

NIAID Awards New Grant to Expand Studies of Peregrine's Anti-PS Antibodies to Treat Viral Hemorrhagic Fevers

- Two-Year Research Grant will Support Evaluation of New Anti-PS Antibodies as Broad-Spectrum Agents to Treat Viral Hemorrhagic Fever Infections -**
- New NIAID-Funded Research Complements Peregrine's Ongoing TMTI Research Contract to Evaluate Baviximab as a Potential Therapy for Viral Hemorrhagic Fevers -**

TUSTIN, Calif., Aug 26, 2009 /PRNewswire-FirstCall via COMTEX News Network/ -- Peregrine Pharmaceuticals, Inc. (Nasdaq: PPHM) today announced that the U.S. National Institute of Allergy and Infectious Diseases (NIAID) has awarded a two-year, \$763,000 grant to Philip Thorpe, Ph.D., of the University of Texas Southwestern Medical Center for research expanding its studies of anti-phosphatidylserine (anti-PS) antibodies as potential treatments for viral hemorrhagic fever (VHF) infections. Anti-PS antibodies work through a unique mechanism that allows the body's own immune system to recognize and attack virus infections. Previously published preclinical data and ongoing research support the potential of anti-PS antibodies for the treatment of VHF infections. The objective of the newly funded research is to evaluate a panel of new fully human anti-PS antibodies with different binding and functional properties as potential second-generation treatments.

The new studies complement Peregrine's ongoing research evaluating its lead anti-PS antibody baviximab and an equivalent fully human antibody for the treatment of VHF, which is classified as a significant biodefense threat. In 2008, Peregrine was awarded a five-year research contract worth up to \$44.4 million by the Defense Threat Reduction Agency for the Transformational Medical Technologies Initiative (TMTI). In previous preclinical studies funded by NIAID, baviximab demonstrated encouraging anti-viral activity as a potential treatment for hemorrhagic fevers.

"PS is a highly specific, host-derived target that becomes exposed on cells when they are infected by a broad variety of viruses," said Dr. Thorpe, professor of pharmacology at UT Southwestern. "As a result, anti-viral approaches targeting PS have potential as broad-spectrum agents effective against a range of viral infections, including VHF and other emerging virus pathogens. This grant from NIAID will enable us to conduct studies in VHF models to assess the anti-viral potential of a panel of fully human anti-PS antibodies. We expect the results will be useful for the development of anti-PS therapies for viral hemorrhagic fevers and also will enhance our basic understanding of anti-PS mechanisms in the treatment of virus infections."

Dr. Thorpe is a pioneer in the field of anti-PS biology and its application to anti-viral and anti-cancer therapeutics. The PS-targeting technology developed by Dr. Thorpe and his colleagues at UT Southwestern is exclusively licensed to Peregrine.

"The research we are conducting under our TMTI contract to assess baviximab and an equivalent human antibody against VHF infections is already generating promising results, and Dr. Thorpe's work under this new NIAID grant dovetails very nicely with that research," said Steven W. King, president and CEO of Peregrine. "The NIAID grant will allow our research collaborators to expand our existing VHF research to the evaluation of new PS-targeting antibodies that could extend the potential of our anti-PS platform. We expect it will result in greater understanding of the anti-viral mechanisms of our anti-PS technology platform that should be valuable for the development of new therapies against VHF as well as other serious viral infections."

Baviximab is currently being assessed in a clinical trial in patients co-infected with hepatitis C virus (HCV) and HIV. Baviximab and Peregrine's other PS-targeting antibodies may have anti-viral potential in a wide range of other virus infections including influenza, cytomegalovirus and biodefense targets such as Ebola, Yellow Fever and Punta Toro viruses. Peregrine's collaborators currently evaluating the anti-viral potential of its PS-targeting platform include researchers affiliated with Duke University, Harvard University, UT Southwestern, the NIH, Utah State University, the Southwest Foundation for Biomedical Research, the University of Texas Medical Branch at Galveston and other institutions. Baviximab is also being tested in Phase II clinical trials for the treatment of advanced breast cancer and non-small cell lung cancer.

The fully human anti-PS antibodies being used in Dr. Thorpe's NIAID research were developed by Affitech A/S in collaboration with Peregrine.

About Phosphatidylserine (PS)-Targeting Anti-Viral Agents

PS is a lipid molecule normally found on the inside of cell membranes that "flips" and becomes exposed on the outside of the membranes of enveloped viruses and virally infected cells. Exposed PS enables viruses to evade immune recognition and

dampens the body's normal responses to infection. By masking the exposed PS, bavituximab and other PS targeting antibodies may block these effects and allow the body to develop a robust immune response. Anti-PS antibodies have been shown to help clear infectious virus from the bloodstream and to induce antibody-dependent cellular cytotoxicity, an important anti-viral immune response. Researchers have found that PS is exposed on the outer membrane of cells infected with HIV, HCV, influenza, hemorrhagic fever viruses, CMV, herpes simplex viruses, respiratory syncytial virus, measles and members of the smallpox and rabies virus families. In addition to its potent anti-viral activity in lethal viral disease models, Peregrine's PS-targeting antibody bavituximab appeared safe and well tolerated with promising signs of anti-viral activity in Phase I trials in patients with chronic HCV infection. An article by Soares et al. discussing the broad anti-viral potential of bavituximab was published in the December 2008 edition of Nature Medicine. For more information on the anti-viral mechanisms of PS-targeting agents, see the Anti-PS Technical Background--Anti-Viral at 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), which provides development and biomanufacturing services for both Peregrine and outside customers. Additional information about Peregrine can be found at 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. 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, 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

(800) 987-8256

Media

Barbara Lindheim

(212) 918-4650

SOURCE Peregrine Pharmaceuticals, Inc.

<http://www.peregrineinc.com>

Copyright (C) 2009 PR Newswire. All rights reserved