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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 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: 001-33277

SYNTA PHARMACEUTICALS CORP.

(Exact name of registrant as specified in its charter)

Delaware	**04-3508648**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
45 Hartwell Avenue Lexington, Massachusetts	**02421**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(781) 274-8200**

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 "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ (Do not check if a smaller reporting company) Smaller reporting company ☐

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

As of November 7, 2008, the registrant had 33,919,584 shares of common stock outstanding.

SYNTA PHARMACEUTICALS CORP.
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PART I FINANCIAL INFORMATION

Item 1. Financial Statements.

SYNTA PHARMACEUTICALS CORP.

Condensed Consolidated Balance Sheets

(in thousands, except share and per share amounts)

(unaudited)

	September 30, 2008	December 31, 2007
Assets		
Current assets:		
Cash and cash equivalents	$ 58,398	$ 115,577
Restricted cash	151	83
Milestone payments receivable	25,000	—
Prepaid expenses and other current assets	1,399	1,337
Total current assets	84,948	116,997
Property and equipment, net	5,740	5,576
Other assets	76	76
Total assets	$ 90,764	$ 122,649
Liabilities and Stockholders' (Deficit) Equity		
Current liabilities:		
Accounts payable	$ 1,999	$ 2,488
Accrued expenses	15,813	9,184
Capital lease obligations	2,410	2,406
Deferred collaboration revenue	7,017	5,351
Other current liabilities	—	1,343
Total current liabilities	27,239	20,772
Deferred collaboration revenue—long-term	92,005	74,166
Collaboration payable—long-term	3,829	—
Capital lease obligations—long-term	2,301	2,815
Total long-term liabilities	98,135	76,981
Total liabilities	125,374	97,753
Stockholders' (deficit) equity:		
Preferred stock, par value $0.0001 per share		
Authorized: 5,000,000 shares at September 30, 2008 and December 31, 2007; no shares issued and outstanding at September 30, 2008 and December 31, 2007	—	—
Common stock, par value $0.0001 per share		
Authorized: 100,000,000 shares at September 30, 2008 and December 31, 2007; 33,919,584 and 33,875,942 shares issued and outstanding at September 30, 2008 and December 31, 2007, respectively	3	3
Additional paid-in-capital	332,105	324,946
Accumulated deficit	(366,718)	(300,053)
Total stockholders' (deficit) equity	(34,610)	24,896
Total liabilities and stockholders' (deficit) equity	$ 90,764	$ 122,649

See accompanying notes to consolidated financial statements.

SYNTA PHARMACEUTICALS CORP.

Condensed Consolidated Statements of Operations

(in thousands, except share and per share amounts)

(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2008	2007	2008	2007
Collaboration revenues:				
License and milestone revenue	$ 2,819	$ —	$ 5,495	$ —
Cost sharing reimbursements, net	(1,547)	—	(3,516)	—
Total collaboration revenues	1,272	—	1,979	—
Operating expenses:				
Research and development	24,058	11,542	58,550	38,691
General and administrative	3,665	3,852	11,272	11,182
Total operating expenses	27,723	15,394	69,822	49,873
Loss from operations	(26,451)	(15,394)	(67,843)	(49,873)
Other income:				
Investment income, net	130	519	1,178	1,902
Net loss	(26,321)	(14,875)	(66,665)	(47,971)
Convertible preferred stock beneficial conversion charge	—	—	—	58,585
Net loss attributable to common stockholders	$ (26,321)	$ (14,875)	$ (66,665)	$ (106,556)
Basic and diluted weighted average common shares outstanding	33,736,510	33,661,580	33,733,436	32,047,169
Basic and diluted net loss attributable to common stockholders per share	$ (0.78)	$ (0.44)	$ (1.98)	$ (3.32)

See accompanying notes to consolidated financial statements.

SYNTA PHARMACEUTICALS CORP.

Condensed Consolidated Statements of Cash Flows

(in thousands)

(unaudited)

	Nine Months Ended September 30,	
	2008	2007
Cash flows from operating activities:		
Net loss	$ (66,665)	$ (47,971)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	5,816	3,901
Depreciation and amortization	2,035	2,472
Changes in operating assets and liabilities:		
Restricted cash	(68)	457
Prepaid expenses and other current assets	(62)	(1,825)
Other assets	—	50
Accounts payable	(490)	(663)
Accrued expenses	6,609	2,885
Deferred collaboration revenue	(5,495)	—
Collaboration payable	3,829	—
Other deferred revenue	—	(457)
Net cash used in operating activities	(54,491)	(41,151)
Cash flows from investing activities:		
Purchases of marketable securities	—	(15,014)
Sales and maturities of marketable securities	—	28,149
Purchases of property and equipment	(1,435)	(1,484)
Net cash (used in) provided by investing activities	(1,435)	11,651
Cash flows from financing activities:		
Proceeds from issuances of common stock and exercise of common stock warrants, net of transaction costs	—	44,660
Proceeds from exercise of stock options	1	39
Repurchase of restricted common stock	—	(290)
Proceeds from sale—leaseback of property and equipment	880	1,689
Payment of capital lease obligations	(2,134)	(1,946)
Net cash (used in) provided by financing activities	(1,253)	44,152
Net (decrease) increase in cash and cash equivalents	(57,179)	14,652
Cash and cash equivalents at beginning of period	115,577	33,687
Cash and cash equivalents at end of period	$ 58,398	$ 48,339
Supplemental disclosure of noncash operating, investing and financing activities:		
Milestone payments receivable for product development milestones	$ 25,000	—
Acquisition of equipment under capital leases	$ 1,624	$ 2,033
Convertible preferred stock beneficial conversion charge	—	$ 58,585
Conversion of preferred stock	—	$ 41,820
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 374	$ 403

See accompanying notes to consolidated financial statements.

(1) Nature of Business

Synta Pharmaceuticals Corp. (the Company) was incorporated in March 2000 and commenced operations in July 2001. The Company is a biopharmaceutical company focusing on discovering, developing and commercializing small molecule drugs that address severe medical conditions, including cancer and chronic inflammatory diseases.

The Company is subject to risks common to emerging companies in the drug development and pharmaceutical industry including, but not limited to, uncertainty of product development and commercialization, lack of marketing and sales history, dependence on key personnel, uncertainty of market acceptance of products, product liability, uncertain protection of proprietary technology, potential inability to raise additional financing and compliance with the Food and Drug Administration (FDA) and other government regulations.

(2) Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements as of September 30, 2008 and for the three months and nine months ended September 30, 2008 and 2007 are unaudited. These unaudited interim condensed consolidated financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Company's financial position as of September 30, 2008 and the consolidated results of operations and cash flows for the three months and nine months ended September 30, 2008 and 2007. The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from these estimates. The results of operations for the three months and nine months ended September 30, 2008 are not necessarily indicative of the results to be expected for the year ending December 31, 2008 or for any other interim period or any other future year. For more complete financial information, these condensed financial statements, and the notes hereto, should be read in conjunction with the audited financial statements for the year ended December 31, 2007 included in the Company's Annual Report on Form 10-K.

Principles of Consolidation

The consolidated financial statements include the financial statements of the Company and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Significant items subject to such estimates and assumptions include long-term contract accruals, recoverability of long-lived and deferred tax assets, measurement of stock-based compensation, and the period of performance under the GSK Agreement (as defined below). The Company bases its estimates on historical experience and various other assumptions that management believes to be reasonable

(2) Summary of Significant Accounting Policies (Continued)

under the circumstances. Changes in estimates are recorded in the period in which they become known. Actual results could differ from those estimates.

Cash, Cash Equivalents and Marketable Securities

The Company's cash and cash equivalents consist of cash deposited in a highly rated financial institution in the United States and in a short-term U.S. Treasury money market fund. The primary objective of the Company's investment activities is to preserve its capital for the purpose of funding operations and the Company does not enter into investments for trading or speculative purposes. The Company did not have material exposure to high-risk investments, such as mortgage-backed securities, auction rate securities or other special investment vehicles, or SIV's, within its money-market fund investments. The Company also believes that it does not have any material exposure to changes in fair value as a result of changes in interest rates. Declines in interest rates, however, would reduce future investment income.

Revenue Recognition

Collaboration and License Agreements

The Company's principal sources of revenue may include up front license payments, development milestones, reimbursement of development costs, profit sharing payments, sales milestones and royalties from its collaborations. The Company recognizes revenue from these sources in accordance with Staff Accounting Bulletin (SAB) 104, "*Revenue Recognition*", or SAB 104, Emerging Issues Task Force (EITF) No. 99-19, "*Reporting Revenue Gross as a Principal Versus Net as an Agent*", or EITF No. 99-19, EITF No. 00-21, "*Revenue Arrangements with Multiple Deliverables*", or EITF No. 00-21, and EITF No. 01-09, *"Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)*", or EITF No. 01-09. The application of EITF No. 00-21 requires subjective analysis and requires management to make estimates and assumptions about whether deliverables within multiple-element arrangements are separable from the other aspects of the contractual arrangement into separate units of accounting and to determine the fair value to be allocated to each unit of accounting.

In October 2007, the Company and GlaxoSmithKline (GSK) entered into a collaborative development, commercialization and license agreement, as amended in June 2008 (the GSK Agreement), for elesclomol, a novel injectable, small molecule compound that triggers apoptosis, or programmed cell death, in cancer cells, which the Company believes has potential for the treatment of a broad range of cancer types. The Company evaluated the multiple deliverables within the GSK Agreement in accordance with the provisions of EITF No. 00-21 to determine whether the delivered elements that are the obligation of the Company have value to GSK on a stand-alone basis and whether objective reliable evidence of fair value of the undelivered items exists. Deliverables that meet these criteria are considered a separate unit of accounting. Deliverables that do not meet these criteria are combined and accounted for as a single unit of accounting. The appropriate recognition of revenue is then applied to each separate unit of accounting.

The Company's deliverables under the GSK Agreement, including the related rights and obligations, contractual cash flows and performance periods, are more fully described in Note 8. Certain of the deliverables have been combined as a single unit of accounting.

(2) Summary of Significant Accounting Policies (Continued)

The GSK Agreement consists of the following key funding streams: an upfront license payment, product development milestones, reimbursements of certain development costs, sales milestones, profit sharing payments and product royalty payments. The cash flows associated with the single unit of accounting from the development portion of the GSK Agreement are recognized as revenue using a time-based model. Under this model, cash flow streams are recognized as revenue over the estimated performance period. Upon achievement of milestones, as defined in the GSK Agreement, revenue is recognized to the extent the accumulated service time, if any, has occurred. The remainder is deferred and recognized as revenue ratably over the remaining estimated performance period. A change in the period of time expected to complete the deliverable is accounted for as a change in estimate on a prospective basis. There have been no changes to this estimate to date. Revenue is limited to amounts that are nonrefundable and that GSK is contractually obligated to pay to the Company.

The $80 million non-refundable upfront license payment the Company received from GSK in November 2007, together with the $260,000 fair value of an option to require GSK to purchase $25 million of the Company's common stock, is being recognized ratably using the time-based model over the estimated performance period which has been defined as the 15-year period through the earliest expiration date of the related patents, which the Company estimates to be the effective life of the GSK Agreement. The Company is also recognizing product development milestones as collaboration revenue using the time-based model over the same performance period through November 2022. The Company recognizes as revenue on the date the milestone is achieved the portion of the milestone payment equal to the applicable amount of the performance period that has elapsed as of the date the milestone is achieved, with the balance being deferred and recognized on a straight-line basis over the remaining development period. In September 2008, the Company achieved $25 million in non-refundable operational milestones related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008. In the three months and nine months ended September 30, 2008, the Company recognized $2.8 million and $5.5 million, respectively, of license and milestone revenue under the GSK Agreement.

Reimbursements of development costs to the Company by GSK are recorded as cost sharing revenue in the period in which the related development costs are incurred. Reimbursements by the Company to GSK for costs GSK incurs under the development program are recorded as a reduction of cost sharing revenue in the period in which the costs are incurred by GSK in accordance with EITF No. 01-09. Reimbursement of GSK's costs in an amount in excess of collaboration revenues otherwise recognized by the Company in a reporting period may result in negative revenue. Based on the guidance of EITF No. 99-19, the Company has determined that it is acting as a principal under the GSK Agreement and, as such, records these amounts as collaboration revenue. In the three months and nine months ended September 30, 2008, the Company recognized, as a reduction to revenue, $1.5 million and $3.5 million, respectively, of net cost sharing reimbursements to GSK under the GSK Agreement as the Company is solely responsible for funding 100% of the development costs of elesclomol for the treatment of metastatic melanoma until a specified limit of expenses has been incurred, after which continuing development costs are shared by GSK with the Company responsible for a modest share of the costs.

Profit sharing payments are based upon a formula that provides for a range of 40-50% of net profits earned on U.S. sales of products included in the GSK Agreement. Royalty revenues are based

(2) Summary of Significant Accounting Policies (Continued)

upon a percentage of net sales in non-U.S. territories. Profit sharing payments and royalties from the sales of products included in the GSK Agreement will be recorded on the accrual basis when results are reliably measurable, collectibility is reasonably assured and all other revenue recognition criteria are met. Sales milestones, which are based upon the achievement of certain agreed-upon sales thresholds, will be recognized in the period in which the respective sales threshold is achieved and collectibility is reasonably assured.

Deferred Collaboration Revenue

Consistent with the Company's policy on revenue recognition, deferred collaboration revenue represents cash received and amounts earned and invoiced for licensing and option fees and milestones. Such amounts are reflected as deferred collaboration revenue until revenue can be recognized under the Company's revenue recognition policy. Deferred collaboration revenue is classified as current if management believes the Company will complete the earnings process and be able to recognize the deferred amount as revenue within 12 months of the balance sheet date. At September 30, 2008, total deferred collaboration revenue was approximately $99 million, of which $7 million is current and will be recognized as revenue during the next 12 months.

Stock-Based Compensation

For the three months and nine months ended September 30, 2008 and 2007, the fair value of each employee stock option award was estimated on the date of grant based on the fair value method using the Black-Scholes option pricing valuation model with the following weighted average assumptions:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2008	2007	2008	2007
Risk-free interest rate	3.41%	4.51%	3.70%	4.64%
Expected life in years	6.25 years	6.25 years	6.25 years	6.25 years
Volatility	70%	75%	70%	75%
Expected dividend yield	—	—	—	—

The options granted during the three months and nine months ended September 30, 2008 and 2007 had a weighted-average grant date fair value, measured on the date of grant, of $5.07, $5.48, $5.20 and $6.14, respectively.

The Company uses the Black-Scholes option pricing model as the most appropriate valuation method for its option grants. The Black-Scholes model requires inputs for risk-free interest rate, dividend yield, volatility and expected lives of the options. Since the Company has a limited history of stock activity, expected volatility is based on historical data from several public biotechnology companies similar in size and value to the Company. The Company will continue to use a weighted average approach using historical volatility and other similar public entity volatility information until historical volatility of the Company is relevant to measure expected volatility for future option grants. The Company estimates the forfeiture rate based on historical data. Based on an analysis of historical forfeitures, the Company has applied a forfeiture rate of 10% to all options that vest upon completion of the first year of service following the date of grant. The analysis will be re-evaluated at least annually and the forfeiture rate will be adjusted as necessary. The risk-free rate for periods within the

(2) Summary of Significant Accounting Policies (Continued)

contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of the grant. The expected lives for options granted represents the period of time that options granted are expected to be outstanding. Since January 1, 2006 the Company has used the simplified method for determining the expected lives of options.

For awards with graded vesting, the Company allocates compensation costs under SFAS No. 123(R), "*Share-Based Payment*", or SFAS No. 123(R), on a straight-line basis over the requisite service period. The Company amortizes the fair value of each option over each option's service period, which is generally the vesting period.

The Company's net loss includes compensation costs in the amount of $1,922,000 and $994,000 for the three months ended September 30, 2008 and 2007, respectively, and $5,816,000 and $3,901,000 for the nine months ended September 30, 2008 and 2007, respectively, and no income tax benefit related to the Company's stock-based compensation arrangements for employee and non-employee awards. As of September 30, 2008, the total amount of unrecognized stock-based compensation expense was $11,165,000, which will be recognized over a weighted average period of 2.7 years.

The Company accounts for stock options issued to non-employees in accordance with the provisions of SFAS No. 123, "*Accounting for Stock-Based Compensation*", or SFAS No. 123, and EITF No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees, or in Conjunction with Selling Goods or Services*, which requires valuing and remeasuring such stock options to the current fair value until the performance date has been reached.

As part of its preparation of its quarterly financial statements for the three months ended March 31, 2008, the Company discovered that it had erroneously accounted for certain of its non-employee stock options during the last three quarters of 2007 under EITF Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock,* which may require stock options held by certain non-employee consultants to be accounted for as liabilities. Under this accounting it had reclassified approximately $1.8 million from additional-paid-in capital to liabilities in the second quarter of 2007 and subsequently during the year adjusted the fair value of the liability for changes in the market price of its common stock, resulting in a $553,000 credit to stock-based compensation expense for the year. In accordance with SEC Staff Accounting Bulletin (SAB) No. 99, *Materiality*, and SAB No. 108, the Company assessed the materiality of this error on its financial statements for the year ended December 31, 2007, using both the roll-over method and iron-curtain method as defined in SAB No. 108. The Company concluded the effect of this error was not material to its financial statements for the year ended December 31, 2007 and, as such, these financial statements are not materially misstated. The Company also concluded that providing for the correction of the error in 2008 would not have a material effect on its financial statements for the year ended December 31, 2008. Accordingly, the Company recorded a charge to stock-based compensation of $553,000 and a reclassification of approximately $1.8 million from liabilities to additional-paid-in-capital in the three months ended March 31, 2008 to correct this error.

