
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended April 4, 2010

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 0-21794

GTC BIOTHERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Massachusetts
(State or Other Jurisdiction of
Incorporation or Organization)

04-3186494
(I.R.S. Employer
Identification No.)

175 Crossing Boulevard, Framingham, Massachusetts
(Address of Principal Executive Offices)

01702
(Zip Code)

(508) 620-9700
(Registrant's Telephone Number, Including Area Code)

(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Indicate by check mark whether registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at May 6, 2010
Common Stock, \$0.01 par value	30,429,731

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements, including statements regarding future revenues, research and development programs, clinical trials and collaborations and our future cash requirements. The words or phrases “will”, “will likely result”, “are expected to”, “will continue”, “is anticipated”, “estimate”, “project”, “potential”, “believe”, “plan”, “anticipate”, “expect”, “intend”, or similar expressions and variations of such words are intended to identify forward-looking statements.

Statements that are not historical facts are based on our current expectations, beliefs, assumptions, estimates, forecasts and projections for our business and the industry and markets related to our business. The statements contained in this report are not guarantees of future performance and involve certain risks, uncertainties and assumptions which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed in such forward-looking statements. Important factors which may affect future revenues, research and development programs, clinical trials and collaborations and our future cash requirements include, without limitation, continued operating losses, our ability to raise additional capital, technology risks to our transgenically produced products, the performance of our collaboration partners and continuation of our collaborations, our ability to enter into collaborations in the future and the terms of such collaborations, regulatory approval of our transgenically produced products, preclinical and clinical testing of our transgenically produced products, and those factors set forth in “Risk Factors” in Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 3, 2010 as filed with the Securities and Exchange Commission, as supplemented and amended by the “Risk Factors” contained in our Quarterly Reports on Form 10-Q.

The forward-looking statements in this Quarterly Report on Form 10-Q are as of the date of this report. We expressly disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained in this Quarterly Report to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any forward-looking statement is based, except as may be required by law.

NOTE REGARDING REVERSE STOCK SPLIT

On May 26, 2009 we effected a reverse stock split of our outstanding common stock. In order to provide accurate comparisons of our financial position as of the end of the quarterly period ended April 4, 2010 to prior periods, we have adjusted certain stock amounts and conversion prices of prior periods to accurately reflect the impact of the reverse stock split on our outstanding common stock.

GTC BIOTHERAPEUTICS, INC.

TABLE OF CONTENTS

	<u>PAGE #</u>
PART I. FINANCIAL INFORMATION	
<u>ITEM 1—Financial Statements</u>	4
<u>Unaudited Consolidated Balance Sheets as of April 4, 2010, and January 3, 2010</u>	4
<u>Unaudited Consolidated Statements of Operations for the Fiscal Three Months Ended April 4, 2010 and March 29, 2009</u>	5
<u>Unaudited Consolidated Statements of Cash Flows for the Fiscal Three Months Ended April 4, 2010 and March 29, 2009</u>	6
<u>Notes to Unaudited Consolidated Financial Statements</u>	7
<u>ITEM 2—Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	14
<u>ITEM 3—Quantitative and Qualitative Disclosures About Market Risk</u>	17
<u>ITEM 4—Controls and Procedures</u>	17
PART II. OTHER INFORMATION	
<u>ITEM 1—Legal Proceedings</u>	19
<u>ITEM 6—Exhibits</u>	20
<u>SIGNATURES</u>	21

PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

GTC BIOTHERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS
(Unaudited, dollars in thousands except share amounts)

	<u>April 4, 2010</u>	<u>January 3, 2010</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 4,850	\$ 3,816
Accounts receivable and unbilled contract revenue	275	243
Related party receivable	1,944	1,500
Inventory	57	56
Restricted cash	599	599
Other current assets	1,269	1,217
Total current assets	<u>8,994</u>	<u>7,431</u>
Net property, plant and equipment	12,141	12,456
Intangible assets, net	5,122	5,348
Other assets	693	765
Total assets	<u>\$ 26,950</u>	<u>\$ 26,000</u>
LIABILITIES AND SHAREHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	\$ 7,022	\$ 6,945
Accrued liabilities	7,875	6,685
Short-term deferred contract revenue	6,847	6,875
Derivative liability	—	2,660
Current portion of long-term debt	24	51
Current portion of debt to related party	302	300
Total current liabilities	<u>22,070</u>	<u>23,516</u>
Long-term deferred contract revenue	8,065	8,173
Long-term debt, net of current portion	48	54
Long-term debt to related party, net of debt discount	23,878	16,704
Other long-term liabilities	37	37
Total liabilities	<u>54,098</u>	<u>48,484</u>
Redeemable convertible preferred stock:		
Series E-1 Redeemable Convertible Preferred stock, net of offering costs; redemption amount of issued shares \$6,000,000; \$.01 par value; 18,000 shares authorized and 6,000 shares were issued and outstanding at January 3, 2010	—	4,223
Series E-2 Redeemable Convertible Preferred stock, redemption amount of issued shares \$6,750,000; \$.01 par value; 20,250 shares authorized and 6,750 shares were issued and outstanding at January 3, 2010	—	4,370
Related party subscription receivable	—	(6,375)
Total redeemable convertible preferred stock	<u>—</u>	<u>2,218</u>
Shareholders' deficit:		
Preferred stock, \$.01 par value; 5,000,000 shares authorized: 15,000 shares were designated as Series D convertible preferred stock; 115 were issued and outstanding at April 4, 2010 and January 3, 2010	—	—
Common stock, \$.01 par value; 210,000,000 shares authorized; 30,432,764 and 24,727,010 shares were issued and outstanding at April 4, 2010 and January 3, 2010, respectively	304	247
Capital in excess of par value	309,113	303,869
Accumulated deficit	<u>(336,565)</u>	<u>(328,818)</u>
Total shareholders' deficit	<u>(27,148)</u>	<u>(24,702)</u>
Total liabilities, redeemable convertible preferred stock and shareholders' deficit	<u>\$ 26,950</u>	<u>\$ 26,000</u>

The accompanying notes are an integral part of these financial statements.

GTC BIOTHERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, dollars in thousands except per share amounts)

	Fiscal three months ended	
	April 4, 2010	March 29, 2009
Revenues:		
Service revenue	\$ 166	\$ 177
Product revenue	180	21
Total revenue	346	198
Costs of revenue and operating expenses:		
Cost of service revenue	8	266
Cost of product revenue	20	—
Research and development	4,768	6,968
Selling, general and administrative	2,783	2,509
Total cost of revenue and operating expenses	7,579	9,743
Operating loss	(7,233)	(9,545)
Other income (expense):		
Interest expense	(514)	(809)
Net loss	\$ (7,747)	\$ (10,354)
Net loss per common share (basic and diluted)	\$ (0.26)	\$ (0.99)
Weighted average number of common shares outstanding (basic and diluted)	30,296	10,407

The accompanying notes are an integral part of these financial statements.

