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ORAL COTI-2 IS EFFECTIVE AS A SINGLE AGENT AND IN COMBINATION WITH GEMCITABINE IN AN ANIMAL MODEL OF HUMAN PANCREATIC CANCER

London, Ontario (December 9, 2009): Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT) announced positive results today from animal experiments carried out at a prominent Canadian cancer research facility. This new series of experiments adds to the already impressive data package for COTI-2, demonstrating efficacy as a single agent and in combination with first line therapies with low toxicity in seven different animal models of human cancers.

This most recent study was designed to determine first, the effectiveness of oral COTI-2 as a single agent, second, the effectiveness of COTI-2 in combination with gemcitabine, a standard first line therapy for advanced pancreatic cancer, and third, the toxicity of chronically administered oral COTI-2 as a single agent and in combination with gemcitabine in an animal xenograft model of human pancreatic cancer (PANC-1). The following results provide strong supportive evidence for the continued evaluation of COTI-2 in combination with conventional single agent therapy for the treatment of pancreatic cancer:

- COTI-2 as a single agent demonstrated efficacy comparable to gemcitabine.
- COTI-2 plus gemcitabine was significantly more effective than gemcitabine as a single agent. This result was observed early and increased throughout the duration of the study.
- Partial tumor regressions were observed in the combination treatment group.
- Chronic oral treatment with COTI-2 as a single agent or in combination with gemcitabine was well tolerated with no treatment deaths or observable toxicity over the duration of the study.

“Pancreatic cancer remains the most lethal cancer and effective new treatments are urgently needed. The results of these experiments indicate that chronically administered oral COTI-2 is a well tolerated single agent with efficacy comparable to the first-line agent gemcitabine, and there is enhanced efficacy in combination with gemcitabine in an animal model of human pancreatic cancer,” said Dr. Wayne Danter, President and CSO of COTI. “These results are significant because they add to the impressive data set of COTI-2, showing effectiveness, particularly in combination with first and second line agents, against multiple cancers and low toxicity.”

"We are delighted with these new scientific results providing evidence supporting the commercial potential of oral COTI-2 in pancreatic cancer. COTI looks forward to sharing this new data with parties

who have expressed interest in a commercial partnership related to COTI-2," said Mr. Michael Cloutier, CEO of COTI.

About COTI-2

COTI-2 is a novel small molecule that acts by inhibition of Akt/PKB (Protein kinase B) phosphorylation that leads to caspase-9 activation in cancer cells resulting in apoptosis or programmed cell death. COTI-2 is easily synthesized and has good *in vitro* and *in vivo* efficacy against multiple cancers including small cell lung, non-small cell lung, colon, brain, ovarian, endometrial and pancreatic cancers. These markets could represent a market size of more than \$21 billion by 2018. COTI-2 test results show it to be highly effective as a single agent therapy and as a combination therapy in a number of animal models of human cancers. COTI-2 differs from other cancer treatments in that other treatments involve the killing of all growing and dividing cells in the body resulting in significant toxic side effects while COTI-2 appears to target and destroy cancer cells only and has demonstrated low toxicity in normal human cells compared to human cancer cells. The combined scientific evidence indicates that COTI-2 is an ideal agent for combination therapy with current standard agents for a number of cancers. COTI is currently evaluating partners to share in the risk/reward of development via a licensing agreement for COTI-2. To request a non-confidential data package or discuss a partnership concerning COTI-2 please contact Michael Barr, Director of Business Development and Marketing at mbarr@criticaloutcome.com.

About Pancreatic Cancer

According to the World Health Organization (WHO) pancreatic cancer is the 13th most common cancer worldwide. WHO states that over 232,000 new cases of pancreatic cancer are diagnosed each year across the globe. According to the National Cancer Institute of the United States (US) an estimated 42,470 individuals will be diagnosed with pancreatic cancer in 2009 in the US and 35,240 will die from this cancer. Incidence and mortality rates have remained steady for the last 30 years, indicating a great need for better, more efficacious treatments. The reasons for poor survival include the insidious and aggressive nature of the tumors, late diagnosis, low rates of resection and the lack of effective therapies. According to WHO, there is currently no early diagnostic test or population based screening procedure for pancreatic cancer. Due to the lack of diagnostics, even better treatments will be necessary to overcome pancreatic cancer in later disease stages.

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, acute myelogenous leukemia, colorectal cancer and Alzheimer's disease.

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

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