical experience that supports synergies between bavituximab and docetaxel and paclitaxel, our deep and consistently positive clinical experience in breast cancer to date, as well as the support of leading breast cancer physicians."

The company plans to initiate a Phase II/III open-label trial of physician's choice of either docetaxel or paclitaxel with or without bavituximab in patients with locally advanced or metastatic HER2 negative breast cancer. The primary endpoint for the Phase II trial will be ORR. Results from this trial are expected to inform decisions on future studies in breast cancer and add value to the overall program. The initiation of this trial is anticipated in the second half of 2015.

Fiscal Year End Cash Position

Peregrine today reported $68 million in cash and cash equivalents, as of fiscal year ended April 30, 2015. The company will review full financial results for the fourth quarter and fiscal year 2015 during its quarterly call on Tuesday, July 14, 2015 after the close of markets, details of which will be included in a forthcoming press release.

Avid Bioservices' Expansion on Track and Strongly Positioned to Meet Increased Client Demand

In December 2014, the company announced the expansion of Avid's Current Good Manufacturing Practice (cGMP) current manufacturing capacity with a build out that is utilizing an existing 40,000 square foot facility located adjacent to the company's current campus. Designed to more than double Avid's current manufacturing capacity, this state-of-the-art biotechnology facility will employ an innovative and flexible modular clean room design and the latest in single-use technologies to meet the growing needs of Avid's existing and future clients as well as the planned commercialization of bavituximab. Avid's new facility is anticipated to be ready for cGMP production of biotechnology products in July 2015.

Added Steve King: "We are very pleased with the rapid progress by which this expansion is advancing as this is a key component to further demonstrating Avid as a leading provider of high quality biotechnology contract manufacturing services. The design and the features that we have employed in this expansion will truly be an integral part to the future growth of this unique part of our business. We look forward to sharing specific details on the expansion upon its formal unveiling later this year."

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. 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. For more information, please visit 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 experience delays in the enrollment of patients in the Phase III SUNRISE trial and may not achieve its anticipated enrollment timeline, the risk that the results from the Phase III SUNRISE trial may not support a future Biologics License Application (BLA) submission, the risk that the company may not have or raise adequate financial resources to complete the Phase III SUNRISE trial or the planned Phase II/III breast cancer trial or Phase II NSCLC trial, the risk that the Phase II portion of the breast cancer trial may not support advancing into the Phase III portion of the trial, and the risk that the new Avid facility may not be ready for Current Good Manufacturing Practice production in July, 2015. 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.

Opdivo® is a registered trademark of Bristol-Myers Squibb Company

CONTACT: Christopher Keenan

Peregrine Pharmaceuticals, Inc.

(800) 987-8256

info@peregrineinc.com

Source: Peregrine Pharmaceuticals, Inc.

News Provided by Acquire Media