
**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 July 1, 2007

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 registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer" and "large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer

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 August 6, 2007
Common Stock, \$0.01 par value	77,965,665

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”, “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, regulatory review of our ATryn[®] product, our ability to enter into transgenic research and development collaborations in the future and the terms of such collaborations, the results of research and development and preclinical and clinical testing of our internal products, competitive and technological advances and regulatory requirements, and those factors set forth in “Risk Factors” in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2006 as filed with the Securities and Exchange Commission.

The forward-looking statements in this Quarterly Report on Form 10-Q speak 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.

GTC BIOTHERAPEUTICS, INC.
TABLE OF CONTENTS

	<u>PAGE #</u>
<u>PART I. FINANCIAL INFORMATION</u>	
ITEM 1—<u>Financial Statements</u>	4
<u>Consolidated Balance Sheets as of July 1, 2007, and December 31, 2006 (Unaudited)</u>	4
<u>Consolidated Statements of Operations and Comprehensive Loss for the Fiscal Three Months and Fiscal Six Months Ended July 1, 2007 and July 2, 2006 (Unaudited)</u>	5
<u>Consolidated Statements of Cash Flows for the Fiscal Six Months Ended July 1, 2007 and July 2, 2006 (Unaudited)</u>	6
<u>Notes to Unaudited Consolidated Financial Statements</u>	7
ITEM 2—<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	10
ITEM 3—<u>Quantitative and Qualitative Disclosures About Market Risk</u>	16
ITEM 4—<u>Controls and Procedures</u>	16
<u>PART II. OTHER INFORMATION</u>	
ITEM 4—<u>Submission of Matters to a Vote of Security Holders</u>	17
ITEM 6—<u>Exhibits</u>	17
<u>SIGNATURES</u>	19

PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

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

	<u>July 1, 2007</u>	<u>December 31, 2006</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 18,284	\$ 25,356
Marketable securities	11,388	18,479
Accounts receivable and unbilled contract revenue	161	285
Inventory	1,048	3,092
Other current assets	<u>1,139</u>	<u>1,006</u>
Total current assets	32,020	48,218
Net property, plant and equipment	14,634	15,336
Intangible assets, net	7,601	7,539
Other assets	1,869	1,692
Restricted cash	<u>450</u>	<u>450</u>
Total assets	<u>\$ 56,574</u>	<u>\$ 73,235</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 4,667	\$ 6,903
Accrued liabilities	4,634	5,195
Accrued liabilities Genzyme Corporation	2,114	2,464
Short-term deferred contract revenue	3,518	3,301
Current portion of long-term debt and capital leases	<u>1,116</u>	<u>973</u>
Total current liabilities	16,049	18,836
Long-term deferred contract revenue	4,959	5,953
Long-term debt and capital leases, net of current portion	8,454	9,027
Long-term convertible note to LFB, net of discount	1,554	1,443
Other long-term liabilities	<u>20</u>	<u>20</u>
Total liabilities	31,036	35,279
Shareholders' equity:		
Preferred stock, \$.01 par value; 4,985,000 shares authorized; no shares were issued and outstanding	—	—
Series D convertible preferred stock, \$.01 par value; 15,000 shares authorized; 14,615 shares were issued and outstanding at July 1, 2007 and December 31, 2006	—	—
Common stock, \$.01 par value; 200,000,000 shares authorized; 80,745,832 and 76,440,477 shares issued and 77,925,832 and 73,620,477 shares outstanding at July 1, 2007 and December 31, 2006, respectively	779	736
Capital in excess of par value	287,990	282,343
Accumulated deficit	(263,230)	(245,129)
Accumulated other comprehensive income (loss)	<u>(1)</u>	<u>6</u>
Total shareholders' equity	25,538	37,956
Total liabilities and shareholders' equity	<u>\$ 56,574</u>	<u>\$ 73,235</u>

