

## FOR IMMEDIATE RELEASE

### **CRITICAL OUTCOME TECHNOLOGIES INC. ACHIEVES IMPORTANT MILESTONE FOR AML PROGRAM**

#### **Initial Test Results Confirm Targets and Activity**

**London, Ontario (October 9, 2012): Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT)** announced today that a number of preclinical tests initiated earlier this year have been successfully completed for the CHEMSAS® derived drug candidates synthesized for its acute myelogenous leukemia (AML) program.

The compounds were evaluated for their in vitro effectiveness, kinase targets and in vitro ADME/Tox properties. A number of the compounds were found to be active in multiple leukemia cell lines including human cell lines with the FLT3 mutant kinase which is found in 40% of AML cell lines. Evaluation of kinase screening results from two independent labs confirmed in vitro activity against FLT3 mutant kinase as well as wild type FLT3 kinase. The in vitro ADME/tox screen did not identify any liabilities that would preclude further development of the compounds.

COTI's AML discovery efforts have been focused on identifying and optimizing multi-kinase inhibitors. This strategy reflects our understanding that AML is the result of numerous gene mutations affecting multiple cell signaling kinase pathways. With few exceptions, traditional therapies targeting a single abnormal kinase have produced disappointing long-term results. Accordingly, COTI scientists believe a therapeutic approach targeting multiple kinases commonly mutated in AML will have a higher probability of success in improving outcomes for patients. The central kinase target of the COTI program is FLT3 with lesser emphasis on PDGF-R, CSF-1R, cAbl and cKIT.

"We are delighted to report these positive preclinical results as the AML therapeutics market is currently underserved by available treatments and we are pleased that a number of the compounds are performing exactly as predicted by the CHEMSAS® process," said Dr. Wayne Danter, CEO. "COTI's AML program has the potential to produce multiple drug candidates with differing activity profiles that can be used to treat acute leukemias with different gene mutation profiles. These positive early preclinical results provide further validation of CHEMSAS® as a powerful artificial intelligence drug discovery engine."

As the next step in the program, the Company is undertaking a detailed assessment of the test data to identify a potential lead and back up compound prior to proceeding with the determination of maximum tolerated dose (MTD) and animal studies.

### **About Acute Myelogenous Leukemia**

AML is the most common type of acute leukemia with 12,950 new cases and 9,050 deaths occurring each year in the United States alone. According to the World Health Organization, there are approximately 250,000 new cases of leukemia annually worldwide. AML accounts for 43% of these cases. The global AML therapeutics market was valued at \$204m in 2010. It is expected to grow to \$617m by 2017.

### **About Critical Outcome Technologies Inc.**

COTI is a leading-edge company specializing in accelerating the discovery of small molecules thus enabling these new drugs to be brought to market in a more cost effective, efficient and timely manner. COTI'S proprietary artificial intelligence system, CHEMSAS<sup>®</sup>, utilizes a series of predictive computer models to identify compounds with high probability of being successfully incorporated in disease-specific drug discovery, as well as subsequent optimization and preclinical development. These compounds are targeted for a variety of diseases, particularly those for which current treatments are either lacking or ineffective.

For more information, visit [www.criticaloutcome.com](http://www.criticaloutcome.com) or contact:

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