



Press Release

FOR IMMEDIATE RELEASE

CRITICAL OUTCOME TECHNOLOGIES INC. INITIATES SYNTHESIS OF ANOTHER KEY ASSET: ACUTE MYELOGENOUS LEUKEMIA DRUG CANDIDATES

London, Ontario (July 28, 2011): Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT) announced today that it has initiated synthesis on compounds from COTI's acute myelogenous leukemia (AML) program, representing a positive step forward in the development of these promising new drug candidates.

"We are delighted to announce an important milestone in the development of our AML program," said Dr. Wayne Danter, CEO. "The synthesis of our third major drug discovery program represents further validation of CHEMSAS® as a drug discovery engine and will provide an additional valuable asset that can be licensed to partners for further development."

Following the completion of a successful private placement in May 2011, COTI announced its intention to use a portion of the funds to advance its AML program. Also as previously announced, this program is moving forward with funding from the National Research Council of Canada Industrial Research Assistance Program.

COTI plans to begin preclinical testing of at least one of these compounds upon completion of synthesis and to aggressively pursue licensing opportunities based upon the scientific results of the program. COTI's AML program is protected by a number of issued US, European and Canadian patents.

About Acute Myelogenous Leukemia

AML is the most common type of acute leukemia with more than 13,000 new cases and 8,950 deaths occurring each year in the US 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 \$174m in 2009. It is expected to grow to \$329m by 2016.

COTI's AML program was designed to target several important cell-signaling enzymes called kinases. These enzymes form a cellular network responsible for a large number of important functions including cell division, cell growth and development, metabolism and cellular immunity. Approaches that are more traditional have sought to discover and develop "clean" drugs that have very good efficacy against a single cell-signaling target. COTI believes that this is a sub-optimal approach since most cancers, including leukemia, have multiple gene mutations and therefore multiple abnormal gene products like kinases. Unfortunately, the adaptive genetic machinery of cancer cells quickly finds an alternative pathway or pathways around the effects of single kinase inhibitors. As a result, resistance to chemotherapy emerges early and often. In AML, the most lethal adult leukemia, up to 40% of cases will have mutations in a particular gene known as FLT3. An abnormal gene

produces an abnormal or absent cellular protein. However, in most cancers including leukemia, multiple gene mutations result in multiple kinase abnormalities. It is for this reason that COTI has undertaken an AML drug discovery project intentionally targeting multiple kinases that are important in leukemia. COTI's multi-kinase inhibitors have also been designed to be orally available, have low toxicity, and potentially synergize with other first line agents.

Notice to Readers

Information contained in this press release may contain certain statements which constitute "forward-looking statements" within the meaning of the Securities Act (Ontario) and applicable securities laws. For example, the statement "The global AML therapeutics market was valued at \$174m in 2009. It is expected to grow to \$329m by 2016." is a forward-looking statement and was sourced from GlobalData, an industry market research group. This statement conveys the projected size of the market based upon an independent research source, but COTI is not in a position at this time to determine what share of the market, if any, the successful development of its AML compounds might obtain. Forward-looking statements, by their nature, are not guarantees of future performance and are based upon management's current expectations, estimates, projections and assumptions. Risks that could impact on these forward-looking statements are outlined in the Company's annual information form. Management of COTI considers the assumptions on which these forward-looking statements are based to be reasonable, but as a result of the many risk factors, cautions the reader that actual results could differ materially from those expressed or implied in these forward-looking statements.

About Critical Outcome Technologies Inc. (COTI)

COTI is a leading-edge biotechnology firm specialized in assisting pharmaceutical, biotechnology and therapeutic companies with the accelerated discovery of small molecules to enable new drugs to be brought to market in a more cost effective, efficient and timely manner.

COTI'S proprietary technology CHEMSAS®, utilizes a series of predictive computer models to identify compounds most likely to be 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 or contact:

Michael Barr

Vice President of Business Development and Marketing

519-858-5157

mbarr@criticaloutcome.com

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.