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

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

	<u>Fiscal three months ended</u>		<u>Fiscal six months ended</u>	
	<u>July 1, 2007</u>	<u>July 2, 2006</u>	<u>July 1, 2007</u>	<u>July 2, 2006</u>
Revenue	\$ 2,838	\$ 416	\$ 8,267	\$ 2,617
Costs of revenue and operating expenses:				
Cost of revenue	4,124	1,214	8,288	2,437
Research and development	6,687	5,854	13,153	13,332
Selling, general and administrative	2,704	2,425	5,261	4,462
	<u>13,515</u>	<u>9,493</u>	<u>26,702</u>	<u>20,231</u>
Operating loss	(10,677)	(9,077)	(18,435)	(17,614)
Other income (expense):				
Interest income	414	212	933	491
Interest expense	(359)	(248)	(622)	(503)
Other income (expense)	30	16	23	26
Net loss	<u>\$ (10,592)</u>	<u>\$ (9,097)</u>	<u>\$ (18,101)</u>	<u>\$ (17,600)</u>
Net loss per common share (basic and diluted)	<u>\$ (0.14)</u>	<u>\$ (0.15)</u>	<u>\$ (0.23)</u>	<u>\$ (0.29)</u>
Weighted average number of common shares outstanding (basic and diluted)	<u>77,886</u>	<u>61,397</u>	<u>77,677</u>	<u>61,085</u>
Comprehensive loss:				
Net loss	\$ (10,592)	\$ (9,097)	\$ (18,101)	\$ (17,600)
Other comprehensive gain (loss):				
Unrealized change in holding loss on securities available for sale	—	(15)	(7)	(29)
Total other comprehensive loss	—	(15)	(7)	(29)
Comprehensive loss	<u>\$ (10,592)</u>	<u>\$ (9,112)</u>	<u>\$ (18,108)</u>	<u>\$ (17,629)</u>

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 six months ended</u>	
	<u>July 1, 2007</u>	<u>July 2, 2006</u>
Cash flows from operating activities:		
Net loss	\$ (18,101)	\$ (17,600)
Adjustments to reconcile net loss from continuing operations to net cash used in operating activities:		
Depreciation and amortization	1,719	1,730
Stock based compensation	510	291
Amortization discount on marketable securities	64	(280)
Non-cash common stock issuance to GTC savings and retirement plan	311	184
Inventory write-off	2,943	2,063
Impairment of fixed assets	22	—
Non cash interest expense	112	—
Changes in assets and liabilities:		
Accounts receivable and unbilled contract revenue	124	(314)
Inventory	(899)	(1,329)
Other assets and liabilities	(310)	214
Accounts payable	(2,236)	592
Accrued liabilities	(561)	546
Accrued liabilities – Genzyme Corporation	(350)	(1,008)
Deferred contract revenue	(777)	2,347
Net cash used in operating activities	<u>(17,429)</u>	<u>(12,564)</u>
Cash flows from investing activities:		
Purchase of property, plant and equipment	(601)	(161)
Purchase of intangible asset	(200)	—
Purchase of marketable securities	(7,239)	(8,892)
Redemption of marketable securities	14,259	12,836
Net cash provided by investing activities	<u>6,219</u>	<u>3,783</u>
Cash flows from financing activities:		
Net proceeds from the issuance of common stock, net of offering costs	4,484	(68)
Net proceeds from employee stock purchase plan	81	37
Net proceeds from employee stock options	4	—
Repayment of long-term debt	(431)	(4,277)
Net cash (used in) provided by financing activities	<u>4,138</u>	<u>(4,308)</u>
Net decrease in cash and cash equivalents	(7,072)	(13,089)
Cash and cash equivalents at beginning of period	<u>25,356</u>	<u>26,351</u>
Cash and cash equivalents at end of period	<u>\$ 18,284</u>	<u>\$ 13,262</u>
Supplemental disclosure of cash flow information:		
Common stock issuance for Start license	\$ 300	—

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 December 31, 2006 (referred to as the 2006 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.

The financial statements for the fiscal six months ended July 1, 2007 and July 2, 2006, 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.

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, 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.

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 \$263.2 million at July 1, 2007. The 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 sales of equity or debt securities. However, there can be no assurance that we will be able to raise needed capital on terms that are acceptable to us, or at all.

2. Accounting Policies:

Our significant accounting policies are the same as described in Note 2 to our Notes to Consolidated Financial Statements included in our 2006 Form 10-K. The following is a summary of the significant accounting policies used in the preparation of these financial statements.

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 shares issuable upon conversion or exercise of convertible preferred stock, warrants, stock options and stock to be issued under the defined contribution retirement plan, totaled 35.5 million shares and 13.2 million shares at July 1, 2007 and July 2, 2006, respectively. Since we were in a net loss position at July 1, 2007 and July 2, 2006, these potential common shares were not used to compute diluted loss per share, as the effect would have been antidilutive. We also have a convertible note in the amount of \$2.6 million payable to LFB Biotechnologies, 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 but only to the extent that any conversion does not result in LFB Biotechnologies' holdings exceeding 19.9% of our common stock on an as-converted basis.

