

CELATOR® PHARMACEUTICALS ANNOUNCES DATA ON REMISSIONS WITH CPX-351 FOLLOWING INDUCTION FAILURE

- RESULTS PRESENTED AT THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY (ASCO) ANNUAL MEETING -

Princeton, NJ (June 7, 2010) – Celator Pharmaceuticals today announced that a subset analysis of data from its Phase 2 study in newly diagnosed acute myeloid leukemia (AML) demonstrates that CPX-351 (Cytarabine:Daunorubicin) Liposome Injection can induce complete remissions in patients following the failure of induction therapy with conventional cytarabine and daunorubicin (the “7+3” regimen). The results were presented at the 2010 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago, IL, June 4-8, 2010 (Abstract 6572¹).

In the multicenter, randomized, open-label study, 126 patients between the ages of 60-75 years with newly diagnosed AML, including patients with high risk disease (secondary AML, age greater than 70, and/or three or more chromosomal abnormalities), were randomized to receive induction with either CPX-351 or the “7+3” regimen. The trial design allowed patients whose induction on “7+3” failed to produced an adequate response to cross-over to the CPX-351 arm. Ten of the 41 patients in the “7+3” arm experienced primary induction failure and were subsequently treated with CPX-351. In this group, four patients (40 percent) experienced complete remissions (CR), including one CR and 3 CRi (complete remission with an incomplete recovery, to a specified level, of neutrophils and/or platelets). Two of 6 patients with secondary AML, and 2 of 4 de novo AML patients, achieved a remission.

“Newly diagnosed patients who do not respond to “7+3” have few treatment options,” said Jeffrey E. Lancet, MD, associate professor, H. Lee Moffitt Cancer Center, and a principal investigator in the study. “The cross-over experience in this study is encouraging because it suggests that we can safely administer CPX-351 to these patients after the failure of conventional therapy and that clearance of leukemia can be achieved. But just as importantly, the cross-over experience aids in the understanding of mechanisms underlying chemotherapy-resistance in AML, one of which may relate to suboptimal drug delivery.”

The cross-over treatment with CPX-351 was generally well tolerated. Half of the patients (5/10) experienced grade 3-5 adverse events with 2 patients having serious adverse events. The four patients who achieved CRs after cross-over to CPX-351 remain alive beyond 6 months from treatment. All six patients who did not respond to either regimen have died.

“These findings are further evidence that CPX-351 is unique compared to the conventional administration of the same two drugs,” said Scott Jackson, chief executive officer of Celator Pharmaceuticals. “CPX-351 can induce remissions in both standard risk and high risk AML following induction failure with “7+3” which demonstrates the potential of CPX-351 to improve treatment outcomes in this rapidly fatal disease.”

Celator previously announced that the primary efficacy endpoint of the study, the rate of patients achieving a complete remission with CPX-351 compared to “7+3,” achieved statistical significance. In addition, the Company reported a reduction in the 30-day and 60-day mortality with CPX-351 versus the “7+3” regimen. The primary efficacy endpoint analysis, and additional results from this study, will be submitted to a major medical conference in 2010.

About CPX-351

CPX-351 (Cytarabine:Daunorubicin) Liposome Injection represents a new approach to developing combinations of drugs in which drug molar ratios with synergistic anti-tumor activity are encapsulated in a drug delivery vehicle in order to maintain the desired ratio following administration. CPX-351 has been granted orphan drug status by the U.S. Food & Drug Administration (FDA) for the treatment of AML. Celator is currently conducting a second randomized phase 2 study of CPX-351 versus intensive salvage therapy in patients up to 65 years of age with AML in first relapse. Enrollment is expected to be completed in 2010. This study is supported by The Leukemia & Lymphoma Society.

About Celator Pharmaceuticals, Inc.

Celator Pharmaceuticals, Inc., with locations in Princeton, NJ, and Vancouver, BC, is a privately held pharmaceutical company developing new and more effective therapies to treat cancer. CombiPlex[®], the company's proprietary drug ratio technology platform, represents a novel approach that identifies molar ratios of drugs that will deliver a synergistic benefit, and locks the desired ratio in a nano-scale drug delivery vehicle that maintains the ratio in patients with the goal of improving clinical outcomes. The company pipeline includes two Phase 2 products; CPX-351 (a liposomal formulation of cytarabine:daunorubicin) for the treatment of acute myeloid leukemia and CPX-1 (a liposomal formulation of irinotecan:floxuridine) for the treatment of colorectal cancer; a preclinical stage compound, CPX-571 (a liposomal formulation of irinotecan:cisplatin); and multiple research programs, including the hydrophobic docetaxel prodrug nanoparticle (HDPN) formulation being studied by the National Cancer Institute's Nanotechnology Characterization Laboratory. Based on the applications of CombiPlex and the proprietary nanoparticle prodrug delivery platform, Celator is positioned to advance a broad pipeline of cancer therapies involving both previously approved and novel drug agents. For more information, please visit the company's website at www.celatorpharma.com. Information on ongoing trials is available at www.clinicaltrials.gov.

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¹**ASCO Abstract #6572:** Lancet J, Feldman E, Cortes, J, et al. CPX-351 can induce remission in AML immediately after failed induction with cytarabine and daunorubicin. Poster presented Saturday, June 5, 2010.

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