Cyclacel announces publication of peer-reviewed journal article describing the mechanism of action of seliciclib

- Seliciclib's down-regulation of the Mcl-1 protein highlighted -

BERKELEY HEIGHTS, NJ – December 30, 2009 – Cyclacel Pharmaceuticals, Inc. (NASDAQ: CYCC, NASDAQ: CYCCP) today announced the publication of an article that reviews and discusses the company's seliciclib (CYC202 or R-roscovitine) product candidate, an orally available inhibitor of multiple cyclin-dependent kinases (CDKs) and its mechanism of action. The peer-reviewed article, "Cyclin-Dependent Kinase Inhibitors as Anticancer Drugs" was published in the online edition of Current Drug Targets.

"The publication sets out the body of evidence that seliciclib is a promising anti-cancer agent that promotes cancer cell death by down-regulation of key proteins, such as p53 and Mcl-1, associated with survival of cancer cells," said Professor David Glover, Ph.D., Cyclacel's Chief Scientist. "A broader therapeutic role for CDK inhibitors in chronic proliferative diseases in addition to cancer has continued to emerge. Recently published evidence suggests that seliciclib promotes apoptosis of uncontrolled white blood cells, including neutrophils and eosinophils, also by down-regulation of Mcl-1. This is a novel finding with promising implications for the treatment of autoimmune and inflammatory conditions, including asthma. It builds upon previously published data showing seliciclib activity in lupus nephritis, polycystic kidney disease, pulmonary fibrosis and rheumatoid arthritis. We look forward to highlighting these non-oncology indications, unveiling Cyclacel's next-generation CDK inhibitors, and reviewing our promising pipeline programs at a Company-sponsored analyst day in 2010."

Poor therapeutic outcomes and serious side effects are common problems of current cancer therapies. Acquired drug resistance is a further major emerging problem as cancer cells learn to evade the activity of anti-cancer drugs by expressing proteins, such as Mcl-1, that make them immortal. The urgent need for new cancer-targeted drugs that can overcome resistance has led to the development of molecules that specifically inhibit CDKs.

The Current Drug Targets article reports the development of CDK inhibitors and their anti-cancer activities, with special attention to the mechanism of action of multi-kinase CDK inhibitors, including Cyclacel's seliciclib, currently in Phase 2 clinical trials as a treatment for various cancers. The ability of CDK inhibitors to suppress transcription and sensitize certain cancer cells to apoptosis by down-regulating the expression of the Mcl-1 protein and their synergy in combination with common DNA damaging anti-cancer drugs are also discussed. Citation: Kryštof V, Uldrijan S., Cyclin-Dependent Kinase Inhibitors as Anticancer Drugs, Curr Drug Targets. 2009 Dec 23. [Epub ahead of print].

Recently scientists from the Centre for Inflammation Research at the University of Edinburgh published preclinical evidence that seliciclib may be a promising treatment for asthma. They studied the effects of the drug on immune cells of the respiratory system known as eosinophils which help the body fight off infections. Uncontrolled proliferation of eosinophils can damage other cells that line lung tissues and thus contribute to inflammatory conditions such as asthma. Researchers found that exposure to seliciclib caused proliferating eosinophil cells to undergo apoptosis or programmed cell death by down-regulating the expression of the Mcl-1 protein. Citation: Duffin R, et al., The CDK inhibitor, R-roscovitine, promotes eosinophil apoptosis by down-regulation of Mcl-1, FEBS Lett. 2009 Aug 6;583(15):2540-6.

About seliciclib

Seliciclib is an orally available molecule that selectively inhibits multiple CDK enzyme targets, CDK2/E, CDK2/A, CDK7 and CDK9, that are central to the process of cell division and cell cycle control. Seliciclib has been administered to approximately 450 patients in Phase 1 and Phase 2 trials. It is currently being evaluated in the APPRAISE trial, a Phase 2b randomized double-blinded study as a treatment in patients with non-small cell lung cancer (NSCLC) who failed at least two prior therapies and in a randomized Phase 2 study as a single agent in patients with nasopharyngeal cancer.

About Cyclacel Pharmaceuticals, Inc.

Cyclacel is a biopharmaceutical company dedicated to the discovery, development and commercialization of novel, mechanism-targeted drugs to treat human cancers and other serious disorders. Three orally-available Cyclacel drugs are in clinical development. Sapacitabine (CYC682), a cell cycle modulating nucleoside analog, is in Phase 2 studies for the treatment of acute myeloid leukemia in the elderly, 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. CYC116, an Aurora kinase and VEGFR2 inhibitor, is in a Phase 1 trial in

patients with solid tumors. 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.

Risk factors

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. These factors and others are more fully discussed under "Risk Factors" in the Annual Report on Form 10-K for the year ended December 31, 2008, as supplemented by the interim quarterly reports, filed with the SEC.

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