
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-Q

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

For the quarterly period ended March 31, 2011

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: 000-51173

Targacept, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

200 East First Street, Suite 300
Winston-Salem, North Carolina
(Address of principal executive offices)

56-2020050
(I.R.S. Employer
Identification No.)

27101
(Zip Code)

Registrant's telephone number, including area code: (336) 480-2100

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

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

Indicate by check mark whether 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.

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 April 29, 2011, the registrant had 29,066,879 shares of common stock, \$0.001 par value per share, outstanding.

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FORM 10-Q
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PART I. Financial Information

Cautionary Note Regarding Forward-Looking Statements

This quarterly report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, which we refer to as the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act. For this purpose, any statement contained in this quarterly report, other than statements of historical fact, regarding, among other things:

- the progress, scope or duration of the development of TC-5214, TC-5619, AZD3480 (TC-1734), AZD1446 (TC-6683), TC-6987, TC-6499 or any of our other product candidates or programs, such as the target indication(s) for development, the size, design, population, conduct, objective or endpoints of any clinical trial, or the timing for initiation or completion of or availability of results from any clinical trial, for submission or approval of any regulatory filing (including a new drug application for TC-5214 with the U.S. Food and Drug Administration), for meeting with regulatory authorities or, where applicable, for an advancement decision by AstraZeneca;
- the benefits that may be derived from any of our product candidates or the commercial opportunity in any target indication;
- any payments that AstraZeneca may make to us;
- our operations, financial position, revenues, costs or expenses; or
- our strategies, prospects, plans, expectations or objectives;

is a forward-looking statement made under the provisions of The Private Securities Litigation Reform Act of 1995. In some cases, words such as “may,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue,” “ongoing,” “scheduled” or other comparable words identify forward-looking statements. Actual results, performance or experience may differ materially from those expressed or implied by any forward-looking statement as a result of various important factors, including our critical accounting policies and risks and uncertainties relating, among other things, to:

- our dependence on the success of our collaborations with AstraZeneca;
- whether the favorable results of our Phase 2b trial of TC-5214 as an adjunct treatment for major depressive disorder will be replicated in Phase 3 clinical trials;
- whether we and AstraZeneca will receive the regulatory approvals required to market and sell TC-5214;
- whether TC-5214 will be eligible for treatment in the United States as a new chemical entity with a five-year statutory exclusivity period, either because we and AstraZeneca submit a new drug application for TC-5214 prior to October 1, 2012 or because the applicable statutory provision is re-authorized by the U.S. Congress;

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- the control or significant influence that AstraZeneca has over the development of TC-5214, AZD3480 and AZD1446, including as to the timing, scope and design of any future clinical trials and as to the conduct at all of further development of AZD3480 in attention deficit/hyperactivity disorder or AZD1446 in Alzheimer's disease;
- the conduct and results of clinical trials and non-clinical studies and assessments of any of our product candidates, including the performance of third parties engaged to execute them, delays resulting from any changes to the applicable protocols or difficulties or delays in subject enrollment or data analysis;
- whether positive findings from completed clinical trials of TC-5619 will be replicated in any future clinical trials;
- whether applicable regulatory authorities in Europe will approve the planned clinical trial of AZD3480 in Alzheimer's disease;
- whether AstraZeneca will decide to conduct any further development of AZD3480 in ADHD in light of reservations about the adequacy of the therapeutic margin;
- our ability to establish additional strategic alliances, collaborations and licensing or other arrangements on favorable terms;
- our ability to protect our intellectual property; and
- the timing and success of submission, acceptance and approval of regulatory filings.

Risks and uncertainties that we face are described in greater detail under the caption "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2010 and in other filings that we make with the Securities and Exchange Commission, or SEC. As a result of the risks and uncertainties to which our business is subject, the results or events indicated by any forward-looking statement may not occur. We caution you not to place undue reliance on any forward-looking statement.

In addition, any forward-looking statement in this quarterly report represents our views only as of the date of this quarterly report and should not be relied upon as representing our views as of any later date. We anticipate that subsequent events and developments may cause our views to change. Although we may elect to update these forward-looking statements publicly at some point in the future, we specifically disclaim any obligation to do so, except as required by applicable law. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

Item 1. Financial Statements**TARGACEPT, INC.****BALANCE SHEETS****(in thousands, except share and par value amounts)**

