Press Release

FOR IMMEDIATE RELEASE

COTI-2 ENHANCES THE EFFECTIVENESS OF TARCEVA® (ERLOTINIB) AND ERBITUX® (CETUXIMAB) IN KILLING HUMAN CANCER CELLS WITH AND WITHOUT THE KRAS MUTATION

London, Ontario (February 9, 2009): Critical Outcome Technologies Inc. (TSX Venture: COT), announced today a significant update in the continued positive development of its lead oncology compound, COTI-2.

A series of *in vitro* experiments carried out in two independent North American cancer research labs using COTI-2 alone and in combination with either Tarceva or Erbitux in seven different human cancer cell lines representing colon cancer and non small cell lung cancer (NSCLC) have been completed with the following results:

- COTI-2, as a single agent, inhibited proliferation of human colon cancer cell lines (HCT-15, HCT-116, HT-29, COLO-205, and SW620) and human NSCLC cell lines (H292 and H1975) at concentrations in the nanomolar range.
- COTI-2, in combination with either Tarceva or Erbitux (administered at concentrations that, as single agents, did not significantly inhibit proliferation of any of the cell lines) had a greater-than-additive capacity to reduce growth in all five colon cancer lines, regardless of KRAS status (normal/wild-type versus mutant).
- COTI-2 in combination with Tarceva (administered at concentrations that, as a single agent, did not significantly inhibit proliferation of any of the cell lines) had an additive or greater-than-additive capacity to reduce growth in both NSCLC cell lines.

These results are significant in view of the growing body of evidence suggesting cancers with the normal form of the KRAS gene respond better to an important class of cancer drugs, known as EGFR inhibitors (i.e. Tarceva and Erbitux), than cancers with a common mutation of the KRAS gene. "Up to 50% of colon cancer tumours and up to 30% of NSCLC tumours will contain the KRAS mutation rendering them less responsive to commonly used and otherwise effective new cancer drugs like Tarceva and Erbitux. Unfortunately the KRAS mutation is too often associated with a poorer prognosis. This represents a large unmet medical need," said Dr. Wayne Danter, President and Chief Scientific Officer of Critical Outcome Technologies Inc. (COTI).

The KRAS gene mutation results in an over expression of the KRAS protein, which is commonly found in many human cancers. The excess KRAS protein promotes uncontrolled cell growth in cancer cells and that leads to drug resistance by preventing apoptotic cell death in cancer cells. Research to date has confirmed that COTI-2's anti-cancer activity is mediated through Akt/PKB signaling and through the reprogramming of the genetic machinery of the cell. COTI-2 acts to overcome the cellular processes that result in the resistance to chemotherapy commonly seen in human cancers.

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COTI has previously completed a mouse xenograft model of human colon cancer (HT29: KRAS wild-type) using low dose COTI-2 by intraperitoneal injection and demonstrated single agent effectiveness. A follow up series of experiments with COTI-2 alone and in combination with Tarceva or Erbitux in xenograft models of human colon cancer and NSCLC with the KRAS mutation are scheduled to commence in the coming weeks

COTI will present this new data to prospective partners including executives from several major pharmaceutical organizations at BioPartnering North America (BPNA) taking place February 8-10, 2009 in Vancouver, BC. "This new data will stimulate further discussions as we continue to evaluate our options pertaining to a licensing arrangement for COTI-2," said Mr. Michael Cloutier, Chief Executive Officer (CEO) of COTI. COTI will be represented at BPNA by Mr. Michael Cloutier, CEO, Dr. Wayne Danter, President and CSO and Mr. Michael Barr, Director of Business Development and Marketing.

About Critical Outcome Technologies Inc. (COTI)

COTI is formed around a unique computational platform technology called CHEMSAS®, which allows for the accelerated identification, profiling and optimization of targeted small molecules potentially effective in the treatment of human diseases for which current therapy is either lacking or ineffective. COTI's business is focused on the discovery and preclinical development of libraries of novel, optimized lead molecules for the treatment of specific cancers, HIV and multiple sclerosis. Currently, five targeted libraries of lead compounds are under active development: small cell lung cancer, HIV integrase inhibitors, acute adult leukemia, multiple sclerosis and colorectal cancer.

For further information, please visit the website at www.criticaloutcome.com or contact:

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