

## FOR IMMEDIATE RELEASE

### CRITICAL OUTCOME TECHNOLOGIES INC. PROVIDES IMPORTANT UPDATE ON AML PROGRAM

#### Three Compounds Advancing Based On Initial Test Results

**London, Ontario (April 9th, 2013):** Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT) announced today that a detailed analysis of the preclinical data from its Acute Myelogenous Leukemia (AML) program involving experiments initiated in 2012 has been completed. As a result, three of the six CHEMSAS<sup>®</sup> identified and patented drug candidates for the treatment of AML will be tested in animal models of human AML.

“We are pleased with the outcome from the analysis of the preclinical test data as the compounds performed essentially as predicted by our CHEMSAS<sup>®</sup> process,” said Dr. Wayne Danter, President & Chief Executive Officer. “I am also encouraged that a number of companies have expressed commercial interest in our AML program once confirmatory animal data from these tests is available. The continued positive preclinical results provide further validation of CHEMSAS<sup>®</sup> as a powerful artificial intelligence drug discovery engine.”

Six compounds were evaluated in three categories; first, for their *in vitro* activity in six different human leukemia cell lines; second, for their kinase inhibitory activity and third, for their *in vitro* ADME/Tox properties. Three compounds were selected to advance based on the overall combination of their *in vitro* efficacy, kinase inhibitory profile and ADME/Tox properties. These compounds were found to be active in multiple leukemia cell lines including human cell lines with the FLT3 mutant kinase, which is the most frequent molecular mutation in AML. Kinase screening results confirmed that all three candidates inhibited both FLT3 mutant and wildtype kinases. The most active compounds had IC50 values less than 100 nmol/L in the cell lines with the FLT3 mutant kinase.

Based on this positive data, the next steps in the preclinical AML program have been initiated with the first step being the determination of the oral maximum tolerated dose (MTD). Once this has been determined for each of the three compounds, COTI will complete experiments in an animal model of FLT3 mutant human AML using MV4-11 tumor cells. All three compounds will be tested at various doses with the goal of selecting a lead and backup compound for continued development towards the clinic and commercial out-licensing.

#### **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 a 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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