3. Inventory:

Inventory consists of:

	(dollars in thousands)	
	At July 1, 2007	At December 31, 2006
Work in process	\$ —	\$ 3,092
Finished goods	1,048	—
Total inventory	\$ 1,048	\$ 3,092

We carry inventory at the lower of cost or market using the first-in, first-out method. Inventories on hand at July 1, 2007 and December 31, 2006 are related to ATryn[®], which is approved for sale in the European Union. We expect that all of the

capitalized inventory will be sold to LEO Pharma either for clinical trials or commercial sales. If at any time we believe that the sale of inventory to LEO is no longer probable, we will charge the inventory to expense. Our current cost of production exceeds our agreed upon maximum transfer price, therefore we expense these excess costs as incurred. We anticipate our cost of production will be substantially reduced as we move to larger production volumes to support clinical and commercial requirements.

During 2006, following delays in regulatory approvals, we wrote off portions of the inventory, to research and development expense, that were designated for clinical trials as well as inventory that was used for development purposes or expected to expire prior to sale.

During the second quarter of 2007 we wrote off in-process inventory which was rendered unusable as a result of the fill/finish process at the facility of our U.S. based third party fill/finish contractor. We recorded a charge of approximately \$2.9 million to cost of sales in connection with the write off. None of this material has been released for clinical or commercial use.

We analyze our inventory levels quarterly and 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 is disposed of and the related costs are written off. If actual market conditions are less favorable than those projected by management, additional inventory write-offs may be required. Also, if we need to use a portion of the capitalized inventory for clinical trials, we expense the inventory when it is designated for use in such clinical trial.

4. Accrued Liabilities:

Accrued liabilities included the following:

	(dollars in thousands)	
	At July 1, 2007	At December 31, 2006
Accrued payroll and benefits	\$ 1,963	\$ 1,740
Accrued bonuses	633	1,167
Amounts owed to third party manufacturer	—	535
Other	2,038	1,753
Total accrued expenses	<u>\$ 4,634</u>	<u>\$ 5,195</u>

5. Intangible Assets:

Our intangible assets consist of marketing rights and technology licenses with amortization lives between 9 years and 15 years. Amortization expense was \$226,000 and \$259,000, respectively for the fiscal three months ended July 1, 2007 and July 2, 2006 and \$438,000 and \$517,000 for the fiscal six months ended July 1, 2007 and July 2, 2006, respectively.

In April 2007, we were granted a non-exclusive license from Start Licensing, Inc., or Start, a joint venture between Geron Corporation and Exeter Life Sciences, Inc., for the patents and patent applications developed by the Roslin Institute to apply nuclear transfer to the production of therapeutic proteins in the milk of transgenic animals. Financial terms include an upfront payment of \$500,000 of which, \$200,000 was paid in cash to Start and a total of 278,370 shares of our common stock, with an aggregate value of approximately \$300,000, were issued, divided equally between Start and Exeter .

The license agreement remains in place through the last patent to expire, which is expected in 2016 for the currently issued patents. Accordingly, the \$500,000 license fee was recorded as an intangible asset in the second quarter of 2007 and is being amortized using the straight-line method over approximately 9 years. There will also be a royalty payable to Start for the commercialization of any products developed with the patented nuclear transfer technology. Our ATryn® product was not developed using this technology.

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

Six months remaining in 2007	\$ 451,000
2008	\$ 902,000
2009	\$ 902,000
2010	\$ 902,000
2011	\$ 902,000
2012 and thereafter	\$3,544,000

6. LFB Biotechnologies:

In January 2007, we sold 3.6 million shares of our Common Stock to LFB Biotechnologies, or LFB, at a purchase price of \$1.23 per share (the market closing price on the date of the agreement in September 2006) representing the final tranche of investment under the stock purchase agreement with LFB. We received approximately \$4.5 million in proceeds from the January sale.

7. Long-Term Debt:

In December 2006, we refinanced our term loan with GE Capital with a new term loan in the amount of \$10 million, of which \$7.1 million was used to pay off the existing loan from GE Capital. There are two separate amortization schedules. The first in the amount of \$8 million, carries a fixed 10.8% annual interest rate and monthly payments of principal and interest of approximately \$109,000 through December 2011 with a balloon payment of approximately \$5.2 million in January 2012. The second, in the amount of \$2 million, carries a fixed 10.84% annual interest rate and monthly payments of principal and interest of approximately \$65,000 through January 2010. Collateral for the loan includes all of our existing and future acquired assets, excluding intellectual property.

In December 2006, as part of the second tranche of investment under the LFB agreement, we issued to LFB a \$2.6 million, five-year convertible note. The note accrues interest at a rate of 2% per annum and will automatically convert into shares of our common stock in conjunction with any future common stock offerings, at the per share offering price of the respective offering, but only to the extent that any conversion does not result in LFB's holdings exceeding 19.9% of our outstanding common stock on an as converted basis. Based on our effective borrowing rate of 10.8%, we recorded a discount of approximately \$1.1 million for the difference between the stated interest rate and our effective borrowing rate. The discount is being amortized over the five year term of the note, resulting in additional interest expense of approximately \$56,000 during the second quarter of 2007 and \$112,000 during the first six months of 2007.