(2) Summary of Significant Accounting Policies (Continued)

The following table outlines the details of recognized and unrecognized expense for these stock-based compensation arrangements (in thousands):

	Stock compensation expense for the three months ended September 30,		Stock compensation expense for the nine months ended September 30,		Unrecognized stock compensation expense as of September 30, 2008
	2008	2007	2008	2007	
Employee stock options	$ 1,473	$1,035	$ 3,955	$2,980	$ 10,490
Repriced employee stock options	29	36	120	105	49
Employee options issued below fair value	2	2	6	7	2
Non-employee stock options	6	(491)	584	(447)	23
Restricted stock	412	412	1,151	1,256	601
	$ 1,922	$ 994	$ 5,816	$3,901	$ 11,165

Stock-based compensation expense is allocated as follows (in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2008	2007	2008	2007
Research and development	$1,439	$ 704	$4,484	$2,863
General and administrative	483	290	1,332	1,038
Total	$1,922	$ 994	$5,816	$3,901

Basic and Diluted Net Loss Per Common Share

Net loss per share is computed based on the guidance of SFAS No. 128, *Earnings Per Share*, requiring companies to report both basic net loss per common share, which is computed using the weighted average number of common shares outstanding during the period, and diluted net loss per common share, which is computed using the weighted average number of common shares outstanding and the weighted average dilutive potential common shares outstanding using the treasury stock method. However, for all periods presented, diluted net loss per share is the same as basic net loss per share as the inclusion of weighted average shares of unvested restricted common stock and common stock issuable upon the exercise of stock options would be anti-dilutive.

The following table summarizes securities outstanding, prior to the application of the treasury stock method, as of each of the periods presented which were not included in the calculation of diluted net loss per share as their inclusion would be anti-dilutive.

	September 30,	
	2008	2007
Common stock options	4,711,375	3,916,522
Nonvested restricted common stock	177,679	166,748

(2) Summary of Significant Accounting Policies (Continued)

Recent Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board, or FASB, issued SFAS No. 141R, *Business Combinations,* or SFAS No. 141R. The pronouncement 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 acquiree and the goodwill acquired. The pronouncement also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS No. 141R is effective for fiscal years beginning after December 15, 2008. The Company does not believe SFAS No. 141R will have a material impact on its results of operations or financial position.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements—an Amendment of ARB No. 51,* or SFAS No. 160. The pronouncement establishes accounting and reporting standards pertaining to ownership interests in subsidiaries held by parties other than the parent, the amount of net income attributable to the parent and to the noncontrolling interest, changes in a parent's ownership interest, and the valuation of any retained noncontrolling equity investment when a subsidiary is deconsolidated. The pronouncement also establishes disclosure requirements that identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 is effective for fiscal years beginning on or after December 15, 2008. The Company does not believe SFAS No. 160 will have a material impact on its results of operations or financial position.

In December 2007, the EITF issued EITF Issue No. 07-1, *Accounting for Collaborative Arrangements,* or EITF No. 07-1, which requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. Further, EITF No. 07-1 clarified that the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF No. 01-9, *Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)*. EITF No. 07-1 is effective for fiscal years beginning on or after December 15, 2008. The Company does not believe the adoption of EITF No. 07-1 will have a material impact on its overall financial position or results of operations.

(3) Fair Value Measurements

The Company adopted SFAS No. 157, *Fair Value Measurements,* or SFAS No. 157, on January 1, 2008. SFAS No. 157 defines and establishes a framework for measuring fair value and expands disclosure about fair value measurements. The standard creates a fair value hierarchy which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability.

Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. Under SFAS No. 157, the Company's cash and cash equivalents, which had a balance of $58.4 million, was required to be measured at fair value at September 30, 2008 and the balance was included in Level 1 inputs.

(4) Property and Equipment

Property and equipment consist of the following:

	September 30, 2008	December 31, 2007
	(in thousands)	
Laboratory equipment	$ 11,635	$ 10,110
Leasehold improvements	4,473	4,238
Computers and software	2,153	1,961
Furniture and fixtures	924	791
	19,185	17,100
Less accumulated depreciation and amortization	(13,445)	(11,524)
	$ 5,740	$ 5,576

Depreciation and amortization expenses of property and equipment were approximately $729,000 and $826,000 in the three months ended September 30, 2008 and 2007, respectively, and $2,035,000 and $2,472,000 for the nine months ended September 30, 2008 and 2007, respectively.

(5) Stockholders' Equity

Initial Public Offering

In February 2007, the Company raised $50.0 million in gross proceeds from the sale of 5,000,000 shares of its common stock in the Company's initial public offering, or IPO, at $10.00 per share. The net offering proceeds after deducting approximately $5.3 million in expenses for underwriters' discounts, fees and commissions, legal, accounting, printing, listing and filing fees, and miscellaneous expenses were approximately $44.7 million.

Convertible Preferred Stock

In June 2006, the Company sold 8,000,000 shares of its Series A Convertible Preferred Stock (the Preferred Stock) at a price of $5.00 per share resulting in gross proceeds of $40 million. The Preferred Stock accrued a cumulative annual dividend of 8% of its purchase price, and was automatically convertible into shares of the Company's common stock upon completion of an IPO. The number of shares of common stock into which each share of Preferred Stock was convertible was determined by dividing the Preferred Stock purchase price plus all accrued dividends by the lesser of $20.00 or 66.6667% of the offering price to the public of the IPO.

In February 2007, all outstanding shares of the Preferred Stock and $1.9 million in accumulated dividends on the Preferred Stock were converted into 6,278,765 shares of common stock upon the completion of the IPO.

In accordance with EITF No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios,* and EITF No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments,* the Company recorded a non-cash beneficial conversion charge of approximately $58.6 million in February 2007 in connection with the contingent adjustable conversion feature of the Preferred Stock.

(6) Stock Option Plans

In March 2006, the Company terminated its 2001 Stock Plan and adopted the Synta Pharmaceuticals Corp. 2006 Stock Plan (the 2006 Stock Plan). The 2006 Stock Plan provides for the grant of incentive stock options, nonstatutory stock options and nonvested stock to employees, officers, directors and consultants to the Company. A total of 3,800,000 shares of common stock have been reserved for issuance under the 2006 Stock Plan. In January 2008, the number of shares of common stock reserved for issuance under the 2006 Stock Plan was increased from 2,500,000 to 3,800,000 pursuant to an "evergreen" provision, which provides for an annual increase based on the lesser of 1,300,000 shares, 5% of the Company's then outstanding shares of common stock, or such other amount as the board of directors may determine. The increase was ratified by the board of directors in February 2008. The administration of the 2006 Stock Plan is under the general supervision of the compensation committee of the board of directors. The exercise price of the stock options is determined by the compensation committee or the board of directors, provided that incentive stock options are granted at not less than fair market value of the common stock on the date of grant and expire no later than ten years from the date the option is granted. Options generally vest over four years.

As of September 30, 2008, under its 2001 Stock Plan, the Company had options outstanding to purchase 2,535,866 shares of its common stock and had outstanding 137,500 restricted shares of common stock and had no shares available for future issuance.

As of September 30, 2008, under its 2006 Stock Plan, the Company had options outstanding to purchase 2,175,509 shares of its common stock, had outstanding 40,179 restricted shares of common stock and had available 1,553,671 shares available for future issuance.

In May 2004, the Company granted its board chairman an option to purchase 75,000 shares of its common stock at an exercise price of $10.843 per share, which was below the then fair market value of $16.00 per share. In December 2007, to comply with Section 409A of the Internal Revenue Code of 1986, the option agreement was amended to increase the exercise price of 28,125 of the shares issuable thereunder to $16.00 per share. No expense was recognized in connection with this amendment. In February 2008, this option was terminated and concurrently the Company granted a fully vested replacement option to purchase 75,000 shares of its common stock under the 2006 Stock Plan at an exercise price of $10.843 per share when the fair market value was $8.82. Accordingly, in the nine months ended September 30, 2008, the Company recognized approximately $25,000 in stock compensation expense in connection with this new option grant.

Non-Vested ("Restricted") Stock Awards With Service Conditions

The Company's share-based compensation plan provides for awards of restricted shares of common stock to officers, other employees and non-employee directors. Restricted stock awards are subject to forfeiture if employment terminates during the prescribed retention period. The remaining unrecognized compensation expense on restricted stock at September 30, 2008 was $601,000. The weighted average period over which the balance is expected to be recognized is 1 year. Vesting may accelerate, with respect to restricted shares issued to certain officers and other employees, upon the FDA's approval of the Company's first new drug application, or NDA.

(6) Stock Option Plans (Continued)

General Option Information

The following table summarizes stock option activity for the nine months ended September 30, 2008:

	Shares	Weighted average exercise price of shares under plan
Outstanding at January 1, 2008	3,850,277	$ 11.22
Granted	1,335,260	8.54
Exercised	(625)	2.00
Cancelled(1)	(473,537)	11.17
Outstanding at September 30, 2008	4,711,375	$ 10.43
Exercisable at September 30, 2008	2,787,090	$ 11.38

(1) In March 2006, the Company terminated the 2001 Stock Plan and adopted the 2006 Stock Plan. Options granted under the 2001 Stock Plan and cancelled subsequent to the March 2006 termination of the 2001 Stock Plan do not return to the pool of options available for future issuance.

Included in the Company's stock options outstanding at September 30, 2008 were 285,305 options issued to non-employee consultants with a weighted average exercise price of $8.94 of which 282,616 were vested. The compensation expense is recorded over the respective vesting periods and is subject to variable accounting treatment prior to vesting, whereby the Company remeasures the fair value of the options at the end of each reporting period. Changes in the fair value may result in an expense or a credit in each reporting period. Compensation expense related to these options was approximately $6,000 and $(491,000) for the three months ended September 30, 2008 and 2007, respectively, and $584,000, including the $553,000 correction referred to in Note 2, and $(447,000) for the nine months ended September 30, 2008 and 2007, respectively.

General Restricted Shares Information

The following table summarizes restricted stock activity during the nine months ended September 30, 2008:

	Shares	Weighted average grant date fair value
Outstanding at January 1, 2008	157,832	$ 20.05
Granted	45,242	7.56
Vested	(23,170)	11.18
Cancelled	(2,225)	8.30
Outstanding at September 30, 2008	177,679	$ 18.18

(7) Accrued Expenses

Accrued expenses consist of the following:

	September 30, 2008	December 31, 2007
	(in thousands)	
Contracted research costs	$ 10,898	$ 3,517
Compensation and benefits	2,305	3,165
Professional fees	1,797	1,721
Other	813	781
	$ 15,813	$ 9,184

(8) Collaborative Development, Commercialization and License Agreement

In October 2007, as amended in June 2008, the Company and GSK entered into the GSK Agreement for elesclomol. Under the terms of the agreement, the companies will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. Pursuant to the agreement, the Company received a non-refundable upfront license payment of $80 million in November 2007. The Company is also eligible to receive potential operational, clinical and regulatory milestone payments from GSK of up to $585 million, which include both payments for operational progress, such as trial initiation and enrollment, and payments for positive clinical and regulatory outcomes, such as regulatory approval. Of the $585 million in potential payments, $145 million are related to the development in metastatic melanoma and $440 million are related to the development in other cancer indications. Of the $145 million related to metastatic melanoma, $45 million are related to operational progress and $100 million are related to positive clinical and regulatory outcomes, which includes $25 million due to the Company either upon achieving the primary endpoint of the SYMMETRY trial, its global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, or upon determination by the Company and GSK to file for regulatory approval if the primary endpoint is not achieved. In addition to milestones related to operational progress in development and clinical and regulatory outcomes, the Company is eligible to receive up to $300 million in potential commercial milestone payments from GSK based on achieving certain net sales thresholds. In September 2008, the Company achieved $25 million in non-refundable operational milestones related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008.

Under the GSK Agreement, the total worldwide development costs for elesclomol, including development in metastatic melanoma, are shared according to an agreed targeted percentage, which represents for the Company a modest share of total costs. This cost share is realized by the Company over time through both direct cost reimbursement payments and operational milestone payments.

The GSK Agreement specifies an initial period during which the Company is solely responsible for all development costs, up to an agreed-upon limit, associated with specific development activities related to seeking FDA approval of elesclomol for the treatment of metastatic melanoma, whether incurred by the Company or GSK. Also during this period, GSK is responsible for certain operational milestone payments to the Company in the amount of up to $50 million. Costs may be incurred by

(8) Collaborative Development, Commercialization and License Agreement (Continued)

GSK during this period that are related to the development of elesclomol in metastatic melanoma. Such costs are the responsibility of the Company; however, these costs are not required to be paid to GSK until after the final completion of the SYMMETRY trial, as defined in the GSK Agreement. Following the initial period, when total melanoma development costs have exceeded the pre-specified limit, additional costs incurred for the program will no longer be the sole responsibility of the Company and will be shared by GSK in accordance with the agreed targeted percentage defined in the GSK Agreement. The Company anticipates that GSK will begin sharing development costs of elesclomol for the treatment of metastatic melanoma, including the costs of the SYMMETRY trial and the related NDA submission with the FDA, in the second quarter of 2009. In addition to development in metastatic melanoma, the Company also funds early clinical development of elesclomol in two other cancer indications. Satisfactory completion of these initial trials would result in certain milestone payments from GSK.

In the United States, the Company's share of the operating profits and losses from the commercialization and sales of elesclomol over the life of the product will range from 40-50%, with the percentage increasing as the level of annual sales increases. Prior to commercialization, the Company is responsible for funding 40% of pre-commercialization costs in the United States. The Company may elect not to participate in co-commercialization, in which case the Company would earn royalties in lieu of profit sharing. Outside of the United States, the Company will receive double-digit tiered royalties.

Under the GSK Agreement, GSK may, subject to the agreement of the Company, purchase up to $45 million of the Company's common stock in two separate tranches upon the achievement of specified development and regulatory milestones. In the first tranche, GSK would be obligated to buy $25 million of the Company's common stock at the sole discretion of the Company. The per share purchase price would be at a specified premium. The Company attributed $260,000 of value to this option to require GSK to purchase its common stock. The second tranche of $20 million of common stock would be subject to the agreement of both the Company and GSK. The per share purchase price would be at a specified premium.

GSK may terminate the agreement upon not less than three months' written notice at any time prior to the date of the first commercial sale of an elesclomol product and upon not less than six months' written notice at any time on and after such date, in which case GSK may be obligated in certain circumstances to make additional payments to the Company. Under the GSK Agreement, the Company has the right, but not the obligation to participate in various joint governance committees (see Note 2).

(9) Related Party Transactions

In January 2005, the Company entered into an Agreement and Release with its scientific founder, who is a board member, whereby all outstanding matters regarding various oral understandings and arrangements between the scientific founder and the Company were resolved, including arrangements relating to (1) the assignment by the scientific founder of the benefit of his interests, if any, resulting from the Company's acquisition of the net assets of Cancer Genomics, Inc., Kava Pharmaceuticals, Inc. and SinglePixel Biomedical, Inc., (2) the scientific founder's assignment of inventions, non-competition, non-solicitation and confidentiality agreements with the Company, and (3) a release by the scientific founder of any and all claims that the scientific founder may have had against the Company. Pursuant to this agreement, the Company is paying the scientific founder $500,000, payable in $25,000

(9) Related Party Transactions (Continued)

installments quarterly for five years. The full amount of the obligation was charged to research and development expense in 2005. Total installment payments in each of the nine months ended September 30, 2008 and 2007 were approximately $75,000.

The Company paid its scientific founder and a member of the board consulting fees of approximately $25,000 per month in January and February 2007 pursuant to a consulting agreement dated April 18, 2005. In March 2007, the Company amended the consulting agreement to reduce the fee from $25,000 to $10,000 per month. Total consulting fees paid in the nine months ended September 30, 2008 and 2007 were approximately $90,000 and $120,000, respectively.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read this discussion together with the consolidated financial statements, related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q. The following discussion may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the Securities and Exchange Commission. These risks could cause our actual results to differ materially from any future performance suggested below.

Overview

We are a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to extend and enhance the lives of patients with severe medical conditions, including cancer and chronic inflammatory diseases. We have a unique chemical compound library, an integrated discovery engine, and a diverse pipeline of clinical- and preclinical-stage drug candidates with distinct mechanisms of action and novel chemical structures. We have three drug candidates in clinical trials, one drug candidate in preclinical studies, and one program in the lead optimization stage of discovery, as well as other programs in earlier stages of discovery. We discovered and developed each of our drug candidates internally using our compound library and discovery capabilities. At present, other than our lead drug candidate, elesclomol, we retain all rights to each of our drug candidates and programs, across all geographic markets and therapeutic indications. We have entered into a partnership with GlaxoSmithKline, or GSK, for the joint development and commercialization of elesclomol.

