



## **Peregrine Reports Promising Interim Survival Data From Phase II Cotara(R) Brain Cancer Study**

### **Single Medical Center Reports Interim Median Overall Survival of 86 Weeks in Patients With Glioblastoma Multiforme (GBM) Treated at First Relapse; Data Presented at 2010 Congress of Neurological Surgeons Annual Meeting**

TUSTIN, CA and SAN FRANCISCO, CA, Oct 18, 2010 (MARKETWIRE via COMTEX News Network) -- Peregrine Pharmaceuticals, Inc. (NASDAQ: PPHM), a clinical-stage biopharmaceutical company developing first-in-class monoclonal antibodies for the treatment of cancer and viral infections, today reported interim data from an ongoing Phase II clinical trial of its novel brain cancer therapy Cotara(R). Interim median overall survival was 86 weeks for a cohort of 14 patients with glioblastoma multiforme (GBM) treated at first relapse with a single infusion of Cotara. Cotara is a targeted monoclonal antibody linked to a radioisotope that is administered directly into the tumor, destroying the tumor from the inside out, with minimal exposure to healthy tissue.

"Interim survival data from patients treated with Cotara have been encouraging, previously ranging from 38 to 41 weeks, when expected survival for these patients is typically 24 weeks from time of disease recurrence," said Joseph S. Shan, M.P.H., vice president, clinical and regulatory affairs of Peregrine Pharmaceuticals. "We look forward to completing enrollment of the few remaining patients in this Phase II trial before the end of this year and reporting data by mid-year next year. Once this trial is completed and we have analyzed the data, we plan to meet with the FDA to determine the optimal registration pathway for Cotara."

As part of an ongoing Phase II clinical trial of 40 patients with GBM at first relapse, 15 GBM patients (mean age 48.5 years) were enrolled at the All India Institute of Medical Sciences (AIIMS) in New Delhi, India, the lead clinical site. Interim data available for 14 of these patients showed median overall survival of 86 weeks and follow-up duration ranges from between four and 107 weeks. Cotara has been granted orphan drug status and Fast Track designation for the treatment of glioblastoma multiforme and anaplastic astrocytoma by the U.S. Food and Drug Administration (FDA).

"Overall median survival of 86 weeks far exceeded our expectations in this very difficult to treat patient population where treatment options are few and rarely extend median survival beyond six months," said Deepak Gupta, M.D., assistant professor of neurosurgery at AIIMS. "Interim data indicate that Cotara appears well-tolerated and active in GBM patients studied. We believe Cotara represents a promising experimental therapy for patients with this most deadly form of brain cancer."

These new interim data are being presented in a poster at the 2010 Congress of Neurological Surgeons (CNS) Annual Meeting in San Francisco, California. The CNS is a world leader in neurosurgical education and innovation with over 7,000 members worldwide. For more information, please visit <http://w3.cns.org/meetings/2010/index.asp>.

About Peregrine's Phase II Cotara Trial Peregrine's ongoing Phase II open-label trial is enrolling up to 40 GBM patients at first relapse at sites in the U.S. and India. The primary endpoint is safety and tolerability of the maximum tolerated dose, a single 25-hour interstitial infusion of 2.5 mCi/cc of Cotara. Secondary endpoints include overall survival, progression free survival, and proportion of patients alive at six months after treatments. For additional information, please visit <http://clinicaltrials.gov/ct2/show/NCT00677716?term=cotara&rank=1>.

About Cotara Cotara is an experimental treatment for brain cancer that links a radioactive isotope to a targeted monoclonal antibody designed to bind to the DNA histone complex that is exposed by dead and dying cells found at the center of solid tumors. Cotara's targeting mechanism enables it to bind to the dying tumor cells, delivering its radioactive payload to the adjacent living tumor cells and essentially destroying the tumor from the inside out, with minimal radiation exposure to healthy tissue. Cotara is delivered using convection-enhanced delivery (CED), an NIH-developed method that targets the specific tumor site in the brain.

About Brain Cancer According to the American Cancer Society, in 2010 there will be an estimated 22,000 malignant tumors diagnosed and approximately 13,000 deaths attributed to brain or spinal cord cancer in the United States. The most common type of brain cancer is glioblastoma multiforme (GBM), which accounts for 60% of all malignant brain cancers. An aggressive form of cancer, GBM is the deadliest form of brain cancer, with a five-year survival rate of only 3%. Currently approved therapies include Temodar(R) (temozolomide) and Avastin(R) (bevacizumab), both of which have modest effect on patient survival.

About All-India Institute of Medical Sciences One of the most prestigious medical colleges in India, All-India Institute of Medical Sciences (AIIMS) was established as an institution of national importance by an act of the Indian Parliament. With comprehensive facilities for teaching, research, and patient care, AIIMS' objective is to provide a high standard of medical education and training in India.

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 multiple clinical programs in cancer and hepatitis C virus infection with its lead product candidate baviximab and novel brain cancer agent Cotara(R). Peregrine also has in-house cGMP manufacturing capabilities through its wholly-owned subsidiary Avid Bioservices, Inc. ([www.avidbio.com](http://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](http://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. The forward-looking statements involve risks and uncertainties including, but not limited to, the risk that interim results may not be indicative of final results and patient enrollment may be delayed and the risk that the company may not have the financial resources to conduct a registration trial for Cotara. It is important to note that the Company's actual results could differ materially from those in any such forward-looking statements. Factors that could cause actual results to differ materially 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, 2010 and quarterly report on Form 10-Q for the quarter ended July 31, 2010. 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.

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