

## **Curis Reports CUDC-907 and CUDC-427 Data at AACR Annual Meeting 2014**

### **CUDC-907 Modulates Expression of Certain Cytokines/ Chemokines, Potentially Targeting Tumor Microenvironment in Addition to Direct Effects on Cancer Cells Sensitivity to CUDC-427 May Be Predicted by Alterations in TNF- $\alpha$ and XIAP Expression**

LEXINGTON, Mass., April 7, 2014 (GLOBE NEWSWIRE) -- Curis, Inc. (Nasdaq:CRIS), an oncology-focused company developing novel, targeted drug candidates for the treatment of human cancers, today announced that it reported data from *in vitro* studies and a translational biomarker analysis for CUDC-907, a dual histone deacetylase (HDAC) and phosphoinositide 3-kinase (PI3K) inhibitor, as well as results from *in vitro* and *in vivo* studies for CUDC-427, an antagonist of inhibitor of apoptosis (IAP) proteins, at the American Association for Cancer Research (AACR) 2014 Annual Meeting. CUDC-907 is being investigated in a Phase 1 trial in patients with relapsed/refractory lymphoma or multiple myeloma. CUDC-427 is being studied in a Phase 1 trial in patients with advanced solid tumors or lymphoma.

#### **CUDC-907 Presentation**

Curis scientists presented an abstract entitled "*Dual function HDAC and PI3K inhibitor, CUDC-907 affects cancer cells and the tumor microenvironment in hematological malignancies*" on Monday, April 7, 2014. The poster presentation included data from cell-based hematologic models suggesting that, in addition to direct effects on cancer cells, CUDC-907 may also alter the tumor microenvironment as measured by changes in the levels of certain cytokines and chemokines. Exposure of Hodgkin's lymphoma, diffuse large B-cell lymphoma and multiple myeloma cell lines to CUDC-907 resulted in reduction in the levels of CCL17 (TARC), a chemokine involved in the stimulation and proliferation of helper T cells required for the survival of certain malignant blood cells.

Preliminary data from patients with lymphoma treated with CUDC-907 in the ongoing Phase 1 study suggested correlative trends between patient benefit and plasma TARC levels prior to treatment, as well as potential correlations between tumor response and plasma TARC level changes induced by 15 days of CUDC-907 treatment. Further analysis of plasma cytokine and chemokine levels is ongoing to explore TARC and other molecules as markers/predictors of CUDC-907's activity, which may also inform patient stratification strategies.

"It is promising to note that CUDC-907, with its dual HDAC and PI3K inhibitory activity, appears to alter the expression of multiple cytokines and chemokines required for the survival and proliferation of certain blood cancers," said Ali Fattaey, Ph.D., Curis' President and Chief Operating Officer. "We believe these early data suggest that disruption of cytokine/chemokine mediated interactions between lymphoma or multiple myeloma cells and their respective tumor microenvironments may be one of the mechanisms by which CUDC-907 may potentially provide benefit in certain hematologic malignancies."

#### **CUDC-427 Presentation**

Curis scientists also presented an abstract entitled "*Post-treatment changes in levels of TNF family ligands and XIAP may predict sensitivity to IAP antagonist CUDC-427*" on Sunday, April 6, 2014. The poster presentation included data investigating the utility of CUDC-427-induced expression of tumor necrosis factor (TNF) family members and reduction of XIAP protein levels as potential markers of CUDC-427 sensitivity. In cancer cell lines that are sensitive to CUDC-427 treatment, exposure to CUDC-427 resulted in the induction of TNF- $\alpha$  or TRAIL expression. In highly sensitive cell lines, CUDC-427 also resulted in down-regulation of XIAP protein levels. These results are consistent with CUDC-427's expected mechanism of action of inducing the non-canonical NF- $\kappa$ B signaling pathway and in switching the TNF signal from survival to cell death through cIAP1 degradation. The company plans to further investigate these and other strategies for patient stratification in trials testing the potential of CUDC-427 as monotherapy and in combination with standard chemotherapeutics.

"We are encouraged by data reported here that support further exploration of potential biomarkers that may help predict CUDC-427's benefit in select patient populations," continued Dr. Fattaey. "In addition to our plans to investigate CUDC-427 in combination with other agents, we intend to continue to investigate promising markers for patient stratification and identify cancers more likely to respond to CUDC-427."

