



Pharmacyclics Announces Presentation of Results From Phase I Trial of Its First-in-Human Btk Inhibitor: PCI-32765

Chicago, IL, and Sunnyvale, CA June 5, 2010 - Pharmacyclics, Inc. (Nasdaq: PCYC) today announced results from a Phase I study of its novel orally administered Bruton's tyrosine kinase (Btk) inhibitor, PCI-32765, in patients with relapsed or refractory B cell non-Hodgkin's lymphoma (NHL) including chronic lymphocytic leukemia (CLL) and Waldenström's Macroglobulinemia (WM). These data are being presented at the American Society of Clinical Oncology (ASCO) Annual Meeting taking place this week in Chicago, IL.

This multicenter Phase I study is being conducted in collaboration with investigators at leading lymphoma centers including Stanford University, MD Anderson Cancer Center, the University of Chicago, the University of Vermont, and US Oncology group. The trial is an ongoing open-label, dose-escalation study of PCI-32765 in recurrent B cell malignancies treating a minimum of 6 patients per cohort. Five dose levels are being explored-1.25, 2.5, 5.0, 8.3 and 12.5 mg/kg/day. Each cycle of treatment consists of 28 consecutive days of once daily dosing followed by a 7-day rest period. An additional dose group at 8.3 mg/kg/day is also being explored using a 35-day cycle with no rest period ("continuous dosing" or "CD"). Dose limiting toxicities were evaluated at the end of the first cycle and drug efficacy is evaluated every 2 cycles. Safety is being monitored throughout the trial. Data, from the second cohort on, has demonstrated that PCI-32765 fully occupied the active site of the target enzyme Btk in peripheral blood cells with minimal variability, fully inhibited surrogate biomarkers for up to 24 hours, and was well tolerated by patients.

PRELIMINARY RESULTS

In the first 5 dose groups (1.25, 2.5, 5.0 and 8.3 mg/kg/day on the standard cycle and 8.3 mg/kg/day CD), a total of 40 relapsed/refractory and progressing patients with a variety of B cell malignancies were enrolled. Thirty-five of the enrolled patients had an on-treatment tumor assessment after completing two cycles of therapy and are evaluable. Seventeen of these evaluable patients had a complete¹ or partial² response as their best response. This equates to a response rate of 49% in the evaluable patients (82% in CLL, 75% in Mantle, 27% in Follicular, 33% in Marginal and 17% in DLBCL). On an intent-to-treat ("ITT") basis the overall response rate (ORR) was 43%.

The final and highest level dosing cohort enrolled 7 patients at 12.5mg/kg/day for a total of 47 in the current safety database. To date, 6 of these 12.5 mg/kg/day patients have completed their first cycle of dosing plus seven days of rest. Efficacy assessments will be taken at the end of cycle 2 which we expect to complete by the end of July.

The first five dose groups showed the following best responses (n=40); there was no evidence of a dose response effect, but the cohorts vary by disease and are small in size making this assessment difficult.

	N	Complete Response	Partial Response	Stable Disease	Progressive Disease	Not Evaluable*	Evaluable RR%	ORR % ITT**
Chronic/Small Lymphocytic Leukemia (CLL/SLL)	13	1	8	2	0	2	82% (9/13)	69% (9/13)
Mantle Cell (MCL)	4	1	2	1	0		75% (3/4)	75% (3/4)
Diffuse Large B Cell Lymphoma (DLBCL)	6		1	1	4		17% (1/6)	17% (1/6)
Follicular Lymphoma (FL)	13		3	4	4	2	27% (3/11)	23% (3/13)
Marginal	4		1	1	1	1	33% (1/3)	25% (1/4)
Total	40	2	15	9	9	5	49% (17/35)	43% (17/40)

* Includes those patients who did not complete 2 cycles of therapy and withdrew from study

** Includes all "Intent To Treat" patients

As of May 27th, 2010, 25 patients continue to remain on study. Duration of response has not yet been determined in the ongoing study. However, 2 patients from the first cohort, cohort 1, have been dosed for more than 12 months.

PCI-32765 appears to be well tolerated through the initial exposure even in its highest dosing cohort (including 12.5 mg/kg). Only 2 patients of the enrolled 47 patients have experienced a dose limiting toxicity (DLT) on this trial. One patient with a prior history of allergies to prescription drugs developed an allergic hypersensitivity to PCI-32765. The other patient, who had a history of neutropenia, developed neutropenia while on treatment and required a delay in treatment of more than 7 days. No other dose limiting toxicities were observed. Thirteen of the 47 heavily pretreated patients had one or more serious adverse events, but only 2 were considered possibly drug related by investigators.

