Management Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended April 30, 2009

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Management Discussion and Analysis

Overview

The following discussion and analysis is a review of the financial condition and results of operations of Critical Outcome Technologies Inc. ("COTI" or the "Company") for the year ended April 30, 2009, and has been prepared with all information available up to and including July 14, 2009. This management discussion and analysis (MD&A) is intended to assist in understanding the dynamics of the Company's business and the key factors underlying its financial results. This analysis should be read in conjunction with the audited financial statements and notes thereto for the year ended April 30, 2009. The financial information contained herein has been prepared in accordance with Canadian generally accepted accounting principles ("GAAP"); however, the information as presented herein represents unaudited disclosure. All dollar amounts are expressed in Canadian dollars. Quarterly interim reports and additional supplementary information concerning the Company can be found on SEDAR at www.sedar.com.

Forward-looking Statements

This MD&A contains 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. Management of COTI considers the assumptions on which these forward-looking statements are based to be reasonable, but because of the many risk factors, cautions the reader that actual results could differ materially from those expressed or implied in these forward-looking statements.

The Company

COTI is a reporting issuer, based in London, Ontario, resulting from the amalgamation on October 13, 2006 of Aviator Petroleum Corp. (Aviator), a public company listed on the TSX Venture Exchange (TSXV) under the symbol AVC, and Critical Outcome Technologies Inc., a private company, under the provisions of the Business Corporations Act (Ontario). The amalgamation constituted the qualifying transaction of Aviator pursuant to the policies of the TSXV. The amalgamated company adopted the name Critical Outcome Technologies Inc. and listed on the TSX Venture Exchange (TSXV) under the symbol COT.

On November 27, 2007, the Company completed an acquisition of all outstanding common shares in the capital of 3015402 Ontario Inc. (formerly 6441513 Canada Inc.) operating as DDP Therapeutics (DDP), in which the Company had, up to the date of the acquisition, a 10% ownership interest. DDP was formed in early 2006 to develop a library of small cell lung cancer molecules discovered by the Company using its drug discovery technology.

On May 1, 2008, the Company amalgamated with this wholly owned subsidiary under the laws of the Province of Ontario.

Our Business

COTI is a biotechnology company focused on applying its proprietary computer-based technology, CHEMSAS®, to identify, profile and optimize commercially viable drug candidates at the earliest stage of preclinical drug development and thereby reduce the timeline and cost of getting new drug therapies to market.

Using CHEMSAS®, the Company is developing highly optimized libraries of 6 to 10 novel, proprietary, small molecules as potential drug candidates for specific therapeutic targets in diseases that have high morbidity and mortality and currently have either poor or no effective therapies. Following synthesis and completion of a core group of confirmatory in vitro and in vivo tests, the Company plans to license these molecules to interested pharmaceutical partners for further drug development and human trials. Currently, libraries in various stages of development include small cell lung cancer, adult acute leukemia, colorectal cancer and other cancers, HIV integrase inhibitors, multiple sclerosis and secretase inhibitors for the treatment of Alzheimer's disease.

In addition to licensing its targeted libraries, the Company may also take particularly promising individual molecules forward through various preclinical tests and Phase 1 clinical trials. This activity involves additional preclinical testing and associated costs with making an investigational new drug application (IND filing) in the United States or a new drug submission (NDS) in Canada and a plan for human Phase 1 clinical studies. These compounds would then be available for licensing or co-development with a pharmaceutical partner. In this regard, COTI, as previously announced, is preparing a Phase 1B Health Canada clinical trial submission based on the positive preclinical results achieved from COTI-2, its lead cancer molecule for small cell lung cancer and other cancers. Testing initiatives and planning for this event continued during the fourth quarter of fiscal 2009 with an NDS filing targeted for January 2010. The Company may also elect to file an IND submission with the Food and Drug Administration in the United States.

The Company is also in discussion with several multinational pharmaceutical and biotechnology organizations related to leveraging CHEMSAS® to identify lead candidates for targets of commercial interest to these prospective partners. Management believes that this collaboration approach could provide another revenue stream as the Company concurrently develops its own novel drug candidates. The Company's preferred commercialization strategy for collaborations incorporates an upfront fee and a shared risk/reward revenue model delivered through a series of milestone payments based on preclinical and clinical test results. Management believes that this service offering to prospective customers represents an efficient and effective approach for them in providing discovery stage compounds while enhancing value to the Company and its shareholders from the underlying CHEMSAS® technology.

Selected Annual Information

Table 1 provides selected financial data from the financial statements of the Company for the last three fiscal years.

Revenues during this three-year period came from contract services. The contract revenues generated in the fiscal years ended April 30 (FYE), 2008 and 2009 resulted from the

collaboration agreement with a major multinational pharmaceutical company announced in October 2007.

The increasing trend of the loss before other income reflects the Company's increased activity and expenditures in developing its technology and bringing its molecules forward to commercialization. During FYE 2009, the Company continued to build its infrastructure with the addition of four staff, which increased the Company's complement of employees to ten. Consistent with the staffing increases, stock-based compensation expense, salaries, and benefits continued to grow totaling $1,677,655 in FYE 2009 compared to $1,025,433 in FYE 2008 and $847,483 in FYE 2007. The other major cost category to grow in FYE 2009 was research and product development (R&D). R&D labour costs rose to $273,721 compared to $246,147 in FYE 2008 and $120,341 in FYE 2007. In addition, the Company incurred product development and synthesis costs with third parties in FYE 2009 totaling $1,093,796 compared to $148,981 in FYE 2008 and $263,400 in FYE 2007.