#### **About CUDC-907**

CUDC-907 is a dual inhibitor of Class I and II HDAC, as well as Class I PI3K enzymes. Specifically, CUDC-907 is designed to inhibit HDACs 1, 2, 3, 6 and 10 and PI3K-alpha, delta and beta isoforms, the combined inhibition of which Curis believes has synergistic effects against cancer cells and their microenvironment. In preclinical studies, CUDC-907 has demonstrated the ability to suppress multiple nodes of cellular survival and proliferation signaling pathways. In addition, preclinical data have shown that CUDC-907 inhibits compensatory pathways that are often utilized in cancer cells during the emergence of resistance to standard-of-care agents.

#### **About CUDC-427**

CUDC-427 is an oral, small molecule Smac mimetic that is designed to promote cancer cell death by antagonizing IAP proteins. IAP proteins are a family of functionally and structurally related proteins that promote cancer cell survival by inhibiting programmed cell death, also known as apoptosis, which is a normal process inherent in every cell. Using IAP proteins and other anti-apoptotic factors, cancer cells evade apoptosis in response to a variety of signals, including those provided by anti-cancer agents such as chemotherapy, or naturally occurring inflammatory and immune signals transmitted through members of TNF family. IAP inhibitors such as CUDC-427 are designed to counteract the effects of IAP proteins, thus shifting the balance away from cancer cell survival and allowing apoptosis to proceed.

#### **About Curis, Inc.**

Curis is an oncology-focused drug development company seeking to develop novel drug candidates for the treatment of human cancers. Curis is seeking to further the development of its pipeline of proprietary targeted cancer drug candidates, including CUDC-907, a dual HDAC and PI3K inhibitor, and CUDC-427, a small molecule antagonist of IAP proteins. Curis is also engaged in a collaboration with Genentech, a member of the Roche Group, under which Genentech and Roche are developing and commercializing Erivedge®, the first and only FDA-approved medicine for

the treatment of advanced basal cell carcinoma. Curis-discovered HSP90 inhibitor, Debio 0932 is being studied in patients with advanced lung and kidney cancers by partner Debiopharm. For more information, visit Curis' website at [www.curis.com](http://www.curis.com).

**Cautionary Note Regarding Forward-Looking Statements:**

*This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including without limitation statements regarding any expressed or implied statements about the efficacy, safety and potential benefits of CUDC-907 and CUDC-427; its plans and timing for clinical studies; and statements about future development plans for with CUDC-907 and CUDC-427 and the potential benefits and safety of these drug candidate. Forward-looking statements used in this press release may contain the words "believes," "expects," "anticipates," "plans," "seeks," "estimates," "assumes," "will," "may," "could" or similar expressions. These forward-looking statements are not guarantees of future performance and involve risks, uncertainties, assumptions and other important factors that may cause actual results to be materially different from those indicated by such forward-looking statements. For example, the FDA could impose restrictions on clinical trials of the Company's drug candidates which could delay, make more costly or otherwise adversely impact Curis' future development plans. Curis' drug candidates, including CUDC-907 and CUDC-427, are unproven and may cause unexpected toxicities and/or fail to demonstrate sufficient safety and efficacy in clinical trials and may never achieve the requisite regulatory approval needed for commercialization. Curis will require substantial additional capital to fund the research and development of its drug development programs, and such capital may be difficult to obtain. Curis may not obtain or maintain necessary patent protection for its programs and could become involved in expensive and time consuming patent litigation and interference proceedings. Curis faces substantial competition from other companies developing cancer therapeutics. Unstable market and economic conditions may adversely affect Curis' financial condition and its ability to access capital to fund the growth of its business. Curis also faces other important risks relating to its business, operations, financial condition and future prospects that are discussed in its Annual Report on Form 10-K for the year ended 2013 and other filings that it periodically makes with the Securities and Exchange Commission.*

*In addition, any forward-looking statements represent the views of Curis only as of today and should not be relied upon as representing Curis' views as of any subsequent date. Curis disclaims any intention or obligation to update any of the forward-looking statements after the date of this press release whether as a result of new information, future events or otherwise.*

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