We were incorporated in March 2000 and commenced operations in July 2001. Since that time, we have been principally engaged in raising capital and in the discovery and development of novel drug candidates. Since our inception, we have had no revenues from product sales. We have funded our operations principally with $195.4 million in net proceeds from private placements of our common stock, $40.0 million in net proceeds from a private placement of our Series A convertible preferred stock, $44.7 million in net proceeds from our initial public offering, and an $80 million non-refundable upfront payment under the GSK Agreement, which, together with the exercise of common stock warrants and options, provided aggregate net cash proceeds of approximately $361.4 million through September 30, 2008. In September 2008, we achieved $25 million in non-refundable operational milestones under the GSK Agreement related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008. We have also generated funds from government grant revenues, equipment lease financings and investment income.

In February 2007, we raised $50.0 million in gross proceeds from the sale of 5,000,000 shares of our common stock in our initial public offering, or the IPO, at $10.00 per share. The net offering proceeds to us after deducting approximately $5.3 million in expenses for underwriters' discounts, fees and commissions, legal, accounting, printing, listing and filing fees, and miscellaneous expenses were approximately $44.7 million. All outstanding shares of our Series A convertible preferred stock and $1.9 million in accumulated dividends on the Series A convertible preferred stock were converted into 6,278,765 shares of common stock upon the completion of the IPO. In accordance with Emerging Issues Task Force, or EITF, No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios*, and EITF No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments,* we recorded a non-cash beneficial conversion charge of approximately $58.6 million in February 2007 in connection with the contingent adjustable conversion feature of the Series A convertible preferred stock.

We have devoted substantially all of our capital resources to the research and development of our drug candidates. We have never been profitable and, as of September 30, 2008, we had an accumulated deficit of $366.7 million. We expect to incur significant operating losses for the foreseeable future as we advance our drug candidates from discovery through preclinical development and clinical trials and seek regulatory approval and eventual commercialization. In addition to these increasing research and development expenses, we expect general and administrative costs to increase in connection with additional headcount, public-company requirements and compliance, commercial development and medical community relations, as we, together with GSK, prepare for the potential launch of elesclomol. We will need to generate significant revenues to achieve profitability and may never do so.

Our Lead Drug Candidate, Elesclomol (formerly, STA-4783)

Our most advanced clinical-stage drug candidate, elesclomol, is a novel, injectable, small molecule compound that triggers apoptosis, or programmed cell death, in cancer cells, which we believe has potential for the treatment of a broad range of cancer types.

In September 2006, we announced positive results for elesclomol in combination with paclitaxel, a leading chemotherapeutic agent, in a double-blind, randomized, controlled, multicenter Phase 2b clinical trial in patients with stage IV metastatic melanoma. We believe that this is the first blinded multicenter clinical trial of a drug candidate for the treatment of metastatic melanoma in 30 years to meet its primary endpoint with statistical significance. In November 2006, we received Fast Track designation from the U.S. Food and Drug Administration, or FDA, for the development of elesclomol for the treatment of metastatic melanoma. In December 2007, we received orphan drug designation for elesclomol in this indication in the United States from the FDA. Orphan drug status is designed to encourage biotechnology and pharmaceutical companies to develop drugs for rare diseases affecting fewer than 200,000 people in the United States. Assuming that elesclomol is approved by the FDA, we will be entitled to seven years of market exclusivity for elesclomol for the treatment of patients with metastatic melanoma.

Based on the results of our Phase 2b trial, we initiated a global, pivotal Phase 3 clinical trial of elesclomol in metastatic melanoma, called the SYMMETRY trial, in the third quarter of 2007. The SYMMETRY trial is being conducted under the terms of a Special Protocol Assessment, or SPA, agreed to by the FDA. The SPA process provides for a written agreement between a clinical trial sponsor and the FDA that the proposed design and planned analyses of the clinical trial is sufficient to support regulatory approval of a drug candidate, unless public health concerns unrecognized at the time of the protocol assessment become evident. The SYMMETRY trial is enrolling patients with stage IV metastatic melanoma who have not received prior chemotherapy but who may have already been treated with non-chemotherapeutic agents, such as biologics. Approximately 630 patients are being enrolled in the blinded, randomized, controlled study, which generally mirrors the design of our Phase 2b trial and will be conducted at approximately 150 centers worldwide.

As with our prior Phase 2b trial, patients enrolled in the SYMMETRY trial will be randomized to receive either elesclomol plus paclitaxel or paclitaxel alone. The dosage of each agent, the dosing schedule, and the primary endpoint—progression free survival, or PFS,—are the same as in our prior Phase 2b trial. The SYMMETRY trial increases the total number of patients enrolled from the prior Phase 2b trial and includes central review of radiology scans, stratification to ensure balance between treatment and control arms, and a no-crossover design for facilitating the assessment of overall survival, or OS.

Based on our current enrollment projections and event rate targets, we expect to complete enrollment in January or February of 2009, and conduct the primary endpoint analysis for PFS shortly thereafter. Assuming that the results of the PFS analysis are positive, we plan to submit a new drug application, or NDA, to the FDA as soon as possible, which we estimate would be in the second half of

2009. If actual enrollment or event rates differ substantially from our current projections, our target dates for submitting the NDA may change.

In October 2007, as amended in June 2008, we entered into a collaborative development, commercialization and license agreement with GSK for elesclomol, or the GSK Agreement, under which we are eligible to receive up to $1.01 billion in milestones and other payments, as well as share 40-50% of the profits and losses from sales in the United States and receive double-digit tiered royalties from net sales outside of the United States. Under the terms of the agreement, we and GSK will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. Pursuant to the agreement, we received a non-refundable upfront license payment of $80 million in November 2007. We are also eligible to receive potential operational, clinical and regulatory milestone payments from GSK of up to $585 million, which include both payments for operational progress, such as trial initiation and enrollment, and payments for positive clinical and regulatory outcomes, such as regulatory approval. Of the $585 million in potential payments, $145 million are related to the development in metastatic melanoma and $440 million are related to the development in other cancer indications. Of the $145 million related to metastatic melanoma, $45 million are related to operational progress and $100 million are related to positive clinical and regulatory outcomes, which includes $25 million due to us either upon achieving the primary PFS endpoint of the SYMMETRY, trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma or upon determination by us and by GSK to file for regulatory approval if the primary endpoint is not achieved. In addition to milestones related to operational progress in development and clinical and regulatory outcomes, we are eligible to receive up to $300 million in potential commercial milestone payments from GSK based on achieving certain net sales thresholds. In September 2008, we achieved $25 million in non-refundable operational milestones related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008.

Under the GSK Agreement, the total worldwide development costs for elesclomol, including the development in metastatic melanoma, are shared according to an agreed targeted percentage, which represents for us a modest share of total costs. This cost share is realized by us over time through both direct cost reimbursement payments and operational milestone payments.

The GSK Agreement specifies an initial period during which we are solely responsible for all development costs, up to an agreed-upon limit, associated with specific development activities related to seeking FDA approval of elesclomol for the treatment of metastatic melanoma, whether incurred by us or GSK. Also, during this period, GSK is responsible for certain operational milestone payments to us in the amount of up to $50 million. Costs may be incurred by GSK during this period that are related to the development of elesclomol in metastatic melanoma. Such costs are our responsibility; however, these costs are not required to be paid to GSK until after the final completion of the SYMMETRY trial, as defined in the GSK Agreement. Following the initial period when total melanoma development costs have exceeded the pre-specified limit, additional costs incurred for the program will no longer be our sole responsibility and will be shared by GSK in accordance with the targeted percentage defined in the GSK Agreement. We anticipate that GSK will begin sharing development costs of elesclomol for the treatment of metastatic melanoma, including the costs of the SYMMETRY trial and the related NDA submission, in the second quarter of 2009. In addition to development in metastatic melanoma, we also fund early clinical development of elesclomol in two other cancer indications. Satisfactory completion of these initial trials would result in certain milestone payments from GSK.

In the United States, our share of the operating profits and losses from the commercialization and sales of elesclomol over the life of the product will range from 40-50%, with the percentage increasing as the level of annual sales increases. Prior to commercialization, we are responsible for funding 40%

of pre-commercialization costs in the United States. We may elect not to participate in co-commercialization, in which case we would earn royalties in lieu of profit sharing. Outside of the United States, we will receive double-digit tiered royalties.

Under the GSK Agreement, GSK may, subject to our agreement, purchase up to $45 million of our common stock in two separate tranches upon the achievement of specified development and regulatory milestones. In the first tranche, GSK would be obligated to buy $25 million of our common stock at our sole discretion. The per share purchase price would be at a specified premium. We attributed $260,000 of value to this option to require GSK to purchase our common stock. The second tranche of $20 million of common stock would be subject to the agreement of both us and GSK. The per share purchase price would be at a specified premium.

GSK may terminate the agreement upon not less than three months' written notice at any time prior to the date of the first commercial sale of an elesclomol product and upon not less than six months' written notice at any time on and after such date, in which case GSK may be obligated in certain circumstances to make additional payments to us. Under the GSK Agreement, we have the right, but not the obligation to participate in various joint governance committees.

The collected preclinical and clinical data we have for elesclomol are suggestive of activity in high-ROS cancers: those cancers with elevated levels of reactive oxygen species that may make them especially vulnerable to an oxidative stress inducer such as elesclomol. These include, in addition to melanoma, prostate, breast, ovarian, and other indications. In November 2008, we initiated a Phase 1/2 trial in hormone-refractory mestastic prostate cancer, and expect the first patient to be treated in November or December. This trial will explore dose, safety, and signs of activity in combination with docetaxel. The prostate cancer trial is being conducted with a sodium salt, water soluble formulation of elesclomol, which we believe allows for greater flexibility of administration in combination with a broad range of commonly-used anti-cancer agents. Together with our partner, GSK, we are planning the initiation of additional trials in new indications in 2009.

Our Other Oncology Drug Candidates and Research Programs

STA-9090. STA-9090 is a novel, injectable, small molecule drug candidate we are developing for the treatment of cancer. STA-9090 inhibits heat shock protein 90, or Hsp90, a chaperone protein that regulates the activity of numerous signaling proteins that trigger uncontrolled proliferation in cancer cells, in particular kinase proteins. Examples of kinase proteins include c-Kit, Bcr-Abl, Her2, EGFR, and others that are the targets of approved direct kinase inhibitors such as Gleevec, Herceptin, Tarceva, and Erbitux. We believe that inhibiting kinases indirectly, by disrupting the chaperone activities of Hsp90, provides two advantages: first, a means to simultaneously attack multiple cancer-promoting kinases; and, second, an ability to kill tumor cells with mutated kinases that have lost responsiveness to a direct kinase inhibitor. We have shown in preclinical experiments that STA-9090 is significantly more potent against certain types of cancer cells than Gleevec, as well as the two Hsp90 inhibitors furthest along in clinical development, 17-AAG and 17-DMAG being developed by Kosan Biosciences. STA-9090 is further differentiated from these Hsp90 inhibitors because it is a novel chemical structure that is not a derivative or analog of the natural product geldanamycin. We believe that this creates a distinct activity profile for STA-9090 and is a competitive advantage. We are currently conducting two Phase 1 studies in solid tumors to identify the maximum tolerated dose of STA-9090 based on once- and twice-a-week intravenous dosing schedules, respectively. In addition to an evaluation of safety and tolerability, patients in these studies will be assessed for biological activity based on biomarker responses and clinical response rates based on the industry standard RECIST criteria, which are the unified response assessment criteria agreed to by the World Health Organization, United States National Cancer Institute, and European Organisation for Research and Treatment of Cancer. We expect to initiate a Phase 1/2 clinical trial of STA-9090 in hematological cancers by the end of 2008 or in the first quarter of 2009.

STA-9584. STA-9584 is a novel, injectable, small molecule compound that disrupts the blood vessels that supply tumors with oxygen and essential nutrients. In preclinical experiments, STA-9584 has shown strong anti-tumor activity in a broad range of cancer models, including prostate, lung, breast, melanoma, and lymphoma. In preclinical testing, STA-9584 has been shown to act against established tumor vessels, a mechanism that is differentiated from the mechanism of anti-angiogenesis inhibitors such as Avastin, which prevents the formation of new tumor vessels. This program is currently in preclinical development.

Autoimmune and Inflammatory Diseases

Apilimod (STA-5326). Apilimod is a novel, orally administered, small molecule drug candidate we are developing for the treatment of autoimmune and other chronic inflammatory diseases. Apilimod inhibits the production of the cytokines interleukin-12, or IL-12, and interleukin-23, or IL-23, and thereby down-regulates the inflammation pathways that underlie certain autoimmune and inflammatory diseases. We are currently conducting a Phase 2a clinical trial of apilimod in patients with rheumatoid arthritis, or RA. The preliminary results of the first 22 patients in the RA Phase 2a trial showed encouraging biomarker and clinical signals suggesting activity of apilimod in this indication. We have elected to enroll an additional cohort in the RA Phase 2a trial to explore a higher dose of apilimod. We expect data from this higher dose cohort in the first half of 2009.

CRAC ion channel inhibitor. We have developed novel, small molecule inhibitors of calcium release activated calcium, or CRAC, ion channels expressed on immune cells. The CRAC ion channel is the primary route for calcium entry into T cells and other immune cells, regulating multiple immune cell processes important for initiating and maintaining an inflammatory immune response. We have demonstrated in preclinical experiments that our CRAC ion channel inhibitors selectively inhibit the production of critical pro-inflammatory cytokines, such as interleukin-2, or IL-2, and TNFa by immune cells, and that these compounds are effective in multiple animal models of immune diseases, including models of arthritis. This program is in the lead optimization stage of discovery.

Financial Operations Overview

Revenue

We have not yet generated any product revenue and do not expect to generate any product revenue until late 2009 at the earliest, if at all. We will seek to generate revenue from product sales and from future collaborative or strategic relationships, which could include research and development, milestone payments, profit sharing and royalties. In October 2007, we entered into the GSK Agreement for our lead drug candidate, elesclomol. The $80 million non-refundable upfront payment we received from GSK in November 2007, together with the $260,000 estimated value of an option to require GSK to purchase $25 million of our common stock, is being recognized ratably as collaboration revenue using the time-based model over the estimated performance period, the 15-year period through the earliest expiration date of the related patents, which we estimate to be the effective life of the GSK Agreement. We are also recognizing product development milestones as collaboration revenue using the time-based model over the same performance period through November 2022 and recognize as revenue on the date the milestone is achieved the portion of the milestone payment equal to the applicable amount of the performance period that has elapsed as of the date the milestone is achieved, with the balance being deferred and recognized on a straight-line basis over the remaining development period. (see "Critical Accounting Policies and Estimates—Revenue Recognition"). In September 2008, we achieved $25 million in non-refundable operational milestones related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008. In the three months and nine months ended September 30,

2008, we recognized $2.8 million and $5.5 million, respectively, of license and milestone revenue under the GSK Agreement.

Reimbursements of development costs to us by GSK are recorded as cost sharing revenue in the period in which the related development costs are incurred. Reimbursements by us to GSK for costs GSK incurs under the development program are recorded as a reduction of cost sharing revenue in the period in which the costs are incurred by GSK. Reimbursement of GSK's costs in an amount in excess of collaboration revenues otherwise recognized by us in a reporting period may result in negative revenue. In the three months and nine months ended September 30, 2008, we recognized, as a reduction to revenue, $1.5 million and $3.5 million, respectively, of net cost sharing reimbursements to GSK under the GSK Agreement as we are solely responsible for funding 100% of the development costs of elesclomol for the treatment of metastatic melanoma until a specified limit of expenses has been incurred, after which continuing development costs are shared by GSK with us responsible for a modest share of the costs. We anticipate that GSK will begin sharing development costs of elesclomol for the treatment of metastatic melanoma, including the costs of the SYMMETRY trial and the related NDA submission, beginning in the second quarter of 2009.

In the future, we expect any revenue we generate will fluctuate from quarter-to-quarter as a result of the timing and amount of payments received under the GSK Agreement and from future collaborations or strategic relationships, and the amount and timing of payments we receive upon the sale of our drug candidates, to the extent any are successfully commercialized.

Research and Development

Research and development expense consists of costs incurred in connection with developing and advancing our drug discovery technology and identifying and developing our drug candidates. We charge all research and development expenses to operations as incurred.

Our research and development expense consists of:

- internal costs associated with research, preclinical and clinical activities;
- payments to third party contract research organizations, investigative sites and consultants in connection with our preclinical and clinical development programs;
- costs associated with drug formulation and supply of drugs for clinical trials;
- personnel related expenses, including salaries, stock-based compensation, benefits and travel; and
- overhead expenses, including rent and maintenance of our facilities, and laboratory and other supplies.

We do not know if we will be successful in developing our drug candidates. While expenses associated with the completion of our current clinical programs are expected to be substantial and increase, we believe that accurately projecting total program-specific expenses through commercialization is not possible at this time. The timing and amount of these expenses will depend upon the costs associated with potential future clinical trials of our drug candidates, and the related expansion of our research and development organization, regulatory requirements, advancement of our preclinical programs and product manufacturing costs, many of which cannot be determined with accuracy at this time based on our stage of development. This is due to the numerous risks and uncertainties associated with the duration and cost of clinical trials, which vary significantly over the life of a project as a result of unanticipated events arising during clinical development, including with respect to:

- the number of clinical sites included in the trial;
- the length of time required to enroll suitable subjects;

- the number of subjects that ultimately participate in the trials; and

- the efficacy and safety results of our clinical trials and the number of additional required clinical trials.

