
**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 March 30, 2008

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 is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "accelerated filer, large accelerated filer and smaller reporting company" in Rule 12b-2 of the Exchange Act. (check one)

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 2, 2008
Common Stock, \$0.01 par value	102,792,412

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 December 30, 2007 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.

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PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

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

	<u>March 30,</u> <u>2008</u>	<u>December 30,</u> <u>2007</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 10,929	\$ 9,075
Marketable securities	726	6,690
Accounts receivable and unbilled contract revenue	314	240
Inventory	1,371	—
Other current assets	<u>1,146</u>	<u>974</u>
Total current assets	14,486	16,979
Net property, plant and equipment	14,107	14,449
Intangible assets, net	6,925	7,151
Other assets	1,639	1,684
Restricted cash	450	450
Total assets	<u>\$ 37,607</u>	<u>\$ 40,713</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 9,645	\$ 9,904
Accrued liabilities	4,241	4,571
Short-term deferred contract revenue	2,960	3,067
Current portion of long-term debt	<u>1,209</u>	<u>1,177</u>
Total current liabilities	18,055	18,719
Long-term deferred contract revenue	4,370	4,433
Long-term debt, net of current portion	7,535	7,850
Long-term convertible note to LFB, net of discount	568	1,667
Other long-term liabilities	20	20
Total liabilities	30,548	32,689
Shareholders' equity:		
Preferred stock, \$.01 par value; 5,000,000 shares authorized: 15,000 shares designated as Series D convertible preferred stock, \$.01 par value; 115 and 14,615 shares were issued and outstanding at March 30, 2008 and December 30, 2007, respectively	—	—
Common stock, \$.01 par value; 200,000,000 shares authorized; 102,373,007 and 78,269,186 shares were issued and outstanding at March 30, 2008 and December 30, 2007, respectively	1,024	783
Capital in excess of par value	295,708	288,688
Accumulated deficit	(289,673)	(281,450)
Accumulated other comprehensive income	—	3
Total shareholders' equity	<u>7,059</u>	<u>8,024</u>
Total liabilities and shareholders' equity	<u>\$ 37,607</u>	<u>\$ 40,713</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>March 30, 2008</u>	<u>April 1, 2007</u>
Revenue	\$ 3,545	\$ 5,429
Costs of revenue and operating expenses:		
Cost of revenue	1,327	4,164
Research and development	7,704	6,466
Selling, general and administrative	<u>2,711</u>	<u>2,557</u>
	<u>11,742</u>	<u>13,187</u>
Operating loss	(8,197)	(7,758)
Other income (expense):		
Interest income	103	519
Interest expense	(307)	(263)
Other income (expense)	178	(7)
Net loss	<u>\$ (8,223)</u>	<u>\$ (7,509)</u>
Net loss per common share (basic and diluted)	<u>\$ (0.10)</u>	<u>\$ (0.10)</u>
Weighted average number of common shares outstanding (basic and diluted)	<u>83,245</u>	<u>77,468</u>
Comprehensive loss:		
Net loss	\$ (8,223)	\$ (7,509)
Other comprehensive loss:		
Unrealized change in holding loss on securities available for sale	(3)	(7)
Total other comprehensive loss	<u>(3)</u>	<u>(7)</u>
Comprehensive loss	<u>\$ (8,226)</u>	<u>\$ (7,516)</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 three months ended</u>	
	<u>March 30, 2008</u>	<u>April 1, 2007</u>
Cash flows from operating activities:		
Net loss	\$ (8,223)	\$ (7,509)
Adjustments to reconcile net loss from continuing operations to net cash used in operating activities:		
Depreciation and amortization	797	1,088
Stock based compensation	90	256
Amortization discount on marketable securities	118	58
Non-cash common stock issuance to GTC savings and retirement plan	—	310
Non cash interest expense	36	56
Changes in assets and liabilities:		
Accounts receivable and unbilled contract revenue	(74)	(744)
Inventory	(1,371)	(112)
Other assets and liabilities	(127)	(343)
Accounts payable	(259)	(492)
Accrued liabilities	99	(1,173)
Deferred contract revenue	(170)	243
Net cash used in operating activities	<u>(9,084)</u>	<u>(8,362)</u>
Cash flows from investing activities:		
Purchase of property, plant and equipment	(229)	(89)
Purchase of marketable securities	—	(3,305)
Redemption of marketable securities	5,846	7,724
Net cash provided by investing activities	<u>5,617</u>	<u>4,330</u>
Cash flows from financing activities:		
Net proceeds from the issuance of common stock, net of offering costs	5,580	4,450
Net proceeds from employee stock purchase plan	24	41
Repayment of long-term debt	(283)	(171)
Net cash provided by financing activities	<u>5,321</u>	<u>4,320</u>
Net increase in cash and cash equivalents	1,854	288
Cash and cash equivalents at beginning of period	9,075	25,356
Cash and cash equivalents at end of period	<u>\$ 10,929</u>	<u>\$ 25,644</u>
Supplemental disclosure for non cash financing activity:		
Conversion of LFB debt	\$ 1,756	\$ —