GTC BIOTHERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, dollars in thousands)

	<u>Fiscal three months ended</u>	
	<u>April 4, 2010</u>	<u>March 29, 2009</u>
Cash flows from operating activities:		
Net loss from operations	\$ (7,747)	\$ (10,354)
Adjustments to reconcile net loss from operations to net cash used in operating activities:		
Depreciation and amortization	541	549
Stock based compensation	93	227
Common stock issuance to GTC savings and retirement plan	329	793
Non-cash interest expense	226	225
Changes in assets and liabilities:		
Accounts receivable and unbilled contract revenue	(476)	262
Inventory	(1)	555
Other assets and liabilities	19	(357)
Accounts payable	77	(766)
Accrued liabilities	1,190	(366)
Deferred contract revenue	(136)	4,712
Net cash used in operating activities	<u>(5,885)</u>	<u>(4,520)</u>
Cash flows from investing activities:		
Purchase of property, plant and equipment	—	(14)
Net cash provided by (used in) investing activities	—	(14)
Cash flows from financing activities:		
Proceeds from long term debt from related party	7,000	—
Net proceeds from employee stock purchase plan	2	7
Repayment of long-term debt and capital leases	(83)	(342)
Net cash provided by (used in) financing activities	<u>6,919</u>	<u>(335)</u>
Net increase (decrease) in cash and cash equivalents	1,034	(4,869)
Cash and cash equivalents at beginning of period	<u>3,816</u>	<u>11,643</u>
Cash and cash equivalents at end of period	<u>\$ 4,850</u>	<u>\$ 6,774</u>

The accompanying notes are an integral part of these financial statements.

GTC BIOTHERAPEUTICS, INC. AND SUBSIDIARIES
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation:

These unaudited consolidated financial statements should be read in conjunction with the Annual Report on Form 10-K of GTC Biotherapeutics, Inc., or GTC, for the fiscal year ended January 3, 2010 (referred to as the 2009 Form 10-K) and the financial statements and footnotes included therein. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to Securities and Exchange Commission rules and regulations.

Our significant accounting policies are the same as described in Note 2 to our Notes to Consolidated Financial Statements included in our 2009 Form 10-K. The financial statements for the fiscal three months ended April 4, 2010 and March 29, 2009, are unaudited but include, in our opinion, all adjustments necessary for a fair presentation of the results for the periods presented. These adjustments are normal and recurring in nature. Comprehensive loss is substantially the same as our net loss.

We are subject to risks common to companies in the biotechnology industry, including, but not limited to, the uncertainties of clinical trials and the regulatory requirements for approval of therapeutic compounds, dependence on existing and new collaborations, the need for additional capital, competitive new technologies, dependence on key personnel, protection of proprietary technology, and compliance with the regulations of the United States Food and Drug Administration and other governmental agencies.

Under our Joint Development and Commercialization Agreement with LFB Biotechnologies, S.A.S., or LFB, a related party, we have established LFB/GTC LLC as a separate legal entity for the joint venture. Our investment in the joint venture is being accounted for at cost based on our ownership percentage and is not being consolidated as we are not the primary beneficiary of the joint venture. In determining whether we are the primary beneficiary, we consider a number of factors, including our ability to direct the activities that most significantly affect the entity's economic success, our contractual rights and responsibilities under the arrangement and the significance of the arrangement to each party. These considerations impact the way we account for our existing collaborative and joint venture relationships and may result in the future consolidation of companies or entities with which we have collaborative or other arrangements.

Our consolidated financial statements have been presented on the basis that we are a going concern, which contemplates the continuity of business, realization of assets and the satisfaction of liabilities in the ordinary course of business. We have incurred losses from operations and negative operating cash flow since inception and have an accumulated deficit of approximately \$337 million at April 4, 2010. We also have negative working capital of \$13.1 million as of April 4, 2010. Based on our cash balance as of April 4, 2010, as well as potential cash receipts from existing programs, we believe our capital resources will be sufficient to fund operations to the end of the second quarter of 2010. Our recurring losses from operations and limited funds raise substantial doubt about our ability to continue as a going concern. Our plans with regard to this matter include seeking additional financing arrangement and seeking collaboration arrangements. If no funds are available, we would have to sell or liquidate the business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amount of reclassification of liabilities, or any adjustments that might be necessary should we be unable to continue as a going concern. Our primary sources of additional capital raised have been equity financings and debt financings. Management expects that future sources of funding may include new or expanded partnering arrangements and additional sales of equity or debt securities. Adequate additional funding may not be available to us on acceptable terms or at all. Our failure to raise capital as and when needed has had a negative impact on our financial condition and our ability to pursue our business strategies. If adequate funds do not become available we may be required to take further steps to delay, reduce the scope of or eliminate our research and development programs, reduce our planned commercialization efforts, or obtain funds through arrangements with collaborators or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently. Additionally, any future equity funding would dilute ownership of our existing equity investors. We are currently engaged in discussions for potential new partnering transactions and plan to bring further financial resources into GTC in the future through some combination of partnering transactions and other debt or equity financing arrangements. However, there can be no assurance that we will be able to enter into anticipated partnering-arrangements, or raise additional capital, on terms that are acceptable to us, or at all.

2. Net Loss per Common Share:

Per share information is based upon the weighted average number of shares of common stock outstanding during the period. Potential common shares consisting of warrants, stock options and stock to be issued under our defined contribution retirement plan totaled 5.6 million shares and 5.3 million at April 4, 2010 and March 29, 2009, respectively. Since we were in a loss position at April 4, 2010 and March 29, 2009, these potential common shares were not used to compute diluted loss per share, as the effect was antidilutive. We also have two convertible notes

GTC BIOTHERAPEUTICS, INC. AND SUBSIDIARIES
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

payable to LFB. The first convertible note has a current principal balance of approximately \$716,000, net of unamortized debt discount of approximately \$127,000, which automatically converts into shares of our common stock in conjunction with any future common stock offerings at the per share offering price of the respective offering. The second convertible note has a current principal balance of approximately \$13.1 million, net of unamortized debt discount of approximately \$319,000, which may be converted into our common stock at \$3.10 per share at LFB's discretion.

3. Reverse Stock Split:

On May 26, 2009, we filed Articles of Amendment to our Restated Articles of Organization with the Secretary of the Commonwealth of Massachusetts to effect a reverse split of our common stock in the ratio of one-for-ten. The reverse stock split was effective at 11:59 p.m. on May 26, 2009. All fractional shares created by the reverse stock split were cashed out. All historical share and per share amounts have been adjusted to reflect the reverse stock split.

4. Inventory:

Inventory consists of finished goods at April 4, 2010 and January 3, 2010.