	<u>March 31,</u> <u>2011</u> <u>(unaudited)</u>	<u>December 31,</u> <u>2010</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 138,837	\$ 165,854
Investments in marketable securities - short term	58,481	48,168
Receivables from collaborations	527	838
Prepaid expenses	2,479	3,219
Total current assets	<u>200,324</u>	<u>218,079</u>
Investments in marketable securities - long term	33,012	38,487
Property and equipment, net	6,074	6,072
Intangible assets	145	149
Total assets	<u>\$ 239,555</u>	<u>\$ 262,787</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 3,603	\$ 4,721
Accrued expenses	12,100	10,516
Current portion of long-term debt	1,718	1,710
Current portion of deferred revenue	75,931	81,710
Total current liabilities	<u>93,352</u>	<u>98,657</u>
Long-term debt, net of current portion	921	1,349
Deferred revenue, net of current portion	37,719	70,934
Total liabilities	<u>131,992</u>	<u>170,940</u>
Commitments and contingencies		
Stockholders' equity:		
Common stock, \$0.001 par value, 100,000,000 shares authorized; 29,061,338 and 28,870,691 shares issued and outstanding at March 31, 2011 and December 31, 2010, respectively	29	29
Preferred stock, \$0.001 par value, 5,000,000 shares authorized; 0 shares issued and outstanding at March 31, 2011 and December 31, 2010	—	—
Capital in excess of par value	313,144	309,994
Accumulated other comprehensive income	204	225
Accumulated deficit	(205,814)	(218,401)
Total stockholders' equity	<u>107,563</u>	<u>91,847</u>
Total liabilities and stockholders' equity	<u>\$ 239,555</u>	<u>\$ 262,787</u>

See accompanying notes.

TARGACEPT, INC.
STATEMENTS OF OPERATIONS
(in thousands, except share and per share amounts)
(unaudited)

	Three Months Ended	
	March 31,	
	2011	2010
Operating revenues:		
Milestones and license fees from collaborations	\$ 38,922	\$ 19,090
Grant revenue	72	428
Net operating revenues	38,994	19,518
Operating expenses:		
Research and development (including stock-based compensation of \$1,237 and \$766 for the three months ended March 31, 2011 and 2010, respectively)	23,517	10,607
General and administrative (including stock-based compensation of \$926 and \$471 for the three months ended March 31, 2011 and 2010, respectively)	3,175	1,822
Total operating expenses	26,692	12,429
Income from operations	12,302	7,089
Other income (expense):		
Interest income	316	374
Interest expense	(31)	(42)
Total other income (expense)	285	332
Income before income taxes	12,587	7,421
Income tax expense	—	626
Net income	\$ 12,587	\$ 6,795
Basic net income per share	\$ 0.43	\$ 0.24
Diluted net income per share	\$ 0.41	\$ 0.23
Weighted average common shares outstanding—basic	28,996,060	28,311,452
Weighted average common shares outstanding—diluted	30,399,750	29,172,218

See accompanying notes.

TARGACEPT, INC.
STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Three Months Ended	
	March 31,	
	2011	2010
Operating activities		
Net income	\$ 12,587	\$ 6,795
Adjustments to reconcile net income to net cash (used in) provided by operating activities:		
Recognition of deferred revenue	(38,994)	(18,944)
Amortization of premium on marketable securities, net	137	—
Depreciation and amortization	600	448
Stock-based compensation expense	2,163	1,237
Excess tax benefits from stock-based compensation	—	(622)
Changes in operating assets and liabilities:		
Receivables from collaborations	311	200,955
Other current assets	685	79
Accounts payable, license fees payable and accrued expenses	466	(15,599)
Net cash (used in) provided by operating activities	(22,045)	174,349
Investing activities		
Purchase of investments in marketable securities	(29,204)	(30,000)
Proceeds from sale of investments in marketable securities	24,263	14,000
Purchase of property and equipment	(598)	(1,169)
Net cash used in investing activities	(5,539)	(17,169)
Financing activities		
Principal payments on long-term debt	(420)	(354)
Proceeds from issuance of common stock, net	987	593
Excess tax benefits from stock-based compensation	—	622
Net cash provided by financing activities	567	861
Net (decrease) increase in cash and cash equivalents	(27,017)	158,041
Cash and cash equivalents at beginning of period	165,854	83,909
Cash and cash equivalents at end of period	<u>\$ 138,837</u>	<u>\$ 241,950</u>

See accompanying notes.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS

March 31, 2011

1. The Company and Nature of Operations

Targacept, Inc., or the Company, is a Delaware corporation formed on March 7, 1997. The Company is a biopharmaceutical company engaged in the design, discovery and development of novel NNR Therapeutics™ for the treatment of diseases and disorders of the nervous system. The Company's NNR Therapeutics selectively target neuronal nicotinic receptors, which it refers to as NNRs. Its facilities are located in Winston-Salem, North Carolina.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP, for interim financial information, the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements and should be read in conjunction with the Company's audited financial statements and notes thereto included in its Annual Report on Form 10-K for the year ended December 31, 2010. In the opinion of the Company's management, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of its financial position, operating results and cash flows for the periods presented have been included. Operating results for the three months ended March 31, 2011 are not necessarily indicative of the results that may be expected for the full year, for any other interim period or for any future year.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts of assets, liabilities, revenues and expenses reported in the financial statements and accompanying notes. Actual results could differ from these estimates.