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 30, 2007 (referred to as the 2007 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 2007 Form 10-K. The financial statements for the three fiscal months ended March 30, 2008 and April 1, 2007, 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, 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.

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 \$289.7 million at March 30, 2008. Our recurring losses from operations and limited funds raise substantial doubt about our ability to continue as a going concern. 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 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 would 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, 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 commercialized independently. Additionally, any future equity funding may dilute ownership of our equity investors. Based on our cash balance as of March 30, 2008, as well as projected cash receipts from existing programs, we believe we have the ability to continue our operations through the end of the third quarter of 2008, including normal recurring debt service payments. We are currently in discussions for potential new partnering transactions with a plan to bring further financial resources into GTC in the near term through upfront payments. In addition, we may sell additional equity or debt securities. 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 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 28.1 million shares and 35.2 million shares at March 30, 2008 and April 1, 2007, respectively. Since we were in a net loss position at March 30, 2008 and April 1, 2007, 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 with a current principal balance of \$600,000, net of unamortized debt discount of \$300,000, 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 March 30, 2008	At December 30, 2007
Work in process	\$ 1,371	\$ —
Total inventory	\$ 1,371	\$ —

We carry inventory at the lower of cost or market using the first-in, first-out method. Inventories on hand at March 30, 2008 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, our partner for ATryn® in Europe, 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 with LEO, 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.

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 will expense the inventory when it is designated for use in a clinical trial.

4. Accrued Liabilities:

Accrued liabilities included the following:

	(dollars in thousands)	
	At March 30, 2008	At December 30, 2007
Accrued payroll and benefits	\$ 1,754	\$ 1,922
Accrued bonuses	363	814
Other	2,124	1,835
Total accrued expenses	\$ 4,241	\$ 4,571

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 \$212,000, respectively for the fiscal three months ended March 30, 2008 and April 1, 2007, respectively.

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

Nine months remaining in 2008	\$ 676,000
2009	\$ 902,000
2010	\$ 902,000
2011	\$ 902,000
2012	\$ 902,000
2013 and thereafter	\$2,643,000

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.

In March 2008, LFB converted 14,500 shares of Series D Convertible Preferred Stock into 14,500,000 shares of Common Stock.

7. Stockholders' Equity:

In February 2008, we received approximately \$5.6 million in proceeds from a registered direct offering, net of approximately \$400,000 in offering costs and fees. In the offering, we sold 6.9 million shares of our common stock at \$0.87 per share (market price on the date of the agreement) and 7-year warrants, which are exercisable after August 12, 2008, to purchase an aggregate of 6.9 million shares of our common stock at an exercise price of \$0.87 per share.

8. Long-Term Debt:

We have a term loan with GE Capital in the aggregate principal amount of \$10 million, with 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. In connection with the closing of our February 2008 registered direct offering, \$1.7 million of the principal amount of this note and approximately \$40,000 of accrued interest on that principal amount were converted into approximately 2 million shares of our common stock at the rate of \$0.87 per share. Based on our effective borrowing rate of 10.8%, upon issuance of the note, 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 \$8,000 during the first quarter of 2008 and \$13,000 during the first quarter of 2007. Upon the February 2008 conversion of a portion of the note, approximately \$600,000 of unamortized debt discount was reclassified to additional paid in capital.