Table 1: Selected Financial Information

	FYE 2009	FYE 2008	FYE 2007
Revenue	$ 49,158	$ 30,822	$ 2,500
Loss before other income	(4,095,362)	(2,129,650)	(1,545,513)
Loss before other income per common share	$ (0.09)	$ (0.05)	$ (0.05)
Other income	176,343	227,278	115,530
Loss	(3,919,019)	(1,902,372)	(1,429,983)
Loss per common share	$ (0.08)	$ (0.05)	$ (0.05)
Dividends declared and paid	-	-	-
Total assets	6,917,125	9,696,761	2,710,280
Long term liabilities	$ -	$ 1,263	$ 21,287

Other income was earned from two sources; first, the cash recovery of refundable investment tax credits (ITC) of eligible expenditures and second, from interest income on the Company's cash balances. ITC revenue sources included the Canadian Scientific Research & Experimental Development (SR&ED) program, the Ontario Innovation Tax Credit (OITC) program and the Ontario Business Research Institute (OBRI) program. The Company expects that a significant amount of its spending related to synthesis, in vitro testing and in vivo testing will continue to qualify for ITCs under these programs in the foreseeable future. Interest income fluctuations reflect the year to year variances in cash balances and the interest rate trends occurring during the respective years.

At FYE 2009, cash, cash equivalents and short-term investments totaled $3,652,459 compared to $6,213,709 at FYE 2008. This decline of $2,561,250 reflects the use of cash to fund the operating loss during FYE 2009. Increased amortization of molecules for $226,856 represents the majority of the remaining decline in assets from the prior year. The decline is the reverse of

the growth in assets in FYE 2008, which consisted primarily of $3,172,967 paid for the assets of DDP Therapeutics and an increase in cash. The cash arose from two sources; first, a private placement that closed in November 2007 for net proceeds of $3,665,882 and second, the net proceeds of $2,374,206 arising from the exercise of share purchase warrants issued on the October 2006 private placement.

The Company's use of long-term debt has been minimal over the past three years with the final payments on capital lease obligations of $1,263 due in the first half of FYE 2010.

Annual Results of Operations Review

For FYE 2009, the Company reported a net loss of $3,919,019 or $0.08 per common share compared to a net loss of $1,902,372 or $0.05 per common share for the FYE 2008. This increased loss of $2,016,647 resulted primarily from the increased level of R&D testing activity. This included putting in place the personnel and business processes necessary to support these development efforts with a primary focus on the lead compound, COTI-2, which is targeted at a number of cancer indications.

Revenues

Revenue of $49,158 was recorded in FYE 2009 compared to $30,822 in FYE 2008 as the Company received collaboration payments under the terms of an oncology project that commenced in the fourth quarter of FYE 2008.

ITC income of $52,055 was generated in FYE 2009, based upon eligible expenditures, compared to $50,112 in FYE 2008. Under the Company's accounting policy, it only records ITC revenue when received due to the contingent nature of these credits that require review and approval by the tax authorities and this occurs well after the Company's year-end. The Company expects to continue receiving refundable ITCs for eligible expenditures under the OITC (10%) and OBRI (20%) programs for its FYE 2009 expenditures and for future years. The estimated cash refund for FYE 2009 that has not been booked by the Company in accordance with its accounting policy is $134,826.

The Company earned $124,288 in interest income on its cash, cash equivalents and short-term investments in FYE 2009 compared to $177,166 in FYE 2008. This decrease of $52,878 reflects the impact of lower interest rates available in the market on short-term high quality investments during FYE 2009 compared to FYE 2008 despite a higher average balance held by the Company during FYE 2009 (FYE 2009 – $4,933,084 FYE 2008 - $4,315,755).

Operating Expenses

Operating expenses increased from $2,160,472 for FYE 2008 to $4,144,520 for FYE 2009, an increase of $1,984,048. Four expense items, as set out in Table 2, accounted for $1,849,266 of this change or 93.2 % of the total expense increase.

Table 2: Major Expense Items

Expense	FYE 2009	FYE 2008	Change	Change as a % of Total
Research and product development [(1)]	$ 1,093,796	$ 148,981	$ 944,815	47.6%
Stock-based compensation	842,202	362,763	479,439	24.2%
Amortization	490,292	238,063	252,229	12.7%
Salaries and benefits	835,453	662,670	172,783	8.7%
	3,261,743	1,412,477	1,849,266	93.2%
Other expenses	882,777	747,995	134,782	6.8%
Total	$ 4,144,520	$ 2,160,472	$ 1,984,048	100.0%

[(1)] Consists of contracted; third party testing, synthesis, consulting and test material purchases.

Table 3 summarizes the third party R&D costs for FYE 2009 and FYE 2008 in conjunction with the internal R&D labour costs. Overall R&D increased $972,389 in FYE 2009 compared to FYE 2008. Contract R&D testing and materials increased $495,721 with the majority of this cost focused on COTI-2, the Company's lead cancer compound. Similarly, contract synthesis costs increased $449,094 with $386,284 or 82.4% of FYE 2009 expenditures for COTI-2. Internal R&D labour costs increased modestly reflecting the addition of staff in this area, a project manager and a senior scientist, in July and December 2008 respectively.

Table 3: R&D Costs

	FYE 2009	FYE 2008	Change
R&D testing, consulting and materials	$ 624,935	$ 129,214	$ 495,721
Synthesis	468,861	19,767	449,094
	1,093,796	148,981	944,815
R&D labour	273,721	246,147	27,574
	$ 1,367,517	$ 395,128	$ 972,389

Stock-based compensation increased by $479,439 reflecting the granting of 1,358,067 stock options in FYE 2009 compared to 330,000 stock options in FYE 2008. This increase reflects the timing of stock option grants to the Board of Directors for their efforts related to fiscal 2008 (Q1 2009) and fiscal 2009 (Q4 2009). In addition, 500,000 stock options were granted to the Chief Executive Officer as part of his employment package and 100,000 stock options to an employee under the employee's annual performance review.

