

FOR IMMEDIATE RELEASE

CRITICAL OUTCOME TECHNOLOGIES INC. REPORTS FISCAL 2010 SECOND QUARTER FINANCIAL RESULTS

London, Ontario (December 10, 2009): Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT) announced fiscal 2010 second quarter financial results today for the three and six month periods ended October 31, 2009.

“We have achieved strong scientific results from our research and development programs during the quarter, and have worked hard to raise awareness of our technology and its capabilities with pharmaceutical and biotech companies in North America and Europe. While these efforts have not yet translated into commercial success,” said Mr. Michael Cloutier, Chief Executive Officer of COTI “we will be continuing our efforts to realize such success during the next quarter.”

The Company reported a net loss of \$976,678 or \$0.02 per share for the three months ended October 31, 2009 compared to a net loss of \$725,002 or \$0.02 per share for the comparable quarter ended October 31, 2008. There were no operating revenues in the quarter compared to minor revenues of \$5,982 in the prior year. The increased loss of \$251,676 resulted from five main sources: increased general and administration costs of \$123,497, increased stock based compensation of \$285,936, decreased interest income of \$29,494, offset by decreased research and product development costs (R&D) of \$56,749 and investment tax credit refunds of \$137,301.

For the six months ended October 31, 2009, the Company reported a net loss of \$1,955,767 or \$0.04 per common share compared to a net loss of \$1,583,773 or \$0.03 per common share on October 31, 2008. This increased loss of \$371,994 resulted from increased R&D costs of \$167,216, increased general and administration costs of \$194,299, increased stock based compensation of \$86,917 and decreased interest income of \$60,701, offset by investment tax credit refunds of \$136,786.

At October 31, 2009, the Company had cash, cash equivalents and short-term investments of \$2,220,081. Since the April 30, 2009 year end, the balance of cash, cash equivalents and short-term investments declined by \$ 1,432,378 from \$3,652,459 reflecting the use of cash in operations.

“We have continued to achieve positive scientific development with COTI-2 our lead cancer compound, which is the foundation for obtaining the licensing deal and commercial success we seek,” said Dr. Wayne Danter, President and Chief Scientific Officer of COTI. “The test results during the quarter added to the impressive data set of COTI-2, showing effectiveness and low toxicity against multiple cancers, particularly in combination with first and second line agents and when viewed with the novel mechanism of action as an inhibitor of AKT2 should be very supportive of our commercialization efforts for this compound.” Key test results reported in the quarter included:

- Completion in August 2009 of animal experiments that showed oral COTI-2 alone, and in combination with Doxil[®], had superior treatment results compared to Doxil[®] alone as measured by significant tumor growth inhibition in an animal model of an aggressive human ovarian cancer (A2780).
- Completion in October 2009 of animal experiments that showed COTI-2 is an effective single agent with low toxicity in multiple xenograft models of human cancers: metastatic model for small cell lung and solid tumor models for non-small cell lung, colon, brain, leukemia and ovarian cancers.
- Completion in October 2009 of a series of tests indicating that COTI 2 prevents the activation of AKT/AKT2 and thereby prevents its cancer promoting activities. Accordingly, COTI-2 is likely to be highly effective in treating human cancers that express high levels of the protein AKT/AKT2 such as endometrial, ovarian, pancreatic, colon, brain, leukemia, breast, small cell lung and non small cell lung cancers.

“We look forward to realizing on the commercial licensing potential for COTI-2 in 2010, based both on the strong scientific package in hand and our hiring of Pullan Consulting, a partnering facilitator of international reputation,” said Michael Cloutier. “We are also actively pursuing the financing necessary to support both our licensing and scientific efforts during the coming months.”

More detailed operating and financial results can be found in the Company’s interim financial statements and Management’s Discussion and Analysis for the six-month period ended October 31, 2009, which can be found on SEDAR at www.sedar.com.

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. Currently, six targeted libraries of lead compounds are under active development; small cell lung cancer, multiple sclerosis, HIV integrase inhibitors, adult acute leukemia, colorectal cancer and Alzheimer’s disease.

Forward-looking Statements

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. These forward-looking statements, by their nature, are not guarantees of future performance and are based upon COTI’s current expectations, estimates, projections and assumptions, which it considers reasonable. COTI operates in a highly competitive and regulated environment that involves significant risks and uncertainties, which could cause actual results to differ materially from those anticipated in these forward-looking statements. Information in this press release should be considered accurate only as of the date of the release and may be superseded by more recent information disclosed in later press releases, filings with the securities regulatory authorities or otherwise.

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