9. Fair Value:

In September 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 157 "Fair Value Measurements" (SFAS 157). SFAS 157 introduces a framework for measuring fair value and expands required disclosure about fair value measurements of assets and liabilities. SFAS 157 for financial assets and liabilities is effective for fiscal years beginning after November 15, 2007, and we have adopted the standard for those assets and liabilities as of December 31, 2007. The adoption of this statement did not have a material impact on our financial position or results of operations. In accordance with the provisions of FSP No. FAS 157-2, "Effective Date of FASB Statement No. 157", we have elected to defer implementation of SFAS 157 as it relates to our non-financial assets and non-financial liabilities that are recognized and disclosed at fair value in the financial statements on a nonrecurring basis until January 1, 2009.

SFAS 157 defines 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. SFAS 157 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 March 30, 2008			
	Total	Level 1	Level 2	Level 3
Money Market Fund	\$ 8,070	\$ 8,070	\$ —	\$ —
Corporate Debentures/Bonds	726	726	—	—
Total	\$ 8,796	\$ 8,796	\$ —	\$ —

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 at fair value many financial instruments and certain other items 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 in earnings at each subsequent reporting date unrealized gains and losses on items for which the fair value option has been elected. 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 did not choose the Fair Value option, therefore, the adoption of SFAS 159 did not have any impact on our financial position or results of operations.

10. New Accounting Pronouncements:

In December 2007, the FASB issued SFAS No. 141 (revised 2007), “Business Combinations” (“SFAS 141R”). SFAS 141R establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any noncontrolling interest in the acquired entity and the goodwill acquired. SFAS 141R also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS 141R is effective as of the beginning of an entity’s fiscal year that begins after December 15, 2008, and will be adopted by the Company in the first quarter of fiscal 2009. We are currently evaluating the impact this statement and we do not anticipate that it will have an impact on our financial position and results of operations.

In December 2007, the FASB issued SFAS No. 160, “Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB No. 51” (“SFAS 160”). SFAS 160 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income attributable to the parent and to the noncontrolling interest, changes in a parent’s ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. SFAS 160 also establishes disclosure requirements that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS 160 is effective as of the beginning of an entity’s fiscal year that begins after December 15, 2008, and will be adopted by the Company in the first quarter of fiscal 2009. We are currently evaluating the impact this statement and we do not anticipate that it will have an impact on our financial position and results of operations.

In December 2007, EITF 07-01, Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property, or EITF 07-01, was issued. EITF 07-01 prescribes the accounting for collaborations. It requires certain transactions between collaborators to be recorded in the income statement on either a gross or net basis when certain characteristics exist in the collaboration relationship. EITF 07-01 is effective for all of our collaborations existing after January 1, 2009. We are evaluating the impact, if any, this Standard will have on our financial position and results of operations.

In March 2008, the FASB issued SFAS No. 161, “Disclosures about Derivative Instruments and Hedging Activities, an amendment of FASB Statement No. 133” (“SFAS 161”). This new standard requires enhanced disclosures for derivative instruments, including those used in hedging activities. It is effective for fiscal years and interim periods beginning after November 15, 2008, and will be applicable to us in the first quarter of fiscal 2009. We are currently evaluating the impact this statement and we do not anticipate that it will have an impact on our financial position and results of operations.

11. Subsequent Event:

In April 2008, we signed a Master Equipment Lease Agreement, with Emigrant Business Credit Corporation which will allow us to lease equipment for up to \$1.9 million, with a 48 month term with draw downs available through August 2008. The proceeds will become available after we raise an additional \$6 million from new equity, debt or partnership collaborations.