Our expenditures are subject to additional uncertainties, including the terms and timing of regulatory approvals and the expense of filing, prosecuting, defending or enforcing any patent claims or other intellectual property rights. In addition, we may obtain unexpected or unfavorable results from our clinical trials. We may elect to discontinue, delay or modify clinical trials of some drug candidates or focus on others. A change in the outcome of any of the foregoing variables in the development of a drug candidate could mean a significant change in the costs and timing associated with the development of that drug candidate. For example, if the FDA or other regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate, or if we experience significant delays in any of our clinical trials, we would be required to expend significant additional financial resources and time on the completion of clinical development. Additionally, future commercial and regulatory factors beyond our control will evolve and therefore impact our clinical development programs and plans over time.

Despite this uncertainty, however, our development strategy for our lead clinical-stage drug candidate, elesclomol, is currently based on a number of assumptions that allow us to make broad estimates of certain clinical trial expenses. We initiated the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, in the third quarter of 2007, and we expect the remaining costs necessary for the NDA submission, including the cost of the clinical trial, clinical drug supplies, registration manufacturing and regulatory activities necessary to compile the NDA submission, together with the costs of related nonclinical toxicology and other testing to support the trial, will be in the range of $40 million to $45 million. We do not expect to receive regulatory approval of any of our drug candidates until 2009 at the earliest, if at all.

Beyond our three lead drug candidates, we anticipate that we will select drug candidates and research projects for further development on an ongoing basis in response to their preclinical and clinical success, as well as commercial potential.

General and Administrative

General and administrative expense consists primarily of salaries and related expenses for personnel in executive, finance, business and commercial development, investor and medical community relations, human resources and administrative functions. Other costs include stock-based compensation costs, directors' and officers' liability insurance premiums, legal costs of pursuing patent protection of our intellectual property, fees for general legal, accounting, public-company requirements and compliance, and other professional services, as well as overhead-related costs not otherwise included in research and development. We anticipate increases in costs of commercial development and medical community relations, as we, together with GSK, prepare for the potential launch of elesclomol.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements which have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported periods. We are required to make estimates and judgments with respect to accrued expenses, including long-term contract accruals, the recoverability of long-lived and deferred tax assets, measurement of stock-based compensation and the period of performance under the GSK Agreement. We base our estimates on historical experience, known trends

and events, and various other factors that are believed 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 and the reported amounts of revenues and expenses. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following accounting policies and estimates are most critical to aid in the understanding and evaluating our reported financial results.

Revenue Recognition

Collaboration and License Agreements

Our principal sources of revenue may include upfront license payments, development milestones, reimbursement of development costs, profit sharing payments, sales milestones and royalties from our collaborations. We recognize revenue from these sources in accordance with Staff Accounting Bulletin (SAB) 104, "*Revenue Recognition*", or SAB 104, Emerging Issues Task Force (EITF) No. 99-19, "*Reporting Revenue Gross as a Principal Versus Net as an Agent*", or EITF No. 99-19, EITF No. 00-21, "*Revenue Arrangements with Multiple Deliverables*", or EITF No. 00-21, and EITF No. 01-09, *"Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)*", or EITF No. 01-09. The application of EITF No. 00-21 requires subjective analysis and requires management to make estimates and assumptions about whether deliverables within multiple-element arrangements are separable from the other aspects of the contractual arrangement into separate units of accounting and to determine the fair value to be allocated to each unit of accounting.

We entered into the GSK agreement with GSK in October 2007. We evaluated the multiple deliverables within the GSK Agreement in accordance with the provisions of EITF No. 00-21 to determine whether the delivered elements that are our obligation have value to GSK on a stand-alone basis and whether objective reliable evidence of fair value of the undelivered items exists. Deliverables that meet these criteria are considered a separate unit of accounting. Deliverables that do not meet these criteria are combined and accounted for as a single unit of accounting. The appropriate recognition of revenue is then applied to each separate unit of accounting.

Our deliverables under the GSK Agreement, including the related rights and obligations, contractual cash flows and performance periods, are more fully described in Note 8 of the accompanying consolidated financial statements. Certain of the deliverables have been combined as a single unit of accounting.

The GSK Agreement consists of the following key funding streams: an upfront license payment, product development milestones, reimbursements of certain development costs, sales milestones, profit sharing payments and product royalty payments. The cash flows associated with the single unit of accounting from the development portion of the GSK Agreement are recognized as revenue using a time-based model. Under this model, cash flow streams are recognized as revenue over the estimated performance period. Upon achievement of milestones, as defined in the GSK Agreement, revenue is recognized to the extent the accumulated service time, if any, has occurred. The remainder is deferred and recognized as revenue ratably over the remaining estimated performance period. A change in the period of time expected to complete the deliverable is accounted for as a change in estimate on a prospective basis. There have been no changes to this estimate to date. Revenue is limited to amounts that are nonrefundable and that GSK is contractually obligated to pay to us.

The $80 million non-refundable upfront license payment we received from GSK in November 2007, together with the $260,000 fair value of an option to require GSK to purchase $25 million of our common stock, is being recognized ratably using the time-based model over the estimated performance period which has been defined as the 15-year period through the earliest expiration date of the related patents, which we estimate to be the effective life of the GSK Agreement. We are also recognizing product development milestones as collaboration revenue using the time-based model over the same performance period through November 2022. We recognize as revenue on the date the milestone is achieved the portion of the milestone payment equal to the applicable amount of the performance period that has elapsed as of the date the milestone is achieved, with the balance being deferred and recognized on a straight-line basis over the remaining development period. In September 2008, we achieved $25 million in non-refundable operational milestones related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008. In the three months and nine months ended September 30, 2008, we recognized $2.8 million and $5.5 million, respectively, of license and milestone revenue under the GSK Agreement.

Reimbursements of development costs to us by GSK are recorded as cost sharing revenue in the period in which the related development costs are incurred. Reimbursements by us to GSK for costs GSK incurs under the development program are recorded as a reduction of cost sharing revenue in the period in which the costs are incurred by GSK. Reimbursement of GSK's costs in an amount in excess of collaboration revenues otherwise recognized by us in a reporting period may result in negative revenue. Based on the guidance of EITF No. 99-19, we have determined that we are acting as a principal under the GSK Agreement and, as such, record these amounts as collaboration revenue. In the three months and nine months ended September 30, 2008, we recognized $1.5 million and $3.5 million, respectively, of net cost sharing reimbursements to GSK under the GSK Agreement as we are solely responsible for funding 100% of the development costs of elesclomol for the treatment of metastatic melanoma until a specified amount of expenses has been incurred, after which continuing development costs are shared by GSK with us responsible for a modest share of the costs

Profit sharing payments are based upon a formula that provides for a range of 40-50% of net profits earned on U.S. sales of products included in the GSK Agreement. Royalty revenues are based upon a percentage of net sales in non-U.S. territories. Profit sharing payments and royalties from the sales of products included in the GSK Agreement will be recorded on the accrual basis when results are reliably measurable, collectibility is reasonably assured and all other revenue recognition criteria are met. Sales milestones, which are based upon the achievement of certain agreed-upon sales thresholds, will be recognized in the period in which the respective sales threshold is achieved and collectibility is reasonably assured.

Deferred Collaboration Revenue

Consistent with our policy on revenue recognition, deferred collaboration revenue represents cash received and amounts earned and invoiced for licensing and option fees and milestones. Such amounts are reflected as deferred collaboration revenue until revenue can be recognized under our revenue recognition policy. Deferred collaboration revenue is classified as current if management believes we will complete the earnings process and be able to recognize the deferred amount as revenue within 12 months of the balance sheet date. At September 30, 2008, total deferred collaboration revenue was approximately $99 million, of which $7 million is current and will be recognized as revenue during the next 12 months.

Accrued Expenses

As part of the process of preparing financial statements, we are required to estimate accrued expenses. This process involves identifying services which have been performed on our behalf, and

estimating the level of service performed and the associated cost incurred for such service as of each balance sheet date in our financial statements. Given our current business, the primary area of uncertainty concerning accruals which could have a material effect on our business is with respect to service fees paid to contract manufacturers in conjunction with the production of clinical drug supplies and to contract research organizations in connection with our preclinical studies and clinical trials. In connection with all of the foregoing service fees, our estimates are most affected by our understanding of the status and timing of services provided. The majority of our service providers, including contract research organizations, invoice us in arrears for services performed. In the event that we do not identify some costs which have begun to be incurred, or we under or over estimate the level of services performed or the costs of such services in a given period, our reported expenses for such period would be understated or overstated. We currently reflect the over or under accrual of expenses directly in our operations in the period the amount was determined.

Our arrangements with contract research organizations in connection with clinical trials often provide for payment prior to commencing the project or based upon predetermined milestones throughout the period during which services are expected to be performed. We recognize expense relating to these arrangements based on the various services provided over the estimated time to completion. The date on which services commence, the level of services performed on or before a given date, and the cost of such services are often determined based on subjective judgments. We make these judgments based upon the facts and circumstances known to us based on the terms of the contract or our ongoing monitoring of service performance. In the three months and nine months ended September 30, 2008 and 2007, respectively, we had arrangements with multiple contract research organizations whereby these organizations commit to performing services for us over multiple reporting periods. We currently recognize and plan to continue to recognize the expenses associated with these arrangements based on our expectation of the timing of the performance of components under these arrangements by these organizations. Generally, these components consist of the costs of setting up the trial, monitoring the trial, closing the trial and preparing the resulting data.

With respect to financial reporting periods presented in this Quarterly Report on Form 10-Q, and based on our receipt of invoices from our third party providers, the timing of our actual costs incurred have not differed materially from our estimated timing of such costs. In light of the foregoing, we do not believe our estimates of future expenses and our practice of making judgments concerning the accrual of expenses are reasonably likely to change in the future. There were no changes in our estimates and accruals for contract service fees that had a material effect on our net losses in the three months and nine months ended September 30, 2008 and 2007, respectively.

Stock-Based Compensation

We continue to use the Black-Scholes option pricing model as the most appropriate valuation method for our option grants. The Black-Scholes model requires inputs for risk-free interest rate, dividend yield, volatility and expected lives of the options. Since we do not have a significant history of stock trading activity, expected volatility is based on historical data from several public companies similar in size and value to us. We will continue to use a weighted average approach using historical volatility and other similar public entity volatility information until historical volatility of our common stock is relevant to measure expected volatility for future option grants. We estimate the forfeiture rate based on historical data. Our options generally vest 25% after one year of service and quarterly over three years thereafter. Based on an analysis of historical forfeitures, we applied a forfeiture rate of 10% to all options that vest upon completion of the first year of service following the date of grant. The analysis will be re-evaluated at least annually and the forfeiture rate will be adjusted as necessary. The risk-free interest rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of the grant. The expected lives for options granted represents the

period of time that options granted are expected to be outstanding. Since January 1, 2006, we have used the simplified method for determining the expected lives of options.

For awards with graded vesting, we allocate compensation costs under Statement of Financial Accounting Standards, or SFAS, No. 123R, *Share-Based Payment,* on a straight-line basis over the requisite service period. Accordingly, we amortize the fair value of each option over each option's service period, which is generally the vesting period.

We account for stock options issued to non-employees in accordance with the provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*, and EITF No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees, or in Conjunction with Selling Goods or Services,* which requires valuing and remeasuring such stock options to the current fair value until the performance date has been reached.

Our net loss for the three months and nine months ended September 30, 2008 and 2007 includes $1.9 million, $1.0 million, $5.8 million and $3.9 million, respectively, of compensation costs and no income tax benefit related to our stock-based compensation arrangements for employee and non-employee awards. As of September 30, 2008, the total amount of unrecognized stock-based compensation expense was $11.2 million, which will be recognized over a weighted average period of 2.7 years.

Consolidated Results of Operations

Three Months Ended September 30, 2008 Compared with Three Months Ended September 30, 2007

Collaboration Revenue

	Three Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
License and milestone revenue	$ 2.8	$—	$ 2.8	—%
Cost sharing reimbursements, net	(1.5)	—	(1.5)	—%
Total collaboration revenue	$ 1.3	$—	$ 1.3	—%

In October 2007, we entered into a collaborative development, commercialization and license agreement with GSK for elesclomol. Under the terms of the GSK Agreement, the companies will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. The $80 million non-refundable upfront payment we received from GSK in November 2007, together with the $260,000 estimated value of an option to require GSK to purchase $25 million of our common stock, is being recognized ratably as collaboration revenue using the time-based model over the estimated performance period, the 15-year period through the earliest expiration date of the related patents, which we estimate to be the effective life of this agreement. We are also recognizing product development milestones as collaboration revenue using the time-based model over the same performance period through November 2022. In September 2008, we achieved $25 million in non-refundable operational milestones related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008. Reimbursements by us to GSK for costs GSK incurs under the development program are recorded as a reduction of cost sharing revenue in the period in which the costs are incurred by GSK. Reimbursement of GSK's costs in an amount in excess of collaboration revenues otherwise recognized by us in a reporting period may result in negative revenue (see earlier discussion and Notes 2 and 8 in the accompanying consolidated financial statements).

Research and Development Expense

	Three Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
Clinical-stage drug candidates				
Elesclomol	$18.3	$ 7.3	$11.0	151%
Apilimod	0.1	0.3	(0.2)	(67)%
STA-9090	1.6	1.2	0.4	33%
Total clinical-stage drug candidates	20.0	8.8	11.2	127%
Early stage programs	4.1	2.7	1.4	52%
Total research and development	$24.1	$11.5	$12.6	110%

In the three months ended September 30, 2008, costs incurred under our elesclomol program increased by $11.0 million over the three months ended September 30, 2007, including a $1.9 million increase for personnel costs, related research supplies, operational overhead and stock compensation, and a $9.1 million increase for external costs. These increases were principally due to expenses incurred in connection with the advancement of the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, which was initiated in the third quarter of 2007, advancement of the sodium salt formulation in support of the Phase 1/2 trial in hormone-refractory mestastic prostate cancer that was initiated in the fourth quarter of 2008 and further clinical development of elesclomol in other cancer types.

In the three months ended September 30, 2008, costs incurred in connection with apilimod decreased by $0.2 million over the three months ended September 30, 2007, including a $0.2 million decrease for external costs. This decrease was principally due to the completion in 2007 of the initial two cohorts of patients in our Phase 2a clinical trial of apilimod in patients with RA.

In the three months ended September 30, 2008, costs incurred under our STA-9090 program increased by $0.4 million over the three months ended September 30, 2007, including a $0.3 million decrease for personnel costs, related research supplies, operational overhead and stock compensation, offset by a $0.7 million increase for external costs. This increase was principally due to the advancement of the program from preclinical development, which included the conduct of toxicology and DMPK studies, as well as manufacturing support, into clinical development upon the initiation of two Phase 1 clinical trials in the fourth quarter of 2007.

In addition, in the three months ended September 30, 2008, costs incurred under our early-stage programs increased by $1.4 million over the three months ended September 30, 2007, including a $1.3 million increase for personnel costs, related research supplies, operational overhead and stock compensation and a $0.1 million increase for external costs.

General and Administrative Expense

	Three Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
General and administrative	$3.7	$3.9	$(0.2)	(5)%

The decrease in general and administrative expense principally resulted from an increase of $0.5 million for personnel costs and related overhead in connection with increased headcount and stock compensation, offset by a $0.7 million decrease in external professional fees.

Investment Income, Net

	Three Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
Investment income, net	$0.1	$0.5	$(0.4)	(80)%

The decrease in net investment income was principally due to declining interest rates.

Nine Months Ended September 30, 2008 Compared with Nine Months Ended September 30, 2007

Collaboration Revenue

	Nine Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
License and milestone revenue	$ 5.5	$ —	$ 5.5	—%
Cost sharing reimbursements, net	(3.5)	—	(3.5)	—%
Total collaboration revenue	$ 2.0	$ —	$ 2.0	—%

In October 2007, we entered into a collaborative development, commercialization and license agreement with GSK for elesclomol. Under the terms of the GSK Agreement, the companies will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. The $80 million non-refundable upfront payment we received from GSK in November 2007, together with the $260,000 estimated value of an option to require GSK to purchase $25 million of our common stock, is being recognized ratably as collaboration revenue using the time-based model over the estimated performance period, the 15-year period through the earliest expiration date of the related patents, which we estimate to be the effective life of this agreement. We are also recognizing product development milestones as collaboration revenue using the time-based model over the same performance period through November 2022. In September 2008, we achieved $25 million in non-refundable operational milestones related to the development of elesclomol for the treatment of metastatic melanoma and recorded a corresponding collaboration receivable in the accompanying balance sheet. The corresponding milestone payments were received from GSK in the fourth quarter of 2008. Reimbursements by us to GSK for costs GSK incurs under the development program are recorded as a reduction of cost sharing revenue in the period in which the costs are incurred by GSK. Reimbursement of GSK's costs in an amount in excess of collaboration revenues otherwise recognized by us in a reporting period may result in negative revenue (see Notes 2 and 8 in the accompanying consolidated financial statements).

