

Management Discussion and Analysis of Financial Condition and Results of Operations

Fiscal 2011 – Second Quarter for the three and six month periods ended October 31, 2010

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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 quarter ended October 31, 2010, and has been prepared with all information available up to and including December 9, 2010. 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, 2010. The financial information contained herein has been prepared in accordance with Canadian generally accepted accounting principles ("GAAP") unless specifically identified otherwise; however, the information as presented herein represents unaudited disclosure. All dollar amounts are expressed in Canadian dollars. Quarterly interim reports, the Company's annual information form (AIF) 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 that constitute "forward-looking information" (FLI) concerning the Company's plans for its operations and other matters within the meaning of applicable Canadian provincial securities laws. Forward-looking statements are necessarily based on a number of estimates and assumptions that are inherently subject to significant business, economic and competitive uncertainties and contingencies. All statements that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future are forward-looking statements. Forward-looking statements are subject to a variety of risks and uncertainties that may cause the actual events or results of the Company to differ materially from those discussed in the forward-looking statements, and even if such actual events or results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on, the Company.

Any statements that express or involve discussion with respect to predictions, expectations, beliefs, plans, projections, objectives, or assumptions of future events or performance (often, but not always, using words or phrases such as "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "estimates" or "intends", or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved) are not statements of historical fact and may be forward-looking statements. The major forward-looking statements included in this MD&A are set out in Table 1.

Table 1: Forward-looking statements

| MD&A Section Heading | Nature of Forward-Looking Information Disclosed |
|-------------------------|---|
| Our Business | Plans to license or co-develop molecules Plans for future research and development activities which could lead to a Phase 1 clinical trial Plans for future application of the CHEMSAS® technology The Company's commercialization strategy for collaborations |



| MD&A Section | Nature of Forward-Looking Information Disclosed |
|----------------------------------|--|
| Heading | |
| Liquidity and Capital | Expectations of future long term contractual commitments |
| Resources | Sufficiency of cash resources to carry out operations for the remainder of the fiscal year |
| Operational Progress and Outlook | The potential for future licensing and collaboration opportunities with near term emphasis on COTI-2 |
| | The requirement to put certain projects on hold until funding is obtained |
| | The expectation for AML and HIV programs to move ahead once |
| | necessary funding is obtained |
| Industry and | The expected continuation of losses until a revenue transaction |
| Economic Factors | is secured |
| Affecting Performance | Plans to negotiate future licensing agreements |
| | Plans to raise additional financing through different venues and |
| | mechanisms available to the Company |
| Changes in Accounting | The progression of the IFRS transition plan and project |
| Policies Including | completion estimates |
| Initial Adoption | The unlikely adoption of new accounting standards issued by the |
| | Accounting Standards Board as the Company is not anticipating |
| | any future business combinations |

The basis for these forward-looking statements is management's current expectations, estimates, projections and assumptions. By their nature, they are not guarantees of future performance as they involve significant risks and uncertainties.

The main assumptions used by management to develop the forward-looking information include the following:

- An ability to obtain sufficient financing to support working capital requirements and fund further research and development initiatives over the long term
- An ability to further develop the CHEMSAS® technology for internal and collaborative purposes
- A continuation of favourable preclinical test results from the COTI-2 program and an ability to meet the requirements for regulatory approval
- Obtaining patent protection for the Company's compounds and other intellectual property
- An ability to attract and retain skilled and experienced personnel and to maintain relationships with third party clinical research organizations

Management of COTI considers the assumptions on which these forward-looking statements are based to be reasonable. However, management cautions the reader that because of the many risk factors as set out in the Company's AIF, including those specifically described below as of particular importance to the assumptions above, actual results could differ materially from those expressed or implied in these forward-looking statements. Readers are cautioned that



these assumptions may prove to be wrong, and as such, undue reliance should not be placed on forward-looking statements.

The main risk factors that will influence the Company's ability to realize its forward-looking statements include:

- The ability to raise sufficient financing for continuing operations and development
- The ability to establish customer relationships leading to licensing agreements for the Company's compounds
- The ability to generate third-party demand for outputs from the CHEMSAS® technology
- Continued favorable preclinical test results
- The ability to meet regulatory requirements to commercialize compounds
- The ability to obtain patent protection for the Company's compounds
- The ability to raise sufficient financing to maintain its workforce.

This FLI is provided as of the date of this MD&A and the Company will not undertake any obligation to publicly update or revise any forward-looking information, whether because of new information, future events, or otherwise, except as required by securities laws.

The Company

COTI is a London, Ontario based company resulting from the amalgamation on October 13, 2006 of Aviator Petroleum Corp. (Aviator), a public company listed on the TSX Venture Exchange (TSXV), and Critical Outcome Technologies Inc., a private company under the provisions of the *Business Corporations Act* (Ontario). The amalgamation constituted the qualifying transaction for Aviator pursuant to the policies of the TSXV. The amalgamated company adopted the name Critical Outcome Technologies Inc. and its common shares were listed and posted for trading on the TSXV under the symbol COT on October 30, 2006.

On November 27, 2007, the Company completed an acquisition of all the 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 2005 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 potential new drug candidates at the discovery stage of preclinical drug development and thereby reduce the timeline and cost of getting new drug therapies to market.