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 specified human protein in their milk. Using this technology, we are developing a portfolio of recombinant blood proteins to treat a range of genetic and acquired blood deficiencies, including hemophilia and other blood coagulation disorders. These blood proteins, also known as plasma proteins, are difficult to produce in other manufacturing systems, and some are currently only available by extraction from human blood. We have also initiated the development of a portfolio of monoclonal antibodies, or MAb's, for use as potential follow-on biologics targeted at several large market products.

Our first product, ATryn[®], our recombinant form of human antithrombin, validated our transgenic production technology's capability to meet the regulatory requirements for recombinant proteins. In 2006, ATryn[®] became the first transgenically produced therapeutic protein to be approved anywhere in the world when we obtained European Commission approval of the use of ATryn[®] as a prophylactic treatment for patients with hereditary antithrombin deficiency, or HD, undergoing surgical procedures. In February 2008, we announced that ATryn[®] had met the statistical requirements for the primary endpoint in our pivotal trial to support our filing of a Biologics License Application, or BLA, for the use of ATryn[®] in the United States in HD patients undergoing surgery or childbirth. We commenced the filing of a rolling BLA in February 2008 and we plan to complete the filing of the BLA in mid-2008.

We also plan to develop ATryn[®] and several of our other recombinant proteins through strategic collaborations. Under our exclusive collaboration agreement entered into with LEO Pharma A/S in 2005, LEO is sponsoring the clinical development of ATryn[®] in Europe for a new indication of disseminated intravascular coagulation, or DIC, in severe sepsis. In September 2006, we entered into a collaboration agreement with LFB Biotechnologies, or LFB, to develop selected recombinant plasma proteins and MAb's. 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. We have subsequently added to the LFB collaboration a program to develop a recombinant form of human blood coagulation factor IX, as well as a program to develop an antibody to the CD20 immune system receptor, the same target as for the MAb marketed as Rituxan[®]. We are engaged in business development activities with the objective of adding additional collaborations for one or more of our recombinant proteins.

We are implementing a strategy in follow-on biologics, or biosimilars, which will be defined in more detail as legislation is enacted and regulatory guidance is established in both Europe and the U.S. In July 2007, LFB Biotechnologies and GTC added the 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.

We have also used our transgenic technology in external programs to produce therapeutic products for our partners. For our external programs, we typically enter into a supply or services agreement with a partner to provide production and/or purification of the partner's product using our transgenic technology. We currently have active external programs with Merrimack Pharmaceuticals and PharmAthene. Most of our revenues in 2007 and 2008 were derived from our external programs.

We have operated at a net loss since our inception in 1993 and we used \$9.1 million of cash in operating cash flows in the first three months of 2008. Our recurring losses from operations and limited funds raise substantial doubt about our ability to continue as a going concern. 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 March 30, 2008, as well as potential cash receipts from existing programs, we believe our resources will be sufficient to fund operations through the end of the third quarter of 2008. We expect that future sources of funding may include new or expanded collaboration arrangements and sales of equity or debt securities. 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 commercialized independently. Additionally, any future equity funding may dilute ownership of our equity investors.

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 30, 2007 (our 2007 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 2007 Form 10-K, and Note 9 in the Notes to the Unaudited Consolidated Financial Statements included in this Form 10-Q. 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 2007 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 March 30, 2008 and April 1, 2007

	(dollars in thousands)			
	March 30, 2008	April 1, 2007	\$ Change	% Change
Revenue	\$ 3,545	\$5,429	\$(1,884)	(35)%
Cost of revenue	\$ 1,327	\$4,164	\$(2,837)	(68)%
Research and development	\$ 7,704	\$6,466	\$ 1,238	19%
Selling, general and administrative	\$ 2,711	\$2,557	\$ 154	6%

Revenue. During the first quarter of 2008, we derived \$3.4 million of our revenue from our external development programs, primarily with Merrimack Pharmaceuticals and PharmAthene, Inc., compared to approximately \$1.7 million from those programs in the comparable period in 2007. This increase is primarily a result of the higher level of activities on the programs during the first quarter of 2008 as compared to the first quarter 2007. We expect revenue from external programs to continue to vary due to the nature, timing and specific requirements for these development activities. During the first quarter of 2007, we also derived \$3.3 million of our revenue from the sale of ATryn[®] product to LEO for clinical and commercial use. We anticipate selling product to LEO during the second quarter of 2008.

