



Press Release

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COTI-2 Demonstrates Low In Vitro Toxicity In Normal Human White Blood Cells Compared With Multiple Human Cancer Cell Lines

London, Ontario (August 6, 2009): Critical Outcome Technologies Inc. (COTI) (TSX Venture: COT), announced today important positive results from experiments carried out at a prominent Canadian cancer research facility. These in vitro experiments were conducted at the request of a potential pharmaceutical partner and were designed to assess the toxicity of COTI-2 in healthy human white blood cells (WBCs). The following results, combined with previous acute animal toxicity data and normal histopathology, provide clear evidence that COTI-2 is likely to have low toxicity in healthy tissues compared with multiple cancer cell types:

- The IC50 value for COTI-2 in normal WBCs harvested from healthy young male and female subjects was >100 µmol/L.
- HL-60 human acute leukemia cells (cancerous WBCs) were greater than 500-fold more sensitive to death induction by COTI-2 compared with normal harvested WBCs from healthy human subjects.
- H226 Non Small Cell Lung Cancer cells (the least sensitive of all human tumor cell lines tested for sensitivity to growth inhibition by COTI-2) were greater than seven-fold more sensitive to death induction by COTI-2 compared with normal harvested WBCs from healthy human subjects.
- A comprehensive evaluation of more than 25 sensitive human cancer cell lines indicates that these cells are between 500 and > 3.3 million fold more sensitive to apoptotic cell death induced by COTI-2 compared with normal WBCs harvested from healthy human subjects.

“Traditional anti-cancer drugs have shown toxicity to both cancer cells and healthy tissues with little selectivity. We are delighted to obtain this new evidence that COTI-2 is much more toxic to cancer cells than healthy human WBCs. These results are significant as they add to the impressive preclinical data set for COTI-2. As the development of COTI-2 moves toward a Phase 1 clinical trial we continue to see efficacy in numerous animal models of human cancers and low toxicity,” said Dr. Wayne R. Danter, President and Chief Scientific Officer of COTI.

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, HIV integrase inhibitors, acute adult leukemia, multiple sclerosis, colorectal cancer and alzheimer’s disease.



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