The Company is developing focused portfolios of novel, proprietary and optimized small molecules as potential drug candidates for specific therapeutic targets in diseases that have high



morbidity and mortality rates and currently have either poor or no effective therapies. COTI has concentrated on developing drug candidates for the treatment of various cancers, human immunodeficiency virus (HIV), multiple sclerosis and Alzheimer's disease. Cancer types specifically targeted include small cell lung, adult myelogenous leukemia, ovarian, endometrial, pancreatic, brain, breast and colon.

Although the Company intends to license its targeted portfolios following synthesis and completion of confirmatory preclinical tests, the Company may also choose to take particularly promising individual molecules forward through various preclinical tests to Phase 1 clinical trials. In this regard, COTI is currently focused on preparing for a Phase 1 clinical trial submission based on the positive preclinical results achieved for COTI-2, its lead cancer molecule, against a number of cancer indications. Current testing initiatives and planning target an IND filing in the latter part of calendar 2011 or early 2012. These compounds would then be available for licensing or co-development with a partner as Phase 1 ready compounds.

The Company also seeks to leverage CHEMSAS® to identify targeted lead candidates of commercial interest to pharmaceutical and biotechnology organizations on a collaborative basis. The Company's preferred commercialization strategy for collaborations involves an upfront fee and a shared risk/reward revenue model delivered through a series of milestone payments based on preclinical and clinical test results. This service offering provides prospective customers with an efficient and effective approach for generating discovery stage compounds while enhancing value to COTI and its shareholders from the underlying CHEMSAS® technology. This collaboration approach has resulted in two engagements with multinational pharmaceutical companies in the past few years with one for an HIV program remaining active.

Financial Review of Operations

Revenues

There were no operating revenues recognized in the quarter ended October 31, 2010 (Q2-F'11) or for the six months ended October 31, 2010 (YTD-F'11). Similarly, no operating revenues were recognized in the quarter ended October 31, 2009 (Q2-F'10) or for the six months ended October 31, 2009 (YTD-F'10). The Company continued to pursue a licensing agreement for its lead preclinical oncology compound, COTI-2, during Q2-F'11 with several interested parties but without reaching agreement on contractual terms.

Investment tax credit (ITC) income of \$122,244 was earned in Q2-F'11, compared to \$137,301 in Q2-F'10. The \$15,057 drop in ITC income is due to a decline in research and development expenditures eligible for ITC programs, which coincides with an overall drop in research and development spending year over year.

The Company earned \$2,708 in interest income on its cash and cash equivalents in Q2-F'11, compared to \$5,412 earned on cash, cash equivalents and short-term investments in Q2-F'10. This decrease of \$2,704 reflects the impact of lower interest rates available in the market on short-term high quality investments during Q2-F'11 compared to Q2-F'10 and the lower average balances (Q2-F'11 - \$1,487,549; Q2-F'10 - \$2,936,270) held by the Company.



Operating Expenses

Operating expenses decreased from \$1,119,391 in Q2-F'10 compared to \$510,123 for Q2-F'11, a decrease of \$609,268. Operating expenses decreased from \$2,106,291 for YTD-F'10 to \$1,062,326 for YTD-F'11, a decrease of \$1,043,965. Three major expense items, as set out in Table 2, accounted for \$593,702 of the comparable quarterly change or 97.4% of the total decrease. Table 3 indicates these same expense items accounted for \$1,016,381 of the YTD-F'11 change or 97.4% of the total decrease compared to YTD-F'10.

Table 2: Major Expense Items - Comparative Second Quarter Ended October 31

| Expense | Q2-F'11 | Q2-F'10 | Change | Change as % of Total |
|----------------------------------|-------------------|--------------|-----------|-------------------------|
| Stock-based compensation | \$ (35,473) \$ | 309,992 \$ | (345,465) | 56.7% |
| Research and product development | 134,769 | 292,037 | (157,268) | 25.8% |
| General and administration | 226,842 | 317,811 | (90,969) | 14.9% |
| | 326,138 | 919,840 | (593,702) | 97.4% |
| Other expenses | 183,985 | 199,551 | (15,566) | 2.6% |
| Total | \$ 510,123 \$ | 1,119,391 \$ | (609,268) | 100.0% |

Table 3: Major Expense Items – Comparative YTD Ended October 31

| | | | | Change as |
|----------------------------------|-----------------|-----------------|-------------------|------------|
| Expense | YTD-F'11 | YTD-F'10 | Change | % of Total |
| Stock-based compensation | \$ (104,790) | \$ 343,594 | \$ (448,384) | 43.0% |
| Research and product development | 331,081 | 717,897 | (386,816) | 37.1% |
| General and administration | 466,246 | 647,427 | (181,181) | 17.3% |
| | 692,537 | 1,708,918 | (1,016,381) | 97.4% |
| Other expenses | 369,789 | 397,373 | (27,584) | 2.6% |
| Total | \$ 1,062,326 | \$ 2,106,291 | \$ (1,043,965) | 100.0% |

The most significant decline in quarterly and year to date expenses is due to a decrease in stock-based compensation expense. The recovery of stock-based compensation expense reflected in Table 2 for Q2-F'11 is primarily the result of the remeasurement of stock options issued to consultants in prior periods. The expense recovery from the remeasurement was partially offset by stock-based compensation expense recognized on previously issued options, which vest over time, and on the October 28, 2010 option grant to members of the Board of Directors, which also vest over time. The options granted to the Board of Directors in Q2-F'10 were assigned a larger fair value using the Black-Scholes option pricing model and they vested immediately upon grant, hence the stock-based compensation expense recognized in Q2-F'10 was substantially larger than in Q2-F'11.

