Press Release

FOR IMMEDIATE RELEASE

CRITICAL OUTCOME TECHNOLOGIES INC. REPORTS FISCAL 2013 SECOND QUARTER FINANCIAL RESULTS

London, Ontario (December 21, 2012): Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT) announced fiscal 2013 second quarter financial results today for the three and six months ended October 31, 2012.

"As we have outlined in the past, the Company has a two-pronged strategy for commercial validation of its underlying CHEMSAS® technology," said Dr. Wayne Danter, President and Chief Executive Officer. "The first strategy is to license a novel compound discovered and optimized using CHEMSAS® that has been successfully moved through preclinical testing as predicted. The second strategy is to enter into research and product development (R&D) collaboration agreements with third parties for therapeutic targets of interest to them. Both of these strategies progressed very well in the quarter."

"We continued our COTI-2 licensing initiatives during the quarter on a number of fronts, which included the engagement of a life science commercialization consulting firm to broaden the Company's reach, experience and effort with the licensing transaction. We believe the positive progress being made in both the scientific results for COTI-2 and our R&D collaboration programs highlighted below will provide momentum for success in this initiative," said Dr. Wayne Danter.

"While only modest revenue was received during the quarter under the collaboration agreements announced in September 2012, we are building shareholder value through the revenue "tails" of milestone payments and royalties that ensue from successfully completing these discovery, optimization and profiling collaborations," noted Dr. Danter. "These collaborations also expand the number and types of parties that can benefit from using CHEMSAS®, which is important in demonstrating the breadth and depth of CHEMSAS® as a drug discovery engine."

Financial Highlights

The Company reported a net loss of $762,669 or $0.01 per common share for the three months ended October 31, 2012 (Q2-F'13) compared to a net loss of $648,530 or $0.01 per common share for the comparable quarter ended October 31, 2011 (Q2-F'12). For the six months ended October 31, 2012 (YTD-F'13) the Company reported a net loss of $1,485,439 or $0.02 per common share compared to a

net loss of $1,290,786 or $0.02 per common share for the six months ended October 31, 2011. The increased loss in the quarter of $114,139 and $194,653 for the six month period related to two major functional expense areas; R&D expenses increased by $113,453 in the quarter and $174,507 year to date and general and administration (G&A) expenses increased by $13,866 for the quarter and $39,270 year to date.

The R&D increase related primarily to R&D testing, consulting and materials, which increased $96,636 in the quarter (YTD-F'13 - $218,615) due to increased *in vitro* and *in vivo* testing of the Company's lead oncology asset, COTI-2. This increase was partially offset by a decrease in synthesis costs of $7,601 in the quarter (YTD-F'13 - $84,880).

The G&A increase related to two expense items; first, Q2-F'13 amortization costs increased by $11,901 (YTD-F'13 - $22,816) resulting from the grant of a patent for COTI-2 by the United States Patent Office in October 2011; and, second, share-based compensation increased $40,152 (YTD-F'13 - $41,356) due to share options granted to officers and a consultant. These increases were partially offset by a reduction in professional fees in the quarter of $31,294 (YTD-F'13 – $18,218) as the Company did not incur the consulting service fees associated with the required transition to International Financial Reporting Standards of 2012.

At the quarter end, the Company held cash, cash equivalents and short-term investments of $575,530. This balance reflected a decline of $1,143,141 since the April 30, 2012 year end with cash used in operating activities representing $1,166,047. "The Company is pursuing additional financing to sustain operations and execute on its business plan with an anticipated closing in the first quarter of calendar 2013," advised Dr. Danter.

Operational Highlights

The Company made steady progress in developing COTI-2 toward an investigational new drug filing leading to human clinical trials and a licensing transaction in the quarter. On September 18, 2012, the Company announced the initiation of the final series of toxicity experiments in two animal species using the oral formulation. On September 20, 2012, the Company announced the broadening of the mechanism of action (MOA) of COTI-2 beyond AKT inhibition. Previous preclinical MOA work clearly showed that COTI-2 modulated the PI3K/AKT/mTOR pathway. However, new data derived from gene profiling and *in vitro* testing indicates that COTI-2 is particularly effective in treating cancer cell lines with p53 mutations, an effect not associated with AKT inhibitors. "The effectiveness of COTI-2 based on the status of p53, a tumor suppressing gene, could make this compound and class an important new treatment for cancer, as at least 50% of human cancers harbor a p53 mutation. These findings improved the understanding of COTI-2's MOA and help clarify some of the positive results seen in earlier experiments and trials that were not explained by AKT inhibition alone," stated Dr. Danter.

Efforts in achieving R&D collaborations using the Company's proprietary CHEMSAS® platform with a variety of life science organizations culminated in the Company being able to announce two collaborations in the quarter; one with Western University on September 6, 2012 and another with

Delmar Chemicals Inc. on September 12, 2012. Subsequent to the quarter end, the Company announced a third collaboration on December 6 with a multinational pharmaceutical company. "Success with these collaborations provides important commercial validation of CHEMSAS®, a source of revenue to the Company and illustrates the capability of the platform to function across multiple disease areas," noted Dr. Danter.

More detailed operating and financial results can be found in the Company's unaudited condensed interim financial statements and the Management Discussion and Analysis for the three and six months ended October 31, 2012, which can both be found on SEDAR at www.sedar.com. This material is also available on the Company's website at www.criticaloutcome.com.

Notice to Readers

Information provided 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 "Success with these collaborations provides important commercial validation of CHEMSAS®, a source of revenue to the Company and illustrates the capability of the platform to function across multiple disease areas…" and "could make this compound and class an important new treatment for cancer…" and "... pursuing additional financing to sustain operations and execute on its business plan with an anticipated closing in the first quarter of calendar 2013…" are forward-looking statements. These statements convey the Company's efforts to commercially validate CHEMSAS® and file a submission to enable human clinical trials to occur for its lead oncology compound and also efforts to obtain a licensing deal and financing, but COTI is not in a position at this time to determine when, or if these events will occur. 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 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®, 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. Upon confirming the predictions of CHEMSAS® through a series of preclinical tests, COTI seeks to license these compounds for further preclinical and clinical compounds.

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