The increase in the non-cash amortization expense of $252,229 at FYE 2009 compared to FYE 2008 relates primarily to a full year of amortization on the molecules acquired on the DDP purchase in November 2007. Table 4 sets out the comparative details of amortization for the past two years.

Table 4: Change in Amortization

	FYE 2009	FYE 2008	Change
Molecules	$ 388,896	$ 162,040	$ 226,856
Patents	6,319	4,270	2,049
Trademark	235	870	(635)
Equipment	94,842	70,883	23,959
	$ 490,292	$ 238,063	$ 252,229

The salaries and benefits increase of $172,783 primarily reflected additional staffing with the addition of a project manager, Chief Executive Officer, senior scientist and a controller. At FYE 2009, the Company had 10 employees compared to six at FYE 2008.

Use of Proceeds from Offering Memorandum of September 13, 2006

Coincident with the amalgamation with Aviator, the Company closed a financing pursuant to an Offering Memorandum (OM) wherein COTI set out how it intended to use the net proceeds raised for a maximum period of 24 months following the financing close. This twenty-four month period ended on October 29, 2008 during FYE 2009. Table 5 below compares that projection against the spending incurred for the 24-month period November 1, 2006 to October 31, 2008 for the respective categories outlined in the OM.

Table 5: Comparison of Projected Use of Net Cash Proceeds

	24 Month Period		Actual
Description of Use	Assuming Minimum [(1)]	Assuming Maximum [(1)]	Nov 1/06 to Oct 31/08
Administration	$ 310,673	$ 580,673	$ 1,291,400
Sales and marketing	326,206	609,706	545,614
Research and product development	916,484	1,712,984	1,243,250
Total	$ 1,553,363	$ 2,903,363	$ 3,080,264

[(1)] The minimum raise was $2.5M and maximum raise was $4.0M in the OM.

The actual spending for the 24-month period varied substantially from initial projections due to the higher administrative time and cost requirements of being a public company compared to expectations. R&D costs were within the range of the initial forecast. The actual proceeds raised, net of costs, was $2,178,877 with the higher spending noted in Table 5 being funded from a subsequent private placement of $984,233 in January 2007 and from the exercise of common share purchase warrants issued on the OM. At FYE 2009, 3,662,466 warrants issued on the OM were exercised, resulting in additional funds net of costs of issuance of $2,681,361 to fund this spending.

Two Year Operational Results Summary by Quarter

Table 6 below summarizes the operating results by quarter for the past two fiscal years.

Table 6: Two-Year Summary of Quarterly Results

FYE 2009	Q1 31-Jul	Q2 31-Oct	Q3 31-Jan	Q4 30-Apr	Full Year
Revenue	$ -	$ 5,982	$ 13,204	$ 29,972	$ 49,158
Loss before other income	(898,304)	(759,908)	(1,036,831)	(1,400,319)	(4,095,362)
Other income	39,533	34,906	38,530	63,374	176,343
Loss	(858,771)	(725,002)	(998,301)	(1,336,945)	(3,919,019)
Loss per common share	$ (0.02)	$ (0.01)	$ (0.02)	$ (0.03)	$ (0.08)

FYE 2008	Q1 31-Jul	Q2 31-Oct	Q3 31-Jan	Q4 30-Apr	Full Year
Revenue	$ -	$ -	$ 30,822	$ -	$ 30,822
Loss before other income	(524,674)	(604,035)	(331,269)	(669,672)	(2,129,650)
Other income	24,216	84,067	61,865	57,130	227,278
Loss	(500,458)	(519,968)	(269,404)	(612,542)	(1,902,372)
Loss per common share	$ (0.01)	$ (0.01)	$ (0.01)	$ (0.02)	$ (0.05)

The increasing quarterly loss reflects the Company's acceleration of research and product development as well as the administrative costs associated with the higher level of activity. The majority of the variation by quarter across the years, and year over year, is explained by a few expense categories as set out in Table 7.

Table 7: Select Quarterly Expense Categories

FYE 2009	Q1 31-Jul	Q2 31-Oct	Q3 31-Jan	Q4 30-Apr	Full Year
Research and product development	$ 133,214	$ 267,282	$ 380,790	$ 312,510	$ 1,093,796
Stock based compensation	232,621	24,056	86,921	498,604	842,202
Salaries and benefits	150,380	200,320	216,767	267,986	835,453
Amortization	118,997	133,139	117,541	120,615	490,292
Total of expense categories	$ 635,212	$ 624,797	$ 802,019	$ 1,199,715	$ 3,261,743
Total expense for the quarter	$ 898,304	$ 765,890	$ 1,050,035	$ 1,430,291	$ 4,144,520
Category expense as % of total expense	70.7%	81.6%	76.4%	83.9%	78.7%

FYE 2008	Q1 31-Jul	Q2 31-Oct	Q3 31-Jan	Q4 30-Apr	Full Year
Research and product development	$ 18,889	$ -	$ 12,713	$ 117,379	$ 148,981
Stock based compensation	159,909	223,075	(14,687)	(5,534)	362,763
Salaries and benefits	159,123	166,761	210,190	126,596	662,670
Amortization	21,658	27,080	14,110	175,215	238,063
Total of expense categories	$ 359,579	$ 416,916	$ 222,326	$ 413,656	$ 1,412,477
Total expense for the quarter	$ 524,674	$ 604,035	$ 392,913	$ 669,672	$ 2,191,294
Category expense as % of total expense	68.5%	69.0%	56.6%	61.8%	64.5%

The increasing trend in research and product development spending will continue in FYE 2010 as the Company continues to develop not only COTI-2 but its other drug candidates as well.

