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## **Peregrine Pharmaceuticals Announces Publication of Data Demonstrating Similar Characteristics of Chimeric and Human TNT Monoclonal Antibodies**

TUSTIN, Calif, Dec 17, 2001 (BW HealthWire) --

### ***Study Concludes That Human TNT Antibody Shows Promise for Human Use***

Peregrine Pharmaceuticals Inc. (Nasdaq:PPHM) today announced that an article published in the journal *Hybridoma and Hybridomics* has verified the similarity of chimeric and human Tumor Necrosis Therapy (TNT) monoclonal antibodies.

The article is titled "Characterization of a Phage Display-Derived Human Monoclonal Antibody (NHS76) Counterpart to Chimeric TNT-1 Directed Against Necrotic Regions of Solid Tumors." It appears in the current issue of the journal (Volume 20, Number 5, 2001).

The study compared the genetically engineered NHS76 human TNT monoclonal antibody (MAb) with the chimeric TNT-1 (chTNT-1) MAb, which is in advanced human clinical testing. It demonstrated that the two MAbs display similar pharmacokinetic characteristics, in vivo behaviors and targeting abilities.

Tumor Necrosis Therapy is Peregrine's tumor-targeting platform technology, which targets DNA-associated antigens in the nucleus of necrotic cancer cells. The concept behind TNT is to take advantage of the fact that all tumors produce numerous necrotic cells as a by-product of their growth.

Healthy tissues quickly flush away necrotic cells, but tumors retain them, holding them locked inside the core of the tumor mass. The outer membranes of necrotic cancer cells become leaky, thus exposing the DNA on the inside of the cell. TNT selectively targets this DNA and anchors its deadly, cancer-killing radioactive isotope at the core of the tumor.

Since DNA exists in all cells, TNT can potentially target all solid tumor cancers.

"The NHS76 and chTNT-1 monoclonal antibodies were tested rigorously in parallel to compare affinity, pharmacokinetics, biodistribution in vivo and tumor targeting," said Alan L. Epstein, M.D., Ph.D., Peregrine's scientific consultant, inventor of the TNT platform technology, and co-author of the study.

"Our demonstration of the comparability of NHS76 to chTNT-1 indicates that the human monoclonal antibody has the potential to accomplish all of the therapeutic goals already demonstrated with the chimeric antibody.

"As a fully human, nonantigenic counterpart to the chimeric TNT antibody, it therefore appears to be a good candidate to be used in future clinical trials for the treatment of refractory solid tumors in man."

#### 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 its "collateral targeting technologies." These technologies target cell structures and cell types that are common among solid tumor cancers, giving them broad applicability across various tumor types.

In clinical and pre-clinical studies, collateral targeting technologies have been shown to deliver various anti-cancer compounds selectively to the tumor site without causing damage to surrounding healthy tissue.

Peregrine has three collateral targeting technologies: Tumor Necrosis Therapy (TNT), Vasopermeation Enhancement Agents (VEA), and Vascular Targeting Agents (VTA).

The company's lead anti-cancer drug, Cotara™, is currently in a multicenter Phase II clinical study for the treatment of brain cancer and in four Phase I clinical studies for the treatment of colorectal, pancreas, liver, soft tissue sarcoma and biliary cancers.

The company recently finalized a Cotara Phase III brain cancer study design with the FDA and expects to enroll patients under this protocol in the first quarter of 2002. Cotara has received fast track and orphan drug status from the FDA.

The company also has a direct tumor targeting agent called Oncolym® for the treatment of advanced non-Hodgkin's B-cell Lymphoma which is currently in a multi-center Phase I/II. Copies of Peregrine news releases, SEC filings, current price quotes and other valuable information for investors may be found on the Web site <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, 2001 and on Form 10-Q for the quarter ended July 31, 2001.

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