8. Commitments and Contingencies:

On November 13, 2001, two employees of one of our former subsidiaries filed an action against us in the Court of Common Pleas for Philadelphia County in Pennsylvania seeking damages, declaratory relief and certification of a class action relating primarily to their GTC stock options. The complaint demanded damages in excess of \$5 million, plus interest. The Court certified the case as a class action, with the class including employees of Primedica who, at the time GTC sold it, had GTC options that had not been exercised. On February 15, 2007, the parties agreed to settle these claims under terms which provide that our insurer will pay \$175,000 in cash and we will deliver \$225,000 of our Common Stock which we accrued as of December 31, 2006. The number of shares of Common Stock to be issued in the settlement will be determined based on the per share market value of the Common Stock on the date of issue after the Court concludes a fairness hearing regarding the settlement.

9. New Accounting Pronouncements:

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* ("SFAS 157"), which defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. SFAS 157 applies under other existing accounting pronouncements that require or permit fair value measurements, the FASB having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, SFAS 157 does not require any new fair value measurements. However, the application of this statement may change our current practice for fair value measurements. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. We are currently evaluating the impact this statement will have on our financial position and results of operations.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115* ("SFAS 159"). SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. SFAS 159 permits all entities to choose, at specified election dates, to measure eligible items at fair value (the "fair value option"). A business entity shall report unrealized gains and losses on items for which the fair value option has been elected in earnings at each subsequent reporting date. Upfront costs and fees related to items for which the fair value option is elected shall be recognized in earnings as incurred and not deferred. SFAS 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between entities that choose different measurement attributes for similar types of assets and liabilities. SFAS 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. We are currently evaluating the impact this statement will have on our financial position and results of operations, if any.

10. Income Taxes

In June 2006, the FASB issued Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement 109" ("FIN 48"). This statement clarifies the criteria that an individual tax position must satisfy for some or all of the benefits of that position to be recognized in a company's financial statements. FIN 48 prescribes a recognition threshold of more-likely-than-not, and a measurement attribute for all tax positions taken or expected to be taken on a tax return, in order for those tax positions to be recognized in the financial statements.

At December 31, 2006, we had net operating loss, or NOL, carryforwards of \$211 million expiring at various dates through 2026 and research and development, or R&D, credit carryforwards of \$6.3 million expiring at various dates through 2026. Utilization of the NOL and R&D credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, as well as similar state and foreign provisions due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of NOL and R&D credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50 percentage points over a three-year period. Since our formation, we have raised capital through the issuance of capital stock on several occasions which, combined with the purchasing shareholders' subsequent disposition of those shares, may have resulted in an ownership change, or could result in an ownership change, in the future upon subsequent disposition. We have not currently completed a study to assess whether an ownership change has occurred, or whether there have been multiple ownership changes since our formation, due to the significant complexity and cost associated with such study. There also could be additional ownership changes in the future. If we have experienced an ownership change at any time since our formation, utilization of our NOL or R&D credit carryforwards would be subject to an annual limitation under Section 382 which is determined by first multiplying the value of our stock at the time of the ownership change by the applicable long-term tax-exempt rate, and then could be subject to additional adjustments, as required. Any limitation may result in expiration of a portion of the NOL or R&D credit carryforwards before utilization. Further, until a study is completed and any limitation known, no amounts are being presented as an uncertain tax position under FIN 48.

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

Business Overview

We are a leader in the development and production of human therapeutic proteins through transgenic technology. Applying our transgenic production technology, we insert human protein-specific DNA into the genetic structure of an animal to enable it to produce what is known as a recombinant form of the corresponding human protein in the animal's milk. We then purify the protein from the milk to obtain the therapeutic product, which is typically administered by injection. Our transgenic technology is protected by our leading patent position, which includes a U.S. patent, issued in 2006 and expiring in 2021, that covers the production of therapeutic proteins in the milk of transgenic mammals.

In November 2005, we entered into an exclusive collaboration agreement with LEO Pharma to develop and market ATryn® for markets in LEO's territories of Europe, Canada and the Middle East.