Cost of revenue. The decrease in cost of revenue was primarily the result of a \$3.2 million decrease in cost of goods sold associated with the sale of ATryn[®] product to LEO as compared to 2007. The decrease was partially offset by a net increase in costs on our external programs due to the stage of development of those 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 quarter 2008 research and development expense included \$5.1 million related to the ATryn[®] program, an increase of \$400,000 as compared to \$4.7 million in the first quarter of 2007. Details of ATryn[®] related expenses for the respective quarters are as follows:

	(dollars in millions)	
	Fiscal three months ended	
	March 30, 2008	April 1, 2007
ATryn [®] manufacturing expenses	\$ 2.5	\$ 1.7
EMEA regulatory process expenses	0.3	1.0
U.S. clinical trial expenses	1.3	1.0
Other	1.0	1.0
Total	\$ 5.1	\$ 4.7

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 in 2007, costs associated with establishment of a second fill site.

During the first quarter of 2008, we incurred approximately \$1.6 million of expense in support of the programs in our LFB collaboration (FVIIa, FIX, CD20 and AAT) as well as approximately \$900,000 on other research and development programs.

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 expenses was primarily a result of senior management hires made during March 2007.

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 as product sales and royalties occur and we achieve positive cash flow from operations. We expect that our ability to raise future funds will be affected by our ability to enter into new or expanded partnering arrangements or contracts for external programs , the terms of such arrangements and contracts, the regulatory review of ATryn[®] in the U.S. for HD, the progress of initial clinical trials for DIC in the EU, 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 2008 we had a net decrease in cash and marketable securities of \$4.1 million, which includes \$5.6 million received in net proceeds from our February registered direct offering, \$9.1 million used in operations, \$300,000 to pay down debt, and \$200,000 used for capital expenditures. We are currently in discussions for potential new partnering arrangements with a plan to bring in further financial resources. In addition, we may sell additional equity or debt securities. 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. We estimate the net use of cash in operations for 2008 to be \$28 million, not including upfront payments from any additional partnering we may be able to enter into during 2008.

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 each of the years 2008 and 2007 and in prior years, and have an accumulated deficit of \$289.7 million at March 30, 2008. Our recurring losses from operations and limited funds raise substantial doubt about our ability to continue as a going concern. The primary sources of additional capital raised in the first quarter of 2008 and 2007 have been equity financings and debt financings under our credit facility. Based on our cash balance as of March 30, 2008, as well as potential cash receipts from existing programs, we believe our resources will be sufficient to fund operations through the end of the third quarter of 2008. We expect that future sources of funding may include new or expanded collaboration arrangements and sales of equity or debt securities. 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 commercialized independently. Additionally, any future equity funding may dilute ownership of our equity investors.

Cash Flows from Financing Activities

Equity Financing Activities

In February 2008, we received approximately \$5.6 million in proceeds from a registered direct offering, net of approximately \$500,000 in offering costs and fees. In the offering, we sold 6.9 million shares of our common stock at \$0.87 per share (market price on the date of the agreement) and 7-year warrants, which are exercisable after August 12, 2008, to purchase an aggregate of 6.9 million shares of our common stock at an exercise price of \$0.87 per share.

Credit Facilities

Our \$9.3 million of outstanding long-term debt at March 30, 2008 includes \$8.7 million owed to GE Capital, and \$600,000 owed to LFB net of an unamortized discount of \$300,000 on the LFB convertible note. Of the \$9.3 million, approximately \$1.2 million was classified as current, which reflects the amount due through March 2009 on our GE Capital term loan.

Cash Flows used in Operating Activities

Cash used in operating activities totaled \$9.1 million and \$8.4 million for the first three months of 2008 and 2007, respectively, an increase of approximately \$700,000. The increase is primarily a result of increased spending on ATryn[®] manufacturing, for which we will receive payment from LEO upon expected shipment of ATryn[®] in the second quarter of 2008, as well as increased expenses associated with completing the clinical and other regulatory work for the initiation of the rolling Biologics License Application for ATryn[®] in the U.S.

