March 10, 2004

Peregrine Pharmaceuticals Announces Publication of Data Related to its Tumor Necrosis Therapy Technology Platform

TUSTIN, Calif., March 10 /PRNewswire-FirstCall/ -- Peregrine Pharmaceuticals (Nasdaq: PPHM) announced today the publication of an article in Hybridoma and Hybridomics related to its Tumor Necrosis Therapy (TNT) technology platform. The research article describes the expression and testing of a TNT monoclonal antibody linked to the human cytokine Interleukin 12 (IL-12). The expressed fusion protein retained functional activity and induced a 44% reduction in prostate tumor growth in therapy experiments. The TNT technology platform for the delivery of cytokines is currently under development by Merck KGaA of Darmstadt, Germany under a licensing agreement with Peregrine.

Cytokines are immune system stimulators that help the human body fight infection and disease. Monoclonal antibodies are targeting agents that recognize specific structures and can be used to deliver therapeutic agents. The combination of a targeting antibody linked to a cytokine is known as an immunocytokine. In the newly published article, an immunocytokine was constructed using a TNT antibody linked to the cytokine IL-12. The TNT antibody guides IL-12 to the tumor where the cytokine can help boost the body's ability to fight the cancer. Immunocytokines are expected to have lower side effects than conventional chemotherapy and thus represent an attractive alternative to standard tumor therapy.

About Tumor Necrosis Therapy (TNT)

Rapidly growing tumors quickly outgrow their blood supply resulting in a region of tumor cells that do not receive adequate oxygen, nutrients and waste removal. The accumulation of dying cells results in the formation of a dead, or necrotic, core present in virtually all solid tumors beyond a very small size. Tumor Necrosis Therapy (TNT)-based products directly target and bind to dead and dying tumor cells found in virtually all solid tumors. Hence, TNT- based therapeutic agents have the potential to deliver therapeutic agents preferentially targeted to virtually all solid tumors.

Peregrine's TNT antibodies bind to universal intracellular antigens, DNA/Histone complexes, exposed in the necrotic core of malignant solid tumors. Since DNA and Histone are not normally accessible in normal tissues, the DNA/Histone complex represents a stable and specific marker of tumors.

Given TNT's near-universal appearance as a tumor marker, TNT antibodies make excellent delivery molecules for a wide variety of anti-cancer killing agents. To date, the TNT technology platform has been used to deliver various killing agents such as radioactive isotopes and cytokines to solid tumors.

About Peregrine Pharmaceuticals, Inc.

Peregrine's research and development efforts focus on discovering and developing products that effect blood flow to tumors. 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 has research collaborations with pharmaceutical and biotechnology companies to develop its VTA platform for therapeutic and diagnostic applications and expects to enter its first APT compound into clinical trials for cancer therapy during calendar year 2004.

Peregrine's vascular agents may also have applications in other angiogenesis-dependent diseases besides cancer such as diabetes, arthritis, skin disorders and eye diseases. Peregrine currently has exclusive rights to over 80 U.S. and foreign patents and patent applications that broadly cover its vascular programs. In addition, the company is currently evaluating its proprietary targets for use in treating non-angiogenesis dependent diseases such as viral infection. The company believes that the pre-clinical data generated by the company and the broad nature of its intellectual property will provide many opportunities for product development, partnering and licensing.

Peregrine's most clinically advanced therapeutic program is based on a targeting platform outside vascular biology. This technology platform is known as Tumor Necrosis Therapy (TNT) and targets dead or dying tumor cells that are common to the majority of different tumor types. Cotara™, the most clinically advanced TNT program, is currently in a phase I clinical trial for the treatment of colorectal carcinoma at Stanford University Medical Center. In addition, we have received protocol approval from the U.S. Food and Drug Administration ("FDA") to initiate a registration clinical study for the treatment of brain cancer. The company is currently seeking a development or funding partner to move the brain cancer program forward. The company

believes that continuing the clinical development of Cotara™ in tumor types other than brain cancer will add significant value t the program. The company has a research collaboration to develop immunocytokines based on the TNT platform and a TNT-based agent has been developed and approved for the treatment of lung cancer in China under a licensing agreement.

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). Avid produces clinical trial materials 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 on the website 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, Peregrine's report on Form 10-Q for the quarter ended October 31, 2003 and on Form 10-K for the year ended April 30, 2003.

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