As noted in the Annual Results of Operations Review, the variability in the quarterly trend for stock-based compensation reflects timing as to option grants for the Board of Directors (Board) and for new employees combined with the impact of share price volatility over the quarters.

The increasing trend for salaries will be highly dependent upon additional staffing needs. At present, the Company sees the need to add science expertise to increase the pace and management of compound development as well as staff in its market research and business development areas to interface with prospective customers.

As the increase in amortization was a direct result of the molecules acquired in Q3 2008 from DDP with a quarterly amortization rate of $97,224, this cost will stay relatively flat going forward. Some increase will occur related to the amortization of patents as a patent for acute leukemia targeted compounds is expected in the United States during FYE 2010.

Analysis of Fourth Quarter 2009

For the three month period ended April 30, 2009 (Q-4 2009), the net loss amounted to $1,336,945 or $0.03 per share compared to a net loss of $612,542 or $0.02 per share for the period ending April 30, 2008 (Q-4 2008) as set out in Table 8 below. Revenue of $29,972 was generated in Q4 2009 under the terms of the oncology collaboration agreement. This increased loss of $724,403 relates primarily to significant year over year quarterly changes occurring in stock-based compensation, R&D, salaries and benefits and amortization.

Stock-based compensation increased $504,138 as 422,389 stock options were granted for Board compensation with a vested value of $415,208 in Q4 2009 compared to no option grants in Q4 2008. In addition, Q4 2008 included a recovery of previously recorded stock-based compensation of $24,350 because of vested options expiring unexercised and unvested options cancelled in that quarter.

Research and product development costs increased $195,131 compared to Q4 2008 with a primary focus on COTI-2 consistent with Q4 2008. In vivo tests of COTI-2 in various cancer cell lines amounted to $186,259 in Q4 2009. Additional expense on COTI-2 occurred with in vitro test expense and compound formulation costs as part of these expense items of $25,220 and

$65,379 respectively. Synthesis costs on HIV compounds as part of a collaboration agreement announced in Q2 2009 were also incurred in the synthesis expense of Q4 2009.

Table 8: Statements of Comprehensive Loss
For the three months ended April 30

	FYE 2009 Q4	FYE 2008 Q4	Change
Revenue	$ 29,972	$ -	$ 29,972
Expenses:			
Stock-based compensation	498,604	(5,534)	(504,138)
Research and product development	312,510	117,379	(195,131)
Salaries and benefits	267,986	126,596	(141,390)
Amortization	120,615	175,215	54,600
Professional fees	69,096	103,596	34,500
Marketing	63,931	27,421	(36,510)
General and adminstration	42,581	51,494	8,913
Corporate governance	28,426	48,133	19,707
Loss on patent disposal	24,735	-	(24,735)
Interest and bank charges	1,728	23,395	21,667
Loss on disposal of equipment	79	1,977	1,898
Loss before other income	(1,400,319)	(669,672)	(730,647)
Other income	63,374	57,130	6,244
Loss and comprehensive loss	$ (1,336,945)	$ (612,542)	$ (724,403)
Basic and diluted loss per common share	$ (0.03)	$ (0.02)	
Weighted average number of common shares outstanding	46,720,214	45,057,108	

The majority of the increase in salary and benefit costs of $141,390 in Q4 2009 compared to Q4 2008 reflects the increased staffing that occurred in Q1 and Q3 2009.

The decrease in amortization expense of $54,600 for Q4 2009 compared to Q4 2008 relates to the timing of amortization of the molecules purchased with the acquisition of DDP in Q3 2008. Amortization did not commence until Q4 2008 and represented five months amortization commencing from the date of purchase in Q3 2008.

Liquidity and Capital Resources

At FYE 2009, the Company had cash, cash equivalents and short-term investments of $3,652,459 compared to $6,213,709 at FYE 2008 for a decrease of $2,561,250 as summarized in Table 9 below.

Table 9: Summary of Capital Resources [(1)]

	FYE 2009	FYE 2008	Change
Increase (decrease) from:			
Operating activities	$ (2,534,065)	$ (1,223,707)	$ (1,310,358)
Investing activities excluding changes in short term investments	(291,006)	(1,011,885)	720,879
Financing activities before issuance of common shares and warrants	(370,115)	(76,535)	(293,580)
(Decrease) in capital resources before issuance of common shares and warrants	(3,195,186)	(2,312,127)	(883,059)
Issuance of common shares and warrants	633,936	6,108,035	(5,474,099)
(Decrease) increase in capital resources	(2,561,250)	3,795,908	(6,357,158)
Capital resources - beginning of year	6,213,709	2,417,801	3,795,908
Capital resources - end of year	$ 3,652,459	$ 6,213,709	$ (2,561,250)

(1) Capital resources = cash, cash equivalents and short-term investments.

The presentation of capital resources is not consistent with GAAP wherein cashflows = cash and cash equivalents.

Cash equivalents = investments of less than 90 days to maturity at date of acquisition.

The investing activities in FYE 2009 related to the purchase of leaseholds and computer hardware and software net of disposal proceeds in the amount of $148,660 and additions to patents for $142,346 offset by the change in short-term investments of $50,643. Investments in computer hardware, software and patents will continue as the Company relies extensively on state of the art PC computing power to run its profiling processes and the patent costs are an important part of the intellectual property protection for its molecules.

The financing activities reflect the continued payment under capital leases of $20,024 and the repayment of a shareholder's note due on July 31, 2008 for $351,886.

The increased cash at FYE 2008, as highlighted in Table 9, was due primarily to funds generated by the issuance of common shares and warrants. These funds came from two sources:

1. a November 2007 brokered private placement of 2,857,143 common shares to accredited investors in Ontario for net proceeds of $3,665,882;

2. the exercise of 3,769,773 warrants and subsequent issuance of common shares for net proceeds of $2,374,206 as set out in Table 12.