The stock-based compensation recovery for YTD-F'11 also includes the recovery of \$110,509 in previously recognized stock-based compensation expense on 300,000 unvested options cancelled upon the resignation of its previous Chief Executive Officer (CEO) on June 30, 2010. Tables 4 and 5 provide a breakdown of the components of stock-based compensation expense for the three and six month periods ended October 31, 2010 and 2009 respectively.



Table 4: Stock-Based Compensation Expense – Comparative Quarters Ended October 31

| | | | | Change as a % |
|--|-------------------|------------|-----------|---------------|
| | Q2-F'11 | Q2-F'10 | Change | of Total |
| Compensation recognized on new option grants | \$ 2,481 \$ | 276,390 \$ | (273,909) | 79.3% |
| Compensation recognized on existing options | 10,530 | 33,602 | (23,072) | 6.7% |
| Compensation adjusted on re-measured options | (48,484) | - | (48,484) | 14.0% |
| | \$ (35,473) \$ | 309,992 \$ | (345,465) | 100.0% |

Table 5: Stock-Based Compensation Expense – Comparative YTD Ended October 31

| | | | | Change as a % |
|--|--------------------|------------|-----------|---------------|
| | YTD-F'11 | YTD-F'10 | Change | of Total |
| Compensation recognized on new option grants | \$ 2,481 \$ | 276,390 \$ | (273,909) | 61.1% |
| Compensation recognized on existing options | 51,722 | 67,204 | (15,482) | 3.5% |
| Compensation adjusted on re-measured options | (48,484) | - | (48,484) | 10.8% |
| Compensation adjusted on cancelled options | (110,509) | - | (110,509) | 24.6% |
| | \$ (104,790) \$ | 343,594 \$ | (448,384) | 100.0% |

Research and development (R&D) activity was scaled down in Q1-F'11 and Q2-F'11 as a strategic decision to reduce the Company's cash usage and thereby lengthen the Company's operational timeline while seeking additional financing. Tables 6 and 7 provide a breakdown of R&D costs for the three and six month periods ended Q2-F'11 and Q2-F'10 by major expense type.

Table 6: R&D Expenses – Comparative Quarters Ended October 31

| | | | | Change as a % |
|---------------------------------------|------------------|------------|-----------|---------------|
| | Q2-F'11 | Q2-F'10 | Change | of Total |
| R&D testing, consulting and materials | \$ 40,135 \$ | 78,740 \$ | (38,605) | 24.6% |
| Synthesis | 1,265 | 98,473 | (97,208) | 61.8% |
| | 41,400 | 177,213 | (135,813) | 86.4% |
| Labour including benefits | 88,113 | 109,141 | (21,028) | 13.4% |
| Other | 5,256 | 5,683 | (427) | 0.2% |
| Total | \$ 134,769 \$ | 292,037 \$ | (157,268) | 100.0% |

Table 7: R&D Expenses – Comparative YTD Ended October 31

| | | | | Change as a % |
|---------------------------------------|------------------|------------|-----------|---------------|
| | YTD-F'11 | YTD-F'10 | Change | of Total |
| R&D testing, consulting and materials | \$ 70,688 \$ | 235,500 \$ | (164,812) | 42.6% |
| Synthesis | 59,145 | 258,020 | (198,875) | 51.4% |
| | 129,833 | 493,520 | (363,687) | 94.0% |
| Labour including benefits | 192,166 | 215,637 | (23,471) | 6.1% |
| Other | 9,082 | 8,740 | 342 | -0.1% |
| Total | \$ 331,081 \$ | 717,897 \$ | (386,816) | 100.0% |

For Q2-F'11, contract testing, consulting and materials decreased \$38,605 due to reductions in R&D activities. Consistent with Q2-F'10, the majority of this cost focused on the Company's lead oncology compound, COTI-2, with spending on COTI-2 of \$39,751 or 99.04% in Q2-F'11 and \$70,382 or 89.39% in Q2-F'10. For YTD-F'11 contract testing, consulting and materials decreased



\$164,812. Again, the majority of this cost focused on COTI-2 with spending of \$68,896 or 97.46% in YTD-F'11 and \$197,240 or 83.8% in YTD-F'10.

For Q2-F'11, synthesis costs decreased \$97,208 compared to Q2-F'10. In Q2-F'10, \$2,990 or 3.04% of synthesis expenditures were for COTI-2, compared to \$1,265 or 100% in Q2-F'11. For YTD-F'11, synthesis costs decreased \$198,875 compared to YTD-F'10. In YTD-F'10, \$50,305 or 19.5% of synthesis expenditures were for COTI-2, compared to \$59,145 or 100% in YTD-F'11. Unlike Q2-F'11 and YTD-F'11, the majority of synthesis cost expenditures in Q2-F'10 and YTD-F'10 focused on the Company's collaboration synthesis activities.