We carry inventory at the lower of cost or market using the first-in, first-out method. We expect that all inventory that we capitalize will be sold for clinical trials or commercial use. Currently, because we have only one customer, we only capitalize inventory if orders have been received. If at any time we believe that the sale of inventory is no longer probable, we will charge the inventory to expense. Because our current cost of production exceeds our agreed upon maximum price, we are expensing these excess costs as incurred. Inventories on hand at April 4, 2010 and January 3, 2010 were related to ATryn®, which has been approved for commercial sale in the U.S. and in Europe. Once our cost of production falls below the agreed upon maximum price, we will capitalize those costs.

We analyze our inventory levels quarterly and will write-down inventory that is expected to expire prior to sale, inventory that has a cost basis in excess of its expected net realizable value and inventory in excess of expected requirements. Expired inventory will be disposed of, and the related costs will be written off. If actual market conditions are less favorable than those projected by management, additional inventory write-offs may be required. Also, if we should need to use a portion of the capitalized inventory for clinical trials, we would expense the inventory when it was designated for use in such clinical trial.

5. Business Agreements:

Lundbeck Inc. (formerly OVATION Pharmaceuticals)

In June 2008, we entered into a collaboration agreement with Lundbeck Inc., or Lundbeck, to develop and market ATryn® in the United States. The collaboration agreement includes the commercialization of ATryn® in the hereditary antithrombin deficiency, or HD, indication and the further development of ATryn® in acquired antithrombin deficiency indications, or AD. Under the terms of the agreement, Lundbeck is obligated to make milestone payments to us for a total of \$9 million through the approval of ATryn® for HD in the U.S., all of which have been received to date. We recorded the \$9 million in total milestones received as deferred revenue, which is being recognized as revenue on a straight-line basis over the 20 year life of the agreement beginning with the first shipment of product to Lundbeck, which began in the first quarter of 2009. Since Lundbeck has a right of return on our first shipment of product, we are deferring the recognition of this product revenue until this product has been sold to end users. At April 4, 2010, we have approximately \$599,000 in deferred revenue related to product shipped to Lundbeck with a right of return. The collaboration anticipates further development of ATryn® in larger market acquired deficiencies of antithrombin, such as the treatment of heparin resistance, or HR, in patients undergoing coronary artery bypass graft (CABG) surgery that requires the use of a cardio pulmonary bypass (CPB) machine, as well as the treatment of disseminated intravascular coagulation, or DIC, associated with severe sepsis. We have recorded \$1.4 million of product revenue and \$57,000 of royalty revenue associated with product shipped to Lundbeck that has been sold to end users.

LFB Biotechnologies

Collaboration Agreement

In September 2006, we entered into a collaboration agreement with LFB, a related party, to develop selected recombinant plasma proteins and MAbs using our transgenic production platform. LFB is a subsidiary of LFB S.A., a vertically integrated plasma fractionation company based in France that currently markets 19 plasma-derived products in the areas of hemostasis, anesthesia-intensive care and immunology. LFB S.A. is a for-profit company currently 100% owned by the French government. The first program in this collaboration is for the development of rhFVIIa. We have subsequently added to the LFB collaboration programs to develop a recombinant form of human factor IX, an antibody to the CD20 immune system receptor, and recombinant human alpha-1 antitrypsin.

GTC BIOTHERAPEUTICS, INC. AND SUBSIDIARIES
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

2010 Debt Financing

On February 24, 2010, we issued and sold a \$7,000,000 secured note to LFB and received \$7,000,000 in gross proceeds. The secured note has a 36-month term and accrues interest at a rate of 4%, with a single payment of principal and interest at maturity. After January 1, 2011 LFB may annually adjust the rate of interest upwards or downwards, based on LFB's then-current cost of capital, as determined by LFB in the exercise of its commercially reasonable discretion. Over the term of the secured note LFB may elect to participate in any of our future equity financing transactions by cancelling all or any portion of the principal and interest outstanding under the secured note for any shares of our common stock or securities convertible, exercisable or exchangeable into shares of our common stock that we issue and sell in the financing. On February 24, 2010, we also entered into amendments to modify our existing security agreements with LFB to add the 2010 secured note to our debt that is secured by a first priority security interest on all of our assets, including our intellectual property, but excluding livestock.

JCOM Co. Ltd ("JCOM")

In February 2009, we entered into a license and development agreement with JCOM, an affiliate of Dong-A Pharmaceuticals (a leading pharmaceutical company in South Korea), whereby we granted to JCOM an option for an exclusive license for Asia and a separate option for a co-exclusive license for the rest of the world, under our patent and know-how rights to make, use, sell, offer for sale and import recombinant human insulin products in these territories. We are developing cell lines to demonstrate production of recombinant human insulin for JCOM. The agreement contemplates the subsequent establishment of a transgenic production system in South Korea. During the first quarter of 2009, we received \$750,000 from JCOM, which was recorded as deferred revenue which will be recognized as revenue when JCOM either exercises its options for Asia and the rest of the world or when the options expire, whichever comes first.

PharmAthene, Inc. ("PharmAthene")

In March 2007, we entered into a process and development and clinical supply manufacturing services agreement with PharmAthene for Protexia®, as well as an agreement providing PharmAthene an expanded license to our patent rights, which will support the further development, manufacturing, regulatory approval and commercialization process for PharmAthene's Protexia® program. The development of Protexia® is funded by the United States Department of Defense.

LEO Pharma A/S ("LEO")

In March 2009, we notified LEO that we were terminating our 2005 collaboration agreement with LEO pursuant to the terms of the agreement (see Note 15).

6. Accrued Liabilities:

Accrued liabilities included the following:

	<i>(dollars in thousands)</i>	
	<u>At April 4, 2010</u>	<u>At January 3, 2010</u>
Accrued payroll and benefits	\$ 1,784	\$ 1,969
Accrued bonuses	1,474	1,172
Other	4,617	3,544
Total accrued expenses	<u>\$ 7,875</u>	<u>\$ 6,685</u>

In November 2009, we announced a restructuring of our organization to meet the requirements of our key programs and extend the duration of our cash resources. Under the restructuring plan, headcount was reduced by approximately 30% from 154 to 109 full time equivalent employees. This restructuring included employees from most departments located at both our Framingham and central Massachusetts locations. During the fourth quarter of 2009 we recorded severance expense in the amount of \$460,000 of which approximately \$374,000 and \$86,000 was recorded to research and development expense and selling, general and administrative expense, respectively. During the first quarter of 2010, approximately \$109,000 was paid out of the severance reserve. At April 4, 2010, approximately \$50,000 remained in accrued liabilities in relation to unpaid severance costs, which will be paid out through the second quarter of 2010.

7. Intangible Assets:

Our intangible assets consist of marketing rights and technology licenses with amortization lives between 9 years and 15 years. Amortization expense was approximately \$226,000 for each of the fiscal three-month periods ended April 4, 2010 and March 29, 2009.