During FYE 2009 1,064,805 warrants were exercised as highlighted in Table 10 that provided net proceeds of $633,936 to support operations. Expected future funding from warrant exercises is limited, as only 16,902 warrants remain outstanding.

Table 10: Summary of Warrant Exercises

Warrant Description	April 30 2007	Warrants Exercised	Warrants Expired	April 30 2008	Warrants Exercised	Warrants Expired	April 30 2009
$0.40 warrants	533,332	533,332	-	-	-	-	-
$0.40 agent warrants	378,930	305,125	-	73,805	29,805	44,000	-
$0.60 warrants	1,000,000	-	-	1,000,000	1,000,000	-	-
$0.70 warrants	3,545,950	2,931,316	516,410	98,224	35,000	46,322	16,902
	5,458,212	3,769,773	516,410	1,172,029	1,064,805	90,322	16,902

The Company's working capital at FYE 2009 was $3,367,742 compared to $5,591,142 at FYE 2008. Current assets decreased to $3,804,279 at FYE 2009 from $6,363,171 at FYE 2008 for a decrease of $2,558,892, primarily due to the decrease in cash, cash equivalents and short-term investments. Current liabilities decreased $335,492 to $436,537 at FYE 2009 from $772,029 at FYE 2008. This decrease reflects the repayment of $351,886 due to a shareholder, Whippoorwill Holdings Limited, on the remaining balance of a $370,000 note taken back on the DDP purchase and a $33,360 increase in accounts payable related to the increased R&D spending levels.

The Company's long-term contractual obligations are summarized in Table 11.

Table 11: Contractual Obligations
for the years ended April 30

Obligation	Total	2010	2011	2012
Capital lease	$ 1,263	$ 1,263	$ -	$ -
Premises rent [(1)]	3,115	3,115	-	-
Research and development contracts	169,000	169,000	-	-
Total contractual obligations	$ 170,263	$ 170,263	$ -	$ -

(1) During fiscal 2009 the Company was assessed additional property taxes of $6,400, which the Company is contesting. Subsequent to year end, the lease agreement which expired on May 31, 2009 has been extended on a month to month basis with a 90 day notice period.

Based upon the balance of cash, cash equivalents and short-term investments at the year-end, management is confident it has sufficient cash resources to carry out its operations for FYE 2010 at planned operating levels. Given this relatively short horizon, the Company was looking at different sources of financing to extend and expand its operations and accordingly announced on June 10, 2009 its intention to raise additional funds through a private placement.

Private Placement

On June 10, 2009, the Company announced that it was undertaking a non-brokered private placement of common share units with accredited investors to raise up to $5,500,000. Each unit consists of one common share and one-half warrant with an issue price of $0.85. Each whole common share purchase warrant is exercisable for one common share at a price of $1.11 for up to thirty-six months following closing. If fully subscribed the Company will issue 6,470,588 common shares and 3,235,294 whole warrants. Costs of the private placement are estimated to be $390,000 if fully subscribed. Pursuant to TSX Venture Exchange regulations, the common shares issued under the private placement will be subject to a four-month hold from the date of closing.

Closing of the private placement is scheduled on or about July 24, 2009 and is subject to certain conditions, including normal regulatory approvals and final acceptance of the completed private placement by the TSX Venture Exchange.

Off Balance Sheet Arrangements

The Company has not historically utilized, nor currently is utilizing any off-balance sheet transactions.

Related Party Transactions

The related party transactions of a material amount that occurred during FYE 2009 are set out in Table 12 below. All transactions were incurred and recorded at the exchange amounts agreed to by the parties.

As highlighted in notes 7 and 8 of the FYE 2009 financial statements, there were interest-bearing notes owing to certain shareholders of $49,033 and $20,000 to a related party. All notes were maintained on a current basis throughout FYE 2009 and subsequent to the year end.

Table 12: Related Party Transactions

Name	Relationship	Business Purpose		Amount
Whippoorwill Holdings	Shareholder[(1)]	Computer lease payments as per lease agreement entered into Oct 1/05. Lease expired April 30/09 and the Company exercised its $1 buyout option. The lease was carried as a capital lease obligation on the balance sheet.	$	16,941
		Balance of a demand note for $370,000 with interest at 5% due on July 31, 2008 issued to the Company on purchase of DDP		351,886
		Interest paid during the year on interest bearing notes	$	5,830

[(1)] Wholly owned company of COTI's Chairman, Mr. John Drake. Mr. John Drake is a Shareholder, Officer and Director of the Company.

Outstanding Share Data

Outstanding share information as at the close of business July 14, 2009 is set out in Table 13.

Table 13: Outstanding Share Data

	Outstanding	Expiry Date
Common shares		
Authorized - unlimited		
Issued	46,720,214	
Fully diluted [(1)]	49,533,583	
Weighted average outstanding [(2)]	46,535,828	
Common share warrants		
$0.70 warrants	16,902	Jul 17/09 to Apr 10/10
Common share stock options		
$0.50	500,000	Oct 30/13
$0.64	1,035,000	Jan 11/12
$0.70	50,000	Jan 14/12
$0.75	309,078	Jun 9/13
$0.90	422,389	Feb 16/14
$1.00	130,000	Apr 30/12
$1.20	100,000	Jul 15/13
$1.35	150,000	Mar 25/12
$2.00	100,000	Oct 8/12
	2,796,467	

(1) Assumes conversion of all outstanding common share stock options and warrants.