Fair Value Measurement

The Company follows Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 820, *Fair Value Measurements and Disclosures*, or ASC 820, for application to financial assets. ASC 820 defines fair value, provides a consistent framework for measuring fair value under GAAP and requires fair value financial statement disclosures. ASC 820 applies only to the measurement and disclosure of financial assets that are required or permitted to be measured and reported at fair value under other ASC topics (except for standards that relate to share-based payments such as ASC Topic 718, *Compensation – Stock Compensation*).

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

2. Summary of Significant Accounting Policies (continued)

The valuation techniques of ASC 820 are based on both observable and unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, and unobservable inputs reflect the Company's market assumptions. ASC 820 classifies these inputs into the following hierarchy:

Level 1 Inputs— quoted prices (unadjusted) in active markets for identical assets that the reporting entity has the ability to access at the measurement date;

Level 2 Inputs— inputs other than quoted prices included within Level 1 that are observable for the asset, either directly or indirectly; and

Level 3 Inputs— unobservable inputs for the asset.

The following tables present the Company's investments in marketable securities that are measured at fair value on a recurring basis as of March 31, 2011 and December 31, 2010, respectively:

<u>March 31, 2011</u>	<u>Quoted Prices in Active Markets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u> (in thousands)	<u>Significant Unobservable Inputs (Level 3)</u>
U.S. Treasury and U.S. government and state government agency-backed securities	\$ 39,446	\$ —	\$ —
Corporate debt securities	46,677	—	—
Certificates of deposit	13,000	—	—
Accrued interest	369	—	—
Total cash equivalents and marketable securities	\$ 99,492	\$ —	\$ —

<u>December 31, 2010</u>	<u>Quoted Prices in Active Markets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u> (in thousands)	<u>Significant Unobservable Inputs (Level 3)</u>
U.S. Treasury and U.S. government and state government agency-backed securities	\$ 47,463	\$ —	\$ —
Corporate debt securities	41,874	—	—
Certificates of deposit	13,000	—	—
Accrued interest	314	—	—
Total cash equivalents and marketable securities	\$102,651	\$ —	\$ —

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

2. Summary of Significant Accounting Policies (continued)

Investments in Marketable Securities

Consistent with its investment policy, the Company invests its cash expected to fund its short-term liquidity requirements with prominent financial institutions in bank depository accounts and institutional money market funds and the Company invests the remainder of its cash in U.S. Treasury notes and bonds, U.S. and state agency-backed certificates, corporate debt securities that are rated at least A quality or equivalent and certificates of deposit.

The Company determines the appropriate classification of marketable securities at the time of purchase and reevaluates its classification as of each balance sheet date. All marketable securities owned during the three months ended March 31, 2011 and 2010 were classified as available for sale. The cost of securities sold is based on the specific identification method. Investments in marketable securities are recorded as of each balance sheet date at fair value, with unrealized gains and, to the extent deemed temporary, unrealized losses included in stockholders' equity. Interest and dividend income on investments in marketable securities, accretion of discounts and amortization of premiums and realized gains and losses are included in interest income in the statement of operations.

An investment in marketable securities is considered to be impaired when a decline in fair value below its cost basis is determined to be other than temporary. The Company evaluates whether a decline in fair value of an investment in marketable securities below its cost basis is other than temporary using available evidence. In the event that the cost basis of the investment exceeds its fair value, the Company evaluates, among other factors, the amount and duration of the period that the fair value is less than the cost basis, the financial health of and business outlook for the issuer, including industry and sector performance, operational and financing cash flow factors, overall market conditions and trends, the Company's intent to sell the investment and whether it is more likely than not the Company would be required to sell the investment before its anticipated recovery. If a decline in fair value is determined to be other than temporary, the Company records an impairment charge in the statement of operations and establishes a new cost basis in the investment.

