

**Contacts:**     **Leiv Lea**  
Pharmacyclics, Inc.  
(408) 774-0330  
**Carolyn Wang**  
WeissComm Partners  
(415) 225-5050

**PHARMACYCLICS RECEIVES NON-APPROVABLE LETTER FROM THE FDA FOR XCYTRIN FOR THE TREATMENT OF LUNG CANCER BRAIN METASTASES**

**SUNNYVALE, Calif. -- December 21, 2007 --** Pharmacyclics, Inc. (Nasdaq: PCYC) today announced that it has received a non-approvable letter from the U.S. Food and Drug Administration (FDA) for the company's new drug application (NDA) for Xcytrin<sup>®</sup> (motexafin gadolinium) Injection for the treatment of non-small cell lung cancer (NSCLC) patients with brain metastases. The NDA for use of Xcytrin in combination with whole brain radiation therapy (WBRT) was filed with the FDA in April 2007.

According to the National Cancer Institute, over 200,000 patients will be diagnosed with lung cancer this year in the U.S. Lung cancer is the most common cause of brain metastases, which are estimated to occur in up to 50% of lung cancer patients.

Pharmacyclics recently completed patient enrollment in three Phase 2 trials evaluating Xcytrin in patients with advanced relapsed NSCLC. These multi-center trials will evaluate Xcytrin as a single agent, in combination with Taxotere<sup>®</sup> (docetaxel), and in combination with Alimta<sup>®</sup> (pemetrexed). Data from these trials is expected in the first half of 2008.

“We are disappointed that brain metastases patients with limited options and serious neurologic problems will not have access to Xcytrin, which we believe has shown important clinical activity in this indication,” said Richard A. Miller, M.D., president and chief executive officer of Pharmacyclics. “We continue to believe that Xcytrin is a novel active cancer drug and we will seek a corporate partner to help support future development. In the meantime, we are also advancing our expanding and versatile pipeline of product candidates.”

Xcytrin’s novel mechanism enables it to selectively concentrate in tumors and induce apoptosis (programmed cell death). Its multifunctional mode of action, including its magnetic resonance imaging detectability and its non-overlapping toxicity, make Xcytrin an appealing agent to use in combination with standard chemotherapy regimens, potentially across a broad range of cancers.

In addition to Xcytrin, the company's other product candidates include a histone deacetylase (HDAC) inhibitor in a Phase 1/2 trial, and a Factor VIIa inhibitor and a Bruton's tyrosine kinase (BTK) inhibitor in pre-clinical testing for cancer and autoimmune diseases.

### **About Pharmacyclics**

Pharmacyclics is a pharmaceutical company developing innovative products to treat cancer and other serious diseases. The company is leveraging its small-molecule drug development expertise to build a pipeline in oncology and other diseases based on a wide range of targets, pathways and mechanisms. Its lead product, Xcytrin, has completed Phase 3 clinical trials and several ongoing Phase 1 and Phase 2 clinical trials are evaluating Xcytrin, either as a single agent or in combination with chemotherapy and/or radiation in multiple cancer types. More information about the company, its technology, and products can be found at <http://www.pharmacyclics.com>. Pharmacyclics®, Xcytrin® and the "pentadentate" logo® are registered trademarks of Pharmacyclics, Inc.

Taxotere® is a registered trademark of Sanofi-Aventis.

Alimta® is a registered trademark of Eli Lilly and Company.

NOTE: Other than statements of historical fact, the statements made in this press release about the initiation of and enrollment and future plans for our clinical trials, progress of and reports of results from preclinical and clinical studies, clinical development plans and product development and corporate partnering activities are forward-looking statements, as defined in the Private Securities Litigation Reform Act of 1995. The words "believe," "will," "may," "continue," "plan," "expect," "intend," "anticipate," variations of such words, and similar expressions also identify forward-looking statements, but their absence does not mean that the statement is not forward-looking. The forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that may cause actual results to differ materially from those in the forward-looking statements. Factors that could affect actual results include risks associated with the fact that data from preclinical studies and Phase 1 or Phase 2 clinical trials may not necessarily be indicative of future clinical trial results; our ability to obtain future financing and fund the product development of our pipeline; the initiation, timing, design, enrollment and cost of clinical trials and preclinical studies; unexpected delays in clinical trials and preclinical studies; our ability to establish successful partnerships and collaborations with third parties; the regulatory approval process in the United States and other countries; and our future capital requirements. For further information about these risks and other factors that may affect the actual results achieved by Pharmacyclics, please see the company's reports as filed with the U.S. Securities and Exchange Commission from time to time, including but not limited to its annual report on Form 10-K for the period ended June 30, 2007 and its subsequently filed quarterly reports on Form 10-Q. Forward-looking statements contained in this announcement are made as of this date, and we undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

###