R&D labour costs decreased slightly in Q2-F'11 and YTD-F'11 compared to Q2-F'10 and YTD-F'10. \$18,105 in salary costs of the President, CEO and Chief Scientific Officer (CSO) have been allocated to general and administration expense (G&A) in Q2-F'11, or \$21,374 on a year to date basis, to recognize his non-R&D related activity since the former CEO resigned in June 2010. There were no changes in R&D staff levels during the comparable periods.

The decrease in G&A of \$90,969 for Q2-F'11 compared to Q2-F'10, and \$181,181 for YTD-F'11 compared to YTD-F'10, relates primarily to decreased salaries and benefits, professional fees, travel expenses and director compensation. Tables 8 and 9 provide a breakdown of G&A by major expense type for the comparable three and six month fiscal periods ended October 31 respectively.

Table 8: G&A – Comparative Quarters Ended October 31

| | | | | Change as a % |
|---------------------------------------|---------------|------------|-------------|---------------|
| | Q2-F'11 | Q2-F'10 | Change | of Total |
| Salaries and benefits | \$ 88,368 | \$ 131,785 | \$ (43,417) | 47.7% |
| Professional fees - financing efforts | - | 20,419 | (20,419) | 22.4% |
| Corporate governance | 44,099 | 54,857 | (10,758) | 11.8% |
| Promotion and travel | 3,583 | 20,708 | (17,125) | 18.9% |
| Professional fees - other | 59,249 | 45,836 | 13,413 | -14.7% |
| | 195,299 | 273,605 | (78,306) | 86.1% |
| Other | 31,543 | 44,206 | (12,663) | 13.9% |
| Total | \$ 226,842 | \$ 317,811 | \$ (90,969) | 100.0% |

Table 9: G&A – Comparative YTD Ended October 31

| | | | | Change as a % |
|---------------------------------------|------------------|------------|-----------|---------------|
| | YTD-F'11 | YTD-F'10 | Change | of Total |
| Salaries and benefits | \$ 198,455 \$ | 275,469 \$ | (77,014) | 42.5% |
| Professional fees - financing efforts | - | 31,950 | (31,950) | 17.6% |
| Corporate governance | 61,383 | 97,281 | (35,898) | 19.8% |
| Promotion and travel | 9,604 | 55,489 | (45,885) | 25.3% |
| Professional fees - other | 134,672 | 112,018 | 22,654 | -12.5% |
| | 404,114 | 572,207 | (168,093) | 92.7% |
| Other | 62,132 | 75,220 | (13,088) | 7.3% |
| Total | \$ 466,246 \$ | 647,427 \$ | (181,181) | 100.0% |

The salaries and benefits figures for Q1-F'10 and YTD-F'10 reflect staff levels that included a dedicated CEO. The comparable Q1-F'11 and YTD-F'11 salaries and benefits were lower



following the CEO's resignation effective June 30, 2010. This decrease in CEO salary was partially offset by a year to date salary allocation of \$21,374 recognizing the G&A activity of the former President and CSO who was also appointed CEO effective July 1, 2010.

The Company incurred substantial professional fees and travel costs in its efforts to facilitate a non-brokered private placement in Q1-F'10 and Q2-F'10. A decision was made to withdraw the placement in August 2009 due to unfavourable market conditions and consequently professional fees related to the financing effort were expensed. No similar action occurred in Q1-F'11 or Q2-F'11 resulting in lower travel costs and professional fees in these periods.

Corporate governance costs decreased in Q2-F'11 and YTD-F'11 primarily due to: fewer meetings of the Board of Director and its committees; two fewer members on the Board; and a decrease in the cash meeting fees paid effective May 1, 2010, which coincided with the beginning of Q1-F'11.

Other professional fees increased primarily due to consulting contracts initiated in the last quarter of fiscal 2010 that were still in place at Q2-F'11. These consulting arrangements contributed \$33,750 to professional fee costs in Q2-F'11, or \$75,576 on a year to date basis, with no comparable expense in Q2-F'10 or YTD-F'10. This increase in consulting costs was partially offset by a drop in human resource consulting costs of \$13,700 from Q2-F'10, or \$31,230 from YTD-F'10.

Financial Results Summary by Quarter

Table 10 summarizes the financial results of COTI by quarter for the past two fiscal years and the two most recent quarters.

Table 10: Summary of Quarterly Financial Results

| FYE 2011 | Q1 | Q2 | Q3 | | Q4 | | 6 Months |
|--------------------------|--------------|--------------|---------|---|---------|---|--------------|
| | 31-Jul | 31-Oct | 31-Jan | | 30-Apr | | YTD |
| Revenue | \$ - | \$ - | \$ | - | \$ | - | \$ - |
| Loss before other income | (552,203) | (510,123) | | - | | - | (1,062,326) |
| Other income | 2,931 | 124,952 | | - | | - | 127,883 |
| Loss | (549,272) | (385,171) | | - | | - | (934,443) |
| Loss per common share | \$ (0.01) | \$ (0.01) | \$ - | | \$ - | | \$ (0.02) |