GTC BIOTHERAPEUTICS, INC. AND SUBSIDIARIES
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The estimated aggregate amortization expense for all our intangible assets over the next five years is as follows:

Nine months remaining in 2010	\$676,000
2011	\$902,000
2012	\$902,000
2013	\$902,000
2014	\$902,000
2015 and thereafter	\$840,000

8. Stockholders' Deficit:

In February 2008, we received approximately \$5.4 million in proceeds from a registered direct offering, net of approximately \$600,000 in offering costs and fees. In the offering, we sold approximately 690,000 shares of our common stock at \$8.70 per share and 7-year warrants, which were immediately exercisable, to purchase an aggregate of approximately 690,000 shares of our common stock at an exercise price of \$8.70 per share.

In March 2008, LFB converted 1,450 shares of Series D Convertible Preferred Stock into 1,450,000 shares of common stock.

On January 8, 2010, LFB converted 12,750 shares of Series E Preferred Stock, representing all of the remaining shares of our Series E Preferred Stock that were outstanding, into a total of 5,299,071 shares of our common stock (see Note 9). As a result of the conversion, the derivative liability was credited against additional paid in capital.

9. Redeemable Convertible Preferred Stock:

On July 30, 2009, our shareholders approved the issuance of newly-designated Series E-1 and Series E-2 redeemable convertible preferred stock ("Series E Preferred Stock").

On January 8, 2010, LFB converted 12,750 shares of Series E Preferred Stock, representing all of the remaining shares of our Series E Preferred Stock that were outstanding, into a total of 5,299,071 shares of our common stock.

As of April 4, 2010, on an as converted basis, LFB beneficially owned approximately 75.7% of our common stock through its holdings of common stock, convertible debt and Series D preferred stock, exclusive of its warrants and the 2010 note.

A summary of activity related to issuance and accretion of the Series E convertible preferred stock is as follows (in thousands):

	Series E-1 and E-2 Redeemable Convertible Preferred Stock
Balance, January 3, 2010	\$ (2,218)
Conversion of series E units	8,593
Subscription receivable	(6,375)
Balance, April 4, 2010	\$ —

10. Long-Term Debt:

Our long-term debt consisted of the following:

	April 4, 2010	January 3, 2010
Capital leases, with monthly payments of approximately \$3 through May 2014	\$ 72	\$ 76
Convertible note to LFB, fixed annual interest of 2%, net of debt discount ⁽¹⁾	716	698
Convertible note to LFB, fixed annual interest of 4% ⁽³⁾ , net of debt discount ⁽²⁾	13,113	12,907
Promissory note to LFB, fixed annual interest of 4% ⁽³⁾	3,351	3,400
Promissory note to LFB, fixed annual interest of 4%	7,000	—
Other debt	—	28
	<u>24,252</u>	<u>17,109</u>
Less current portion	<u>(326)</u>	<u>(351)</u>
	<u>\$23,926</u>	<u>\$ 16,758</u>

⁽¹⁾ Based on our effective borrowing rate of 10.8%, we recorded a debt discount of approximately \$1.1 million for the difference between the stated interest rate and the effective borrowing rate. The debt discount is being amortized over the five-year term of the note. The debt discount balance as of April 4, 2010 is approximately \$127,000.

GTC BIOTHERAPEUTICS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

- (2) We recorded a debt discount of approximately \$500,000 for the expenses incurred by us on LFB's behalf. The debt discount is being amortized over the term of the note. The debt discount balance as of April 4, 2010 is approximately \$319,000.
- (3) In December 2009, we amended the convertible note and promissory note reducing the interest rate to 4% from 8% and 10.8%, respectively, effective January 1, 2010.

At April 4, 2010 and January 3, 2010, the fair values of all of our material debt instruments were as follows:

	(dollars in thousands)	
	At April 4, 2010	At January 3, 2010
Convertible note to LFB, fixed annual interest of 2%	\$ 714	\$ 688
Convertible note to LFB, fixed annual interest of 4%	17,022	17,022
Promissory note to LFB, fixed annual interest of 4%	2,800	2,802
Promissory note to LFB, fixed annual interest of 4%	4,817	—

The fair values of our LFB convertible notes and promissory note were calculated using a net present value approach using unobservable inputs that are supported by little or no market activity. We used an effective interest rate of 15% in our fair value calculation.

11. Fair Value:

The accounting standards define fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. This accounting standard also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1 - Quoted prices in active markets for identical assets or liabilities.

Level 2 - Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company utilizes the market approach to measure fair value for its financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

Description	Fair Value Measure as of April 4, 2010			
	(dollars in thousands)			
	Total	Level 1	Level 2	Level 3
Money Market Fund	\$ 448	\$ 448	\$ —	\$ —
Total	<u>\$ 448</u>	<u>\$ 448</u>	<u>\$ —</u>	<u>—</u>

Description	Fair Value Measure as of January 3, 2010			
	(dollars in thousands)			
	Total	Level 1	Level 2	Level 3
Money Market Fund	\$ 448	\$ 448	\$ —	\$ —
Derivative Liability	2,660	—	—	2,660
Total	<u>\$3,108</u>	<u>\$ 448</u>	<u>\$ —</u>	<u>\$2,660</u>

Given the complex structure of the warrant and derivative liabilities, we engaged a third party consulting firm to assist us with our valuation. We used the valuation model from the third party consulting firm to establish the fair value for these instruments. The model utilized assumptions for volatility based on our historical volatility and credit spread based on Standard & Poor's Corporate Ratings criteria. We record all changes in fair value of the derivative to other income (expense).

GTC BIOTHERAPEUTICS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table provides a reconciliation of fair value for which we used Level 3 or significant unobservable inputs at April 4, 2010 and January 3, 2010 (in thousands):

	January 3, 2010 Balance	Purchase of Series E Preferred Stock	Fair Value Adjustments	Conversion of Series E Preferred Stock	April 4, 2010 Balance
Derivative Liability	\$ 2,660	\$ —	\$ —	\$ (2,660)	\$ —
Total	\$ 2,660	\$ —	\$ —	\$ (2,660)	\$ —

12. Retention Incentive Plan:

In June 2008, we established a Retention Incentive Plan, or Retention Plan, the purpose of which is to encourage the continued employment of our executive officers and other senior personnel through the grant of equity awards and other payments conditioned on continued employment with the Company. Our Compensation Committee is administering the Retention Plan and has the authority to determine the individual participants and the amount of any awards under the Retention Plan. Eligible participants besides our executive officers include Vice Presidents, Senior Directors, Directors and Associate Directors.

Participants in the Retention Plan were eligible to receive awards of restricted stock units issued pursuant to our 2002 Equity Incentive Plan. We granted 61,583 restricted stock units during 2008 and 10,260 in January 2009. The restricted stock units awarded under the Retention Plan vested on June 30, 2009, for all participants who remained our employee until that date.

During the first quarter of 2009 we recorded approximately \$86,000 of compensation expense related to the restricted stock units.

Participants in the Retention Plan who remained employed by us through March 31, 2010 also received a specified cash retention payment which was paid out in April 2010. We accrued the amount on a straight line basis over a 22-month period, resulting in an expense of approximately \$224,000 during the first quarter of 2010 and \$117,000 during the first quarter of 2009.

