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**PHARMACYCLICS ANNOUNCES INTERIM RESULTS FROM TWO ONGOING  
PHASE 2 TRIALS SUPPORTING POTENTIAL OF XCYTRIN® PLUS  
CHEMOTHERAPY TO TREAT RECURRENT NON-SMALL CELL LUNG CANCER**

**WAILEA, Hawaii and SUNNYVALE, Calif., June 27, 2007** – Pharmacyclics, Inc. (Nasdaq: PCYC) today announced preliminary results from two open-label, multi-center Phase 2 clinical trials supporting the potential use of Xcytrin® (motexafin gadolinium) Injection, the company's lead product candidate, in combination with Alimta® (pemetrexed) and in combination with Taxotere® (docetaxel) as a second-line treatment for patients with non-small cell lung cancer (NSCLC) who failed at least one platinum-based chemotherapy regimen. The results were presented today at the Eighth International Lung Cancer Congress in Wailea, Hawaii.

The first ongoing study is evaluating Xcytrin plus Alimta and has enrolled 27 patients of which 20 are evaluable for response at this time. Patients are receiving 15mg/kg Xcytrin with a standard dose of Alimta and treatment is repeated every 21 days. Seventeen patients (85%) receiving Xcytrin and Alimta have achieved stabilization of their tumors, with 10 of the 17 still on treatment for up to nine cycles. The median survival time and median time to progression have not been reached, with estimated actuarial survival of 69% at 12 months. Patients still on treatment remain under evaluation for tumor response. The most common severe (Grade 3 or higher) side effects were asthenia (10.3%), pneumonia (10.3%), thrombocytopenia (10.3%), and neutropenia (6.9%).

The other ongoing study is evaluating Xcytrin plus Taxotere and has enrolled 24 patients of which 14 are evaluable for response at this time. Patients are given 15mg/kg Xcytrin with a standard dose of Taxotere and treatment is repeated every 21 days. Thirteen patients (87%) receiving Xcytrin and Taxotere have achieved stabilization of their tumors, with four still on treatment. The median survival time is 8.2 months and the median time to progression is 8.7

months. Patients still on treatment remain under evaluation for tumor response. The most common severe (Grade 3 or higher) side effects were neutropenia (20.8%), asthenia (16.7%), febrile neutropenia (12.5%), atrial fibrillation (8.3%) and hypotension (8.3%).

“These initial results are encouraging because a relatively low proportion of patients are experiencing disease progression at this time when treated with Xcytrin plus chemotherapy consistent with the synergistic effects we observed in preclinical and early clinical studies,” said Richard A. Miller, M.D., president and CEO of Pharmacyclics. “Along with the activity seen in our single agent trial for second-line treatment of non-small cell lung cancer reported last month at ASCO, these data continue to support Xcytrin’s potential role in this underserved cancer and further inform the design of our pivotal Phase 3 trial in this indication, which we plan to begin in the first half of 2008.”

A New Drug Application for use of Xcytrin in combination with whole brain radiation therapy for treatment of brain metastases from NSCLC was filed with the U.S. Food and Drug Administration in April 2007.

### **About Non-Small Cell Lung Cancer**

The American Cancer Society estimates that there will be more than 213,000 new cases of lung cancer in the United States in 2007. Lung cancer is the leading cause of cancer death, and accounts for over 160,000 deaths in the United States each year. The most common form of lung cancer, non-small cell, is incurable in advanced stages. Lung cancer frequently spreads to other body parts, including the brain.

### **Xcytrin in Second-Line Lung Cancer**

Pharmacyclics is developing Xcytrin as an anti-cancer agent with a novel mechanism of action that is designed to selectively concentrate in tumors and induce apoptosis (programmed cell death). Xcytrin is a redox-active drug that has been shown to disrupt redox-dependent pathways in cells and inhibit oxidative stress-related proteins such as thioredoxin reductase. Its multifunctional mode of action, including its magnetic resonance imaging detectability, provides the opportunity for Xcytrin to be used in a broad range of cancers. In previously conducted randomized trials, Xcytrin combined with whole brain radiation therapy (WBRT) has been shown to prolong time to neurologic progression in patients with brain metastases from NSCLC.

Xcytrin's non-overlapping toxicity makes it an appealing agent to use in combination with standard chemotherapy regimens.

The target for Xcytrin is the enzyme thioredoxin reductase, which is frequently overexpressed in lung cancer cells. This enzyme has been shown to confer to cancer cells characteristics of aggressive tumor growth and resistance to chemotherapy. First-line therapy for advanced NSCLC includes combination chemotherapy using drugs such as carboplatin, cisplatin, Gemzar®, taxanes and others. Currently approved agents for second-line treatment of NSCLC include Alimta, Tarceva® and Taxotere.

### **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. A New Drug Application for use of Xcytrin in combination with WBRT for treatment of brain metastases from NSCLC was filed with the Food and Drug Administration in April 2007. More information about the company, its technology, and products can be found at [www.pharmacyclics.com](http://www.pharmacyclics.com). In addition, more information about advocacy on behalf of Xcytrin can be found at [www.yourcanceryourchoice.com](http://www.yourcanceryourchoice.com). Pharmacyclics®, Xcytrin® and the "pentadentate" logo® are registered trademarks of Pharmacyclics, Inc.

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Tarceva® is a registered trademark of Genentech.

Taxotere® is a registered trademark of Sanofi-Aventis.

NOTE: Other than statements of historical fact, the statements made in this press release about plans for our NDA filing, 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 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 possibility that the FDA refuses to approve our NDA; because our Phase 3 clinical trial known as the SMART (Study of Neurologic Progression with **M**otexafin **G**adolinium **A**nd **R**adiation **T**herapy) trial failed to meet its primary endpoint, the FDA may require additional data, analysis or studies before the NDA is approved by the FDA; the outcome of any discussions with the FDA; the initiation, timing, design, enrollment and cost of clinical trials; unexpected delays in clinical trials and preparation of materials for submission to the FDA as part of our NDA filing; 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, 2006 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.

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