| FYE 2010 | Q1 | Q2 | Q3 | Q4 | | |
|--------------------------|--------------|--------------|--------------|--------------|----|-------------|
| | 31-Jul | 31-Oct | 31-Jan | 30-Apr | | Full Year |
| Revenue | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Loss before other income | (986,899) | (1,119,391) | (775,963) | (833,037) | (| (3,715,290) |
| Other income | 7,810 | 142,713 | 2,746 | 1,711 | | 154,980 |
| Loss | (979,089) | (976,678) | (773,217) | (831,326) | (| (3,560,310) |
| Loss per common share | \$ (0.02) | \$ (0.02) | \$ (0.02) | \$ (0.02) | \$ | (0.08) |



| FYE 2009 | Q1 | Q2 | Q3 | Q4 | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|
| | 31-Jul | 31-Oct | 31-Jan | 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) |

The decreasing quarterly loss trend evident since Q1-F'10 reflects the Company's decision to reduce R&D and discretionary spending in moderating the Company's use of cash. The majority of the variation by quarter across the years, and year over year, is explained by three expense categories as set out in Table 11.

Table 11: Selected Quarterly Expense Categories

| FYE 2011 | Q1 | Q2 | Q3 | | Q4 | | 6 | 6 Months | |
|--|---------------|---------------|--------|----|--------|----|----|-----------|--|
| | 31-Jul | 31-Oct | 31-Jan | | 30-Apr | | | YTD | |
| General and administration | \$ 239,404 | \$ 226,842 | \$ | - | \$ | - | \$ | 466,246 | |
| Research and product development | 196,312 | 134,769 | | - | | - | | 331,081 | |
| Stock-based compensation | (69,317) | (35,473) | | - | | - | | (104,790) | |
| Total of expense categories | \$ 366,399 | \$ 326,138 | \$ | - | \$ | - | | 692,537 | |
| Total expense for the quarter | \$ 552,203 | \$ 510,123 | \$ | - | \$ | - | | 1,062,326 | |
| Expense categories as a % of total expense | 66.4% | 63.9% | 0.0 | 0% | 0. | 0% | | 65.2% | |

| FYE 2010 | Q1 | | Q2 | Q3 | Q4 | |
|--|---------------|----|-----------|---------------|---------------|--------------|
| | 31-Jul | | 31-Oct | 31-Jan | 30-Apr | Full Year |
| General and administration | \$ 329,615 | \$ | 317,812 | \$ 286,793 | \$ 312,262 | \$ 1,246,482 |
| Research and product development | 425,860 | | 292,037 | 233,476 | 165,637 | 1,117,010 |
| Stock-based compensation | 33,602 | | 309,992 | 52,895 | 174,243 | 570,732 |
| Total of expense categories | \$ 789,077 | \$ | 919,841 | \$ 573,164 | \$ 652,142 | \$ 2,934,224 |
| Total expense for the quarter | \$ 986,899 | \$ | 1,119,391 | \$ 775,963 | \$ 833,037 | \$ 3,715,290 |
| Expense categories as a % of total expense | 80.0% | | 82.2% | 73.9% | 78.3% | 79.0% |

| FYE 2009 | Q1 | | Q2 | Q3 | Q4 | |
|--|----|---------|---------------|-----------------|-----------------|--------------|
| | | 31-Jul | 31-Oct | 31-Jan | 30-Apr | Full Year |
| General and administration | \$ | 258,814 | \$ 194,314 | \$ 283,366 | \$ 296,097 | \$ 1,032,591 |
| Research and product development | | 201,895 | 348,786 | 485,113 | 422,758 | 1,458,552 |
| Stock-based compensation | | 232,621 | 24,056 | 86,922 | 498,603 | 842,202 |
| Total of expense categories | \$ | 693,330 | \$ 567,156 | \$ 855,401 | \$ 1,217,458 | \$ 3,333,345 |
| Total expense for the quarter | \$ | 898,304 | \$ 765,890 | \$ 1,050,035 | \$ 1,430,291 | \$ 4,144,520 |
| Expense categories as a % of total expense | | 77.2% | 74.1% | 81.5% | 85.1% | 80.4% |

The variability in the first two quarters of FYE 2011 is largely due to the impact of the recovery of \$158,993 in previously recognized stock-based compensation costs, of which \$110,509 was recognized in Q1-F'11 on the cancellation of options upon the resignation of the former CEO and \$48,484 was recognized in Q2-F'11 on the re-measurement of consultant options.

Liquidity and Capital Resources

At Q2-F'11, the Company had cash and cash equivalents of \$1,029,721 compared to \$1,945,376 of cash and cash equivalents at FYE 2010 reflecting a decrease of \$915,655. The decreased cash position at Q2-F'11 from FYE 2010 was due primarily to cash utilized to fund operations in the



period as operating activities used \$919,402. The average monthly cash usage rate was \$152,609 on a year to date basis, compared to \$238,730 during YTD-F'10. The drop in average monthly cash usage reflects management's cash conservation efforts in lengthening the operational runway while management pursues additional funding from a license agreement, new financing or both.

The investing activities of \$20,664 in Q2-F'11 relate solely to expenditures on intangible assets, primarily on patents of \$14,703. Patent costs represent an investment in intellectual property protection for the Company's molecules and an important element in creating value for each compound being developed by the Company.

