



Press Release

FOR IMMEDIATE RELEASE

CRITICAL OUTCOME TECHNOLOGIES INC. REPORTS SECOND QUARTER 2008 FINANCIAL RESULTS

London, Ontario (December 20, 2007): Critical Outcome Technologies Inc. (TSX Venture: COT) today announced its financial results for the second quarter ended October 31, 2007 of its fiscal 2008 year.

There were no operating revenues during the quarter as the Company reported a net loss for the period of \$(519,968) or \$(0.01) per share compared to a net loss of \$(113,997) or less than \$(0.01) per share for the quarter ended October 31, 2006. There were four major expenses in the quarter which accounted for the majority of the increased loss of \$405,971 over the comparable period in 2006: a non-cash expense for stock option compensation recorded in the amount of \$223,075 resulting from stock options granted in October 2007, an increase in salaries and benefits of \$74,183 related to increased staffing levels, a \$69,255 increase in professional fees for legal, accounting and consulting costs and \$35,825 in corporate governance costs.

For the six months ending October 31, 2007 the Company recorded a net loss of \$(1,020,426) or \$(0.03) per share compared to a net loss of \$(277,085) or \$(0.01) for the comparable six months in 2006, an increased loss of \$743,341. The four major expense categories affecting the quarterly results were also responsible for the majority of the year to date increase. Consistent with the second quarter results, the year to date results reflect the increased business activity of the Company in the first two quarters of fiscal 2008 as the Company focused on moving its molecular libraries forward in development and marketing. This was significantly different compared to the first half of fiscal 2007 where the predominant activities were raising the capital necessary to execute its business plans and completing the qualifying transaction and amalgamation with Aviator Petroleum Corp, the predecessor public company.

Financing activities in the quarter generated gross proceeds of \$356,338 from the exercise of 530,477 common share warrants to support the Company's operations. For the six month period 2,102,142 warrants have been exercised for gross proceeds of \$1,301,162. At October 31, 2007 the Company had \$2,936,448 in cash and cash equivalents.

Highlights during the quarter included:

- Continued positive pre-clinical results from the small cell lung cancer library (in collaboration with DDP Therapeutics).

- Promising discussions with prospective Pharma partners on a variety of lead molecule identification pilot projects.
- The signing of a pilot project agreement with Merck Serono, a division of Merck KGaA, to identify drug development candidates for a specific oncology cellular target utilizing our proprietary technology CHEMSAS®.

Subsequent to the quarter end, COTI announced on November 29th, the completion of the acquisition of DDP Therapeutics and the contemporaneous closing of a \$4.0 million private placement.

About Critical Outcome Technologies Inc. (COTI)

COTI is a biotechnology company focused on applying its proprietary computer technology, CHEMSAS®, to identify, profile and optimize commercially viable drug candidates at the earliest stage of preclinical drug development and thereby dramatically reduce the timeline and cost of getting new drug therapies to market. In developing its technology, COTI has focused on novel, proprietary, small molecules used to treat cancer and HIV. This focus has been on cancers with high morbidity and mortality such as acute leukemia in adults, hormone resistant breast cancer, hormone resistant prostate cancer, small cell lung cancer and melanoma, which currently have either poor or no effective therapies.

Using CHEMSAS® the Company is developing a pipeline of highly optimized libraries of 6-10 small molecules for specific therapy targets and plans to sell/licence these libraries to interested pharmaceutical partners for human trials and further drug development. Currently, the libraries in various stages of development in the pipeline are targeted at small cell lung cancer, colorectal cancer, HIV integrase inhibitors, chronic and acute leukemia and multiple sclerosis.

Notice to Readers

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 management’s current expectations, estimates, projections and assumptions. 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. 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. 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.

For more information on COTI, visit www.criticaloutcome.com or contact:

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The TSX Venture Exchange does not accept responsibility for the adequacy or accuracy of this release.

Critical Outcome Technologies Inc.
(a development stage company)
Interim Balance Sheets

	Unaudited October 31, 2007	Audited April 30, 2007
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,936,448	\$ 2,417,801
Other receivables	64,969	76,655
Deferred financing charges	40,514	-
Prepaid expenses and deposits	14,445	28,095
	3,056,376	2,522,551
Equipment	129,951	52,560
Patents	151,605	134,298
Trademark	435	870
Investment in DDP Therapeutics	117,307	1
	\$ 3,455,674	\$ 2,710,280
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 218,713	\$ 179,091
Due to shareholders	110,781	118,631
Notes payable	20,000	20,000
Current portion of capital lease obligations	10,278	20,244
	359,772	337,966
Capital lease obligations	21,287	21,287
Shareholders' equity		
Share capital and warrants	5,398,196	4,037,165
Contributed surplus	1,058,452	675,469
Deficit	(3,382,033)	(2,361,607)
	3,074,615	2,351,027
	\$ 3,455,674	\$ 2,710,280

Critical Outcome Technologies Inc.
(a development stage company)
Interim Statements of Operation and Deficit
(Unaudited)

