

## FOR IMMEDIATE RELEASE

### **CRITICAL OUTCOME TECHNOLOGIES INC. ANNOUNCES DEFINITIVE PROOF OF COTI-2'S TARGET AND SINGLE AGENT EFFECTIVENESS FROM CRITICAL STUDY**

**London, Ontario (August 16, 2011): Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT)** announced today the results of recent experiments demonstrating clear evidence of COTI-2's ability to significantly inhibit the growth of cancer cells that over express Akt/Akt2, confirming it as a promising targeted therapy candidate. COTI-2 is the first drug developed using the Company's proprietary artificial intelligence system, CHEMSAS®.

"These results and their implications represent a significant milestone in the development of COTI-2. They strengthen our prior research, provide new insights into a specific mechanism of action and support a first-in-class distinction for this promising anti-cancer drug candidate," said Dr. Wayne Danter, COTI's Chief Executive Officer. "We have established a clear relationship between the dose of COTI-2 and reduced levels of Akt/Akt2 protein, activated Akt/Akt2 in tumor tissues, and observed tumor growth inhibition. This is powerful evidence that COTI-2 is a potent modulator of Akt/Akt2 in cancer cells that over express the target."

Detailed analysis of these new data confirmed the following:

- (1) There was a complete remission rate of 30% ( $p < 0.01$ ) in the high dose IV treatment group (40 mg/kg) and a 10% complete ( $p = \text{NS}$ ) remission rate in the low dose IV treatment group (20 mg/kg).
- (2) Tumor Growth Inhibition (TGI) was greater than 84% in all treatment groups and was strongly associated with the dose of COTI-2.
- (3) There was strong evidence that the increase in COTI-2 dose and TGI is associated with a decrease in total tumor Akt, Akt2 and Ser473\_phosphoAkt, but not Thr308\_phosphoAkt proteins.
- (4) The combined evidence indicates that a significant component of the COTI-2 effect is mediated through a decrease in both the amount and phospho-activation of the Akt2 component of total Akt protein.
- (5) All treatments appeared to be well tolerated.

At the recent American Society for Clinical Oncology (ASCO) annual meeting, the M.D. Anderson Cancer Center suggested that customizing targeted therapies to a tumor's specific molecular characteristics, rather than tumor type, may be more effective in certain types of cancers. According to the National Cancer Institute, targeted cancer therapies can improve a doctor's ability to tailor cancer treatment and may result in fewer side effects.

COTI-2's specific cellular targeting, low toxicity, and proven efficacy support a potentially dramatic change in the treatment of susceptible cancers consistent with the views expressed at ASCO. Over expression of Akt/Akt2 is common in a broad range of human cancers, including ovarian, endometrial, pancreatic, breast, colorectal and lung. The percent of tumors with active Akt/Akt2 range from 20% to 100% depending on the cancer type.

These results are from the first of three key studies related to the continued development of COTI-2 based on feedback from prospective licensing partners. This data is important to potential licensing partners as it provides specific insight into a clinical development strategy for COTI-2. COTI will share a detailed scientific report of this data with prospective licensing partners. COTI also plans to present this scientific data at key scientific conferences this fall. Additional data related to this study will be released in early fall.

#### **About Critical Outcome Technologies Inc. (COTI)**

COTI is a leading-edge company specializing in accelerating the 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 artificial intelligence system, 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.

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