



# Press Release

**FOR IMMEDIATE RELEASE**

## **CRITICAL OUTCOME TECHNOLOGIES INC. RECEIVES ANOTHER KEY ASSET: A CANADIAN PATENT IN SUPPORT OF ITS ACUTE MYELOGENOUS LEUKEMIA PROGRAM**

**London, Ontario (July 26, 2011):** Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT) announced today that a patent for its protein tyrosine kinase inhibitors supporting the Company's acute myelogenous leukemia (AML) program was granted by the Canadian Patent Office on June 14, 2011. This further strengthens the Company's patent portfolio for AML as European and US patents for these compounds were previously granted.

"We are quite pleased to announce another important milestone in the growth and development of our Company," said Dr. Wayne Danter, CEO. "The granting of this patent by the examiners of the Canadian Patent Office represents a further validation of our proprietary technology, CHEMSAS®. This development, in conjunction with the continued progress of our lead oncology compound COTI-2 and the early success with our HIV integrase inhibitor program demonstrates COTI's unique ability to efficiently discover novel drug candidates. These patents are valuable assets in the advancement of our AML program, which can be licensed to partners eager to develop novel therapeutics for the treatment of this disease."

According to the National Cancer Institute, tyrosine kinase inhibitors interfere with cell communication and research suggests prevents tumor growth by inhibiting the uncontrolled white blood cell proliferation common in leukemia. The portfolio of patents provides the Company protection in a market where approximately 39,300 new cases of AML are diagnosed each year.

The Company plans to begin synthesis and preclinical development of at least one compound from this library and to aggressively pursue licensing opportunities. This program is funded in part by a grant from the National Research Council of Canada Industrial Research Assistance Program, as announced in June 2010.

### **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. The most recent Canadian data suggests there are approximately 1,300 new cases of AML in Canada each year. According to the World Health Organization there are approximately 250,000 new cases of leukemia annually worldwide. AML accounts for 43% of these cases.

COTI's AML treatment 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



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a single cell-signaling target. COTI believes that this is the 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.

## **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<sup>®</sup>, 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.

COTI is located in London, Ontario and is publicly traded on the TSX Venture Exchange under the symbol 'COT'.

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