Research and Development Expense

	Nine Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
Clinical-stage drug candidates				
Elesclomol	$42.5	$23.3	$19.2	82%
Apilimod	0.3	1.3	(1.0)	(77)%
STA-9090	4.8	5.6	(0.8)	(14)%
Total clinical-stage drug candidates	47.6	30.2	17.4	58%
Early stage programs	11.0	8.5	2.5	29%
Total research and development	$58.6	$38.7	$19.9	51%

In the nine months ended September 30, 2008, costs incurred under our elesclomol program increased by $19.2 million over the nine months ended September 30, 2007, including a $5.1 million increase for personnel costs, related research supplies, operational overhead and stock compensation, and a $14.1 million increase for external costs. These increases were principally due to expenses incurred in connection with the advancement of the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, which was initiated in the third quarter of 2007, advancement of the sodium salt formulation in support of the Phase 1/2 trial in hormone-refractory mestastic prostate cancer that was initiated in the fourth quarter of 2008 and further clinical development of elesclomol in other cancer types.

In the nine months ended September 30, 2008, costs incurred in connection with apilimod decreased by $1.0 million over the nine months ended September 30, 2007, including a $0.2 million decrease for personnel costs, related research supplies, operational overhead and stock compensation, and a $0.8 million decrease for external costs. These decreases were principally due to the completion in 2007 of the initial two cohorts of patients in our Phase 2a clinical trial of apilimod in patients with RA.

In the nine months ended September 30, 2008, costs incurred under our STA-9090 program decreased by $0.8 million over the nine months ended September 30, 2007, including a $1.6 million decrease for personnel costs, related research supplies, operational overhead and stock compensation, offset by a $0.8 million increase for external costs. This decrease was principally due to the advancement of the program from preclinical development, which included the conduct of toxicology and DMPK studies, as well as manufacturing support, into clinical development upon the initiation of two Phase 1 clinical trials in the fourth quarter of 2007.

In addition, in the nine months ended September 30, 2008, costs incurred under our early-stage programs increased by $2.5 million over the nine months ended September 30, 2007, including a $2.5 million increase for personnel costs, related research supplies, operational overhead and stock compensation.

General and Administrative Expense

	Nine Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
General and administrative	$11.3	$11.2	$0.1	1%

The increase in general and administrative expense principally resulted from an increase of $1.0 million for personnel costs and related overhead in connection with increased headcount and stock compensation, offset by a $0.9 million decrease in external professional fees.

Investment Income, Net

	Nine Months Ended September 30,		2008 to 2007 Change	
	2008	2007	$	%
	(dollars in millions)			
Investment income, net	$1.2	$ 1.9	$(0.7)	(37)%

The decrease in net investment income was principally due to declining interest rates and lower average cash balances.

Liquidity and Capital Resources

Sources of Liquidity

We have incurred significant operating losses since our inception. We have funded our operations principally with $195.4 million in net proceeds from private placements of our common stock, $40.0 million in net proceeds from a private placement of our Series A convertible preferred stock, $44.7 million in net proceeds from the IPO, and the $80 million non-refundable upfront payment under the GSK Agreement, which, together with the exercise of common stock warrants and options, provided aggregate net cash proceeds of approximately $361.4 million through September 30, 2008. We have also generated funds from government grant revenues, equipment lease financings and investment income.

As of September 30, 2008, we had cash and cash equivalents of $58.4 million, a decrease of $57.2 million from $115.6 million as of December 31, 2007. This decrease principally reflects net cash used in operations as discussed under Cash Flows below.

In October 2007, we entered into the GSK Agreement with GSK and received a non-refundable upfront cash payment of $80 million in November 2007. We are also eligible to receive potential operational, clinical and regulatory milestone payments from GSK of up to $585 million, which include both payments for operational progress, such as trial initiation and enrollment, and payments for positive clinical and regulatory outcomes, such as regulatory approval. Of the $585 million in potential payments, $145 million are related to the development in metastatic melanoma and up to $440 million are related to the development of elesclomol in other cancer indications. In addition, we are eligible to receive up to $300 million in potential commercial milestone payments from GSK based on achieving certain net sales thresholds.

In September 2008, we achieved $25 million in operational milestones under the GSK Agreement, which were paid by GSK in the fourth quarter of 2008. Based upon our current operating plans, we expect to achieve and receive an additional $25 million in operational milestones over the fourth quarter of 2008 and the first quarter of 2009. We are also eligible to receive up to $100 million of potential milestone payments from GSK in the event of positive clinical and regulatory outcomes of the SYMMETRY trial, including $25 million due upon either achieving the primary PFS endpoint or upon determination by us and GSK to file for regulatory approval if the primary endpoint is not achieved. In addition, we estimate that GSK will begin sharing development costs of elesclomol for the treatment of metastatic melanoma, including the costs of the SYMMETRY trial and the related NDA submission, beginning in the second quarter of 2009, with us responsible for a modest share of these and other worldwide development costs thereafter.

Under our equipment lease agreement, we periodically directly leased, or sold and leased back up equipment and leasehold improvements. The term of this lease agreement ended in July 2008 and we intend to negotiate a new equipment lease facility.

Cash Flows

The following table provides information regarding our cash position, cash flows and capital expenditures for the nine months ended September 30, 2008 and 2007.

	Nine Months Ended September 30,	
	2008	2007
	(dollars in millions)	
Cash, cash equivalents and marketable securities	$ 58.4	$ 48.3
Working capital	57.7	36.7
Cash flows provided by (used in):		
Operating activities	(54.5)	(41.2)
Investing activities	(1.4)	11.7
Financing activities	(1.3)	44.2
Capital expenditures (included in investing activities)	(1.4)	(1.5)

Our operating activities used cash of $54.5 million and $41.2 million in the nine months ended September 30, 2008 and 2007, respectively. The use of cash in these periods principally resulted from our losses from operations, as adjusted for non-cash charges for depreciation and stock-based compensation, and changes in our working capital accounts.

Our investing activities used cash of $1.4 million in the nine months ended September 30, 2008 in connection with purchases of property and equipment. Our investing activities provided cash of $11.7 million in the nine months ended September 30, 2007, resulting from sales and maturities of marketable securities in our investment portfolio in the amount of $28.1 million, offset by the purchases of marketable securities in the amount of $15.0 million and purchases of property and equipment in the amount of $1.5 million.

Our financing activities used cash of $1.3 million in the nine months ended September 30, 2008 and provided cash of $44.2 million in the nine months ended September 30, 2007. In February 2007, we raised net cash proceeds of $44.7 million from the sale of 5,000,000 shares of our common stock in the IPO. We raised $0.9 million and $1.7 million in proceeds from the sale and lease-back of property and equipment in the nine months ended September 30, 2008 and 2007, respectively. We repaid $2.1 million and $1.9 million in capital equipment leases in the nine months ended September 30, 2008 and 2007, respectively. In January 2007, we repurchased 29,046 shares of our previously restricted common stock in the amount of $0.3 million from certain officers and non-officer employees in order to fund the minimum statutory tax withholding requirements related to the vesting of 80,000 shares of restricted common stock.

Contractual Obligations and Commitments

There have been no material changes to the contractual obligations and commitments included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007.

Funding Requirements

We expect to incur substantial expenses and generate significant operating losses as we continue to advance our drug candidates into preclinical studies and clinical trials and as we:

- complete the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, that was initiated in the third quarter of 2007, and initiate Phase 2 clinical trials of elesclomol in other cancer types;
- begin to perform and fund pre-commercialization activities, and establish sales and marketing functions and commercial manufacturing arrangements for elesclomol, consistent with our obligations under our agreement with GSK;
- complete the current Phase 2a clinical trial of apilimod for the treatment of RA, and possibly initiate Phase 2 clinical trials of apilimod in other inflammatory disease indications;
- initiate additional Phase 3 clinical trials of elesclomol in other cancer types and one or more Phase 3 clinical trials of apilimod, if supported by Phase 2 results;
- complete two Phase 1 clinical trials of STA-9090 that were initiated in the fourth quarter of 2007, and initiate additional clinical trials, if supported by positive preclinical data or Phase 1 results;
- complete preclinical development of STA-9584 and initiate clinical trials, if supported by positive preclinical data;
- advance our CRAC ion channel inhibitor program into clinical trials, if supported by positive preclinical data;
- discover, develop, and seek regulatory approval for backups of our current drug candidates and other new drug candidates;
- identify additional compounds or drug candidates and acquire rights from third parties to those compounds or drug candidates through licenses, acquisition or other means;
- commercialize any approved drug candidates;
- hire additional clinical, scientific, and management personnel; and
- add operational, financial, and management information systems and personnel.

Our funding requirements will depend on a number of factors, including:

- the progress of our research and development programs, including the completion of preclinical studies and clinical trials for our current drug candidates and the results from these studies and trials;
- the number of drug candidates we advance into later-stage clinical trials and the scope of our research and development programs;
- our ability to discover additional drug candidates using our drug discovery technology and advance them into clinical development;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims for our drug discovery technology and drug candidates and avoiding infringing the intellectual property of others;
- the time and costs involved in obtaining regulatory approvals for our drug candidates;
- our ability to establish and maintain collaborative arrangements, including our agreement with GSK;

- the potential in-licensing of other products or technologies or the acquisition of complementary businesses;
- the cost of manufacturing, marketing and sales activities, if any; and
- the timing, receipt and amount of revenue, if any, from our drug candidates.

We do not anticipate that we will generate product revenue until 2009 at the earliest, if at all. We expect our continuing operating losses to result in increases in cash used in operations over the next several years. Based on our current operating plans, we expect our existing funds, including earned but unpaid milestone payments, will be sufficient to fund operations through at least the middle of 2009. Payment to us by GSK of milestones for our operational progress and achievement of certain success criteria leading to the approval by the FDA of elesclomol for the treatment of metastatic melanoma could extend our cash availability, as could payments of milestones in connection with the development of elesclomol in other cancer indications and achievement of certain net sales thresholds. We are also eligible to receive up to $100 million of potential milestone payments from GSK in the event of positive clinical and regulatory outcomes of the SYMMETRY trial, including $25 million due upon either achieving the primary PFS endpoint or upon determination by us and GSK to file for regulatory approval if the primary endpoint is not achieved. In addition, we estimate that GSK will begin sharing development costs of elesclomol for the treatment of metastatic melanoma, including the costs of the SYMMETRY trial and the related NDA submission, beginning in the second quarter of 2009, with us responsible for a modest share of these and other worldwide development costs thereafter.

However, we may require significant additional funds earlier than we currently expect in order to conduct additional clinical trials and seek regulatory approval of our drug candidates. Because of the numerous risks and uncertainties associated with the development and commercialization of our drug candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials.

To the extent our capital resources are insufficient to meet our future capital requirements, we will need to finance our future cash needs through public or private equity offerings, collaboration agreements, debt financings or licensing arrangements. However, the credit markets and the financial services industry have recently been experiencing a period of unprecedented turmoil and upheaval characterized by the bankruptcy, failure, collapse or sale of various financial institutions and an unprecedented level of intervention from the United States federal government. These events have generally made equity and debt financing more difficult to obtain. Additional funding may not be available to us on acceptable terms or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our stockholders. For example, if we raise additional funds by issuing equity securities or by selling debt securities, if convertible, further dilution to our existing stockholders may result. If we raise funds through collaboration agreements or licensing arrangements, we may be required to relinquish rights to our technologies or drug candidates, or grant licenses on terms that are not favorable to us.

If adequate funds are not available, we may be required to terminate, significantly modify or delay our research and development programs, reduce our planned commercialization efforts, or obtain funds through collaborators that may require us to relinquish rights to our technologies or drug candidates that we might otherwise seek to develop or commercialize independently. We may elect to raise additional funds even before we need them if the conditions for raising capital are favorable.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements or relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities.

Certain Factors That May Affect Future Results of Operations

The Securities and Exchange Commission, or SEC, encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This Quarterly Report on Form 10-Q contains such "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995.

Words such as "may," "anticipate," "estimate," "expects," "projects," "intends," "plans," "believes" and words and terms of similar substance used in connection with any discussion of future operating or financial performance, identify forward-looking statements. All forward-looking statements are management's present expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those described in the forward-looking statements. These risks include, but are not limited to, those set forth in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2007 that we have filed with the SEC.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this Quarterly Report on Form 10-Q might not occur. Stockholders are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this Quarterly Report on Form 10-Q. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to Synta or to any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Sensitivity. As of September 30, 2008, we had cash and cash equivalents of $58.4 million consisting of cash deposited in a highly rated financial institution in the United States and in a short-term U.S. Treasury money market fund. The primary objective of our investment activities is to preserve our capital for the purpose of funding operations and we do not enter into investments for trading or speculative purposes. We believe that we did not have material exposure to high-risk investments such as mortgage-backed securities, auction rate securities or other special investment vehicles, or SIV's, within our money-market fund investments. We believe that we do not have any material exposure to changes in fair value as a result of changes in interest rates. Declines in interest rates, however, would reduce future investment income. During the nine months ended September 30, 2008, we had investment income of $1.6 million. If overall interest rates fell by 10% during the nine months ended September 30, 2008, our interest income would have decreased by less than $0.2 million, assuming consistent investment levels.

Capital Market Risk. We currently have no product revenues and depend on funds raised through other sources. One possible source of funding is through further equity offerings. Our ability to raise funds in this manner depends upon capital market forces affecting our stock price.

Item 4T. Controls and Procedures.

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this Quarterly Report on Form 10-Q, have concluded that, based on such evaluation, our disclosure controls and procedures were adequate and effective. In designing and evaluating our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

(b) *Changes in Internal Controls.* There were no changes in our internal control over financial reporting, identified in connection with the evaluation of such internal control that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

Item 1. Legal Proceedings.

We are currently not a party to any material legal proceedings.

Item 1A. Risk Factors.

There have been no material changes to the risk factors included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Submission of Matters to a Vote of Security Holders.

None.

Item 5. Other Information.

None.

Item 6. Exhibits.

(a) *Exhibits*

10.1 Second Amendment to Lease, dated as of August 22, 2008, to Lease, dated January 13, 2005, by and between the Registrant and Mortimer B. Zuckerman and Edward H. Linde, Trustees of 91 Hartwell Avenue Trust, as amended.

10.2 Letter Agreement, dated July 9, 2008, by and between the Registrant and Michael P. Bailey.

10.3 Severance and Change of Control Agreement, dated August 6, 2008, between the Registrant and Michael P. Bailey.

10.4 Amended and Restated 2006 Stock Plan (incorporated by reference to Exhibit 99.1 to the Registrant's Registration Statement on Form S-8 filed on August 6, 2008 (Registration No. 333-152824).

31.1 Certification of principal executive officer under Section 302(a) of the Sarbanes-Oxley Act of 2002.

31.2 Certification of principal financial officer under Section 302(a) of the Sarbanes-Oxley Act of 2002.

32.1 Certifications of the principal executive officer and the principal financial officer under Section 906 of the Sarbanes-Oxley Act of 2002.

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.

SYNTA PHARMACEUTICALS CORP.

By: /s/ SAFI R. BAHCALL, PH.D.

Safi R. Bahcall, Ph.D.
President and Chief Executive Officer
(principal executive officer)

Date: November 13, 2008

By: /s/ KEITH S. EHRLICH

Keith S. Ehrlich
Vice President Finance and Administration, Chief Financial Officer
(principal accounting and financial officer)

Date: November 13, 2008

QuickLinks

Exhibit 10.1

SECOND AMENDMENT TO LEASE

SECOND AMENDMENT TO LEASE dated as of this 22 day of August, 2008 by and between MORTIMER B. ZUCKERMAN AND EDWARD H. LINDE, Trustees of 91 Hartwell Avenue Trust under Declaration of Trust dated September 28, 1981 filed with the Middlesex South Registry as Document No. 616455 as amended by instruments dated December 10, 1984 and April 17, 1991 respectively filed with said Registry District as Document Nos. 675674 and 844541 but not individually ("Landlord") and SYNTA PHARMACEUTICALS, INC., a Delaware corporation ("Tenant").

RECITALS

A. Landlord and Tenant are parties to (i) that certain Lease Agreement dated as of January 13, 2005 (as amended by the instrument hereinafter described in subsection (ii), the "Lease") and (ii) that certain First Amendment to Lease dated as of September 7, 2007 (the "First Amendment"), in connection with certain premises located at 91 Hartwell Avenue, Lexington, Massachusetts (the "Building"), consisting of 13,764 square feet of rentable floor area on the second (2nd) floor and 8,068 square feet of rentable floor area on the third (3rd) floor collectively (the "Rentable Floor Area of the Premises") in the Building (referred to in the Lease as the "Premises" or "Tenant's Space").

B. Landlord now desires to lease to Tenant and Tenant now desires to hire and lease from Landlord an additional 8,386 square feet of rentable floor area (the "Rentable Floor Area of the Additional Premises") located on the second (2nd) floor of the Building, which space is shown on Exhibit A attached hereto and made a part hereof (the "Additional Premises"), upon all of the same terms and conditions set forth in the Lease except for those terms and conditions amended herein (the "Second Amendment").

C. Capitalized terms used herein and not otherwise defined herein shall have the meaning set forth in the Lease.

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. Effective as of October 1, 2008 (the "Additional Premises Commencement Date"), the Additional Premises shall constitute a part of the "Premises" demised to Tenant under the Lease, so that the Premises (as defined in Section 1.1 of the Lease) shall include both the Initial Premises and the Additional Premises and shall contain a total of 30,218 square feet of rentable floor area. By way of example the option to extend the Term of the Lease provided in Section 5 of the First Amendment shall apply to both the Initial Premises and the Additional Premises collectively but not to either space independently.