The Company's working capital at Q2-F'11 was \$919,413 compared to \$1,705,078 at FYE 2010. Current assets decreased to \$1,108,494 at Q2-F'11 from \$2,050,087 at FYE 2010 for a decrease of \$941,593, primarily due to the decrease in cash and cash equivalents. Current liabilities decreased \$155,928 to \$189,081 at Q2-F'11 from \$345,009 at FYE 2010 because of reduced trade payables related to R&D testing expenditures and professional fee accruals.

The Company's exposure to fluctuations in the recoverability of its financial assets is limited as cash not required for current purposes is invested in short-term instruments with high credit ratings. Miscellaneous receivables are of high credit quality. The short periods to maturity of these instruments and their capacity for prompt liquidation result in future settlement amounts, which are consistent with carrying values. Given the nature of the Company's financial liabilities, there is also limited risk that future settlement amounts will differ from carrying values. The Company does not have any derivative financial instruments, nor does it engage in hedging transactions, as risk exposure is limited.

The Company's long-term contractual obligations are summarized in Table 12.

Table 12: Contractual Obligations

| | | 31 | L-Oct-2010 | | | 30- | Apr-2010 | |
|------------------------------------|---------------|----|------------|---------------|---------------|-----|----------|---------|
| Obligation | Total | | 2011 | 2012 | Total | | 2011 | 2012 |
| Premises rent (1) | \$ 9,345 | \$ | 9,345 | \$ - | \$ 9,345 | \$ | 9,345 | \$ - |
| Research and development contracts | 287,422 | | 106,304 | 181,118 | 238,547 | | 238,547 | - |
| Consulting services | 30,250 | | 30,250 | - | 48,950 | | 48,950 | - |
| Total contractual obligations | \$ 327,017 | \$ | 145,899 | \$ 181,118 | \$ 296,842 | \$ | 296,842 | \$ - |

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

The increase in research and development contract obligations at Q2-F'11 relates to the announcement of the IRAP grant in Q1-F'11. In order to receive the \$300,000 in government assistance, the Company must incur certain expenditures, currently estimated at \$561,662, to develop the AML program. The Company is actively pursuing sources of financing so that it will have sufficient funds to finance the AML project to completion. The Company has sufficient working capital to meet its other contractual obligations for fiscal 2011.

Based upon the balance of cash and cash equivalents at the quarter-end, the Company believes it has sufficient cash resources to carry out its operations for the remainder of FYE 2011 at planned operating levels. This belief reflects a continued decrease in contract R&D expenditures and control over discretionary spending.

Off-Balance Sheet Arrangements

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

Foreign Exchange Exposure

During Q2-F'11, the Company recorded a foreign exchange loss of \$591 compared to a loss of \$914 in Q2-F'10. The loss recorded in Q2-F'11 reflects \$125 in unrealized losses resulting from holding foreign currency balances at the quarter end, compared to \$1,375 in unrealized gains at Q2-F'10. The foreign currency exposure in Q2-F'11 was immaterial and unchanged from FYE 2010.

Related Party Transactions

There were no related party transactions of a material amount during Q2-F'11. All transactions were incurred and recorded at the exchange amounts agreed by the parties.

Outstanding Share Information

Outstanding share information as at the close of business December 9, 2010 is set out in Table 13.

Table 13: Outstanding Share Information

| | Outstanding | Expiry Date |
|----------------------------------|-------------|-----------------------|
| Common shares | | |
| Authorized - unlimited | | |
| Issued | 49,871,215 | |
| Fully diluted ⁽¹⁾ | 55,718,500 | |
| Weighted average outstanding (2) | 49,857,550 | |
| Common share warrants | | |
| \$0.40 agent warrants | 105,607 | Oct 27/11 |
| \$0.40 agent warrants | 643 | Nov 27/11 |
| \$0.55 warrants | 1,519,070 | Oct 27/11 |
| \$0.55 warrants | 56,430 | Nov 27/11 |
| | 1,681,750 | |
| Common share stock options | | |
| \$0.01 - \$0.50 | 2,066,018 | Sep 9/14 - Oct 27/15 |
| \$0.51 - \$1.00 | 1,749,517 | Jan 11/12 - Mar 14/15 |
| \$1.01 - \$1.50 | 250,000 | Mar 25/12 - Jul 15/13 |
| \$1.51 - \$2.00 | 100,000 | Oct 8/12 |
| | 4,165,535 | |

 $^{^{(1)}}$ Assumes conversion of all outstanding common share stock options and warrants.

⁽²⁾ Weighted average shares outstanding calculated from May 1, 2010 to December 9, 2010.

Operational Progress and Outlook

The Company continued to make progress in developing its drug candidate pipeline during Q2-F'11. Figure 1 highlights the development status of specific compounds and libraries to the date of this report. A clear box indicates the progress made in the quarter for a particular library or compound.

The Company has a number of valuable drug compounds and programs that because of limited near term financial resources must be put on hold for further development. These include oncology compounds COTI-4, COTI-219 and the colorectal cancer portfolio, the multiple sclerosis program, the HIV program and the Alzheimer's disease project. The Company is exploring a variety of ways to realize value on these compounds or further their development through codevelopment projects.