Cash Flows from Investing Activities

Cash flows provided by investing activities include \$5.8 million in net redemptions of marketable securities in our portfolio and \$200,000 used for purchases of capital equipment. We anticipate a similar level of capital expenditures company-wide in 2008 as compared to 2007.

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 5 in the Notes to Consolidated Financial Statements included in Item 8 of our 2007 Form 10-K. We have reviewed the commitments and contingencies at March 30, 2008 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 30, 2007. Our market risk disclosures are discussed in our 2007 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 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 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.
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.
10.1	Amendment No. 1 to the Stock and Note Purchase Agreement between the Company and LFB Biotechnologies S.A.S.U. dated October 18, 2006. Filed herewith.
10.2	Amendment No. 2 to the Stock and Note Purchase Agreement between the Company and LFB Biotechnologies S.A.S.U. dated March 25, 2008. Filed herewith.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a). Filed herewith.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a). Filed herewith.
32	Certifications pursuant to 18 U.S.C. Section 1350. Filed herewith.

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: May 8, 2008

GTC BIOTHERAPEUTICS, INC.

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

EXHIBIT INDEX

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10.1	Amendment No. 1 to the Stock and Note Purchase Agreement between the Company and LFB Biotechnologies S.A.S.U. dated October 18, 2006. Filed herewith.
10.2	Amendment No. 2 to the Stock and Note Purchase Agreement between the Company and LFB Biotechnologies S.A.S.U. dated March 25, 2008. Filed herewith.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a). Filed herewith.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a). Filed herewith.
32	Certifications pursuant to 18 U.S.C. Section 1350. Filed herewith.



October 18, 2006

LFB Biotechnologies
3, avenue des Tropiques
Les Ulis
91958 Courtaboeuf
France

Re: Amendment to the Stock and Note Purchase Agreement

This letter sets forth an amendment to the Stock and Note Purchase Agreement dated as of September 29, 2006 (the "Agreement") between LFB Biotechnologies (the "Purchaser") and GTC Biotherapeutics, Inc. (the "Company") and shall be interpreted in accordance with the terms thereof. Capitalized terms not defined herein shall have the meanings set forth in the Agreement.

The second paragraph of Section 3 of the Agreement is hereby amended and restated in its entirety as follows:

"Upon approval by the SEC of such preliminary proxy or consent solicitation statement or, if the SEC has not reviewed such statement, promptly after the expiration of 10 calendar days from the filing of the preliminary proxy statement or consent solicitation statement, the Company shall file a definitive proxy statement or consent solicitation statement and call and hold a shareholder meeting within 40 calendar days of the filing of such definitive proxy statement to obtain the Shareholder Approvals."

GTC BIOTHERAPEUTICS, INC.

By: /s/ John B. Green

John B. Green
Senior Vice President and Chief Financial
Officer

AGREED:

LFB BIOTECHNOLOGIES S.A.S.U.

By: /s/ Christian Béchon

Christian Béchon
President



March 25, 2008

LFB Biotechnologies, S.A.S.U.
3, avenue des Tropiques
Les Ulis
91958 Courtaboeuf
France

Re: Amendment No. 2 to the Stock and Note Purchase Agreement

This letter sets forth a second amendment to the Stock and Note Purchase Agreement dated as of September 29, 2006 between LFB Biotechnologies (the "**Purchaser**") and GTC Biotherapeutics, Inc. (the "**Company**"), as amended by the amendment dated October 18, 2006 (as previously amended, the "**Agreement**"). This amendment shall be interpreted in accordance with the terms of the Agreement. Capitalized terms not defined herein shall have the meanings set forth in the Agreement.