In December 2008, we granted 222,500 stock options to our executive officers and other senior personnel pursuant to a retention plan under our Equity Plan. The options to purchase our common stock are exercisable at a price of \$3.10 per share. Fifty percent of the options vested on September 30, 2009 and the remaining options will vest on June 30, 2010.

13. Warrant for Purchase of Common Stock:

In January 2009, we adopted the provisions of Emerging Issues Task Force Issue No. 07-5 “*Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity’s Own Stock*”, which would qualify as a scope exception under previously issued accounting standards. In August 2005, we sold 457,142 shares of our Common Stock at \$17.50 per share and 5 year warrants to purchase an aggregate of 182,857 shares of our Common Stock at an exercise price of \$26.80 per share in a private placement to institutional investors, which were exercisable on or after February 10, 2006. This warrant was reassessed under the new accounting standard and due to a price adjustment clause included in this warrant, it is no longer deemed to be indexed to our stock and therefore, no longer meets the scope exception of the previously issued accounting standard. Therefore, this warrant was determined to be a derivative and was reclassified to a liability and will be marked to market going forward. As a result, we recorded a cumulative catch up adjustment of approximately \$2.3 million to additional paid in capital and approximately \$97,000 to other liabilities during the first quarter of 2009.

14. New Accounting Pronouncements:

In June 2009, the FASB also issued an amendment to the accounting and disclosure requirements for the consolidation of variable interest entities (VIEs). The elimination of the concept of a QSPE, as discussed above, removes the exception from applying the consolidation guidance within this amendment. This amendment requires an enterprise to perform a qualitative analysis when determining whether or not it must consolidate a VIE. The amendment also requires an enterprise to continuously reassess whether it must consolidate a VIE. Additionally, the amendment requires enhanced disclosures about an enterprise’s involvement with VIEs and any significant change in risk exposure due to that involvement, as well as how its involvement with VIEs impacts the enterprise’s financial statements. Finally, an enterprise will be required to disclose significant judgments and assumptions used to determine whether or not to consolidate a VIE. This amendment is effective for financial statements issued for fiscal years beginning after November 15, 2009. Our joint venture with LFB involves the development and commercialization of recombinant

GTC BIOTHERAPEUTICS, INC. AND SUBSIDIARIES

NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

plasma proteins and MAbs. Our investment in the joint venture is being accounted for at cost based on our ownership percentage and is not being consolidated as we are not the primary beneficiary of the joint venture. Adoption did not have an impact in our consolidated financial statements. In determining whether we are the primary beneficiary, we consider a number of factors, including our ability to direct the activities that most significantly affect the entity's economic success, our contractual rights and responsibilities under the arrangement and the significance of the arrangement to each party. These considerations impact the way we account for our existing collaborative and joint venture relationships and may result in the future consolidation of companies or entities with which we have collaborative or other arrangements.

In October 2009, the FASB issued an update to existing guidance on revenue recognition for arrangements with multiple deliverables. This update will allow companies to allocate consideration received for qualified separate deliverables using estimated selling price for both delivered and undelivered items when vendor-specific objective evidence or third-party evidence is unavailable. Additional disclosures discussing the nature of multiple element arrangements, the types of deliverables under the arrangements, the general timing of their delivery, and significant factors and estimates used to determine estimated selling prices are required. We have not yet determined when we will adopt this update or what the impact will be on our financial position or results of operations.

In January 2010, the FASB issued a standard to further update the fair value measurement guidance to improve fair value measurement disclosures. This update to the standard requires new disclosures related to transfers in and out of Level 1 and Level 2, as well as activity in Level 3 fair value measurements, and provides clarification to existing disclosures. This standard is effective for interim periods and annual periods beginning after December 15, 2009, except for disclosures about purchases, sales, issuances, and settlements in the rollforward of activity in Level 3 fair value measurements as these disclosures are effective for fiscal years beginning after December 15, 2010, and for interim periods within those fiscal years. We adopted this standard during the first quarter of 2010. Adoption did not have an impact in our consolidated financial statements.

In February 2010, the FASB issued a standard to amend the subsequent events guidance. The amendment states that SEC filers are no longer required to disclose the date through which subsequent events have been evaluated in originally issued and revised financial statements. We adopted this standard during the first quarter of 2010. Adoption did not have an impact in our consolidated financial statements.

15. Legal Proceedings:

LEO Pharma informed us in September 2008 of its internal reprioritization and desire to transfer the ATryn® program to us or a third party, and LEO attempted to terminate its 2005 collaboration agreement with us for alleged cause before completion of the Phase II study in DIC. However, LEO made it clear to us that their decision was not based on any safety or efficacy issues. We did not believe that LEO had any basis for such termination, and we further believed that LEO was in breach of the agreement. We initiated International Chamber of Commerce (ICC) arbitration proceedings in the fourth quarter of 2008 and asked the tribunal to determine that LEO is not legally entitled to exercise its contractual remedies on termination for alleged cause and that we are entitled to damages with respect to LEO's actions. In March 2009, we notified LEO that we were terminating the agreement pursuant to the terms of the agreement. LEO has asserted counterclaims totaling approximately \$11 million for the return of unused ATryn® product under the terms of the agreement and for its costs of maintaining the clinical program on hold during the ICC proceeding, as well as unspecified amounts for breach of confidentiality and for interest on amounts awarded to LEO, if any, which amounts would only be expected to be awarded if the tribunal finds that LEO had a right to terminate the agreement. If the tribunal instead finds in our favor, there can be no assurance as to what amount, if any, may be awarded to us, but the total amount of our specified damage claims against LEO are for several times the amount of LEO's counterclaims. A hearing on the dispute was held in the third quarter of 2009 before a tribunal of the ICC, and we are awaiting a decision of the tribunal regarding the claims presented. We expect a decision in the first half of 2010, but cannot predict its likely outcome. A ruling by the ICC in favor of LEO would likely have a material adverse effect on our business.

BioProtein Technologies Company, a French corporation, brought a legal action against LFB and GTC in France on a breach of contract claim regarding a contract between BioProtein and LFB. LFB is the principal defendant, but we were joined in the lawsuit based on the allegations by BioProtein that we tortiously interfered with an existing contract between LFB and BioProtein. The total claim against both parties is for 31 million euros. We have retained counsel in France, and we will vigorously defend ourselves. However, pursuant to our Joint Commercialization and Development Agreement with LFB, LFB has agreed to fully indemnify us with respect to any legal fees and damages arising from this lawsuit.