2. (A) The Term of the Lease for both the Initial Premises and the Additional Premises shall be coterminous and shall expire at the end of the First Extended Term on August 31, 2009, unless extended or sooner terminated as provided in the Lease.

(B) Section 5(A) of the First Amendment is hereby amended by deleting the words and numerals "fourteen (14)" in the third line thereof and substituting the words and numerals "twenty-seven (27)" therefor.

3. (A) Annual Fixed Rent for the Initial Premises shall continue to be payable as set forth in Section 3(B) of the First Amendment.

(B) Commencing on the Additional Premises Commencement Date continuing through the expiration or earlier termination of the First Extended Term, Annual Fixed Rent for the Additional Premises shall be payable at the annual rate of $251,580.00 (being the product of (i) $30.00 and (ii) the Rentable Floor Area of the Additional Premises (being 8,386 square feet)).

(C) Annual Fixed Rent for the Initial Premises during the Second Extended Term (if exercised) shall be payable as set forth in Section 5(C) of the First Amendment.

(D) Annual Fixed Rent for the Additional Premises during the Second Extended Term (if exercised) shall be payable at the annual rate of $251,580.00 (being the product of (i) $30.00 and (ii) the Rentable Floor Area of the Additional Premises (being 8,386 square feet)). Base Operating Expenses and Base Taxes for the Additional Premises during the Second Extended Term (if exercised) shall be calculated in accordance with Section 4(B) contained herein.

4. (A) For the purposes of computing Tenant's payments for Operating Expenses Allocable to the Premises pursuant to Section 2.6 of the Lease, Tenant's payments for Landlord's Tax Expenses Allocable to the Premises pursuant to Section 2.7 of the Lease and Tenant payments for electricity (as determined pursuant to Sections 2.5 and 2.8 of the Lease), for the portion of the Term on and after the Additional Premises Commencement Date, the "Rentable Floor Area of the Premises" shall comprise a total of 30,218 square feet including both the Rentable Floor Area of the Initial Premises (being 21,832 square feet) and the Rentable Floor Area of the Additional Premises (being 8,386 square feet) and "Tenant's Share" and "Tenant's Tax Share" (as those terms are defined in Sections 2.6 and 2.7 of the Lease, respectively) shall be 24.7% and 26%, respectively. For the portion of the Lease Term prior to the Additional Premises Commencement Date, the "Rentable Floor Area of the Premises" shall continue to be the Rentable Floor Area of the Initial Premises for such purposes and "Tenant's Share" and "Tenant's Tax Share" shall continue to be 17.85% and 18.79%, respectively.

(B) Base Operating Expenses and Base Taxes for the Additional Premises during the First Extended Term (and the Second Extended Term, if exercised) shall be the same as for the Initial Premises, as set forth in Section 4 of the First Amendment.

5. (A) Landlord shall, at Landlord's sole cost and expense, perform the work shown on the plans (the "Additional Premises Plans") listed on Exhibit B annexed hereto ("Landlord's Additional Premises Work") in order to prepare the Additional Premises for Tenant's use and occupancy. It shall be Landlord's obligation to obtain all necessary permits for the construction of the Landlord's Additional Premises Work, together with a certificate of occupancy or other like governmental approval to the extent the same is required for the occupancy of the Additional Premises by Tenant for the Permitted Use. Landlord shall have no responsibility for the installation or connection of Tenant's computer, telephone, other communication equipment, systems or wiring. Subject to (i) delays caused by Tenant, Tenant's contractors, architects, engineers, or anyone else engaged by Tenant in connection with the preparation of the Additional Premises for Tenant's occupancy (including, without limitation, utility companies and other entities furnishing communications, data processing or other service, equipment, or furniture) and (ii) delays due to governmental regulation, strikes, lockouts, acts of God, acts of war, terrorists acts, civil commotions, unusual scarcity of or inability to obtain labor or materials, labor difficulties, casualty or other causes reasonably beyond Landlord's control, Landlord shall use its best efforts to have the Landlord's Additional Premises Work substantially completed on or before the Additional Premises Commencement Date, but Tenant shall have no claim against Landlord for failure so to complete construction of Landlord's Additional Premises Work in the Additional Premises by any given date (provided that Landlord has used best efforts as aforesaid) and the Term of the Lease with respect to the Additional Premises shall commence on the Additional Premises Commencement Date irrespective of whether such Landlord's Additional Premises Work has been completed as of such date.

(B) Landlord shall permit Tenant access for installing Tenant's trade fixtures in portions of the Additional Premises prior to the Additional Premises Commencement Date when it can be done

without material interference with remaining work or with the maintenance of harmonious labor relations. Any such access by Tenant shall be upon all of the terms and conditions of the Lease (other than the payment of Annual Fixed Rent, Operating Expenses Allocable to the Premises, Landlord's Tax Expenses Allocable to the Premises and electricity respecting the Additional Premises) and shall be at Tenant's sole risk, and Landlord shall not be responsible for any injury to persons or damage to property resulting from such early access by Tenant (unless and to the extent the same is caused by Landlord's negligence or willful misconduct).

(C) Landlord's Additional Premises Work shall be done in a good and workmanlike manner and in compliance with all applicable Legal Requirements and all Insurance Requirements (as such terms are defined in the Lease). All of Tenant's work shall be coordinated with any work being performed by or for Landlord and in such manner as to maintain harmonious labor relations. Each party may inspect the work of the other at reasonable times and shall promptly give notice of observed defects. Each party authorizes the other to rely in connection with design and construction upon approval and other actions on the party's behalf by any Construction Representative of the party named in Section 1.1 of the Lease or any person hereafter designated in substitution or addition by notice to the party relying. Except to the extent to which Tenant shall have given Landlord notice of respects in which Landlord has not performed the Landlord's Additional Premises Work required under this Second Amendment not later than the sixth (6th) full calendar month next beginning after the date on which the Landlord's Additional Premises Work has been substantially completed, Tenant shall be deemed conclusively to have approved Landlord's construction and shall have no claim that Landlord has failed to perform any of Landlord's obligations under this Second Amendment. Landlord agrees to correct or repair at its expense items which are then incomplete or do not conform to the work contemplated under the Additional Premises Plans and as to which, in any case, Tenant shall have given notice to Landlord, as aforesaid; provided, however, that Landlord agrees that upon and after the expiration of the aforesaid six (6) month period, Landlord shall, at Tenant's request and at Tenant's sole cost and expense, enforce and exercise on behalf of Tenant any and all construction and manufacturers' warranties and guaranties with respect to the Additional Premises to the extent still in force and effect at the time of Tenant's request. For the purposes of this Second Amendment, "substantial completion" means that (i) the Landlord's Additional Premises Work has been completed except for items of work and adjustment of equipment and fixtures which can be completed after occupancy has been taken without causing substantial interference with Tenant's use of the Additional Premises (i.e. so-called "punch list" items), and (ii) permission has been obtained from the applicable governmental authority, to the extent required by law, for occupancy by Tenant of the Additional Premises for the Permitted Use.

(D) Notwithstanding anything contained in the Lease or in this Second Amendment to the contrary, Landlord shall be responsible (i) for correcting any component of the Landlord's Additional Premises Work which are not in compliance with Legal Requirements in effect as of the date of this Second Amendment (unless such non-compliance is caused by Tenant), whether or not such notice is given within six (6) months following substantial completion, and (ii) for performing, as part of the Landlord's Additional Premises Work, all work necessary to obtain a certificate of occupancy or other like governmental approval (to the extent the same is required for the occupancy of the Additional Premises by Tenant for the Permitted Use) whether or not such work is contemplated by the Additional Premises Plans, except and to the extent that Tenant requests that the Additional Premises Plans be modified in any way or that the need for such certificate or approval is caused by any work being performed by Tenant, Tenant's contractors, architects, engineers, or anyone else engaged by Tenant in connection with the preparation of the Additional Premises for Tenant's occupancy (including, without limitation, utility companies and other entities furnishing communications, data processing or other service, equipment, or furniture).

(E) Notwithstanding anything contained in the Lease to the contrary, it is understood and agreed that Tenant shall not be required to remove any component of the Landlord's Additional Premises Work upon the expiration or earlier termination of the Lease Term.

6. For the portion of the Term from and after the Additional Premises Commencement Date, the Number of Tenant Parking Spaces (as defined in Section 1.1 of the Lease) shall be increased to One Hundred Six (106).

7. (A) It is acknowledged and agreed that Landlord is currently holding a security deposit in the amount of Thirty-Five Thousand Four Hundred Seventy-Seven and 00/100 Dollars ($35,477.00) in accordance with the terms and provisions of Section 8.20 of the Lease.

(B) Concurrently with the execution of this Second Amendment, Tenant shall pay to Landlord an additional security deposit (the "Additional Security Deposit") in the amount of Sixty-Eight Thousand and 00/100 ($68,000.00) and Landlord shall hold the same, throughout the First Extended Term, pursuant to and in accordance with the terms and provisions of this Section 7(B). The Additional Security Deposit shall in the form of either cash or an irrevocable, unconditional, negotiable letter of credit (the "Letter of Credit"). The Letter of Credit shall (i) be issued by and drawn on a bank reasonably approved by Landlord and at a minimum having a corporate credit rating from Standard and Poor's Professional Rating Service of BBB- or a comparable minimum rating from Moody's Professional Rating Service, (ii) be substantially in the form attached hereto as Exhibit C, (iii) permit one or more draws thereunder to be made accompanied only by certification by Landlord or Landlord's managing agent that pursuant to the terms of this Lease, Landlord is entitled to draw upon such Letter of Credit, (iv) permit transfers at any time without charge, (v) permit presentment in Boston, Massachusetts and (vi) provide that any notices to Landlord be sent to the notice address provided for Landlord in this Lease. If the credit rating for the issuer of such Letter of Credit falls below the standard set forth in (i) above or if the financial condition of such issuer changes in any other material adverse way, Landlord shall have the right to require that Tenant provide a substitute letter of credit that complies in all respects with the requirements of this Section 7(B), and Tenant's failure to provide the same within ten (10) days following Landlord's written demand therefor shall entitle Landlord to immediately draw upon the Letter of Credit. Any such Letter of Credit shall be for a term of two (2) years (or for one (1) year if the issuer thereof regularly and customarily only issues letters of credit for a maximum term of one (1) year) and shall in either case provide for automatic renewals through the date which is ninety (90) days subsequent to the scheduled expiration of the First Extended Term or if the issuer will not grant automatic renewals, the Letter of Credit shall be renewed by Tenant each year and each such renewal shall be delivered to and received by Landlord not later than thirty (30) days before the expiration of the then current Letter of Credit (herein called a "Renewal Presentation Date"). In the event of a failure to so deliver any such renewal Letter of Credit on or before the applicable Renewal Presentation Date, Landlord shall be entitled to present the then existing Letter of Credit for payment and to receive the proceeds thereof, which proceeds shall be held as Tenant's security deposit, subject to the terms of Section 8.20 of the Lease and this Section 7(B). Any failure or refusal of the issuer to honor the Letter of Credit shall be at Tenant's sole risk and shall not relieve Tenant of its obligations hereunder with regard to the security deposit.

(C) It is acknowledged and agreed that the Additional Security Deposit is being provided by Tenant in order to secure the costs of the Landlord's Additional Premises Work that will not have been amortized as of the expiration of the First Extended Term, and accordingly that Landlord shall be entitled to retain the Additional Security Deposit in full in the event that Tenant does not exercise its option to extend the Term of the Lease for the Second Extended Term in accordance with the provisions of Section 5 of the First Amendment. If, however, Tenant shall exercise its option to extend the Term of the Lease for the Second Extended Term, Landlord shall return to Tenant the amount of the Additional Security Deposit then being held by Landlord within thirty (30) days after the commencement of the Second Extended Term. Landlord shall have no right to draw down on the

Additional Security Deposit unless and until such time as Tenant shall have failed to timely exercise (or shall otherwise affirmatively elected not to exercise) its option to extend the Term of the Lease for the Second Extended Term in accordance with the provisions of Section 5 of the First Amendment. In the event that Landlord does thus draw down on the Additional Security Deposit, Landlord shall under no circumstances be required to apply any of the proceeds thereof to any of the obligations of Tenant under the Lease.

8. (A) Tenant warrants and represents that Tenant has not dealt with any broker in connection with the consummation of this Second Amendment except for Richard Barry Joyce & Partners (the "Broker"); and in the event any claim is made against Landlord relative to dealings by Tenant with brokers other than the Broker, Tenant shall defend the claim against Landlord with counsel of Tenant's selection first approved by Landlord (which approval will not be unreasonably withheld) and save harmless and indemnify Landlord on account of loss, cost or damage which may arise by reason of such claim.

(B) Landlord warrants and represents that Landlord has not dealt with any broker in connection with the consummation of this Second Amendment except for the Broker; and in the event any claim is made against Tenant relative to dealings by Landlord with brokers other than the Broker, Landlord shall defend the claim against Tenant with counsel of Landlord's selection and save harmless and indemnify Tenant on account of loss, cost or damage which may arise by reason of such claim.

9. Except as herein amended the Lease shall remain unchanged and in full force and effect. All references to the "Lease" shall be deemed to be references to the Lease as herein amended.

Page Ends Here

EXECUTED as a sealed instrument as of the date and year first above written.

WITNESS:	LANDLORD:
	91 HARTWELL AVENUE TRUST
	By: Boston Properties Limited Partnership, its sole beneficiary
	By: Boston Properties, Inc., its general partner
/s/ Illegible	By: /s/ David C. Provost
	Name: David C. Provost
	Title: Senior Vice President Boston Properties

ATTEST:	TENANT:
	SYNTA PHARMACEUTICALS, INC.
By: /s/ Wendy E. Rieder	By: /s/ Keith Ehrlich
Name: Wendy E. Rieder	Name: Keith Ehrlich
Title: Secretary or Assistant Secretary	Title: President or Vice President
	(Hereto duly authorized)
	By: /s/ Keith Ehrlich
	Name: Keith Ehrlich
	Title: Treasurer or Assistant Treasurer

EXHIBIT A

Additional Premises

[FLOOR PLAN]

EXHIBIT B

Landlord's Additional Premises Work

[WORK PLANS AND FLOOR PLANS]

EXHIBIT C

Form of Letter of Credit

(Letterhead of a money center bank
acceptable to the Owner)

, 2008

[insert name of landlord]
c/o Boston Properties, Inc.
Prudential Center
800 Boylston Street, Suite 1900
Boston, Massachusetts 02199-8103

Gentlemen:

We hereby establish our Irrevocable Letter of Credit and authorize you to draw on us at sight for the account of **[insert name of tenant]**, the aggregate amount of Dollars ($). You shall have the right to make partial draws against this Letter of Credit from time to time.

Funds under this Letter of Credit are available to the beneficiary hereof as follows:

Any or all of the sums hereunder may be drawn down at any time and from time to time from and after the date hereof by **[insert name of landlord]** ("Beneficiary") when accompanied by this Letter of Credit and a written statement signed by an individual purporting to be an authorized agent of Beneficiary, certifying that such moneys are due and owing to Beneficiary, and a sight draft executed and endorsed by such individual.

This Letter of Credit is transferable in its entirety to any successor in interest to Beneficiary as owner of **[insert address of building, including city and state in which it is located].** Should a transfer be desired, such transfer will be subject to the return to us of this advice, together with written instructions.

The amount of each draft must be endorsed on the reverse hereof by the negotiating bank. We hereby agree that this Letter of Credit shall be duly honored upon presentation and delivery of the certification specified above.

This Letter of Credit shall expire on **[insert expiration date].**

Notwithstanding the above expiration date of this Letter of Credit, the term of this Letter of Credit shall be automatically renewed for successive, additional one (1) year periods unless, at least thirty (30) days prior to any such date of expiration, the undersigned shall give written notice to Holder, by certified mail, return receipt requested and at the address set forth above or at such other address as may be given to the undersigned by Holder, that this Letter of Credit will not be renewed.

This Letter of Credit is governed by the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication 500.

Very truly yours,

(Name of Issuing Bank)

By: _____

QuickLinks

Exhibit 10.2

[SYNTA LETTERHEAD]

July 8, 2008

REVISED

Michael Bailey
[ADDRESS]

Dear Michael:

On behalf of Synta Pharmaceuticals, I am pleased to offer you the position of Sr. Vice President and Chief Commercial Officer reporting to Safi Bahcall, President and Chief Executive Officer for Synta Pharmaceuticals Corp. (hereinafter "Synta Pharmaceuticals" or the "Company").

1. *Effective Date:* The effective date of your employment will be August 4, 2008.

2. *Compensation:* Your initial base salary will be $300,000.00 annually; payable at a semi-monthly rate of $12,500.00, from which all applicable taxes and other customary employment-related deductions will be taken.

For the first annual performance review following your hire date, all pay-for-performance compensation (such as merit increases and bonuses) will be pro-rated to reflect your start date and the percentage of the calendar year that you worked. Employees who start after October 31st will not be included in the performance review for that calendar year.

3. *Bonus:* You will be eligible to receive an annual performance based bonus. This cash bonus, for fully meeting and exceeding expectations under the Company's bonus program, is expected to be at a target level of 40% of your base salary. Such bonus, if any, will be granted at the discretion of the Company's Board of Directors.