Development Stage Target Identification Lead & Research Selection Therapy: Compound / Library Discovery Synthesis Preclinical Phase 1 Oncology COTI-2 - AKT inhibitor COTI-219 COTI-4 COTI-58 Acute myelogenous leukemia Colon 6 additional compounds Multiple sclerosis Alzheimer's - secretase inhibitors **HIV** - integrase inhibitors (Currently in co-development)

Figure 1: COTI Product Development Pipeline at December 9, 2010

COTI-2

During the quarter, the Company continued development of COTI-2 by carrying out additional experiments and laboratory work to determine optimal oral and intravenous formulations and validation of the drug detection method in preparation for the IND studies and submission of the Phase 1 clinical trial plan.

On September 14, 2010, the Company announced that it was selected by the Consulate General of Canada and BIOTECanada to attend a life sciences partnering mission in Boston, MA, and on November 15, 2010, the Company announced its participation in Bio-Europe, taking place in



Munich, Germany. The objective of both of these meetings was to present detailed scientific information on COTI-2 and to discuss licensing opportunities with prospective partners, including pharmaceutical, biotechnology and investment organizations. Feedback received at these meetings was favourable and management continues to pursue licensing opportunities for COTI-2.

Acute Myelogenous Leukemia

The Company continued the development of its acute myelogenous leukemia compounds as part of its project being co-funded by the National Research Council of Canada Industrial Research Assistance Program (IRAP), as announced on June 29, 2010. The Company recognized \$4,826 in government assistance in Q2-F'11 related to optimizing the compounds in computer simulations in preparation for synthesis. The compounds are now ready for synthesis once sufficient funds are available to finance their development.

Collaborations and Co-Development Projects

HIV-1 Integrase Co-development

During Q2-F'11, the Company's collaboration partner (Partner) completed its initial preclinical experiments as part of their evaluation of the compounds. The initial hurdle of identifying HIV integrase inhibitors having an enzyme binding mode different from the current diketo acid type moiety typical for current drug treatments and showing good inhibitory activity has been met. The Partner has identified additional development work that COTI must undertake in developing the compounds to a level at which the Partner would consider a licensing agreement for the compounds. COTI must now optimize final candidates from the scaffolds for optimal virus killing activity, activity against known resistant viral mutations and ADME/Tox properties. COTI estimates the cost for completing this work would be in the range of \$300,000 once sufficient funds are available to finance their development.

Industry and Economic Factors Affecting Performance

The biotechnology industry is regarded as high risk given the uncertain nature of developing drug candidates and limited access to capital. On the other hand, success in this industry can be highly rewarding. COTI operates in the discovery and preclinical stage of the drug development cycle. The realization of COTI's long-term potential is dependent upon the successful development and commercialization of molecules discovered using the Company's drug discovery technology either for its own account or in collaboration agreements for others, and in utilizing the technology to provide profiling and screening services on a fee for service basis. The major industry and economic risk factors affecting realization of this potential in Q2-F'11 remain substantially unchanged from the analysis discussed at length in the Company's AIF and the risks discussed in the prior quarter MD&A.



The three risk categories having the greatest affect on the Company during the quarter were:

- 1. the lack of product revenues;
- 2. the ability to negotiate adequate licensing agreements; and,
- 3. financing requirements.

Lack of Product Revenues

COTI has not recorded any revenues from the sale or license of any drug compounds or compound libraries during its first four full years as a public company consistent with the most recent quarter of this period, Q2-F'11. COTI has an accumulated deficit since its inception through to October 31, 2010 of \$12,677,751. This deficit is expected to increase in the near term as COTI continues its product development efforts, develops relationships with prospective customers, and strives to obtain licensing and collaboration agreements. Operating losses are expected to be incurred until upfront licensing payments, milestone payments and royalty payments are sufficient to generate revenues to fund its continuing operations. COTI is unable to predict with any certainty when it will become profitable, or the extent of any future losses or profits.

Negotiate Adequate Licensing Agreements

The Company's ability to commercialize its products successfully will depend on its ability to negotiate licensing agreements with biotech or Pharma companies for preclinical compounds. While continued positive test results in the second quarter, including the most recent efforts on finalizing an oral formulation of COTI-2, generate positive feedback from potential licensees, efforts have not translated into a contractual agreement. Licensing discussions during Q2-F'11 continued to find a strong preference for assets with lower risk profiles (clinical safety and proof of concept in Phase 2). However, there has been an increasing interest for earlier stage deals, as the focus on late stage compounds during the past three years has diminished the availability of good compounds in the mid to late stages of development held by companies looking to do such deals. This is reflected in an increasing number of early stage deals in many therapeutic areas during calendar 2010. Industry media coverage continues to highlight the productivity challenges of pharmaceutical industry R&D spending in generating new compounds (*Wall Street Journal, Aug 4/10, Big Pharma Won't Wait in Rush for Biotech's Drugs*) but there is no certainty that licensing deals can be successfully negotiated for COTI's preclinical compounds.