In August 2006, we obtained the first regulatory approval of a transgenically produced therapeutic protein anywhere in the world when the European Commission approved the use of ATryn®, our recombinant form of human antithrombin, as a prophylactic treatment of patients with hereditary antithrombin deficiency, or HD, undergoing surgical procedures. ATryn® was introduced to the European medical community for the first time at the International Society on Thrombosis and Haemostasis, or ISTH, Bi-Annual meeting in early July 2007 and LEO is expected to launch ATryn® in the EU on a country-by-country basis, as pricing arrangements are established, over the next twelve to eighteen months. LEO is also beginning a phase II clinical study for the development of ATryn® for the large market indication in disseminated intravascular coagulation, or DIC, associated with severe sepsis. Provided the results of our ongoing pivotal trial are supportive, we are planning to file a Biologics License Application, or BLA, seeking approval of the United States Food and Drug Administration, or FDA, to begin marketing ATryn® for HD patients undergoing surgery or childbirth in the U.S.

Building upon the ATryn[®] approval in Europe, we are focusing our pipeline of proprietary programs on recombinant plasma proteins and monoclonal antibodies for use in hematology, including replacement therapies for genetic disorders, oncology and autoimmune diseases. In doing so, we focus on those potential therapeutic proteins that are difficult to express using traditional recombinant production methods, such as cell culture or bacteria production, or on those product candidates where production of commercial volumes using those methods requires significant capital investment for adequate production capacity, or where the cost of goods is a critical issue. Human plasma proteins that are used for therapeutics may have one or more of these characteristics. With the potential to produce large quantities of therapeutic proteins at a lower cost than using other methods, our production technology enables the pursuit of clinical indications requiring large amounts of the therapeutic protein and offers the opportunity to create markets significantly greater than those supported today by traditional recombinant produced and plasma-derived proteins.

In September 2006, we entered into a collaboration agreement with LFB Biotechnologies to develop selected recombinant plasma proteins and monoclonal antibodies using our transgenic production platform. The first program in this collaboration is for the development of a recombinant form of human factor VIIa.

We are developing a strategic position in follow-on biologics, or biosimilars, which will be defined in more detail as legislation is defined in both Europe and the U.S. In July 2007, LFB Biotechnologies and GTC have added development of a CD20 monoclonal antibody as the second product in our collaboration. This CD20 monoclonal antibody may be considered for clinical development as a follow-on biologic in the U.S. and a biosimilar in the EU as the appropriate legislation is enacted and regulatory guidance is established.

We have also used our transgenic technology in external programs to produce therapeutic products for our partners and to collaborate in development programs. For our external programs, we enter into licensing and development agreements with partners to use our transgenic technology to develop, produce and purify recombinant forms of therapeutic proteins. Historically, we operated on a service contract basis, generally receiving fees for the development of the production platform and production and purification of the proteins. We currently have two active external programs other than the LEO collaboration, one with Merrimack Pharmaceuticals and the other with PharmAthene. Most of our second quarter 2007 revenues were derived from our development programs with Merrimack and PharmAthene. Most of our second quarter 2006 revenues were derived from our Merrimack program.

We have operated at a net loss since our inception in 1993 and we used \$17.4 million of cash in operations in the first six months of 2007. We are entirely dependent upon funding from equity financings, partnering programs and proceeds from debt to finance our operations until we achieve commercial success in selling and licensing our products and positive cash flow from operations.

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 December 31, 2006 (our 2006 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”.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements requires that we make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. Our critical accounting policies are summarized in Note 2 in the Notes to Consolidated Financial Statements included in Item 8 of our 2006 Form 10-K. On an on-going basis, we evaluate our estimates, including those related to revenue recognition, investments, intangible and long-lived assets, inventory, income taxes, accrued expenses, financing operations, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. There have been no material changes to the critical accounting policies that are set forth in Management’s Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 of our 2006 Form 10-K.

Results of Operations The key components to our losses are revenue, costs of revenue, research and development expenses, and selling, general and administrative expenses.

Fiscal three months ended July 1, 2007 and July 2, 2006

	(dollars in thousands)			
	July 1, 2007	July 2, 2006	\$ Change	% Change
Revenue	\$2,838	\$ 416	\$ 2,422	582%
Cost of revenue	\$4,124	\$1,214	\$ 2,910	240%
Research and development	\$6,687	\$5,854	\$ 833	14%
Selling, general and administrative	\$2,704	\$2,425	\$ 279	12%

Revenue. During the second quarter of 2007, approximately \$2.2 million of our revenue was derived from our external development programs with Merrimack Pharmaceuticals and PharmAthene and approximately \$254,000 was derived from the sale of ATryn[®] product to LEO Pharma for clinical and commercial use. During the second quarter of 2006, all of our revenue was derived from external development programs, primarily with Merrimack. We expect revenue from external programs to continue to vary due to the nature and timing of our milestone-based research and development activities for these programs as well as the timing of product shipment to LEO.