	Three Months Ended October 31,		Six Months Ended October 31,		Cumulative period April 30, 1999 (inception) to Oct 31, 2007
	2007	2006	2007	2006	
Revenues:					
Contract services	\$ -	\$ -	\$ -	\$ -	\$ 32,500
Screening services	-	-	-	2,500	2,500
	-	-	-	2,500	35,000
Expenses:					
Stock option compensation	223,075	-	382,984	-	1,058,453
Salaries and benefits	166,761	92,578	325,884	172,323	922,816
Professional fees	84,955	15,700	177,532	52,656	510,889
Marketing	31,814	30,321	70,663	51,056	227,521
Amortization of furniture and equipment	26,863	6,021	48,303	14,333	104,167
Synthesis costs	-	-	18,889	-	401,449
Office and general	12,073	6,119	23,174	10,752	71,205
Insurance	10,135	-	20,269	-	32,961
Rent	9,346	4,673	13,852	9,255	66,920
Corporate governance	35,825	-	39,919	-	54,668
Interest and bank charges	2,108	2,882	4,147	7,470	29,512
Computer expense	863	3,272	2,658	5,091	58,829
Amortization of trademark	217	217	435	435	3,915
Research and product development	-	6,072	-	15,072	54,628
Reorganization costs	-	23,404	-	18,404	106,544
	604,035	191,259	1,128,709	356,847	3,704,477
Loss before other income	(604,035)	(191,259)	(1,128,709)	(354,347)	(3,669,477)
Other income					
Investment tax credit refund	53,077	75,050	53,077	75,050	190,692
Interest income	30,990	2,212	55,206	2,212	96,752
	84,067	77,262	108,283	77,262	287,444
Loss	(519,968)	(113,997)	(1,020,426)	(277,085)	(3,382,033)
Deficit, beginning of the period	(2,862,065)	(1,094,712)	(2,361,607)	(931,624)	-
Deficit, end of the period	\$ (3,382,033)	\$ (1,208,709)	\$ (3,382,033)	\$ (1,208,709)	\$ (3,382,033)
Basic and diluted loss per common share	\$ (0.01)	\$ -	\$ (0.03)	\$ (0.01)	
Weighted average number of common shares outstanding	39,287,366	24,970,560	38,522,001	23,671,946	

Critical Outcome Technologies Inc.
(a development stage company)
Interim Statements of Cash Flows
(Unaudited)

	Three Months Ended October 31,		Six Months Ended October 31,		Cumulative period April 30, 1999 (inception) to Oct 31, 2007
	2007	2006	2007	2006	
Cash provided by (used in):					
Operations:					
Loss	\$ (519,968)	\$ (113,997)	\$ (1,020,426)	\$ (277,085)	\$ (3,382,033)
Items not involving cash:					
Stock option compensation	223,075	-	382,984	-	1,058,453
Amortization of trademark	217	217	435	435	3,915
Amortization of furniture and equipment	26,863	6,021	48,303	14,333	104,167
Change in non-cash operating working capital	54,467	(54,707)	24,442	176,276	70,469
	(215,346)	(162,466)	(564,262)	(86,041)	(2,145,029)
Investing activities:					
Additions to office furniture, equipment and leaseholds	(65,748)	-	(125,693)	-	(154,605)
Investment in DDP Therapeutics	(112,200)	-	(117,306)	-	(117,307)
Additions to patents and trademark	(12,249)	(10,010)	(17,307)	(18,960)	(155,955)
	(190,197)	(10,010)	(260,306)	(18,960)	(427,867)
Financing activities:					
Issuance of common shares and warrants	421,472	2,400,886	1,361,031	2,166,068	5,128,451
Research advances	-	-	-	-	269,745
Notes payable and other advances	-	(25,000)	-	(25,000)	20,000
Repayment of obligation under capital lease	(5,026)	(4,012)	(9,966)	(7,955)	(19,629)
Due to shareholders	-	14,777	(7,850)	26,659	110,781
	416,446	2,386,651	1,343,215	2,159,772	5,509,348
Increase in cash	10,903	2,214,175	518,647	2,067,135	2,936,452
Cash and cash equivalents, beginning of period	2,925,545	23,424	2,417,801	170,464	-
Cash and cash equivalents, end of period	\$ 2,936,448	\$ 2,237,599	\$ 2,936,448	\$ 2,237,599	\$ 2,936,452
Represented by:					
Cash	\$ 419,994	\$ 2,237,599	\$ 419,994	\$ 2,237,599	419,994
Cash equivalent	2,516,454	-	2,516,454	-	2,516,454
	\$ 2,936,448	\$ 2,237,599	\$ 2,936,448	\$ 2,237,599	\$ 2,936,448
Supplemental cash flow information:					
Interest paid	\$ 1,786	\$ 2,044	\$ 22,774	\$ 2,343	\$ 25,700
Non-cash transactions:					
Acquisition of equipment under capital lease	\$ -	\$ -	\$ -	\$ -	\$ 62,274