Cyclacel announces presentation of preclinical data demonstrating combination potential of clinical agents at AACR Annual Meeting

Berkeley Heights, NJ, April 4, 2011 - Cyclacel Pharmaceuticals, Inc. (NASDAQ: CYCC, NASDAQ: CYCCP; Cyclacel or the Company), a biopharmaceutical company developing oral therapies that target the various phases of cell cycle control for the treatment of cancer and other serious disorders, today announced the presentation of preclinical results for two of its clinical compounds at the 102nd Annual Meeting of the American Association of Cancer Research (AACR) in Orlando, Florida.

Sapacitabine:

Abstract No. 962 ***"Mechanism-based drug combinations with the DNA-strand-breaking nucleoside analog CNDAC"***

CNDAC is the main active metabolite of sapacitabine, Cyclacel's orally available nucleoside analogue, currently in Phase 3 development for the treatment of acute myeloid leukemia in the elderly under a Special Protocol Assessment agreement with the U.S. Food and Drug Administration, and in Phase 2 studies for myelodysplastic syndromes and lung cancer. Unlike other nucleoside analogues, CNDAC causes the formation of double-stranded (ds) DNA breaks that activate the dsDNA damage checkpoint and cause arrest in the G2/M phase of the cell cycle. CNDAC-induced dsDNA damage is repaired by the homologous recombination (HR) DNA repair pathway.

From in vitro studies reported at AACR, investigators led by William Plunkett, Ph.D., Professor and Deputy Chair, Department of Experimental Therapeutics at The University of Texas MD Anderson Cancer Center (Houston, TX) have further assessed the potential to enhance the sensitivity of cancer cell lines to CNDAC by co-treating with other inhibitors targeting components of the HR DNA repair response. The agents reported to increase sensitivity to CNDAC included ATM inhibitor KU55933, PARP1 inhibitor olaparib, and c-Abl kinase inhibitor imatinib. Together with previous publications from Prof. Plunkett's group[1] and Cyclacel researchers[2,3], these findings further support the rationale for clinical testing of sapacitabine with inhibitors of DNA repair in both solid tumors and hematological malignancies.

CYC116:

Abstract No. 735 ***"Identification and characterization of potential tumor cell resistance mechanisms towards a novel aurora kinase inhibitor, CYC116***"

CYC116, an Aurora kinase inhibitor discovered and developed by Cyclacel, is currently in a Phase 1 clinical trial in patients with advanced solid tumors. In a study presented at AACR, researchers led by Marian Hajduch, M.D., Ph.D., Associate Professor of Oncology and Head of Laboratory of Experimental Medicine, at Palacky University and University Hospital (Olomouc, Czech Republic) have developed resistant clones of colon carcinoma cell lines to study mechanisms of CYC116-induced resistance, and to compare these with resistance to another Aurora kinase inhibitor ZM447439.

The resistant clones generated were cross-resistant to other Aurora kinase inhibitors tested, but showed differing resistance or sensitivity to a panel of other chemotherapeutics. Unlike the ZM447439-resistant clones, CYC116-resistant clones did not contain mutations in the Aurora kinase genes, but became stably tetraploid. In particular CYC116-resistant clones with functional p53 showed increased sensitivity to Bcl-2 inhibitor navitoclax (ABT-263). This work demonstrates the potential mechanisms by which CYC116 resistance could be acquired and highlights combination treatments that could overcome or even prevent such resistance.

About Cyclacel Pharmaceuticals, Inc.

Cyclacel is a biopharmaceutical company developing oral therapies that target the various phases of cell cycle control for the treatment of cancer and other serious diseases. Sapacitabine (CYC682), a cell cycle modulating nucleoside analog, is in Phase 3 development for the treatment of acute myeloid leukemia in the elderly under a Special Protocol Assessment agreement with the U.S. Food and Drug Administration, and in Phase 2 studies for myelodysplastic syndromes and lung cancer. Seliciclib (CYC202 or R-roscovitine), a CDK (cyclin dependent kinase) inhibitor, is in Phase 2 studies for the treatment of lung cancer and nasopharyngeal cancer and in a Phase 1 trial in combination with sapacitabine. Cyclacel's ALIGN Pharmaceuticals subsidiary markets directly in the U.S. Xclair® Cream for radiation dermatitis, Numoisyn® Liquid and Numoisyn® Lozenges for xerostomia. Cyclacel's strategy is to build a diversified biopharmaceutical business focused in hematology and oncology based on a portfolio of commercial products and a development pipeline of novel drug candidates.

Please visit www.cyclacel.com for additional information.

Forward-looking Statements

This news release contains certain forward-looking statements that involve risks and uncertainties that could cause actual results to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. Such forward-looking statements include statements regarding, among other things, the efficacy, safety, and intended utilization of Cyclacel's product candidates, the conduct and results of future clinical trials, plans regarding regulatory filings, future research and clinical trials and plans regarding partnering activities. Factors that may cause actual results to differ materially include the risk that product candidates that appeared promising in early research and clinical trials do not demonstrate safety and/or efficacy in larger-scale or later clinical trials, the risk that Cyclacel will not obtain approval to market its products, the risks associated with reliance on outside financing to meet capital requirements, and the risks associated with reliance on collaborative partners for further clinical trials, development and commercialization of product candidates. You are urged to consider statements that include the words "may," "will," "would," "could," "should," "believes," "estimates," "projects," "potential," "expects," "plans," "anticipates," "intends," "continues," "forecast," "designed," "goal," or the negative of those words or other comparable words to be uncertain and forward-looking. For a further list and description of the risks and uncertainties the Company faces, please refer to our most recent Annual Report on Form 10-K and other periodic and current filings that have been filed with the Securities and Exchange Commission and are available at www.sec.gov. Such forward-looking statements are current only as of the date they are made, and we assume no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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[1] Liu, X. et al., Blood 2010, 116, 1737-1746.

[2] Frame, S. et al., 14th Congress EHA, 2009, Abstract 0761.

[3] Frame, S. et al., 101st Annual Meeting AACR 2010, Abstract 3502.