Cost of revenue. The increase in cost of revenue is primarily a result of the write-off of \$2.9 million of ATryn[®] inventory which was rendered unusable as a result of the fill/finish process conducted at our U.S. based third party fill/finish contractor. We are pursuing recovery of our losses, but we cannot estimate whether or to what extent we will be successful in these efforts. In any event, even excluding the impact of this write-off, 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 second quarter 2007 research and development expense included \$4.4 million related to the ATryn[®] program, a decrease of \$230,000 as compared to \$4.6 million in the second quarter of 2006. Details of ATryn[®] related expenses for the respective quarters are as follows:

	(dollars in millions)	
	Fiscal three months ended	
	July 1, 2007	July 2, 2006
ATryn [®] manufacturing expenses	\$ 2.3	\$ 1.5
EMEA regulatory process expenses	0.7	0.9
U.S. clinical trial expenses	1.4	1.3
Write-down of prior period inventory	—	0.9
Total	\$ 4.4	\$ 4.6

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

We also incurred approximately \$1 million of expense in the factor VIIa development program which was initiated in the fourth quarter of 2006 in conjunction with our LFB collaboration.

We cannot estimate the costs to complete the 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 expenses was primarily a result of increased costs related to FAS 123R expense of approximately \$119,000 as well as to costs related to senior management hires of approximately \$183,000, partially offset by lower audit, Sarbanes-Oxley and director and officer insurance fees.

Fiscal six months ended July, 2007 and July 2, 2006

	(dollars in thousands)			
	July 1, 2007	July 2, 2006	\$ Change	% Change
Revenue	\$ 8,267	\$ 2,617	\$ 5,650	216%
Cost of revenue	\$ 8,288	\$ 2,437	\$ 5,851	240%
Research and development	\$13,153	\$13,332	\$ (179)	(1)%
Selling, general and administrative	\$ 5,261	\$ 4,462	\$ 799	18%

Revenue. During the first six months of 2007, \$3.5 million of our revenues were derived from the sale of ATryn® product to LEO Pharma for clinical and commercial use and approximately \$3.9 million was derived from our external development programs with Merrimack Pharmaceuticals and PharmAthene. During the first six months of 2006, all of our revenues were derived from external development programs, primarily with Merrimack. We expect revenues on external programs to continue to vary due to the nature and timing of our milestone-based research and development activities for these programs as well as the timing of product shipment to LEO.

Cost of revenue. The increase in cost of revenue is primarily the result of \$3.3 million of the cost of goods sold associated with the sale of ATryn® product to LEO as well as the \$2.9 million write-off of ATryn® inventory rendered unusable, as described above, which was partially offset by a net reduction in expenses for the external development programs. 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 first six months of 2007 research and development expense included \$9.5 million related to the ATryn® program, a decrease of \$1.3 million as compared to \$10.8 million in the first six months of 2006. Details of ATryn® related expenses for the respective six month periods are as follows:

	(dollars in millions)	
	Fiscal six months ended	
	July 1, 2007	July 2, 2006
ATryn® manufacturing expenses	\$ 5.3	\$ 4.9
EMEA regulatory process expenses	1.7	1.8
U.S. clinical trial expenses	2.4	2.0
Write-down of prior year inventory	—	2.1
Other	0.1	—
Total	\$ 9.5	\$ 10.8

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

We also incurred approximately \$1.7 million of expense in the factor VIIa development program which was initiated in the fourth quarter of 2006 in conjunction with our LFB collaboration.

We cannot estimate the costs to complete the 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 expenses was primarily a result of increased legal costs related to patents, partnering and financing transactions of approximately \$513,000, increased costs related to FAS 123R expense of approximately \$149,000 as well as costs related to senior management hires of approximately \$172,000, partially offset by lower audit, Sarbanes-Oxley and director and officer insurance fees.

Liquidity and Capital Resources

Our objective is to finance our business appropriately through a mix of equity financings, partnering and collaborations, grant revenue, debt financings and interest income earned on our cash and cash equivalents, until such time as product sales and royalties occur and we achieve positive cash flow from operations. Our ability to raise future funds will be affected by the extent and timing of the launch of ATryn® for the HD indication in the EU, the progress of clinical trials and the regulatory review of ATryn® in the U.S. for HD, the progress of initial clinical trials for DIC in the EU, our ability to enter into new or expanded partnerships and collaborations, the terms of such collaborations, the results of research and development and preclinical testing of our other proprietary product candidates, and competitive and technological advances, as well as general market conditions.

