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Peregrine Announces Initiation of Phase I/II Investigator-Sponsored Trial in Liver Cancer

Investigators Evaluating Novel Monoclonal Antibody Bavituximab in Combination With Sorafenib

TUSTIN, CA and DALLAS, TX -- (MARKET WIRE) -- 12/01/10 -- Peregrine Pharmaceuticals, Inc. (NASDAQ: PPHM), a clinical-stage biopharmaceutical company developing first-in-class monoclonal antibodies for the treatment of cancer and viral infections, today announced the initiation of an investigator-sponsored trial (IST) for patients with advanced hepatocellular carcinoma (HCC), or liver cancer. This Phase I/II trial will treat patients with Peregrine's investigational monoclonal antibody bavituximab in combination with sorafenib.

"Our research has demonstrated that sorafenib increases the exposure of the highly immunosuppressive molecule phosphatidylserine (PS) on tumor vasculature, providing more of a specific target for bavituximab," said Adam C. Yopp, M.D., lead investigator of this trial and assistant professor of surgery at the University of Texas Southwestern Medical Center. "We are eager to determine if combining the growth-blocking mechanisms of sorafenib with the vascular-targeting and immune-reactivation mechanisms of bavituximab offers additive anti-tumor effects for patients with HCC."

Currently, Peregrine's bavituximab is being evaluated in combination with chemotherapy in multiple Phase II trials in non-small cell lung cancer and advanced breast cancer, as well as a Phase Ib trial for hepatitis C virus (HCV) and HIV coinfection.

"In prior studies, bavituximab has demonstrated broad therapeutic potential in multiple oncology indications," said Marvin R. Garovoy, M.D., head of clinical science at Peregrine Pharmaceuticals. "Our IST program is designed to provide valuable clinical data on bavituximab's potential use in different therapeutic combinations and indications. We also expect to further clarify details of bavituximab's multiple mechanisms of action, and to identify specific biomarkers that could ultimately help to measure and predict bavituximab's potential anti-tumor and immunostimulatory effects. We look forward to collaborating with Dr. Yopp and his team, as well as other investigators who have applied for our program."

About the Phase I/II HCC Trial
In this Phase I/II non-randomized, open-label trial, patients with advanced HCC will receive bavituximab weekly and sorafenib (400 mg) twice daily, until disease progression or toxicity. Phase I of the trial is dose escalation (0.3, 1 or 3 mg/kg) to determine the maximum tolerated dose (MTD) and Phase II is expansion of the study at the MTD. Approximately 50 patients will be enrolled in this trial.

Primary objectives are to determine the MTD of bavituximab in patients with advanced HCC treated with sorafenib and the radiographic median time to progression. Secondary objectives include response rate, progression free-survival, overall survival, safety and tolerability. Further information about this trial is available at PeregrineTrials.com and University of Texas Southwestern Medical Center Clinical Trials, and will be available at ClinicalTrials.gov.

About Peregrine's Investigator-Sponsored Trials (IST) Program
Peregrine's IST program offers oncologists the opportunity to conduct clinical trials using bavituximab in the following indications:

Breast cancer
Hepatocellular carcinoma
Brain cancer
Prostate cancer
Pancreatic cancer
Non-small cell lung cancer
Colorectal cancer
Melanoma
Fibrosarcoma
Renal cancer
Urinary bladder cancer
Hodgkin's lymphoma
Ovarian cancer

To apply for Peregrine's IST program, please visit http://www.peregrineinc.com/pipeline/investigator-sponsored-trials.html.

About Hepatocellular Carcinoma (HCC)
According to the National Cancer Institute, primary liver and bile duct cancers are the sixth most common cause of cancer death in men, and ninth most common in women. Approximately 24,000 new cases of these two cancers are expected to be diagnosed this year in the United States, with approximately 19,000 deaths attributable to these forms of cancer. The most common risk factor for liver cancer is chronic hepatitis C virus (HCV) or hepatitis B virus (HBV) infection. Currently approved treatment options for HCC are surgery, radiation, chemotherapy, targeted therapeutics, tumor ablation, and tumor embolization.

About Peregrine Pharmaceuticals
Peregrine Pharmaceuticals, Inc. is a biopharmaceutical company with a portfolio of innovative monoclonal antibodies in clinical trials for the treatment of cancer and serious viral infections. The company is pursuing multiple clinical programs in cancer and hepatitis C virus infection with its lead product candidate bavituximab and novel brain cancer agent Cotara®. 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 outside 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 results from investigator-sponsored trials will not be consistent with results experienced in earlier clinical trials and preclinical studies, the risk that investigators may experience delays in patient enrollment, risk that results may not support registration filings with the U.S. Food and Drug Administration, and the risk that Peregrine may not have or raise adequate financial resources to complete the planned clinical programs. Factors that could cause actual results to differ materially or otherwise adversely impact the company's ability to obtain regulatory approval for its product candidates 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, 2010 and the quarterly report on Form 10-Q for the quarter ended July 31, 2010. 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.

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