Financing Requirements

The Company needs to seek additional funds to continue to develop its clinical and discovery programs and to move its compounds more rapidly through development in fiscal 2011 and 2012. The Company intends to raise these funds through public or private equity offerings, convertible debt, and collaborations with other biopharmaceutical companies or from other sources. If adequate funding is not available, COTI may be required to delay, reduce, or eliminate one or more of its product development programs or obtain funds through corporate partners or others who may require it to relinquish significant rights to product candidates or obtain funds on less favourable terms than COTI would otherwise accept. COTI's success in obtaining future capital requirements will depend on many factors, such as establishing and



maintaining investment industry relationships, collaborative partnering relationships and the general economic conditions and availability of capital in the equity markets for biotechnology companies.

During Q2-F'11, the Company continued to explore various financing options. In this regard, the Company voluntarily filed an AIF on August 30, 2010. COTI is a Tier 2 issuer on the TSXV and accordingly is not required to file an AIF, however, this filing enables the Company to proceed with a short form prospectus offering at a later date should the Company determine this to be an appropriate course of action at that time.

Despite the Company's financing efforts, there can be no assurance additional funding will be available on terms acceptable to COTI.

Changes in Accounting Policies including Initial Adoption

(i) Change in Accounting for Non-employee Stock Options

As set out in the Canadian Institute of Chartered Accountants Handbook section 3870, Stock-Based Compensation and Other Stock-Based Payments, measurement of stock options granted to non-employees are measured on the earliest of three dates. First, the date when the service is complete; second, the date when a performance commitment is reached; or third, the grant date if the options are fully vested and non-forfeitable.

At FYE April 30, 2010, COTI measured the stock options granted under two consulting agreements as of the grant date. Subsequent to the year end, COTI determined that this approach was incorrect since the performance commitments had not been reached at the time when the agreements were signed but rather the services were to be performed over time with a portion of the compensation for these services to be received as stock options that also vested over time. As neither contract had reached the end of its service term at April 30, 2010, the stock-based compensation should have been remeasured as of April 30, 2010. One of the service agreements remained uncompleted at July 31, 2010 and remeasurement of that service agreement should have occurred for that reporting date. The error estimates calculated for these periods were not material.

At October 31, 2010 the performance commitments under both agreements were achieved and the stock compensation was remeasured in accordance with the guidance of section 3870 whereby the stock options were valued based upon the fair value of the options at the completion of the service commitments.

The change in the assumptions of the Black-Scholes option pricing model used in the remeasurement of the stock-based compensation calculation for the stock options granted to the consultants is outlined in Table 14. The decline in the Company's share trading price between the initial measurement done at the grant date and the re-measurement date is the main factor causing the fair value estimates of stock-based compensation to decrease upon re-measurement.



Table 14: Weighted Average Black-Scholes Assumptions for the Fair Value Calculation of Consultant Stock Options

| | | _ | At Service ompletion |
|---|---------------|----|----------------------|
| | At Grant Date | C | Date |
| Trading price on measurement date | \$ 0.46 | \$ | 0.26 |
| Risk free interest rate | 1.53% | | 1.74% |
| Expected dividend yield | - | | - |
| Expected share volatility | 149% | | 150% |
| Expected average option life | 2 years | | 2 years |
| Estimated total stock option compensation | \$ 123,800 | \$ | 59,500 |

(ii) Adopted in Q2-F'11

The Company did not adopt any new accounting standards in Q2-F'11 as no new standards were issued by the CICA that required adoption.

(iii) To be Adopted in Fiscal 2012

The Canadian Institute of Chartered Accountants issued new accounting standards that will apply to the Company for Fiscal 2012 and beyond. These standards are described below.

a) International financial reporting standards (IFRS):

The development phase of the Company's IFRS transition plan as previously reported remains ongoing. In Q2-F'11, the Company made limited progress on its IFRS transition as efforts were focused on licensing, financing and other operational activities. The Company expects to resume IFRS transition activities in Q3-F'11.

There have been no changes to the Company's prior guidance on the component evaluations (CEs) that it expects will have the most significant impact on the financial statements upon transition.

The Company estimates that at October 31, 2010 it has completed draft CEs for 96% of the accounting standards applicable to the Company. The Company expects to finalize all of the CEs by the end of Q4-F'11. The process of drafting model financial statements compliant with IFRS has commenced and completion is anticipated to coincide with the finalization of the CEs. The implementation phase of the transition plan is expected to commence late in fiscal 2011, enabling the Company to prepare comparative results once it adopts IFRS in fiscal 2012.

b) Business combinations, consolidated financial statements and non-controlling interests:

In December 2008, the Accounting Standards Board (AcSB) issued Section 1582, "Business Combinations" that replaced Section 1581, "Business Combinations". The AcSB also issued Section 1601, "Consolidated Financial Statements" that replaced Section 1600, "Consolidated Financial Statements", and the AcSB amended Section 1602, "Non-controlling interests". These



Sections will become effective for the Company with interim and annual financial statement reporting beginning on January 1, 2011. The standards are to be applied prospectively to future business combinations; however, entities transitioning to IFRS may choose to adopt these Sections early to minimize the effect of transitional differences with IFRS. If an entity chooses to adopt Section 1582 before the required transition date, Sections 1601 and 1602 must be applied at the same time. These standards are expected to have no effect on the Company before transition to IFRS as no future business combinations are being considered at present.