



June 24, 2009

## **Peregrine Pharmaceuticals Awarded Broad New U.S. Patent for Vascular Imaging Applications of Its PS-Targeting Platform**

**-- --- New Claims Cover Use of Phosphatidylserine-Targeting Antibodies to Image Solid Tumors and Other Malignancies -- --- Supported by Published Data Showing Utility of PS-Targeting Antibodies for the Molecular Imaging of Cancer --**

TUSTIN, Calif., June 24, 2009 /PRNewswire-FirstCall via COMTEX News Network/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) today reported the issuance of a U.S. patent with broad claims covering vascular imaging applications for phosphatidylserine (PS)-targeting antibodies. The patent represents the first broad coverage of imaging claims under Peregrine's PS-targeting platform, which includes Peregrine's lead antibody bavituximab. PS is a phospholipid that becomes exposed on the surface of tumor blood vessel cells. Since PS is typically not exposed on the surface of normal tissues, it represents a unique target for the vascular imaging of tumors and tumor metastases in patients with cancer.

"PS-targeting antibodies such as bavituximab preferentially bind to tumor blood vessels, which makes them ideal vehicles for imaging the tumor vasculature," said Dr. Philip Thorpe, professor of pharmacology at UT Southwestern Medical Center and a scientific advisor to Peregrine. "Last year we published data from preclinical imaging studies confirming bavituximab's high specificity for targeting tumor blood vessels with little or no localization to normal tissue.(1) Bavituximab's ability to achieve unusually clear images of tumors in living animals in these studies supports the concept that PS-targeting antibodies may be useful for the non-invasive detection of tumors and their metastases in cancer patients."

The new patent claims methods for imaging solid tumors using PS-targeting antibodies coupled to a variety of imaging agents.

"Issuance of this broad vascular imaging patent expands the breadth of our intellectual property around our PS-targeting platform," said Steven W. King, president and CEO of Peregrine. "This patent protects expanded use of bavituximab and other PS-targeting antibodies to track disease and treatment status in cancer patients. The growing patent estate around our PS-targeting technology provides us with new options and applications for leveraging our PS-targeting antibodies."

Bavituximab, Peregrine's most advanced PS-targeting antibody, is currently being tested in combination with chemotherapy in one Phase II trial in advanced lung cancer and two Phase II trials in advanced breast cancer. Interim data from these studies has been promising.

U.S. Patent #7,550,141, which was issued on June 23, 2009, was granted to the University of Texas System and is exclusively licensed to Peregrine Pharmaceuticals.

1. M Jennewein, M Lewis, D Zhao, E Tsyganov, N Slavine, J He, L Watkins, V Kodibagkar, S O'Kelly, P Kulkarni, P Antich, A Hermanne, F Rosch, R Mason, P Thorpe, Vascular Imaging of Solid Tumors in Rats with a Radioactive Arsenic-Labeled Antibody that Binds Exposed Phosphatidylserine, *Clinical Cancer Research*. March 1, 2008.

### About Phosphatidylserine (PS)-Targeting Antibodies

The rapid and disorganized growth that is the hallmark of cancer results in the exposure of the lipid phosphatidylserine (PS) on the surface of tumor blood vessels. Since PS typically is not exposed on the surface of normal tissues, it represents a unique target for cancer diagnostics and therapeutics. Bavituximab is a monoclonal antibody that specifically targets PS exposed on the surface of the cells lining tumor blood vessels. It currently is in three Phase II clinical trials for the treatment of advanced breast cancer and advanced lung cancer. Further information on the role of exposed PS in the tumor environment can be found in the Anti-PS Technical Backgrounder posted at [www.peregrineinc.com](http://www.peregrineinc.com).

### 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 three separate clinical programs in cancer and hepatitis C virus 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. ([www.avidbio.com](http://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](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 PS-targeting antibodies will not be useful for the non-invasive imaging of tumors in cancer patients. 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 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, 2008 and the quarterly report on Form 10-Q for the quarter ended January 31, 2009. 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

[info@peregrineinc.com](mailto:info@peregrineinc.com)

(800) 987-8256

Media

Barbara Lindheim

(212) 918-4650

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<http://www.peregrineinc.com>

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