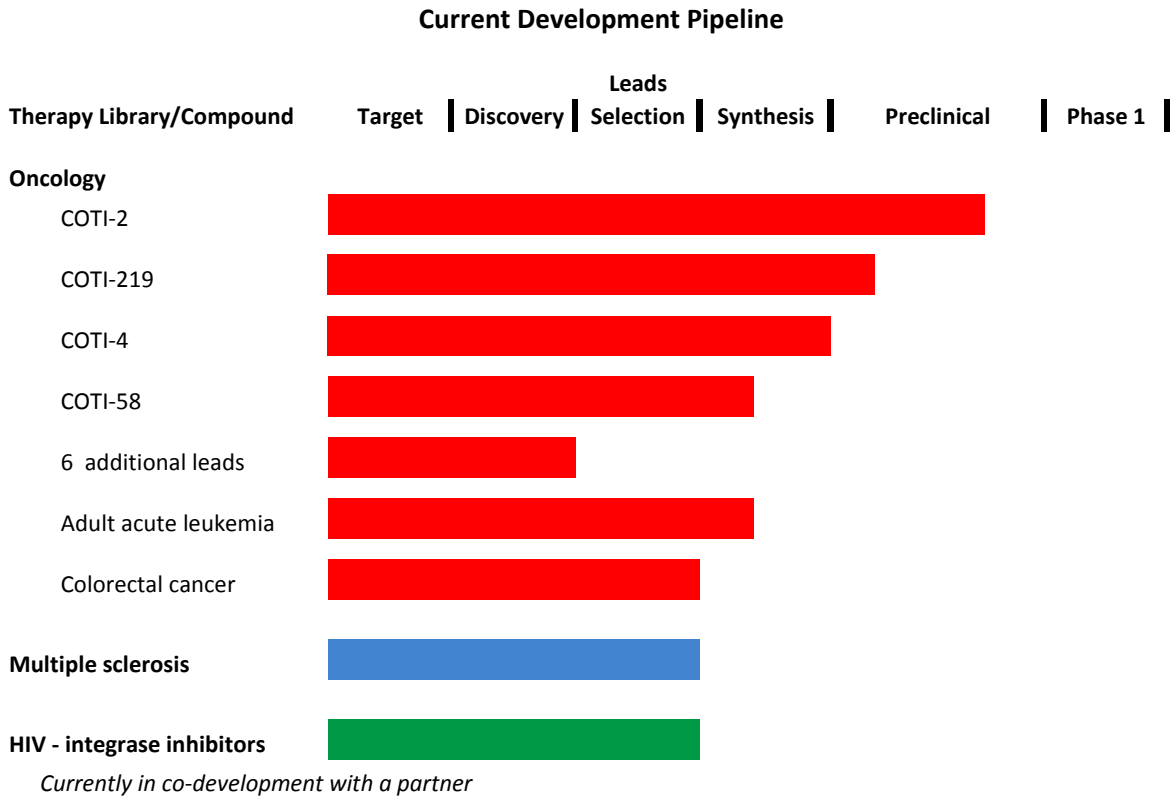
(2) Weighted average shares outstanding calculated from May 1, 2008 to July 14, 2009.

Operational Progress and Outlook – Q4 2009

Product Development

The Company continued to make progress in developing its drug candidate pipeline during Q4 2009. Figure 1 highlights the development status of specific compounds and libraries, in particular the positive development of the Company's lead oncology compound COTI-2.

Figure 1: COTI Product Development Pipeline at July 14, 2009



COTI-2

During Q4 2009, Company representatives advanced discussions with multiple pharmaceutical organizations regarding a prospective licensing agreement for COTI-2. Concurrently, the Company continued its investment in this promising molecule by carrying out additional animal experiments and laboratory work to determine an optimal formulation for PK-Tox animal testing. In addition to the formulation work, other toxicity experiments and Phase 1 enabling research activities were pursued with continued positive outcomes. The Company also bolstered its intellectual property (IP) position for COTI-2 with additional patent filings for additional therapy indications.

Subsequent to FYE 2009, the Company issued a press release on May 14, 2009 announcing significant and positive test results. A series of animal experiments carried out at a prominent American cancer research facility provided supportive evidence for the continued evaluation of

COTI-2 in combination with conventional first line single agent therapy for the treatment of endometrial cancer as follows:

- Up to 40% complete tumor regression was observed in combination treatment group (paclitaxel plus COTI-2) while no complete regression occurred in the paclitaxel treatment group (paclitaxel only).
- The combination treatment group had a statistically significant improvement in absolute survival compared with the paclitaxel group.
- The tumor growth inhibition was 71.5% greater in the combination treatment animals compared with animals treated with paclitaxel alone.
- The combination treatments were well tolerated.

A press release was also issued on July 2, 2009 announcing strong supportive evidence for the continued evaluation of COTI-2 in combination with conventional single agent therapy for the treatment of ovarian cancer:

- Tumor growth inhibition was significantly greater in the COTI-2 plus Doxil treated animals compared to the Doxil control group treated animals with:
  - 12.5 mg/kg COTI-2 + 2 mg/kg Doxil causing 57% tumor growth inhibition
  - 25 mg/kg COTI 2 + 2 mg/kg Doxil causing 54% tumor growth inhibition
  - 2mg/kg Doxil control causing 29% tumor growth inhibition
- The effectiveness of the combination treatments with COTI 2 was apparent early in the study (day 4) and increased throughout the remainder of the study.
- Combination treatments were well tolerated.

These are important results adding to the impressive data set of COTI-2 showing efficacy against multiple cancers and low toxicity. Moreover, these results are significant in light of recent industry media activity related to the merit of combination treatment in oncology, as many leading oncology experts believe that it is unrealistic for a single agent to be dramatically active in a broad population of cancer patients.

