September 1, 2004

Peregrine Pharmaceuticals Extends its Platform of Novel Anti-Cancer Technologies

Announces Issuance of U.S. Patent No. 6,783,760 for Vascular Targeting Agents That Enhance Cancer Therapy

TUSTIN, CA, September 1, 2004 -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) announced today the grant of a new patent for the development of novel compounds that deliver cancer drugs directly to tumor blood vessels to enhance standard anti-cancer therapy. Compounds covered by the new patent include methods for treating cancer using Vascular Targeting Agents (VTAs) that bind to tumor blood vessels combined with standard cancer therapies including radiotherapy and chemotherapy. These novel VTA compounds may be directed to targets included in Peregrine's Anti-Phospholipid Therapy (APT) platform to enhance the anti-tumor effects of standard anti-cancer therapies without harming normal, healthy cells surrounding the tumor.

"Issuance of this new patent extends Peregrine's already strong intellectual property position, and also provides important clinical applications for our Vascular Targeting Agent program," said Steven King, Peregrine's president and CEO. "This new patent is particularly important since we believe that VTAs will be used in combination with standard therapies including surgery, radiotherapy and chemotherapy."

Aminophospholipids, which include the phospholipids phosphatidylserine (PS) and phosphatidylethanolamine (PE), are the foundation of APT. They are targets for anti-cancer therapies because they are arranged differently on cells in tumor blood vessels than are phospholipids on normal, healthy cells. In normal cells, aminophospholipids are found on the inside of the cellular membrane -- the outermost layer of the cell. Studies have shown, however, that these structures are found on the outside of the cellular membrane in tumor vasculature of a number of solid tumors. By linking antibodies that bind to phospholipids to therapeutic agents, the novel compounds are capable of directly attacking the cancer through the tumor blood vessels -- a platform technology referred to as Vascular Targeting Agents (VTA).

Early Experience with APT Antibodies

Peregrine already has several APT agents under development. Data from pre-clinical research studies show that these agents are able to specifically bind to cells on the outside of tumor vessels. In addition, pre-clinical results indicate potential single-agent activity with APT therapies as well; in studies, one of Peregrine's APT antibodies was shown to significantly inhibit tumor growth in a variety of rodent tumor models, in some instances, up to 50 percent.

Further, data collected by researchers from the University of Texas Southwestern Medical Center at Dallas show that APT antibodies significantly enhance the effectiveness of chemotherapy. In one pre-clinical study, breast cancer tumors were treated with a combination of an APT antibody and the widely used breast cancer chemotherapy treatment, docetaxel. The combination therapy resulted in a 93 percent inhibition of human breast cancer growth compared to 68 percent and 60 percent in groups treated with docetaxel or the APT antibody alone. In addition, therapy with the APT antibody alone was very well tolerated and did not enhance toxicities seen with docetaxel alone.

Peregrine is also developing APT compounds for use as anti-viral agents as aminophospholipids are also found on the outside of viruses.

About Peregrine Pharmaceuticals, Inc.

Peregrine Pharmaceuticals is a biopharmaceutical company primarily engaged in the research, development, manufacture and commercialization of cancer therapeutics and diagnostics through a series of proprietary platform technologies. The company is primarily focused on discovering and developing products that affect blood vessels and blood flow in cancer and other diseases. Peregrine's vascular research programs fall under several different proprietary platforms including Anti-Phospholipid Therapy (APT), Vascular Targeting Agents (VTAs), Anti-Angiogenesis and Vasopermeation Enhancement Agents (VEAs). The company expects to enter its first APT compound, Tarvacin™, into clinical trials for cancer therapy during calendar year 2004

Peregrine's most clinically advanced therapeutic program is known as Tumor Necrosis Therapy (TNT) and targets dead or dying tumor cells that are common to the majority of different tumor types. The company is developing a radiolabeled TNT agent that it has trademarked as CotaraÂ® for the treatment of cancer. Peregrine has completed enrollment in a Phase I CotaraÂ® clinical trial for the treatment of colorectal carcinoma at Stanford University Medical Center and has

received approval from the U.S. Food and Drug Administration ("FDA") to initiate a product registration clinical trial using CotaraÂ® to treat brain cancer. In addition, a TNT based agent similar to CotaraÂ® was developed under a licensing agreement in China and has been approved for the treatment of advanced lung cancer.

The company's wholly-owned subsidiary, Avid Bioservices, Inc. (http://www.avidbio.com), develops and manufactures monoclonal antibodies and recombinant proteins to support Phase I through Phase III clinical trials for biotechnology companies, including Peregrine.

Copies of Peregrine press releases, SEC filings, current price quotes and other valuable information for investors may be found at 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. Except for historical information presented herein, matters discussed in this release contain certain forward-looking statements. The inclusion of forward-looking statements should not be regarded as a representation by us, or any other person, that the objectives or plans will be achieved. The words "may," "should," "plans," "believe," "anticipate," "estimate," "expect," their opposites and similar expressions are intended to identify forward-looking statements. We caution readers that such statements are not guarantees of future performance or events and are subject to a number of factors that may tend to influence the accuracy of the statements, including but not limited to, risk factors discussed in Peregrine's report on Form 10-K for the year ended April 30, 2004 and subsequent quarterly reports on Form 10-Q. Peregrine disclaims any obligation and does not undertake to update or revise the forward-looking statements discussed in this press release.

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09/01/2004
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