We are not party to any other material pending legal proceedings, other than ordinary routine litigation incidental to our business.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

Business Overview

We are the leader in the development and production of human therapeutic proteins through transgenic technology that enables animals to produce what is known as a "recombinant" form of a specific human protein in their milk. Using the unique characteristics of this production technology, we are developing two portfolios of therapeutic proteins:

- **Recombinant plasma proteins.** Our portfolio of recombinant plasma proteins is being developed to treat a range of genetic and acquired blood deficiencies, including hemophilia and other blood coagulation disorders. Historically these blood proteins, also known as plasma proteins, have only been available by extraction from human blood. Recombinant versions of plasma proteins are difficult to produce in an economically viable manner using other manufacturing systems.
- **Monoclonal antibodies as follow-on biologics.** Our portfolio of monoclonal antibodies, or MABs, is being developed for use as potential follow-on biologics targeted at several large markets in oncology and autoimmune diseases.

We also continue to provide production services for external partners, which can provide us a continuing source of cash and revenue.

Our production technology has been validated by the regulatory approval of our first product ATryn[®], which is a recombinant form of the human plasma protein antithrombin, by the European Medicines Agency, or EMA, in 2006 and by the United States Food and Drug Administration, or FDA, in February 2009. ATryn[®] remains the only transgenically produced therapeutic protein to be approved anywhere in the world. In connection with the approval of ATryn[®], the FDA's Center for Veterinary Medicine also approved our New Animal Drug Application, the first of its kind to regulate genetically engineered animals. We believe that these regulatory approvals of our transgenic technology are important benchmarks for obtaining future approvals for our portfolio of products in development.

The key characteristics of our transgenic production technology include:

- the manufacture of proteins that are difficult to express in other manufacturing systems;
- the production of proteins in large quantities;
- the production of proteins with significantly lower capital cost and lower cost of goods;
- predictable and flexible scale-up;
- naturally enhanced efficacy for oncology MABs (increased Antibody Dependent Cell-mediated Cytotoxicity, or ADCC);
- strong intellectual property position and freedom to operate; and
- an established commercial scale infrastructure capable of supporting the production of our recombinant plasma protein and MAB products.

We plan to develop our portfolio of recombinant protein products through strategic collaborations:

- In September 2006, we entered into a collaboration agreement with LFB Biotechnologies, S.A.S, or LFB, to develop selected recombinant plasma proteins and MABs. The first program in this collaboration is for the development of a recombinant form of human blood coagulation factor VIIa for the treatment of patients with hemophilia. This collaboration is established in a separate joint venture entity, and we have added other programs to this joint venture, including a recombinant form of human blood coagulation, which we in-licensed from ProGenetics LLC, and a recombinant human alpha-1 antitrypsin, as well as an antibody to the CD20 immune system receptor, the same target as for the MAB marketed as Rituxan[®] or MabThera[®].
- In June 2008, we entered into a collaboration agreement with Lundbeck Inc. (formerly OVATION Pharmaceuticals, Inc.), to develop and market ATryn[®] in the United States. The collaboration agreement includes the commercialization of ATryn[®] in the HD indication and the further development of ATryn[®] in acquired antithrombin deficiency indications, or AD. In the second quarter of 2009, Lundbeck commercially launched and reported the first sales of ATryn[®] in the U.S.

We are also seeking collaborations for the further development and commercialization of all of our proteins in development including those in the portfolio with LFB, as well as recombinant alpha-fetoprotein, or AFP, for the treatment of multiple sclerosis and myasthenia gravis and our portfolio of MABs. We acquired exclusive worldwide rights to AFP in 2009.

We are subject to risks common to companies in the biotechnology industry, including, but not limited to, the uncertainties of clinical trials and regulatory requirements for approval of therapeutic compounds, the risks of development of new biological products, the need for additional capital and collaboration partners, competitive new technologies, dependence on key personnel, protection of proprietary technology, and compliance with the FDA and other United States and foreign government regulations.

Our consolidated financial statements have been presented on the basis that we are a going concern, which contemplates the continuity of business, realization of assets and the satisfaction of liabilities in the ordinary course of business. We have operated at a net loss since our inception in 1993, and we used \$5.9 million of net cash in our operating cash flows during the first three months of 2010. We also have negative working capital of \$13.1 million as of April 4, 2010. We are entirely dependent upon funding from equity financings, partnering programs and proceeds from short and long-term debt to finance our operations until we achieve commercial success in selling and licensing our products and positive cash flow from operations. Based on our cash balance as of April 4, 2010, as well as potential cash receipts from existing programs, we believe our capital resources will be sufficient to fund operations to the end of the second quarter of 2010. Our recurring losses from operations and our limited available funds raise substantial doubt about our ability to continue as a going concern. Our plans with regard to this matter include seeking additional financing arrangements and seeking collaboration arrangements. If no funds are available, we would have to sell or liquidate the business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amount of reclassification of liabilities, or any adjustments that might be necessary should we be unable to continue as a going concern. Management expects that future sources of funding may include new or expanded partnering arrangements and additional sales of equity or debt securities. Adequate additional funding may not be available to us on acceptable terms or at all. Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategies. We may be required to delay, reduce the scope of or eliminate our research and development programs, or obtain funds through arrangements with collaborators or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently. Additionally, any future equity funding would dilute ownership of our existing equity investors. On November 5, 2009, we implemented a restructuring plan to enable us to meet the requirements of key programs and maximize the impact of our cash resources. The restructuring plan, which is expected to provide savings of \$5 to \$6 million on an annualized basis, included a reduction in our workforce from 154 to 109 employees.

This discussion and analysis of our financial condition should be read in connection with our consolidated financial statements herein and the accompanying notes thereto, and, our Annual Report on Form 10-K for the fiscal year ended January 3, 2010 (our 2009 Form 10-K), in particular, the information set forth therein under Item 7 – “Management’s Discussion and Analysis of Financial Condition and Results of Operations”.

Results of Operations

The key drivers of our losses are revenue, costs of revenue, and research and development expenses. During the fourth quarter of 2009, we implemented a restructuring plan, which included a headcount reduction of 30%, or 45 full time equivalent employees. This restructuring included employees from most departments located at both our Framingham and central Massachusetts locations. We recorded severance expense in the amount of \$460,000 for the year ended January 3, 2010 of which approximately \$374,000 and \$86,000 was recorded to research and development expense and selling, general and administrative expense, respectively. During the first quarter of 2010, approximately \$109,000 was paid out of the severance reserve. At April 4, 2010, approximately \$50,000 remained in accrued liabilities in relation to unpaid severance costs, which will be paid out through the second quarter of 2010. This reduction will help enable us to meet the requirements of our key programs and maximize the impact of our cash resources. This change along with other operating expense reductions is expected to provide savings of \$5 to \$6 million on an annualized basis. Based on the first quarter of 2010 and our projections for the remainder of 2010, we believe we are on track to achieve these savings in 2010. Through the end of the first quarter of 2010, we have reduced the run rate of expenses by approximately 72% of these expected reductions on an annual basis, which is in line with our planned expectations.