"PCI-32765 inhibits the enzyme Btk and also has shown very promising drug activity and early signs of efficacy" said Dr. Nathan Fowler MD Anderson Medical Center, one of the investigators of the trial and presenter of the trial results at the oral presentation at ASCO. "We have seen bona fide responses in a rather wide variety of histologies."

A conference call is scheduled for Monday, June 7, 2010 at 8:30 AM Eastern Time (7:30 AM Central Time and 5:30AM Pacific Time). Please dial: 866-727-3220 International Dial In: 706-643-1591. The Conference ID is: 77085515

To see a slide presentation to be discussed during the call and to replay the audio broadcast, please go to the Investor Relations Section of our website, under Events & Webcasts: <http://ir.pharmacyclics.com/events.cfm> and click on "ASCO Conference Call Slides" and "ASCO Conference Call Webcast". The archived version of the webcast will be available on the company's website for one month.

About Bruton's Tyrosine Kinase Inhibitor PCI- 32765

PCI-32765 is an orally active small molecule inhibitor of Bruton's tyrosine kinase (Btk) that is being developed by Pharmacyclics for the treatment of patients with B-cell lymphoma or leukemia. Btk plays a prominent role in B-cell lymphocyte maturation by mediating B-cell receptor (BCR) signal transduction. Recent studies indicate that some B-cell lymphomas have kinases that are activated downstream of the BCR and that suppression of this signaling by a Btk inhibitor can induce apoptosis in these cells. BCR signaling is also thought to promote malignant cell expansion and survival in chronic lymphocytic leukemia (CLL).

About Non-Hodgkin's Lymphoma

Non-Hodgkin's Lymphoma (NHL) is a type of malignant disease that occurs within the lymphatic system and the fifth most common form of cancer. It is caused by the abnormal proliferation of white blood cells, which spreads through the lymphatic system. NHL can occur at any age and is often marked by lymph nodes that are larger than normal, fever, and weight loss. NHL can be broadly classified into two main clinical categories: indolent lymphomas, mainly characterized as follicular lymphomas, which tend to grow relatively slowly; and aggressive lymphomas, mainly typified as diffuse large B-cell lymphomas (DLBCL), which grow much more rapidly. According to the National Cancer Institute's SEER database the incidence of NHL (all types including indolent and aggressive) is projected at nearly 66,000 in the United States for 2009 and approximately 19,500 patients are expected to die from this disease. According to the Leukemia & Lymphoma Society (LLS), there are approximately 452,723 people in the United States. living with NHL (with active disease or in remission).

NOTE: This announcement may contain forward-looking statements made in reliance upon the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding our expectations and beliefs regarding our future results or performance. Because these statements apply to future events, they are subject to risks and uncertainties. When used in this announcement, the words "anticipate", "believe", "estimate", "expect", "expectation", "should", "would", "project", "plan", "predict", "intend" and similar expressions are intended to identify such forward-looking statements. Our actual results could differ materially from those projected in the forward-looking statements. Additionally, you should not consider past results to be an indication of our future performance. For a discussion of the risk factors and other factors that may affect our results, please see the Risk Factors section of our filings with the Securities and Exchange Commission, including our annual report on Form 10-K and quarterly reports on Form 10-Q. We do not intend to update any of the forward-looking statements after the date of this announcement to conform these statements to actual results, to changes in management's expectations or otherwise, except as may be required by law.

About Pharmacyclics

Pharmacyclics(R) is a clinical-stage biopharmaceutical company focused on developing and commercializing innovative small-molecule drugs for the treatment of immune-mediated diseases and cancer. Our mission and goal are worth repeating: to build a viable biopharmaceutical company that designs, develops and commercializes novel therapies intended to improve quality of life, increase duration of life, and resolve serious unmet medical healthcare needs. To identify promising product candidates based on exceptional scientific development expertise, develop our products in a rapid, cost-efficient manner and pursue commercialization and/or development partners when and where appropriate. We exist to make a difference for the better and these are important times to do just that.

The Company is headquartered in Sunnyvale, California and is listed on NASDAQ under the symbol PCYC. To learn more about how Pharmacyclics advances science to improve human healthcare visit us at <http://www.pharmacyclics.com>.

¹ e.g. complete disappearance of all detectable clinical evidence of disease and disease related symptoms if present before

therapy per the Revised Response Criteria for Malignant Lymphoma *Bruce D. Cheson J Clin Oncol 25:579-586*

² e.g. a 50% or greater decrease in sum of the product of the diameters of up to 6 largest dominant masses; no increase in size of other nodes per the Revised Response Criteria for Malignant Lymphoma *Bruce D. Cheson J Clin Oncol 25:579-586*