COTI-219

Experiments designed to determine the mechanism of action of COTI-219 continued during Q4 2009. These experiments will assist management with determining the nature and design of the next tests in preclinical development. The Company also moved forward with planning for additional animal experiments to contribute to a growing data package in preparation for licensing this compound in fiscal 2010.

COTI-4

During Q4 2009, the Company designed and commenced execution on an intellectual property strategy related to the derivative of the original COTI-4 scaffold. Once this additional patent work is completed, this molecule or an analog will move through preclinical testing during fiscal 2010.

Adult Acute Leukemia (AAL)

The AAL project is based upon patents received by COTI for three tyrosine kinase inhibitor scaffolds. Tyrosine kinase mutations have been identified as common factors in many cancers and may specifically promote uncontrolled white blood cell proliferation common in leukemia. Management continued actively seeking a licensing or co-development partner for these compounds during the quarter.

Colorectal Cancer

There was no further development of this library during Q4 2009 as resources, both time and money, were focused on the other initiatives.

Multiple Sclerosis

Management has delayed its decision regarding the further advancement of this program until a patent review opinion from the US Patent and Trademark Office (USPTO) related to a potentially competing patent claim is received. Multiple Sclerosis continues to be an important project for the Company and the program is likely to proceed when the intellectual property approach can be clearly defined in relation to this potentially competing claim.

Collaborations and Co-Development Projects

(i) Oncology Pilot Project

COTI delivered six synthesized drug candidates to its collaboration partner during the quarter. Testing and analysis of these compounds and further compound synthesis is ongoing.

(ii) HIV Integrase Co-development

As announced during Q2 2009, COTI established a co-development agreement with a major pharmaceutical company to advance up to six HIV-1 integrase inhibitor drug candidates identified using its CHEMSAS® drug discovery process.

The first two compounds are in the process of being synthesized. Upon completion of synthesis, the major pharmaceutical company will manage, conduct and fund agreed upon preliminary preclinical experiments as part of its evaluation of these compounds. Once the final experiments have been completed and the results have been received by COTI, the major pharmaceutical company will have an exclusive period to negotiate a licensing agreement with COTI for the select compounds. If an agreement is not reached within this period, COTI will be able to engage other potential partners for its HIV-1 integrase inhibitor program.

Future Collaboration Projects

Building on the lead discovery collaboration strategy implemented to date in pilot project agreements, the Company is carrying out a targeted business development campaign to global pharmaceutical and biotechnology organizations in order to market the benefits of working with COTI on lead discovery collaborations. Discussions with multiple prospective customers are currently on-going following meetings at BioPartnering North America in February 2009 and BIO in May 2009.

Industry and Economic Factors Affecting Performance

The biotechnology industry is generally regarded as high risk given the uncertain nature of developing drug candidates. COTI operates in the discovery stage of the drug development cycle, which is the initial preclinical segment of the cycle. On the other hand, success in this area can be highly rewarding. The realization of COTI's long-term potential is dependent upon the successful development and commercialization of molecule profiling services and drug candidates. The major industry and economic risk factors affecting realization of this potential in the past year are highlighted below.

(i) Economic Downturn and Financial Markets

During FYE 2009, the appetite for preclinical licensing deals diminished as the economic downturn throughout North America and then the rest of the world caused a contraction in financial markets to which biotechnology companies like COTI with perceived high risk were not immune. The decreased interest for early stage deals was felt throughout the Tier 1, 2 and 3 pharmaceutical companies as they chose to focus on licensing opportunities already in clinical trials preferably in phase 2 or 3 and moved to an inward focus on their own programs to conserve cash. In addition, the value of deals done in the market place came under pressure reflecting the more conservative stance adopted with the contraction in financial markets. Q3 and Q4 of FYE 2009 also saw the movement by major pharmaceutical companies to solve their drug pipeline issues through merger activities with like-minded partners. Three major pharmaceutical mergers were announced. This merger activity has created an inward focus as these companies moved to integrate their operations. This is predicted to continue throughout calendar 2009. These changes have had a ripple effect on other major pharmaceutical companies and throughout the industry as it digests both the impact of these mergers and the downturn of the economy in general.

The impact of these two major events was a dramatic tightening of available capital for risk taking and particularly in the biotechnology space as venture capital financing dried up and the general somber mood of the financial markets impacted risk perceptions particularly during the November 2008 to April 2009 period.

It was within this market downturn that COTI was working to obtain a licensing deal for its discovery stage lead compound COTI-2.

(ii) Dependence on Third Party Clinical Research Organizations

COTI depends on independent preclinical investigators, contract research organizations and other third party service providers to conduct preclinical trials for its drugs. It expects to continue to do so in the future. The Company relies heavily on these parties for successful execution of preclinical trials, but does not control many aspects of their activities, as the investigators are not its employees. These third parties may not complete activities on schedule, or may not conduct the testing in accordance with protocols or regulatory requirements. However, COTI bears responsibility for ensuring that its preclinical testing is conducted in accordance with the quoted investigational plan and protocols of the tests. This risk was a major factor in the Company's performance in FYE 2009, which the Company recognized by hiring a Project Manager to bring focus; required structure and discipline; and accountability to the relationship with these third party providers. This will continue to be an area of Company focus in FYE 2010 as the Company develops and implements a "preferred supplier program".

(iii) Dependence on Key Personnel

The Company depends on certain members of its management and scientific staff and the loss of services of one or more could adversely affect the operations. The Company's ability to manage growth effectively will require it to continue to implement and improve its management systems and to recruit and train new employees. There can be no assurance that the Company will be able to successfully attract and retain skilled and experienced personnel. The nature of the positions hired during FYE 2009, as noted earlier, reflects the degree of skill and expertise necessary for the Company to realize commercialization success. These hires were significant steps in FYE 2009 and additional scientific bench strength is seen as an important focus for FYE 2010 in the R&D, market analysis and business development areas of the Company.