Fiscal three months ended April 4, 2010 and March 29, 2009

	(dollars in thousands)			
	April 4, 2010	March 29, 2008	\$ Change	% Change
Revenue	\$ 346	\$ 198	\$ 148	75%
Cost of revenue	\$ 28	\$ 266	\$ (238)	(89)%
Research and development expense	\$4,768	\$ 6,968	\$(2,200)	(32)%
Selling, general and administrative	\$2,783	\$ 2,509	\$ 274	11%

Revenue. Our revenue for the first quarter of 2010 was primarily derived from Lundbeck, of which approximately \$62,000 related to the sale of ATryn® product and approximately \$118,000 related to the amortization of milestone payments previously received. During the first quarter of 2009 our revenue was primarily derived from our external development programs. We expect revenue from external programs to continue to vary from quarter to quarter due to the nature, timing and specific requirements for these development activities. In subsequent periods we expect shipments of ATryn® product to continue to generate revenue, though it will vary from quarter to quarter.

Cost of revenue. The decrease in cost of revenue was primarily a result of a write off of accrued royalties of approximately \$118,000 associated with a technology agreement no longer in use as well as a decrease of approximately \$68,000 on the PharmAthene program related to development activities. The level of expenses for our external programs will fluctuate from period to period depending upon the stage of development of individual programs as they progress.

Research and development expense. The decrease in research and development expense was primarily due to \$1.9 million of funding from LFB in the first quarter of 2010 as well a decrease of ATryn® related expenses of approximately \$1.9 million. Also included in research and development expense in the first quarter of 2010 is a write off of approximately \$270,000 of accrued royalties and license fees related to the technology agreement mentioned above.

Our first quarter 2010 research and development expense included \$1.9 million related to the ATryn® program as compared to \$3.8 million in the first quarter of 2009. Details of ATryn® related expenses for the respective quarters are as follows:

	(dollars in millions)	
	Fiscal three months ended	
	April 4, 2010	March 29, 2009
ATryn® manufacturing expenses	\$ 1.6	\$ 2.4
EMEA regulatory process expenses	0.2	0.2
U.S. clinical trial and regulatory expenses	0.1	1.2
Total	\$ 1.9	\$ 3.8

Manufacturing costs include costs of producing clinical material in excess of the maximum transfer price to Lundbeck, process development and validation costs for the scale up of the ATryn® manufacturing process, costs associated with the establishment of a second fill site as well as the accrual of manufacturing costs.

During the first quarter of 2010 we incurred approximately \$3.4 million of expenses for our joint collaboration programs with LFB (FVIIa, FIX, CD20 and AAT) and we also recorded a \$1.9 million receivable from LFB related to an agreed upon reimbursable portion of our costs incurred in these programs during the first quarter of 2010, which was reflected as a reduction in the program costs in research and development. During the first quarter of 2009, we incurred approximately \$1.2 million of expense in support of the programs in our LFB collaboration (FVIIa, FIX, CD20 and AAT).

We also incurred approximately \$1.3 million of expenses on other research and development programs, including follow-on biologics, during the first quarter of 2010 as compared to \$1.9 million in the first quarter of 2009. This decrease is primarily due to lower expenses incurred on the follow-on biologics programs as well as the AFP program. We cannot estimate the costs to complete our ongoing research and development programs due to significant variability in clinical trial costs and the regulatory approval process.

Selling, general and administrative expense. The increase in SG&A is primarily the result of higher consulting costs of \$650K related to our financing and partnering efforts, partially offset by a decrease in other legal costs of approximately \$196,000 related to the LEO arbitration and a decrease in investor relation costs of approximately \$155,000.

Liquidity and Capital Resources

Our objective is to finance our business appropriately through a mix of equity financings, partnering payments, receipts from contracts for external programs, grant proceeds, debt financings and interest income earned on our cash and cash equivalents, until such time we have sufficient product sales and royalties to achieve positive cash flow from operations. We expect that our ability to raise future funds will be affected by our ability to enter into some combination of new or expanded partnering arrangements with contracts for external programs, the terms of such arrangements and contracts, the success of ATryn® sales in the U.S. for HD, the progress of initial clinical trials of ATryn® for AD indications, the results of research and development and preclinical testing of our other proprietary product candidates, and advances in competing products and technologies, as well as general market conditions.

We use our cash primarily to pay salaries, wages and benefits, facility and facility-related costs of office, farm and laboratory space and other outside direct costs such as manufacturing and clinical trial expenses. During the first quarter of 2010 we had a net increase in cash and marketable securities of \$1 million, which reflects \$5.9 million used in operations and \$83,000 used to pay down debt, net of \$7 million of funding from LFB related to our issuance to LFB of a secured note.

Our consolidated financial statements have been presented on the basis that we are a going concern, which contemplates the continuity of business, realization of assets and the satisfaction of liabilities in the ordinary course of business. We have incurred losses from operations and negative operating cash flow in the first quarter of 2010 and since inception, and we had an accumulated deficit of \$337 million at April 4, 2010. The primary sources of additional capital raised in 2009 and the first three months of 2010 have been equity financings and debt financings. Based on our cash balance as of April 4, 2010, as well as the potential cash receipts from existing programs, we anticipate that we have the ability to continue our operations to the end of the second quarter of 2010. We are currently engaged in discussions for potential new partnering arrangements and plan to bring in further financial resources through some combination of partnering transactions, including milestones, and other debt or equity financing. However, there can be no assurance that we will be able to enter into anticipated partnering arrangements, or raise additional capital, on terms that are acceptable to us, or at all. If no funds are available we would have to sell or liquidate the business. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate our research and development programs, reduce our planned commercialization efforts, or obtain funds through arrangements with collaborators or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently. Additionally, any future equity funding would dilute the ownership percentage of our existing equity investors. On November 5, 2009, we implemented a restructuring plan to enable us to meet the requirements of key programs and maximize the impact of our cash resources. The restructuring plan, which is expected to provide savings of \$5 to \$6 million on an annualized basis, included a reduction in our workforce from 154 to 109 employees.

Cash Flows used in Operating Activities

Cash used in operating activities increased by approximately \$1.4 million from \$4.5 million for the first three months of 2009 to \$5.9 million in the first three months of 2010. The increase is primarily a result of milestone payments of \$4 million received from Lundbeck and \$750,000 received from JCOM in 2009 partially offset by a decrease in our net loss of \$2.6 million, which includes \$1.9 million of cost reimbursement from LFB in the first quarter of 2010.

Cash Flows from Investing Activities

There were no significant cash flows provided by or used in investing activities during the first three months of 2010 and 2009.

Cash Flows from Financing Activities

In February 2010 we issued a secured note to LFB in the principal amount of \$7,000,000, the principal and accrued interest of which may be cancelled at LFB's option and credited to the purchase of shares of our common stock or securities convertible or exchangeable into shares of our common stock through participation, at LFB's option, in future offerings or our securities at the price per share of the respective offering.