4. *Stock Option:* You will be granted an incentive stock option to purchase 150,000 shares of the Company's common stock pursuant to the terms of the Synta Pharmaceuticals Corp. 2006 Stock Plan (the "Plan") and formal stock option agreement. All stock option grants shall be priced at the fair market value (as defined in the 2006 plan) on the grant date and are subject to a vesting schedule over four years (25% vest on the first year anniversary of your hire date and the remainder in equal portions quarterly over the next three years.)

You will also be granted 25,000 restricted shares of Synta stock with the following vesting schedule: 50% vest on the second anniversary of your hire date and the remainder on the third anniversary of your hire date.

5. *Severance and Change of Control:* Please refer to the document included with this offer of employment entitled Severance and Change of Control Agreement which is attached hereto and incorporated herein by reference.

6. *Benefits:* As a full-time employee, you will be eligible to participate in certain Company- sponsored benefit plans to the same extent as, and subject to the same terms, conditions and limitations applicable to other employees of the Company of similar rank and tenure. All benefits may be changed or modified from time to time at the Company's sole discretion.

7. *Employment Period:* Your employment with the Company will be at-will, meaning that you will not be obligated to remain employed by the Company for any specified period of time; likewise, the Company will not be obligated to continue your employment for any specific period and may terminate your employment at any time, with or without cause.

8. *Contingencies:* Our employment offer to you is contingent upon (1) your execution of the standard form of Non-Competition, Confidentiality and Inventions Agreement (a copy of which is attached hereto as *Exhibit A)*; (2) your ability, as required under federal law, to establish your employment eligibility as a U.S. citizen, a lawful permanent resident of the U.S. or an individual specifically authorized for employment by the Immigration and Naturalization Service; and (3) completion of a satisfactory background check. If any of the foregoing conditions are not met, this employment offer shall be null and void.

9. *Jurisdiction and Waiver:* In the case of any dispute, this offer of employment shall be interpreted under the laws of the Commonwealth of Massachusetts. By accepting this offer of employment, you agree that any action, demand, claim or counterclaim in connection with any aspect of your employment with the Company, or any separation of employment (whether voluntary or involuntary) from the Company, shall be resolved in a court of competent jurisdiction in Massachusetts by a judge alone, and you knowingly waive and forever renounce your right to a trial before a civil jury.

10. *Medical Surveillance:* As part of Synta's medical surveillance program, all laboratory employees working with hazardous chemical, infectious agents, radio labeled materials or animals are required to have an initial physical provided by Mount Auburn Hospital. An employee may refuse an exam by signing a release. If you want to decline from having the initial physical, please notify Human Resources on your first day at New Employee Orientation. Your initial surveillance examination will be scheduled to take place during the first 10 days of your employment.

11. *Orientation:* On your first day of employment, please arrive at 45 Hartwell Avenue at 8:30am for benefits enrollment with Human Resources.

Michael, we are very enthusiastic about the prospect of your joining us as a Synta Pharmaceuticals employee. Please indicate your acceptance of the foregoing by signing one enclosed copy of this letter and returning it to Art McMahon within seven days of the date of this letter. After that date, this offer will lapse. If you need additional time to respond to this offer, please let us know immediately.

Sincerely,

SYNTA PHARMACEUTICALS CORP.

/s/ SAFI BAHCALL

Safi Bahcall, Ph.D.
Director, President and Chief Executive Officer

Agreed to and accepted:

Name: /s/ MICHAEL P. BAILEY Date: 7/9/08

Synta Pharmaceuticals Corp.
45 Hartwell Avenue
Lexington, MA 02421

June 13, 2008

Michael Bailey
[ADDRESS]

Dear Michael:

This letter is to confirm our understanding with respect to (i) your agreement not to compete with Synta Pharmaceuticals Corp. or its subsidiaries or affiliates (collectively, the "Company") and (ii) your agreement to protect and preserve information and property which is confidential and proprietary to the Company (the terms and conditions agreed to in this letter shall hereinafter be referred to as the "Agreement"). You hereby acknowledge and agree that you are an "at-will" employee and that no provision of this Agreement shall be construed to create an express or implied employment contract, or a promise of employment for a specific period of time, and the Company expressly reserves the right to end your employment at any time, with or without notice or cause.

In consideration of your employment by the Company, the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged, we have agreed as follows:

1. *Prohibited Competition and Solicitation.*

(a) *Certain Acknowledgments and Agreements.*

(i) We have discussed, and you recognize and acknowledge the competitive and proprietary aspects of the business of the Company.

(ii) You will devote your full time and efforts to the business of the Company and, during the period of your employment with the Company (the "Term") and for a period of twelve (12) months following termination of your employment (whether such termination is voluntary or involuntary. If such termination is involuntary and through no fault of your own, the twelve (12) month non-compete restriction as discussed herein will not apply), shall not participate, directly or indirectly, in any capacity, in any business which is competitive with the Company without the prior written consent of the Company. You acknowledge and agree that a business will be deemed competitive with the Company if it conducts research, performs any of the services or manufactures or sells any of the products provided or offered by the Company or if it performs any other services and/or engages in the production, manufacture, distribution or sale of any product that may be purchased in lieu of purchasing services performed or products produced, manufactured, distributed or sold by the Company within the Field of Interest (as defined below) at any time during the period of your employment with the Company.

(iii) You further acknowledge and agree that, during the course of your employment with the Company, the Company will furnish, disclose or make available to you confidential and proprietary information related to the Company's business and that the Company may provide you with unique and specialized training. You also acknowledge that such confidential information and such training have been developed and will be developed by the Company through the expenditure by the Company of substantial time, effort and money and that all such confidential information and training could be used by you to compete with the Company.

(b) *Non-Solicitation.* During the Term and for a period of twelve (12) months following termination of your employment, whether such termination is voluntary or involuntary, you shall not, without the prior written consent of the Company:

(i) either individually or on behalf of or through any third party, solicit, divert or appropriate or attempt to solicit, divert or appropriate, any customer of the Company with which you had any contact at any time during the Term, with the effect or intention of reducing or limiting the amount of business the customer does with the Company; or

(ii) either individually or on behalf of or through any third party, directly or indirectly, solicit, entice or persuade or attempt to solicit, entice or persuade any employees of or consultants to the Company (other than your spouse), who have been employees or consultants of the Company at any time during the Term, or who are employees at the time of the solicitation, to leave the services of the Company.

(c) *Field of Interest.* As used herein, the term "Field of Interest" means the research of, and/or the development, manufacture and sale of, any therapeutic or diagnostic product that is developed, manufactured or sold by the Company at any time during the Term, as documented in the bi-weekly scientific project reports or other scientific planning documents of the company (the "Scientific Reports") prepared by the Company during the Term. You hereby acknowledge and agree that the Field of Interest shall be assessed for purposes of this Agreement as of the date on which your employment with the Company terminates, which assessment shall include, without limitation, a review of the applicable Scientific Reports.

(d) *Reasonableness of Restrictions.* You further acknowledge and agree that (i) the activities which are prohibited by this Section 1 are narrow and reasonable in relation to the skills which represent your principal salable asset both to the Company and to your other prospective employers, and (ii) given the global nature of the Company's business, including its need to market its services and sell its products in a large geographic area in order to have a sufficient customer base to make the Company's business profitable, the geographic, length of time and substantive scope of the provisions of this Section 1 are reasonable, legitimate and fair to you.

(e) *Survival of Acknowledgments and Agreements.* Except as expressly set forth hereunder, your acknowledgments and agreements set forth in this Section 1 shall survive the termination of your employment with the Company for the periods set forth above.

2. *Protected Information.*

(a) *Confidentiality Obligations.* You shall at all times, both during the Term and thereafter, maintain in confidence and shall not, without the prior written consent of the Company, use, except in the course of performance of your duties for the Company, disclose or give to others any Confidential Information of the Company. As used herein, the term "Confidential Information" shall mean any information which is disclosed to or developed by you during the course of performing services for, or receiving training from, the Company, and is not generally available to the public, including but not limited to confidential information concerning business plans, customers, future customers, suppliers, licensors, licensees, partners, investors, affiliates or others, training methods and materials, financial information, sales prospects, client lists, Company Inventions (as defined in Section 3), or any other scientific, technical, trade or business secret or confidential or proprietary information of the Company or of any third party provided to you during the Term. In the event anyone not employed or otherwise engaged by the Company seeks information from you in regard to any such Confidential Information or any other secret or confidential work of the Company, or concerning any fact or circumstance relating thereto, you will promptly notify the chief executive officer of the Company.

(b) *Limited Exceptions.* The restrictions in Section 2(a) hereof shall not apply to information that, as can be established by competent written records: (i) was publicly known at the time of the Company's communication thereof to you; (ii) becomes publicly known through no fault of yours subsequent to the time of the Company's communication thereof to you; (iii) was in your possession free of any obligation of confidence at the time of the Company's communication thereof to you; or (iv) is developed by you independently of and without reference to or use of any of the Company's Confidential Information. In the event that you are required by law, regulation or court order to disclose any of the Company's Confidential Information, you shall (i) first notify the Company of such disclosure requirement and (ii) furnish only that portion of the Confidential Information that is legally required and will exercise all reasonable efforts to obtain reliable assurances that confidential treatment will be accorded the Confidential Information.

(c) *Survival of Acknowledgements and Agreements.* Except as expressly set forth hereunder, your acknowledgements and agreements set forth in this Section 2 shall survive the termination of your employment with the Company.

3. *Ownership of Intellectual Property Ideas.*

(a) *Property of the Company.* As used in this Agreement, the term "Inventions" shall mean all ideas, discoveries, creations, manuscripts and properties, innovations, improvements, know-how, inventions, designs, developments, apparatus, techniques, methods, biological processes, cell lines, laboratory notebooks and formulae, whether patentable, copyrightable or not, including all rights to obtain, register, perfect and enforce any of the foregoing. You hereby agree that any Inventions which you may conceive, reduce to practice or develop during the Term in connection with the business activities of the Company or otherwise within the Field of Interest, alone or in conjunction with any other party, whether during or out of regular business hours, and whether at the request or upon the suggestion of the Company, or otherwise (collectively, the "Company Inventions"), shall be the sole and exclusive property of the Company. You hereby assign to the Company all of your right, title and interest in and to all such Company Inventions and hereby agree that you shall not publish any of the Company Inventions without the prior written consent of the Company.

(b) *Cooperation.* During the Term, you agree that, without further compensation, you will disclose promptly to the Company in writing, all Company Inventions you conceive, reduce to practice or develop during the Term (or, if based on or related to any Confidential Information of the Company obtained by you during the Term, within one (1) year after the termination of your employment). You further agree that you will fully cooperate with the Company, its attorneys and agents in the preparation and filing of all papers and other documents as may be reasonably required to perfect the Company's rights in and to any of such Company Inventions, including, but not limited to, joining in any proceeding to obtain patents, copyrights, trademarks or other legal rights of the United States and of any and all other countries on such Company Inventions; *provided*, *that*, the Company will bear the expense of such proceedings (including all of your reasonable expenses). You further agree that any patent or other legal right covering any Company Invention so issued to you, personally, shall be assigned by you to the Company without charge by you. You further acknowledge that all original works of authorship made by you, whether alone or jointly with others within the scope of your employment and which are protectable by copyright are "works made for hire" within the meaning of the United States Copyright Act, 17 U.S.C. § 101, as amended, the copyright of which shall be owned solely, completely and exclusively by the Company. If any Company Invention is considered to be work not included in the categories of work covered by the United States Copyright Act, 17 U.S.C. § 101, as amended, such work shall be owned solely by, or hereby assigned or transferred completely and exclusively to, the Company. If the Company is unable because of your mental or physical incapacity or for any other reason, after reasonable effort, to secure your signature on any document or documents needed to obtain or

enforce any patent, copyright, trademarks or any other rights covering Inventions or original works of authorship assigned by you to the Company as required above, you hereby irrevocably designate and appoint the Company and its duly authorized officers and agents as your agent and attorney-in-fact, to act for and in your behalf and stead to execute and file any application or assignment and to do all other lawfully permitted acts to further the prosecution and issuance to the Company of patents, copyright registrations, trademark registrations or similar protections covering the Inventions with the same legal force and effect as if executed by you.

4. *Provisions Necessary and Reasonable/Breach/Attorneys' Fees.* You agree that (i) the provisions of Sections 1, 2 and 3 of this Agreement are necessary and reasonable to protect the Company's Confidential Information, Company Inventions, and goodwill and (ii) in the event of any breach of any of the covenants set forth herein, the Company would suffer substantial irreparable harm and would not have an adequate remedy at law for such breach. In recognition of the foregoing, you agree that in the event of a breach or threatened breach of any of these covenants, in addition to such other remedies as the Company may have at law, without posting any bond or security, the Company shall be entitled to seek and obtain equitable relief, in the form of specific performance, and/or temporary, preliminary or permanent injunctive relief, or any other equitable remedy which then may be available. The seeking of such injunction or order shall not affect the Company's right to seek and obtain damages or other equitable relief on account of any such actual or threatened breach. In the event the Company takes any court action with respect to your breach or threatened breach of this Agreement, and prevails in such action, you shall be obligated to reimburse the Company for its reasonable attorneys' fees and costs incurred in such action.

5. *Disclosure to Future Employers.* You agree that you will provide, and that the Company may similarly provide in its discretion, a copy of the covenants contained in Sections 1, 2 and 3 of this Agreement to any business or enterprise which you may directly, or indirectly, own, manage, operate, finance, join, control or in which you participate in the ownership, management, operation, financing, or control, or with which you may be connected as an officer, director, employee, partner, principal, agent, representative, consultant or otherwise.

6. *Representations Regarding Prior Work and Legal Obligations.*

(a) You represent that you have no agreement or other legal obligation with any prior employer or any other person or entity that restricts your ability to engage in employment discussions with, employment with, or to perform any function for, the Company.

(b) You represent that you have been advised by the Company that at no time should you divulge to or use for the benefit of the Company, any trade secret or confidential or proprietary information of any previous employer. You acknowledge that you have not divulged or used any such information for the benefit of the Company.

(c) You acknowledge that the Company is basing important business decisions on these representations, and affirm that all of the statements included herein are true.

7. *Records.* Upon termination of your employment relationship with the Company, you shall deliver to the Company any property of the Company which may be in your possession including products, materials, memoranda, notes, records, reports, or other documents or photocopies of the same.

8. *No Conflicting Agreements.* You hereby represent and warrant that you have no commitments or obligations inconsistent with this Agreement and you hereby agree to indemnify and hold the Company harmless against loss, damage, liability or expense arising from any claim based upon circumstances alleged to be inconsistent with such representation and warranty.

9. *General.*

(a) *Notices.* All notices, requests, consents and other communications hereunder shall be in writing, shall be addressed to the receiving party's address set forth below or to such other address as a party may designate by notice hereunder, and shall be either (i) delivered by hand, (ii) made by telex, telecopy or facsimile transmission with confirmed receipt thereof (and with a copy of such telex, telecopy or facsimile, together with a copy of the confirmation sent to the recipient by regular U.S. mail on the next business day), (iii) sent by overnight courier, or (iv) sent by registered mail, return receipt requested, postage prepaid.

If to the Company: Synta Pharmaceuticals Corp.
45 Hartwell Avenue
Lexington, MA 02421
Attn: Chief Executive Officer

If to you: To the address set forth on the signature page of this Agreement.

All notices, requests, consents and other communications hereunder shall be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if made by telex, telecopy or facsimile transmission, at the time that receipt thereof has been acknowledged by electronic confirmation or otherwise, (iii) if sent by overnight courier, on the next business day following the day such notice is delivered to the courier service, or (iv) if sent by registered mail, on the fifth business day following the day such mailing is made.

(b) *Entire Agreement.* This Agreement embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement shall affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(c) *Modifications and Amendments.* The terms and provisions of this Agreement may be modified or amended only by written agreement executed by the parties hereto.

(d) *Waivers and Consents.* The terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

(e) *Assignment.* The Company may assign its rights and obligations hereunder to any person or entity that succeeds to all or substantially all of the Company's business or that aspect of the Company's business in which you are principally involved. Your rights and obligations under this Agreement may not be assigned by you without the prior written consent of the Company.

(f) *Benefit.* All statements, representations, warranties, covenants and agreements in this Agreement shall be binding on the parties hereto and shall inure to the benefit of the respective successors and permitted assigns of each party hereto. Nothing in this Agreement shall be construed to create any rights or obligations except among the parties hereto, and no person or entity shall be regarded as a third-party beneficiary of this Agreement.

(g) *Governing Law.* This Agreement and the rights and obligations of the parties hereunder shall be construed in accordance with and governed by the laws of the Commonwealth of Massachusetts, without giving effect to the conflict of laws principles thereof.

(h) *Jurisdiction.* Any legal action or proceeding with respect to this Agreement may be brought in the courts of the Commonwealth of Massachusetts or of the United States of America. By execution and delivery of this Agreement, each of the parties hereto accepts for itself and in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts.

