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## **New Data Confirms That a Selective, Fully Human Anti-VEGF Antibody Being Developed by Peregrine is as Effective as Avastin® in Preclinical Cancer Models**

-- Data Presented at Anti-Angiogenesis Conference Shows R84, the Selective Human Anti-VEGF Antibody Developed by Peregrine in Association with Affitech, Is Equivalent to Avastin in Inhibiting Growth of Established Tumors in a Preclinical Breast Cancer Model --

-- R84 Is Being Advanced as a Potential Clinical Candidate --

BOSTON and TUSTIN, Calif., Nov. 13 /PRNewswire-FirstCall/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) a clinical stage biopharmaceutical company developing targeted monoclonal antibodies for the treatment of cancer and hepatitis C virus (HCV) infection, today reported that preclinical data presented at IBC's 5th Annual International Anti-Angiogenesis Conference showed that its anti-VEGF antibody R84 was as effective as Avastin® (bevacizumab) in inhibiting tumor growth in a mouse model of human breast cancer. R84 is a selective, fully human monoclonal antibody that blocks the cancer-promoting agent vascular endothelial growth factor (VEGF). R84 selectively blocks VEGF from binding only to VEGF receptor 2 (VEGFR2), while non-selective agents such as Avastin block binding to both VEGFR2 and VEGF receptor 1 (VEGFR1). Selective anti-VEGF agents may have potential advantages over non-selective approaches and Peregrine is now assessing R84 as a candidate for clinical development. R84 is a product of the collaboration between Peregrine and antibody developer Affitech AS of Oslo, Norway.

The data demonstrating the potential anti-cancer efficacy of R84 in xenograft models of human cancer was part of a presentation by Dr. Rolf Brekken, assistant professor of surgery and pharmacology and Effie Marie Cain Scholar in Angiogenesis Research at UT Southwestern Medical Center, and an advisor to Peregrine. Dr. Brekken's study treated tumor-bearing animals with R84, Avastin, or a placebo in an orthotopic model of breast cancer. Treatment with R84 reduced the growth of well-established breast tumors by 55%, equivalent to the reduction achieved with Avastin. The researchers also demonstrated that R84 and Avastin were equally effective at controlling tumor growth in a preclinical model of sarcoma. In every preclinical tumor model evaluated thus far, the anti-tumor activity of R84 has been comparable to that of Avastin.

"These encouraging findings build on positive preclinical data we presented at the 2007 AACR meeting showing that Peregrine's selective anti-VEGF mouse antibody 2C3 and its fully human counterpart R3 demonstrated potent anti-cancer efficacy equivalent to Avastin in a model of pancreatic cancer," said Steven W. King, president and CEO of Peregrine. "We are delighted that R84 is generating similar, and potentially superior, results in preclinical cancer models. As a result of these positive developments, we are initiating additional preclinical studies to advance R84 as our next potential clinical candidate."

The study results also showed that tumor-associated macrophages, immune system cells found in tumors, are reduced after R84 therapy. Tumor-associated macrophages are often associated with poor prognosis as these cells are linked to increased angiogenesis and metastasis. In addition, the study data showed that when given for a prolonged period, R84 decreased microvessel density and expression of VEGFR2, demonstrating that the antibody is acting to reduce VEGF-induced angiogenesis in tumor tissue.

Dr. Brekken commented, "VEGF binding to VEGFR2 on blood vessels is a primary driver in promoting the development and maintenance of the blood vessels needed by tumors to survive and grow. These new studies further tested the hypothesis that selectively inhibiting VEGFR2 is an equally effective anti-tumor strategy as blocking both VEGF receptors. Most of the anti-angiogenic agents currently being developed or marketed, such as Avastin, block the activity of both VEGF receptors. The data we previously presented on 2C3, our selective anti-VEGF mouse antibody, along with the current study results demonstrate that selective inhibition of VEGFR2 alone can reduce tumor growth. They also suggest that inhibiting VEGFR1 is not necessary to effectively limit VEGF-induced angiogenesis. We look forward to further assessing R84 as a potential anti-angiogenic clinical candidate."

Peregrine in association with Affitech has filed a patent application for R84 with the United States Patent and Trademark Office to preserve the right to obtain patent protection in the United States, all member countries of the European Union and the rest of the world.

This research was supported in part by a sponsored research agreement between UT Southwestern and Peregrine Pharmaceuticals. These studies were also supported in part by Susan G. Komen for the Cure and the Department of Surgery at UT Southwestern.

Dr. Brekken's presentation, "Development of 2C3 as a Clinical Candidate for Inhibition of VEGF Activation of VEGF Receptor 2," was presented at IBC's 5th Annual International Conference on Anti-Angiogenesis at the Tremont Hotel in Boston, Mass., on November 12, 2007. The presentation was not webcast.

#### 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 in the U.S. and India with its lead product candidates bavituximab and Cotara<sup>®</sup>. 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 pre-clinical mouse model results for breast cancer will not correlate to efficacy studies in human clinical trials for breast or other solid tumor cancers, the risk that selective VEGF inhibitors will not prove to have advantages compared to non-selective approaches, the risk that results will not continue to be consistent with those of Avastin and the risk that the Company may experience delays in initiating clinical trials using its R83 antibody. 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 July 31, 2007. 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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