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**CELATOR[®] PHARMACEUTICALS PRESENTS
POSITIVE DATA FROM PHASE 2 STUDY OF CPX-351
AT THE AMERICAN SOCIETY OF HEMATOLOGY ANNUAL MEETING**

-- CPX-351 produced higher remission rates, reduced early mortality, with improvements in event-free survival and overall survival in elderly patients with newly-diagnosed acute myeloid leukemia (AML) --

-- Results demonstrate multiple patient populations for further clinical development of CPX-351 --

Princeton, NJ (December 7, 2010) -- [Celator Pharmaceuticals](http://www.celator.com) today announced positive clinical data in elderly patients with newly-diagnosed acute myeloid leukemia (AML) treated with CPX-351 (Cytarabine:Daunorubicin) Liposome Injection. Data were presented from the podium at the 52nd American Society of Hematology (ASH) Annual Meeting in Orlando, Florida. The results were based on 12 months of follow-up in a randomized, Phase 2 trial that compared CPX-351 to conventional cytarabine and daunorubicin (the “7+3” regimen), the current standard of care (ASH Abstract #655).

“Our findings suggest that CPX-351 may provide a long-sought opportunity to improve clinical outcomes over “7+3” in previously untreated AML,” said Jeffrey E. Lancet, M.D., associate professor, H. Lee Moffitt Cancer Center, who gave the presentation. “Importantly, these improvements were seen in the overall patient population but were greater in patients with high-risk AML, especially those with secondary AML.”

The randomized, open-label Phase 2 study enrolled 126 patients between the ages of 60-75 years with newly-diagnosed AML at 18 sites in the United States and Canada. Patients were stratified as high risk (age 70 or older, secondary AML, or ≥ 3 chromosomal abnormalities) or standard risk (all other patients). Following randomization, 85 patients received CPX-351 and 41 received the “7+3” regimen.

Compared to patients in the “7+3” arm, patients treated with CPX-351 demonstrated a higher aplasia rate, a higher remission rate (including complete remissions [CR] and complete remissions with incomplete neutrophil/platelet recovery [CRi]), lower induction mortality, improved median event-free survival (EFS), and improved median overall survival (OS).

	CPX-351	“7+3”
Aplasia Rate	87.7%	71.1%
Remission Rate (CR+CRi)	66.7%	51.2%
Induction Mortality, Day 60	4.7%	14.6%
Median EFS	5.4 months	2.0 months
Median OS	14.7 months	12.9 months

Follow-up is continuing for another 12 months. Larger improvements over “7+3” were seen in high-risk patients, where median event free survival was 4.5 months versus 1.8 months and median overall survival was 11.0 months versus 7.5 months. Even more noteworthy were the improvements seen in patients with secondary AML treated with CPX-351 who experienced a median event free survival of 3.8 months versus 1.4 months for “7+3” and a statistically significant improvement in median overall survival of 12.1 months versus 6.1 months ($p=0.01$).

Treatment with CPX-351 was associated with well-characterized and manageable adverse events that were generally comparable to conventional therapy. The myelosuppressive effect of CPX-351 was 7 days and 10 days longer for neutrophil and platelet recovery respectively, than those treated with “7+3,” effects consistent with the pharmacokinetics of CPX-351. The frequency and severity of cardiac events was low and similar in both groups.

“These encouraging results provide multiple paths for further development of CPX-351, with some patient populations representing opportunities for rapid clinical development and potential product registration,” said Scott Jackson, chief executive officer of Celator Pharmaceuticals. “As we plan for Phase 3, we will continue to collect data from this study until completion of the 24 month follow-up period and look forward to presenting initial results from our second Phase 2 study of CPX-351 in patients with AML in first relapse next year.”

Other CPX-351 presentations from the American Society of Hematology Annual Meeting

- **CPX-351 in Sequential Therapy for Refractory Leukemia**

Results of a Phase 1 trial of sequential treatment for relapsed or primary refractory acute leukemia demonstrated that CPX-351 can be utilized as salvage chemotherapy prior to a reduced intensity conditioning regimen and allogeneic stem cell transplantation (ASH Abstract #1334). Further research is planned to define a maximum tolerated dose of CPX-351 and to shorten the interval between the administration of CPX-351 and the stem cell transplant.

- **Activity of CPX-351 Against Human Leukemias**

A laboratory evaluation of the cytotoxicity of CPX-351 in 35 patient specimens suggested that CPX-351 possesses potent anti-leukemic activity against a wide range of human leukemia cell types (ASH Abstract #2886). The data establish a rationale for clinical testing of CPX-351 in other leukemia diagnoses besides AML and provide a model for *in vitro* screening that could help identify specific patient populations most likely to benefit from CPX-351.

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 acute myeloid leukemia (AML). CPX-351 is currently in phase 2 clinical development for the treatment of AML. Celator has completed a successful

randomized, phase 2 study comparing CPX-351 to the standard "7+3" regimen of cytarabine:daunorubicin in patients 60 years of age up to and including 75 years of age with newly diagnosed AML and has completed enrollment in a randomized, phase 2 study of CPX-351 versus intensive salvage therapy in patients 18 years of age up to and including 65 years of age with AML in first relapse. The second 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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ASH Abstracts on CPX-351:

Abstract #655 – Podium Presentation

Jeffrey E. Lancet, MD, Jorge E. Cortes, MD, Donna E. Hogge, MD, PhD, Martin Tallman, MD, Tibor Kovacs, MD, Lloyd E. Damon, MD, Ellen Ritchie, MD, Rami S. Komrokji, MD, Arthur C. Louie, MD and Eric J. Feldman, MD. Phase 2B randomized study of CPX-351 vs. Cytarabine (CYT) + Daunorubicin (DNR) (7+3 regimen) in newly diagnosed AML patients aged 60-75.

Abstract #1334 – Poster

Usama Gergis, MD, Ellen Ritchie, MD, Gail J. Roboz, MD, Joseph M. Scandura, MD, PhD, Sebastian Mayer, MD, Tomer M. Mark, MD, MSc, Tsiporah B. Shore, MD, Usama Wissa, MD and Eric J. Feldman, MD. A novel sequential treatment utilizing CPX-351 as salvage chemotherapy followed by a reduced intensity conditioning allogeneic stem-cell transplantation for patients with refractory leukemia.

Abstract #2886 – Poster

Jeffrey W. Tyner, PhD, Paul Tardi, PhD, Lawrence Mayer, PhD, Luke B. Fletcher, Stephen Spurgeon, MD, Tibor Kovacs, MD and Marc M. Loriaux, MD, PhD. Evaluation of CPX-351 (Cytarabine:Daunorubicin) Liposome Injection anti-leukemic activity against primary patient leukemia cells.