(i) *Severability.* The parties intend this Agreement to be enforced as written. However, (i) if any portion or provision of this Agreement shall to any extent be declared illegal or unenforceable by a duly authorized court having jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law and (ii) if any provision, or part thereof, is held to be unenforceable because of the duration of such provision or the geographic area covered thereby, the Company and you agree that the court making such determination shall have the power to reduce the duration and/or geographic area of such provision, and/or to delete specific words and phrases ("blue-penciling"), and in its reduced or blue-penciled form such provision shall then be enforceable and shall be enforced.

(j) *Headings and Captions.* The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and shall in no way modify, or affect the meaning or construction of any of the terms or provisions hereof.

(k) *No Waiver of Rights, Powers and Remedies.* No failure or delay by a party hereto in exercising any right, power or remedy under this Agreement, and no course of dealing between the parties hereto, shall operate as a waiver of any such right, power or remedy of the party. No single or partial exercise of any right, power or remedy under this Agreement by a party hereto, nor any abandonment or discontinuance of steps to enforce any such right, power or remedy, shall preclude such party from any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The election of any remedy by a party hereto shall not constitute a waiver of the right of such party to pursue other available remedies. No notice to or demand on a party not expressly required under this Agreement shall entitle the party receiving such notice or demand to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of the party giving such notice or demand to any other or further action in any circumstances without such notice or demand.

(l) *Counterparts.* This Agreement may be executed in one or more counterparts, and by different parties hereto on separate counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

If the foregoing accurately sets forth our agreement, please so indicate by signing and returning to us the enclosed copy of this letter.

Very truly yours,

SYNTA PHARMACEUTICALS CORP.

By: /s/ SAFI BAHCALL

Safi Bahcall, Ph.D.
Director, President and Chief Executive Officer

Agreed to and accepted:
Name: /s/ MICHAEL P. BAILEY

Michael P. Bailey
Address: [ADDRESS]
Date: 7/9/08

QuickLinks

Exhibit 10.3

SEVERANCE AND CHANGE OF CONTROL AGREEMENT

This Agreement (the "*Agreement*") is entered into as of the 6th day of August, 2008 by and between Synta Pharmaceuticals Corp., a Delaware corporation (the "*Company*"), and Michael Bailey (the "*Executive*").

WHEREAS Executive is employed by the Company, and because of such employment, possesses detailed knowledge of the Company and its business and operations;

WHEREAS Executive's continued service to the Company is very important to the future success of the Company;

WHEREAS the Company desires to enter into this Agreement to provide Executive with certain financial protection in the event that Executive's employment terminates under certain circumstances, and thereby to provide Executive with incentives to remain with the Company; and

WHEREAS the Board of Directors of the Company (the "*Board*") acting through the Compensation Committee has determined that it is in the best interests of the Company to enter into this Agreement.

NOW THEREFORE for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and Executive agree as follows:

1. ***Definitions.***

(a) *Cause.* As used herein, "Cause" shall include (and is not limited to): (i) material misrepresentation with respect to the Company or any affiliate, parent or subsidiary of the Company; (ii) insubordination; (iii) substantial malfeasance or nonfeasance of duty; (iv) unauthorized disclosure of confidential information; (v) Executive's breach of any material provision of any employment, consulting, advisory, non-disclosure, invention assignment, non-competition, or similar agreement between Executive and the Company; or (vi) conduct substantially prejudicial to the business of the Company or any affiliate, parent or subsidiary of the Company. The Board shall have sole discretion to determine the existence of "Cause," and its determination will be conclusive on Executive and the Company; provided that the Board may delegate its power to act under this paragraph (a) to a committee of the Board in which case the determination of such committee shall be conclusive. "Cause" is not limited to events which have occurred prior to the termination of Executive's service, nor is it necessary that the Board's finding of "Cause" occur prior to such termination. If the Board determines, subsequent to Executive's termination of service, that either prior or subsequent to Executive's termination Executive engaged in conduct which would constitute "Cause," then Executive shall have no right to any benefit or compensation under this Agreement.

(b) *Change of Control.* As used herein, a "Change of Control" shall mean the occurrence of any of the following events:

(i) *Ownership.* Any "Person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) becomes the "Beneficial Owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities (excluding for this purpose any such voting securities held by the Company, or any affiliate, parent or subsidiary of the Company, or by any employee benefit plan of the Company) pursuant to a transaction or a series of related transactions which the Board does not approve; or

(ii) *Merger/Sale of Assets.* (A) A merger or consolidation of the Company whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or parent of such corporation, as the case may be, outstanding immediately after such merger or consolidation; (B) or the stockholders of the Company approve an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; or

(iii) *Change in Board Composition.* A change in the composition of the Board, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" shall mean directors who either (A) are directors of the Company as of the date of this Agreement, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors, or by a committee of the Board made up of at least a majority of the Incumbent Directors, at the time of such election or nomination (but shall not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company).

(c) *Good Reason.* As used herein, a "Good Reason" shall mean: (i) Executive, as a condition of remaining an employee of the Company, is required to change the principal location where Executive renders services to the Company to a location more than fifty (50) miles from Executive's then-current location of employment; (ii) there occurs a material adverse change in Executive's duties, authority, reporting structure (reporting to CEO) or responsibilities which causes Executive's position with the Company to become of significantly less responsibility or authority than Executive's position is on the date hereof; or (iii) there occurs a material reduction in Executive's base salary from Executive's base salary received on the date hereof, *provided that* any notice of termination by Executive for Good Reason shall be given by Executive within fifteen (15) business days of Executive's becoming aware of the occurrence of the facts giving rise to such Good Reason. For purposes of this Agreement, "Good Reason" shall be interpreted in a manner, and limited to the extent necessary, so that it will not cause adverse tax consequences for either party with respect to Section 409A of the Internal Revenue Code of 1986, as amended ("*Code Section 409A*"), and any successor statute, regulation and guidance thereto.

(d) *Base Salary.* As used herein, "Base Salary" shall mean Executive's annual base salary, excluding reimbursements, bonuses, benefits, and amounts attributable to stock options and other non-cash compensation.

2. ***Severance for Termination by the Company Other than For Cause or by Executive for Good Reason.*** In the event that (i) Executive's employment is terminated by action of the Company other than for Cause, or (ii) Executive terminates Executive's employment for Good Reason, then Executive shall receive the following (subject to Executive's execution of a release of claims as described in *Section 7*):

(a) *Severance Payments.* Continuation of payments in an amount equal to Executive's then-current Base Salary for a six (6) month period less all customary and required taxes and employment-related deductions, in accordance with the Company's normal payroll practices (provided such payments will be made at least monthly.)

(b) *Equity Acceleration.* Acceleration of vesting of any and all outstanding stock option awards that would have vested during the period commencing on Executive's date of termination through and including the date that is six (6) months following Executive's date of termination.

(c) *COBRA Payments.* Upon completion of the appropriate COBRA(1) forms, and subject to all the requirements of COBRA, the Company shall continue Executive's participation in the Company's health and dental insurance plans at the Company's cost (except for Executive's co-pay, if any, which shall be deducted from Executive's severance compensation) for the six (6) months following Executive's date of termination, to the same extent that such insurance is provided to similarly situated Company executives, *provided that* this benefit will cease and the Company will be under no obligation to provide it if Executive has become eligible for coverage under another employer's group coverage, and Executive hereby agrees to notify the Company promptly and in writing should that occur.

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(1) "COBRA" is the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

(d) *No Duplication.* In the event that Executive is eligible for the severance payments and benefits under *Section 3* below, Executive shall not be eligible for and shall not receive any of the severance payments and benefits as provided in this *Section 2*.

3. ***Change of Control Severance.*** In the event that a Change of Control occurs and within a period of one (1) year following the Change of Control, either: (i) Executive's employment is terminated other than for Cause, or (ii) Executive terminates Executive's employment for Good Reason, then Executive shall receive the following (subject to Executive's execution of a release of claims, as described in *Section 7*):

(a) *Lump Sum Severance Payment.* Within thirty (30) days following Executive's termination, payment of an amount equal to twelve (12) months of Executive's then-current Base Salary less all customary and required taxes and employment-related deductions.

(b) *Separation Bonus.* Within thirty (30) days following Executive's termination, payment of a separation bonus in an amount equal to the target annual bonus to which Executive may have been entitled for the year in which Executive is terminated, prorated for the portion of the year in which Executive was employed.

(c) *Equity Acceleration.* Full acceleration as of the date of termination of vesting of any and all equity awards outstanding immediately prior to termination.

(d) *COBRA Payments.* Upon completion of the appropriate COBRA forms, and subject to all the requirements of COBRA, the Company shall continue Executive's participation in the Company's health and dental insurance plans at the Company's cost (except for Executive's co-pay, if any, which shall be deducted from Executive's severance compensation) for the twelve (12) months following Executive's date of termination, to the same extent that such insurance is provided to similarly situated Company executives, *provided that* this benefit will cease and the Company will be under no obligation to provide it if Executive has become eligible for coverage under another employer's group coverage, and Executive hereby agrees to notify the Company promptly and in writing should that occur.

(e) *No Duplication.* In the event that Executive is eligible for the severance payments and benefits under *Section 2* above, Executive shall not be eligible for and shall not receive any of the severance payments and benefits as provided in this *Section 3*.

4. ***No Severance.*** In the event that Executive's employment is terminated for any reason other than those outlined in *Sections 2* or *3*, then Executive shall have no right to any of the severance payments and benefits provided under this Agreement.

5. ***Distribution Limitation.*** If any payment or benefit Executive would receive under this Agreement, when combined with any other payment or benefit Executive receives pursuant to a Change of Control (for purposes of this section, a "*Payment*") would: (i) constitute a "parachute payment" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "*Code*"); and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "*Excise Tax*"), then such Payment shall be either: (x) the full amount of such Payment; or (y) such lesser amount (with

cash payments being reduced before stock option compensation) as would result in no portion of the Payment being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local employments taxes, income taxes, and the Excise Tax, results in Executive's receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax.

6. ***Timing of Payments.*** Notwithstanding any other provision with respect to the timing of payments under *Sections 2* or *3*, if, at the time of Executive's termination, Executive is deemed to be a "specified employee" of the Company (within the meaning of Code Section 409A(a)(2)(B)(i) and any successor statute, regulation and guidance thereto ("*Code Section 409A*")), then limited only to the extent necessary to comply with the requirements of Code Section 409A, any payments to which Executive may become entitled under *Sections 2* or *3* which are subject to Code Section 409A (and not otherwise exempt from its application) will be withheld until the first (1st) business day of the seventh (7th) month following the termination of Executive's employment, at which time Executive shall be paid an aggregate amount equal to the accumulated, but unpaid, payments otherwise due to Executive under the terms of *Sections 2* or *3*.

7. ***Release of Claims.*** The Company shall not be obligated to pay Executive any of the compensation set forth in *Sections 2* and *3* unless and until Executive has executed a timely full and general release of all claims against the Company and any affiliate, parent or subsidiary, and its and their officers, directors, employees, and agents, in a form satisfactory to the Company.

8. ***No Impact on Employment Status.*** This Agreement is not intended to confer, and shall not be interpreted as conferring, any additional employment rights on Executive, and has no impact on either party's right to terminate Executive's employment under contract or applicable law.

9. ***Enforceability; Reduction.*** If any provision of this Agreement shall be deemed invalid or unenforceable as written, this Agreement shall be construed, to the greatest extent possible, or modified, to the extent allowable by law, in a manner which shall render it valid and enforceable and any limitation on the scope or duration of any provision necessary to make it valid and enforceable shall be deemed to be a part thereof. No invalidity or unenforceability of any provision contained herein shall affect any other portion of this Agreement.

10. ***Notices.***

(a) All notices, requests, consents and other communications hereunder shall be in writing, shall be addressed to the receiving party's address set forth below or to such other address as a party may designate by notice hereunder, and shall be either (i) delivered by hand, (ii) made by telex, telecopy or facsimile transmission, (iii) sent by overnight courier, or (iv) sent by registered or certified mail, return receipt requested, postage prepaid.

If to the Company:

President and Chief Executive Officer
Synta Pharmaceuticals Corp.
45 Hartwell Avenue
Lexington, MA 02421

With a copy to:

General Counsel
Synta Pharmaceuticals Corp.
45 Hartwell Avenue
Lexington, MA 02421

If to Executive:

Michael Bailey
[ADDRESS]

(b) All notices, requests, consents and other communications hereunder shall be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if made by telex, telecopy or facsimile transmission, at the time that receipt thereof has been acknowledged by electronic confirmation or otherwise, (iii) if sent by overnight courier, on the next business day following the day such notice is delivered to the courier service, or (iv) if sent by registered or certified mail, on the fifth (5th) business day following the day such mailing is made.

11. ***Entire Agreement / No Duplication of Compensation or Benefits.*** This Agreement embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof including, but not limited to, any offer letter or employment agreement previously entered into between the Executive and the Company. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement shall affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement. The terms of *Sections 2* and *3* above shall replace any agreement, policy or practice which otherwise would obligate the Company to provide any severance compensation and/or benefits to Executive, *provided* that this provision shall not be construed to otherwise limit Executive's rights to payments or benefits provided under any pension plan (as defined in Section 3(2) of the Employee Retirement Income Security Act of 1974, as amended), deferred compensation, stock, stock option or similar plan sponsored by the Company.

12. ***Modifications and Amendments.*** The terms and provisions of this Agreement may be modified or amended only by written agreement executed by all parties hereto. Any such amendment shall comply with the requirements of Code Section 409A, if applicable.

13. ***Waivers and Consents.*** The terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

14. ***Assignment.*** The rights and obligations under this Agreement may be assigned by the Company.

15. ***Benefit.*** All statements, representations, warranties, covenants and agreements in this Agreement shall be binding on the parties hereto and shall inure to the benefit of the respective successors and permitted assigns of each party hereto. Nothing in this Agreement shall be construed to create any rights or obligations except among the parties hereto, and no person or entity shall be regarded as a third-party beneficiary of this Agreement.

16. ***Arbitration.*** Any controversy, dispute or claim arising out of or in connection with this Agreement will be settled by final and binding arbitration to be conducted in Boston, Massachusetts pursuant to the national rules for the resolution of employment disputes of the American Arbitration Association then in effect. The decision or award in any such arbitration will be final and binding upon the parties, and judgment upon such decision or award may be entered in any court of competent jurisdiction, or application may be made to any such court for judicial acceptance of such decision or award and an order of enforcement. In the event that any procedural matter is not covered by the aforesaid rules, the procedural law of Massachusetts will govern. Any disagreement as to whether a particular dispute is arbitrable under this Agreement shall itself be subject to arbitration in accordance

with the procedures set forth herein. Notwithstanding the foregoing, any right or obligation arising out of or concerning any separate contract or agreement between the parties (including but not limited to any employee, non-competition, non-solicitation, non-disclosure and invention agreement) shall be decided in accordance with the dispute resolution mechanism provided for by such contract or agreement.

17. ***Governing Law / Jurisdiction / Service of Process.*** This Agreement and the rights and obligations of the parties hereunder shall be construed in accordance with and governed by the law of the Commonwealth of Massachusetts, without giving effect to the conflict of law principles thereof. Any legal action or proceeding with respect to this Agreement that is not subject to arbitration pursuant to *Section 16* will be brought in the courts of the Commonwealth of Massachusetts in Middlesex County or of the United States of America for the District of Massachusetts, sitting in Boston. By execution and delivery of this Agreement, each of the parties hereto accepts for itself and in respect of its property, generally and unconditionally, the exclusive jurisdiction of the aforesaid courts. Each of the parties hereto irrevocably consents to the service of process of any of the aforementioned courts in any such action or proceeding by the mailing of copies thereof by certified mail, postage prepaid, to the party at its address set forth in *Section 10*.

18. ***Counterparts.*** This Agreement may be executed in one or more counterparts, and by different parties hereto on separate counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(REMAINDER OF PAGE INTENTIONALLY LEFT BLANK)

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

SYNTA PHARMACEUTICALS CORP.

By: /s/ Safi R. Bahcall

Safi R. Bahcall, Ph.D.
President and Chief Executive Officer

EXECUTIVE:

/s/ Michael Bailey

Michael Bailey
Senior Vice President, Commercial Operations and
Chief Business Officer

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Exhibit 31.1

CERTIFICATIONS UNDER SECTION 302

I, Safi R. Bahcall, Ph.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Synta Pharmaceuticals Corp.;

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(s) 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(s) 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: November 13, 2008

/s/ SAFI R. BAHCALL, PH.D.

Safi R. Bahcall, Ph.D.
President and Chief Executive Officer
(principal executive officer)

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Exhibit 31.2

CERTIFICATIONS UNDER SECTION 302

I, Keith S. Ehrlich, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Synta Pharmaceuticals Corp.;

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(s) 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(s) 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: November 13, 2008

/s/ KEITH S. EHRLICH

Keith S. Ehrlich
Vice President, Finance and Administration,
Chief Financial Officer
(principal accounting and financial officer)

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Exhibit 32.1

CERTIFICATIONS UNDER SECTION 906

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Synta Pharmaceuticals Corp., a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the period ended September 30, 2008 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 13, 2008

/s/ SAFI R. BAHCALL, PH.D.

Safi R. Bahcall, Ph.D.
President and Chief Executive Officer
(principal executive officer)

Dated: November 13, 2008

/s/ KEITH S. EHRLICH

Keith S. Ehrlich
Vice President, Finance and Administration,
Chief Financial Officer
(principal accounting and financial officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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