We use our cash primarily to pay salaries and wages, 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 six months of 2007 we had a net decrease in cash and marketable securities of \$14.2 million, which reflects the receipt of \$4.5 million in proceeds from the LFB financing, \$17.4 million used in operations (which is net of \$3.2 million in receipts from LEO for product manufactured in 2006), and \$601,000 used for capital expenditures. We estimate the net use of cash and marketable securities for the remaining six-months of 2007 to be between \$7 and \$9 million, reflecting anticipated revenues from new and existing partnering arrangements including our programs with Merrimack and PharmAthene. This estimate does not assume any recovery in relation to the unusable ATryn® batches.

We had working capital of \$16 million at July 1, 2007 compared to \$29.4 million at December 31, 2006.

Cash Flows from Financing Activities

Equity Financing Activities

In January 2007, we sold 3.6 million shares of our Common Stock to LFB at a purchase price of \$1.23, the market closing price on the date of the agreement in September 2006, representing the final tranche of investment under the stock purchase agreement with LFB. We received approximately \$4.5 million in proceeds from the January sale.

Credit Facility

In December 2006, we refinanced our term loan with GE Capital with a new term loan in the amount of \$10 million of which \$7.1 million was used to pay off the existing loan with GE Capital. There are two separate amortization schedules. The first in the amount of \$8 million, carries a fixed 10.8% annual interest rate and monthly payments of principal and interest of approximately \$109,000 through December 2011 with a balloon payment of approximately \$5.2 million in January 2012. The second, in the amount of \$2 million, carries a fixed 10.84% annual interest rate and monthly payments of principal and interest of approximately \$65,000 through January 2010. Collateral for the loan includes all of our existing and future acquired assets, excluding intellectual property.

In December 2006, as part of the second tranche investment under the LFB Biotechnologies agreement, we issued to LFB a \$2.6 million, five-year convertible note. The note accrues interest at a rate of 2% per annum and will automatically convert into shares of our common stock in conjunction with any future common stock offerings at the per share offering price of the respective offering, but only to the extent that any conversion does not result in LFB's holdings exceeding 19.9% of our outstanding common stock on an as converted basis. Based on our effective borrowing rate of 10.8%, we recorded a discount of approximately \$1.1 million for the difference between the stated interest rate and our effective borrowing rate. The discount is being amortized over the five year term of the note, resulting in additional interest expense of approximately \$56,000 during the second quarter of 2007 and \$112,000 during the first six months of 2007.

Our \$11.1 million of outstanding long-term debt at July 1, 2007 includes \$9.6 million owed to GE Capital, \$2.6 million owed to LFB and \$1.1 million of unamortized discount on the LFB note. Of the \$11.1 million, approximately \$1.1 million was classified as current, which reflects the amount due through June 2008 on our GE Capital term loan.

Cash Flows used in Operating Activities

Cash used in operating activities totaled \$17.4 million and \$12.6 million for the first six months of 2007 and 2006, respectively, an increase of approximately \$4.8 million. Cash used in operating activities for the first six months of 2007 included a net loss of \$18.1 million, which was partially offset by certain non-cash charges of approximately \$5.7 million, including an inventory write-off of approximately \$2.9 million. Use of cash in 2007 also included a decrease of approximately \$3.1 million in accounts payable and accrued expenses, an increase of approximately \$900,000 in inventory related to the manufacturing of batches for LEO, a decrease of approximately \$800,000 in advance payments from partners that were recorded as deferred revenue pursuant to our revenue recognition policy and a decrease in other assets and liabilities of approximately \$300,000. Sources of funds included a decrease in accounts receivable of approximately \$100,000.

Cash Flows from Investing Activities

Cash flows provided by investing activities include \$7 million in net redemptions of marketable securities in our portfolio, \$200,000 used for the purchase of the Start license and \$601,000 used for purchases of capital equipment. We anticipate a similar level of capital expenditures company-wide in 2007 as compared to 2006.

COMMITMENTS AND CONTINGENCIES

Our commitments and contingencies are disclosed in Note 8 in the Notes to Unaudited Consolidated Financial Statements included in Item 1 of this Form 10-Q as well as in Note 6 in the Notes to Consolidated Financial Statements included in Item 8 of our 2006 Form 10-K. We have reviewed the commitments and contingencies at July 1, 2007 and noted that there were no material changes or additions.

We are a party to license agreements for certain technologies. Certain of these agreements contain provisions for future royalties to be paid on commercial sales of products developed from the licensed technologies. Currently the amounts payable under these agreements and any resulting commitments on our behalf are unknown and are not able to be estimated since the level of future sales, if any, is uncertain.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

There have been no material changes in our market risk since December 31, 2006. Our market risk disclosures are discussed in our 2006 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. 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 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

We held our Annual Meeting of Stockholders on May 23, 2007. The following represents the results of voting on the proposals submitted to the Company's stockholders:

(1) Proposal to elect each of the following nominees to the Board of Directors for a three-year term:

Nominee	Total Vote "FOR"	Total Vote Withheld
Robert W. Baldrige	82,264,521	1,113,390
James A. Geraghty	79,649,943	3,727,968
Michael J. Landine	82,320,932	1,056,979

Each nominee received a plurality of the votes cast, and, therefore, has been duly elected a director of GTC. The directors whose term of office as a director continued after the meeting are Francis J. Bullock, Geoffrey F. Cox, Alan W. Tuck, Kenneth A. Bauer, Christian Béchon, Pamela W. McNamara and Marvin L. Miller.