(iv) Financing Requirements and Access to Capital

As highlighted under Liquidity and Capital Resources, the Company needs to seek additional funds beyond FYE 2010 to continue to develop its clinical and discovery programs and to move its compounds more rapidly through development in FYE 2010.

The Company will raise additional required funds for these purposes through public or private equity or debt financing, collaborations with other biopharmaceutical companies and/or from other sources. There can be no assurance that additional funding or partnerships that would foster successful commercialization of the products will be available on terms acceptable to the Company. COTI's future capital requirements will depend on many factors, such as the following:

1. establishing and maintaining collaborative partnering relationships;
2. continued scientific progress in our research, drug discovery and developmental programs;
3. the size of our programs and progress with preclinical and Phase 1B clinical programs;
4. time and costs involved in obtaining regulatory approvals;

5. competing technological and market developments, including the introduction by others of new therapies in our market; and
6. the general economic conditions and availability of capital in the equity markets for biotechnology companies.

(v) Additional Major Risks and Uncertainties

In addition to the economic challenges described above, the Company could also face ongoing uncertainties in FYE 2010 related to risks for which it has limited ability to influence, foresee, manage or change including:

a) rapid technological change;
b) potential clinical and product liability;
c) changes in healthcare reimbursement and funding mechanisms;
d) delay or abandonment of the commercialization of drugs under development;
e) government regulations and drug approval;
f) competition – technological and therapeutic;
g) dependence on collaborative partners, licensors and others;
h) patents and proprietary technology;
i) volatility of share price, absence of dividends and fluctuation of operating results.

Changes in Accounting Policies including Initial Adoption

(i) Adopted in 2009

The Canadian Institute of Chartered Accountants issued three new accounting standards that became effective for the Company for FYE 2009. The impact of these accounting policies on the Company's current business was not material. These policies are described below.

a) Section 1535 Capital Disclosures

This standard required disclosure of an entity's objectives, policies and processes for managing capital. What the Company regards as capital must be quantified. The Company must also disclose whether it has complied with any capital requirements and, if it has not complied, the consequences of such non-compliance.

b) Section 3862 Financial Instruments – Disclosures

HB 3862 placed greater emphasis on disclosures about risks related to recognized and unrecognized financial instruments and how these risks are managed. Increased disclosure was required around liquidity, currency and other price risks. Net income sensitivity was required for changes in market risk factors not just interest rates as in HB 3861 the predecessor section. Other specific disclosures not previously required to be disclosed include; movements into or out of a fair value classifications, details of collateral pledged or collateral held, reconciliation of changes in financial asset allowance accounts for credit losses, multiple embedded derivatives in compound financial instruments and details of debt defaults.

c) Section 3863 Financial Instruments – Presentation

This standard carried forward unchanged the presentation standards previously embodied in HB 3861, the predecessor section, adopted in FYE 2008.

(ii) To be Adopted in 2010

The Canadian Institute of Chartered Accountants issued three new accounting standards that will apply to the Company for its FYE 2010. The impact of these accounting policies on the Company's current business is not anticipated to be material. These policies are described below.

(a) Goodwill and intangible assets:

In February 2008, the Accounting Standards Board ("AcSB") issued Section 3064, "Goodwill and Intangible Assets", which replaces Section 3062, "Goodwill and Other Intangible Assets" and Section 3450, "Research and Development Costs". This Section establishes standards for the recognition, measurement, and disclosure of goodwill and intangible assets. The Company is currently evaluating the impact of this new standard on its financial statements, notably on the molecules and its granted and in progress patents. The adoption of this standard is not expected to have a significant effect on the amounts reported in the financial statements.

(b) International financial reporting standards (IFRS):

In February 2008, the AcSB confirmed that Canadian GAAP for publicly accountable enterprises would converge with IFRS effective in calendar year 2011, with early adoption allowed starting in calendar year 2009. IFRS uses a conceptual framework similar to Canadian GAAP, but there are significant differences on recognition, measurement and disclosures. For the Company, the change to reporting financial results under IFRS will be required for the interim and annual financial statement reporting periods of its fiscal year ending April 30, 2012. However, in order to provide comparative data for this reporting period the Company will also capture its financial results under IFRS commencing with reporting for the quarter ended July 31, 2010 as part of its April 30, 2011 year end.

The Company has commenced the process to transition from Canadian GAAP to IFRS. The transition plan includes the following 3 phases:

- Diagnostic – this phase involves the preparation of high level diagnostic analyses of key financial statement items that are expected to be impacted upon transition to IFRS. As part of this process, the Company expects to identify key data requirements and process modifications that will be required before transition occurs.

- Development – this phase involves more detailed analyses of the impact of IFRS on key financial statement items and focuses on implementation differences and issue resolution. During this stage of the transition process, management will finalize financial statement component evaluations and make decisions on accounting

policy options. The development phase will conclude with the preparation of a proforma set of financial statements prepared in accordance with IFRS.

- Implementation – this phase involves the execution of changes to financial reporting and business processes that will enable the Company to compile financial statements, which are compliant with IFRS. Accounting policies compliant with IFRS will be approved and entrenched in the financial reporting system.

The Company has completed the diagnostic phase of its IFRS transition plan. The development phase is underway and key component evaluations are in the process of being prepared for key items identified in the diagnostic phase.

(c) General standards of financial statement presentation:

In January 2008, Section 1400, "General Standards of Financial Statement Presentation" was amended to require disclosure of material uncertainties that cast significant doubt as to an entity's ability to continue as a going concern. This new standard is expected to have minimal impact on the financial statements.