1. Non-Exercise by the Company of Mandatory Conversion Right

Subject to the simultaneous conversion of shares of Series D Preferred Stock pursuant to Section 4 below, and as an inducement for the Purchaser to make such conversion, the Company irrevocably agrees not to exercise its right provided under Section 4.4.6 (as corrected in accordance with Section 3 below) of the Company's Articles of Amendment designating the Series D Preferred Stock, as filed on October 2, 2007 with the Secretary of the Commonwealth of the Commonwealth of Massachusetts (the "**Articles of Amendment**"), to require conversion of all of the outstanding shares of Series D Preferred Stock into shares of Common Stock if the right of the Purchaser to nominate the "Purchaser Designee" pursuant to the Agreement automatically terminates pursuant to clause (iii) of Section 9(c) of the Agreement after conversion of more than 50% of the shares of Series D Preferred Stock issued to the Purchaser.

2. Amendment to Section 9 of the Agreement

Section 9(c) of the Agreement is hereby amended and restated in its entirety as follows:

"(c) **Ownership Requirements.** After June 30, 2012, or if the annual shareholder meeting for 2012 in which directors are elected is held after June 30, 2012, after the date of such meeting, the Purchaser's right to nominate the Purchaser Designee, including any successor, shall automatically terminate upon the occurrence of either (i) the Purchaser's ownership of Common Stock of the Company declining to less than ten percent (10%) on an as-converted basis and termination of the Development Agreement or (ii) the Purchaser's ownership of Common Stock of the Company declining to less than five percent (5%) on an as-converted basis. For purposes of this Agreement, "ownership" shall be determined in accordance with the rules for "beneficial ownership" set forth in the Rights Agreement referenced in Section 10(e) below, and ownership on an "as-converted basis" shall mean inclusion of all shares of Common Stock issuable upon conversion or exercise of convertible or exercisable securities of the Company in the number of outstanding shares of Common Stock."

3. Correction to Charter Amendment

The Company and the Purchaser agree that the Company shall file Articles of Correction to its Restated Articles of Organization to correct a typographical error in Section 4.4.6 of the Articles of Amendment to correctly refer to Section 9(c) of the Stock Purchase Agreement dated as of September 29, 2006 instead of Section 9(b).

4. Exercise by the Purchaser of Optional Conversion Right

Pursuant to Section 4.4.5 of the Articles of Amendment, immediately following, and in consideration of, the effectiveness of the amendment to Section 9(c) of the Agreement as set forth in Section 1 above, the Purchaser irrevocably elects, and irrevocably instructs the Company, to convert 14,500 shares (the "**Converted Series D Shares**") of the shares of Series D Preferred Stock that the Purchaser holds into 14,500,000 shares (the "**Conversion Shares**") of Common Stock registered in the name of the Purchaser. Notwithstanding anything to the contrary in Section 4.4.5(c) of the Articles of Amendment, the date of this amendment shall be the conversion date of the conversion of the Converted Series D Shares and the issuance of the Conversion Shares shall be effective as of the close of business on the date hereof; and the Converted Series D Shares shall no longer be deemed to be outstanding, and all rights with respect to such shares shall terminate, at the close of business on the date hereof, except only for the right of the Purchaser to receive the Common Shares in exchange therefor. The Purchaser shall promptly surrender the certificates representing the Converted Series D Shares and the Company shall promptly issue and deliver to the Purchaser a certificate representing the Conversion Shares and a replacement certificate for the remaining shares of Series D Preferred Stock held by the Purchaser.

4. Miscellaneous

A. Effect on Agreement. Except as specifically amended herein, the Agreement, and all other documents, instruments and agreements executed and/or delivered in connection therewith, shall remain in full force and effect.

B. Incorporation of Other Terms. Except as specifically amended herein, this amendment shall be governed by all the terms and provisions of the Agreement.

C. This amendment may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

GTC BIOTHERAPEUTICS, INC.

By: /s/ John B. Green

John B. Green
Senior Vice President and Chief Financial Officer

LFB Biotechnologies
March 25, 2008
Page 3 of 3

AGREED:

LFB BIOTECHNOLOGIES, S.A.S.U.

By: /s/ Christian Béchon
Christian Béchon
President

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 8, 2008

/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 8, 2008

/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 March 30, 2008, 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 8, 2008

/s/ Geoffrey F. Cox

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

Date: May 8, 2008

/s/ John B. Green

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