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## **Peregrine Pharmaceuticals Announces Grant of Patent For Vasopermeation Enhancing Agents**

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### ***New Patent Expands the Uses of VEA Platform Technology***

Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) announced the issuance of U.S. Patent No. 6,524,823 covering liposomal conjugates that act to increase tumor blood vessel permeability. The patent, entitled Vasopermeability-enhancing conjugates, covers methods for selectively delivering liposomes to tumors which act to increase vascular permeability and expand blood volume at or in proximity to the tumor site. Researchers at the University of Southern California (USC), through a Peregrine-sponsored research collaboration, developed the Vasopermeation Enhancement Agents (VEA) technology. This technology has been exclusively licensed to Peregrine from USC.

"We are pleased to continue to expand our patent position for our key platform technologies," said Steven King, Peregrine's president and CEO. "The delivery of potential VEA agents within liposomes would be an excellent way to avoid any potential systemic side effects from these drugs. This new patent adds to the vast potential of licensing opportunities we have for the VEA and our other platform technologies. We looking forward to working with other companies to move this platform technology into the clinic."

About Vasopermeation Enhancement Agents

### **Barriers to Existing Cancer Therapies**

Most traditional approaches to cancer therapy attempt to destroy individual cancer cells. Drugs that target cancer cells must overcome a significant number of structural barriers within the tumor in order to be effective. They must first exit the tumor blood vessels, migrate past the support structures that underlie the vessels and eventually make their way to the cancer cells. As result of these structural barriers, very little drug injected into the blood stream of a patient is able to reach and destroy cancer cells. One potential solution to this problem is to increase the permeability of the blood vessels within the tumor which will permit more therapeutic drug to reach and kill substantially more cancer cells.

### **Mechanism of Action**

Vasopermeation Enhancement Agents are a new class of drugs which are designed to increase the uptake of cancer therapeutics and imaging agents at the tumor site, potentially resulting in greater efficacy. VEAs work by using monoclonal antibodies, or other biologically active targeting agents, to deliver known vasoactive compounds (i.e. molecules that cause tissues to become more permeable) selectively to solid tumors. Once localized at the tumor site, VEAs alter the physiology and the permeability of the vessels and capillaries that supply the tumor. In pre-clinical studies, drug uptake has been increased up to 400% in solid tumors when VEAs were administered several hours prior to the therapeutic treatment. VEAs are intended to be used as a pre-treatment for most existing cancer therapies and imaging agents. VEAs may be effective across multiple tumor types.

### **About Peregrine Pharmaceuticals**

Peregrine Pharmaceuticals is a biopharmaceutical company focused on the development, commercialization and licensing of unique technologies for the treatment of cancer, primarily based on three collateral targeting technologies. Peregrine's Tumor Necrosis Therapy (TNT), Vasopermeation Enhancement Agents (VEA), and Vascular Targeting Agents (VTA) technologies target cell structures and cell types that are common among solid tumor cancers, giving them broad applicability across various tumor types. The company has received approval from the FDA to start a Cotara™ Phase III clinical trial for brain cancer. Cotara is also being studied in a Phase I trial for colorectal, pancreas, soft tissue sarcoma and biliary cancers at Stanford University. The company is focused on licensing collaborations for all of its technologies under development. The company's Oncolym&reg; technology to treat non-Hodgkin's B-cell lymphoma is in Phase I/II of development is available for licensing. The company also operates a cGMP contract manufacturing facility for monoclonal antibodies and recombinant proteins through its wholly owned subsidiary Avid Bioservices, Inc. ([www.avidbio.com](http://www.avidbio.com)). Copies of Peregrine press releases, SEC filings, current price quotes and other valuable information for investors may be found on the website [www.peregrineinc.com](http://www.peregrineinc.com).

Safe Harbor Statement: This release may contain certain forward-looking statements that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Actual events or results may differ from the company's expectations as a result of risk factors discussed in Peregrine's reports on file with the U.S. Securities and Exchange Commission, including, but not limited to, the company's report on Form 10-K for the year ended April 30, 2002 and on Form 10-Q for the quarter ended January 31, 2003.

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