(2) Proposal to approve the amendment and restatement of our 2002 Equity Incentive Plan:

Total Vote "FOR"	Total Vote "AGAINST"	Total Vote Abstaining	Total Broker Non-Votes
44,243,696	2,441,291	540,679	36,152,245

This proposal received the affirmative vote of a majority of the shares represented in person or by proxy at the annual meeting and entitled to vote on this proposal and, therefore, the proposed amendment to the 2002 Equity Incentive Plan was approved.

ITEM 6. EXHIBITS.

Exhibit	Description
3.1.1	Restated Articles of Organization of the Company, filed with the Secretary of the Commonwealth of Massachusetts on December 27, 1993. Filed as Exhibit 3.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 1993 (File No. 0-21794) and incorporated herein by reference.
3.1.2	Articles of Amendment to the Restated Articles of Organization filed with the Secretary of the Commonwealth of Massachusetts on October 3, 1994. Filed as Exhibit 3.1.2 to the Company's Annual Report on Form 10-K for the year ended December 28, 1997 (File No. 0-21794) and incorporated herein by reference.
3.1.3	Articles of Amendment to the Restated Articles of Organization filed with the Secretary of Commonwealth of Massachusetts on June 26, 1997. Filed as Exhibit 3 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 29, 1997 (File No. 0-21794) and incorporated herein by reference.
3.1.4	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on June 1, 2000. Filed as Exhibit 4.1.5 to the Company's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 2, 2000 (File No. 333-38490) and incorporated herein by reference.
3.1.5	Certificate of Vote of Directors Establishing a Series of a Class of Stock of the Company and designating the Series C Junior Participating Cumulative Preferred Stock. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 1, 2001 (File No. 0-21794) and incorporated herein by reference.
3.1.6	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on May 31, 2002. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 3, 2002 (File No. 0-21794) and incorporated herein by reference.
3.1.7	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on October 2, 2006. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on October 5, 2006 (File No. 0-21794) and incorporated herein by reference.
3.1.8	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on December 11, 2006. Filed as Exhibit 3.1.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 0-21794) and incorporated herein by reference.

Exhibit	Description
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. 000-21794) 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.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 9, 2007

GTC BIOTHERAPEUTICS, INC.

By: /s/ John B. Green
John B. Green
Senior Vice President,
Chief Financial Officer and Treasurer

EXHIBIT INDEX

<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 December 27, 1993. Filed as Exhibit 3.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 1993 (File No. 0-21794) and incorporated herein by reference.
3.1.2	Articles of Amendment to the Restated Articles of Organization filed with the Secretary of the Commonwealth of Massachusetts on October 3, 1994. Filed as Exhibit 3.1.2 to Company's Annual Report on Form 10-K for the year ended December 28, 1997 (File No. 0-21794) and incorporated herein by reference.
3.1.3	Articles of Amendment to the Restated Articles of Organization filed with the Secretary of Commonwealth of Massachusetts on June 26, 1997. Filed as Exhibit 3 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 29, 1997 (File No. 0-21794) and incorporated herein by reference.
3.1.4	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on June 1, 2000. Filed as Exhibit 4.1.5 to the Company's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 2, 2000 (File No. 333-38490) and incorporated herein by reference.
3.1.5	Certificate of Vote of Directors Establishing a Series of a Class of Stock of the Company and designating the Series C Junior Participating Cumulative Preferred Stock. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 1, 2001 (File No. 0-21794) and incorporated herein by reference.
3.1.6	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on May 31, 2002. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 3, 2002 (File No. 0-21794) and incorporated herein by reference.
3.1.7	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on October 2, 2006. Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on October 5, 2006 (File No. 0-21794) and incorporated herein by reference.
3.1.8	Articles of Amendment to the Restated Articles of Organization of the Company filed with the Secretary of the Commonwealth of Massachusetts on December 11, 2006. Filed as Exhibit 3.1.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 0-21794) 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. 000-21794) 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: August 9, 2007

/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: August 9, 2007

/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 July 1, 2007, 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: August 9, 2007

/s/ Geoffrey F. Cox

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

Date: August 9, 2007

/s/ John B. Green

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