Our \$24.3 million of outstanding long-term debt at April 4, 2010 includes approximately \$13.1 million owed to LFB (net of unamortized discount of approximately \$319,000) on the convertible note that we issued to LFB in December 2008, approximately \$716,000 owed to LFB (net of an unamortized discount of approximately \$127,000) on the convertible note that we issued to LFB in December 2006, approximately \$3.5 million owed to LFB on the term debt promissory note that we issued in June 2009 and approximately \$7 million on the term debt promissory note that was issued in January 2010. Of the \$24.3 million, approximately \$326,000 was classified as current, which reflects the amount due through March 2011 on the convertible notes and the term debt promissory notes with LFB as well as the amounts due for capital leases.

As described in Part II, Item 1 of this Quarterly Report, the likely outcome of the LEO arbitration proceedings cannot be predicted and could have a material impact on our liquidity and cash resources.

COMMITMENTS AND CONTINGENCIES

Our commitments and contingencies are disclosed in Note 6 in the Notes to Consolidated Financial Statements included in Item 8 of our 2009 Form 10-K. We have reviewed the commitments and contingencies at April 4, 2010 and noted that there were no material changes or additions.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

There have been no material changes in our market risk since January 3, 2010. Our market risk disclosures are discussed in our 2009 Form 10-K under the heading Item 7A — "Quantitative and Qualitative Disclosures About Market Risk."

ITEM 4. CONTROLS AND PROCEDURES.

(a) Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this quarterly report.

(b) Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) identified in connection with the evaluation of our internal control that occurred during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

LEO Pharma informed us in September 2008 of its internal reprioritization and desire to transfer the ATryn® program to us or a third party, and LEO attempted to terminate its 2005 collaboration agreement with us for alleged cause before completion of the Phase II study in DIC. However, LEO made it clear to us that their decision was not based on any safety or efficacy issues. We did not believe that LEO had any basis for such termination, and we further believed that LEO was in breach of the agreement. We initiated International Chamber of Commerce (ICC) arbitration proceedings in the fourth quarter of 2008 and asked the tribunal to determine that LEO is not legally entitled to exercise its contractual remedies on termination for alleged cause and that we are entitled to damages with respect to LEO's actions. In March 2009, we notified LEO that we were terminating the agreement pursuant to the terms of the agreement. LEO has asserted counterclaims totaling approximately \$11 million for the return of unused ATryn® product under the terms of the agreement and for its costs of maintaining the clinical program on hold during the ICC proceeding, as well as unspecified amounts for breach of confidentiality and for interest on amounts awarded to LEO, if any, which amounts would only be expected to be awarded if the tribunal finds that LEO had a right to terminate the agreement. If the tribunal instead finds in our favor, there can be no assurance as to what amount, if any, may be awarded to us, but the total amount of our specified damage claims against LEO are for several times the amount of LEO's counterclaims. A hearing on the dispute was held in the third quarter of 2009 before a tribunal of the ICC, and we are awaiting a decision of the tribunal regarding the claims presented. We expect a decision in the first half of 2010, but cannot predict its likely outcome. A ruling by the ICC in favor of LEO would likely have a material adverse effect on our business.

BioProtein Technologies Company, a French corporation, brought a legal action against LFB and GTC in France on a breach of contract claim regarding a contract between BioProtein and LFB. LFB is the principal defendant, but we were joined in the lawsuit based on the allegations by BioProtein that we tortiously interfered with an existing contract between LFB and BioProtein. The total claim against both parties is for 31 million euros. We have retained counsel in France, and we will vigorously defend ourselves. However, pursuant to our Joint Commercialization and Development Agreement with LFB, LFB has agreed to fully indemnify us with respect to any legal fees and damages arising from this lawsuit.

We are not party to any other material pending legal proceedings, other than ordinary routine litigation incidental to our business.

ITEM 6. EXHIBITS.

<u>Exhibit</u>	<u>Description</u>
3.1.1	Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on May 8, 2009. Filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 29, 2009 (File No. 0-21794) and incorporated herein by reference.
3.1.2	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on May 26, 2009. Filed at Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 0-21794) on May 27, 2009 and incorporated herein by reference.
3.1.3	Articles of Amendment to the Restated Articles of Organization of GTC Biotherapeutics, Inc., filed with the Secretary of the Commonwealth of Massachusetts on July 30, 2009. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 0-21794) on July 31, 2009 and incorporated herein by reference.
3.2	By-Laws of the Company, as amended, filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 1999 (File No. 0-21794) and incorporated herein by reference.
4.1	\$7,000,000 secured note issued by the Company to LFB Biotechnologies S.A.S. on February 24, 2010. Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
10.1	Note Purchase Agreement between the Company and LFB Biotechnologies S.A.S. dated February 22, 2010. Filed as Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
10.2	Third Amendment to the Amended and Restated Security Agreement between the Company and LFB Biotechnologies S.A.S. Filed as Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
10.3	Third Amendment to Mortgage Agreement and Fixture Filing between the Company and LFB Biotechnologies S.A.S. Filed as Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a).
32	Certifications pursuant to 18 U.S.C. Section 1350.

EXHIBIT INDEX

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3.1.3	Articles of Amendment to the Restated Articles of Organization of GTC Biotherapeutics, Inc., filed with the Secretary of the Commonwealth of Massachusetts on July 30, 2009. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 0-21794) on July 31, 2009 and incorporated herein by reference.
3.2	By-Laws of the Company, as amended, filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 4, 1999 (File No. 0-21794) and incorporated herein by reference.
4.1	\$7,000,000 secured note issued by the Company to LFB Biotechnologies S.A.S. on February 24, 2010. Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
10.1	Note Purchase Agreement between the Company and LFB Biotechnologies S.A.S. dated February 22, 2010. Filed as Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
10.2	Third Amendment to the Amended and Restated Security Agreement between the Company and LFB Biotechnologies S.A.S. Filed as Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
10.3	Third Amendment to Mortgage Agreement and Fixture Filing between the Company and LFB Biotechnologies S.A.S. Filed as Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 0-21794) on February 26, 2010 and incorporated herein by reference.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a).
32	Certifications pursuant to 18 U.S.C. Section 1350.

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Geoffrey F. Cox, certify that:

1. I have reviewed this quarterly report on Form 10-Q of GTC Biotherapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2010

/s/ Geoffrey F. Cox

Geoffrey F. Cox
Chairman of the Board,
President and Chief Executive Officer

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John B. Green, certify that:

1. I have reviewed this quarterly report on Form 10-Q of GTC Biotherapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2010

/s/ John B. Green

John B. Green
Senior Vice President,
Chief Financial Officer and Treasurer

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of GTC Biotherapeutics, Inc. (the "Company") for the quarterly period ended April 4, 2010, as filed with the Securities and Exchange Commission on the date hereof, (the "Report"), each of the undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 12, 2010

/s/ Geoffrey F. Cox

Geoffrey F. Cox
Chairman of the Board, President and
Chief Executive Officer

Date: May 12, 2010

/s/ John B. Green

John B. Green
Senior Vice President,
Chief Financial Officer and Treasurer