Revenue Recognition

The Company uses the revenue recognition guidance established by ASC Topic 605, *Revenue Recognition*, or ASC 605. In determining the accounting for collaboration and alliance agreements, the Company follows the provisions of ASC 605, Subtopic 25, *Multiple Element Arrangements*, or ASC 605-25. ASC 605-25 provides guidance on whether an arrangement that involves multiple revenue-generating activities or deliverables should be divided into separate units of accounting for revenue recognition purposes and, if division is required, how the arrangement consideration should be allocated among the separate units of accounting. If the arrangement constitutes separate units of accounting according to the separation criteria of ASC 605-25, a revenue recognition policy must be determined for each unit. If the arrangement constitutes a single unit of accounting, the revenue recognition policy must be determined for the entire arrangement.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

2. Summary of Significant Accounting Policies (continued)

Collaboration research and development revenue is earned and recognized as research is performed and related expenses are incurred. Non-refundable upfront fees, which may include, for example, an initial payment upon effectiveness of the contractual relationship, payment representing a common stock purchase premium or payment to secure a right for a future license, are recorded as deferred revenue and recognized into revenue as milestones and license fees from collaborations on a straight-line basis over the estimated period of the Company's substantive performance obligations. If the Company does not have substantive performance obligations, it recognizes non-refundable upfront fees into revenue over the estimated development period for the applicable licensed product candidate(s).

Revenue for non-refundable payments based on the achievement of collaboration milestones is recognized as revenue when the applicable milestone event is achieved if all of the following conditions are met: (1) achievement of the milestone event was not reasonably assured at the inception of the arrangement; (2) substantive effort is involved to achieve the milestone event; and (3) the amount of the milestone payment appears reasonable in relation to the effort expended, the other milestone payments in the arrangement and the related risk associated with achievement of the milestone event. If any of these conditions is not met, the milestone payment is deferred and recognized on a straight-line basis over a period determined as discussed above.

Research and development costs that are reimbursable under collaboration agreements are recorded in accordance with ASC 605, Subtopic 45, *Principal Agent Considerations*. Amounts reimbursed under a cost sharing arrangement are reflected as a reduction of research and development expense.

Grant payments received prior to the Company's performance of work required by the terms of the award are recorded as deferred revenue and recognized as grant revenue as the Company performs the work and incurs qualifying costs.

Income Taxes

The Company uses the liability method in accounting for income taxes as required by ASC Topic 740, *Income Taxes*, or ASC 740. Under ASC 740, deferred tax assets and liabilities are recorded for operating loss and tax credit carryforwards and for the future tax consequences attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets unless it is more likely

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

2. Summary of Significant Accounting Policies (continued)

than not that the assets will be realized. ASC 740 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. ASC 740 requires interim income tax expense or benefit to be calculated using an estimated annual effective tax rate, unless the taxpayer's best estimate of the annual effective tax rate is the actual year-to-date tax rate. ASC 740 also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosures and transition. The Company's policy is to classify any interest recognized in accordance with ASC 740 as interest expense and to classify any penalties recognized in accordance with ASC 740 as an expense other than income tax expense.

Net Income Per Share

The Company computes net income per share in accordance with ASC Topic 260, *Earnings Per Share*, or ASC 260. Under the provisions of ASC 260, basic net income per share, or Basic EPS, is computed by dividing net income by the weighted average number of common shares outstanding. Diluted net income per share, or Diluted EPS, is computed by dividing net income by the weighted average number of common shares and dilutive common share equivalents outstanding. The calculations of Basic EPS and Diluted EPS are set forth in the table below (in thousands, except share and per share amounts):

	Three Months Ended	
	March 31,	
	2011	2010
Basic:		
Net income	\$ 12,587	\$ 6,795
Weighted average common shares - basic	28,996,060	28,311,452
Basic EPS	\$ 0.43	\$ 0.24
Diluted:		
Net income	\$ 12,587	\$ 6,795
Weighted average common shares - basic	28,996,060	28,311,452
Common share equivalents	1,403,690	860,766
Weighted average common shares - diluted	30,399,750	29,172,218
Diluted EPS	\$ 0.41	\$ 0.23

Common share equivalents consist of the incremental common shares issuable upon the exercise of stock options. Shares subject to outstanding stock options that were anti-dilutive and consequently not included in the calculation of common share equivalents totaled 946,034 and 679,615 for the three months ended March 31, 2011 and 2010, respectively, calculated on a weighted-average basis.

TARGACEPT, INC.**NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)****March 31, 2011****2. Summary of Significant Accounting Policies (continued)*****Common Stock and Stock-Based Compensation***

The Company issued 190,647 shares of common stock upon the exercise of stock options during the three months ended March 31, 2011. The Company issued 643,862 shares of common stock upon the exercise of stock options during the year ended December 31, 2010.

The Company granted to employees options to purchase 926,141 shares of common stock as of a grant date of March 29, 2011. These stock options have an estimated aggregate fair value, using the Black-Scholes-Merton formula, of \$14,954,000. The Company is recording this amount, as adjusted for forfeitures, as stock-based compensation on a straight line basis over 16 quarters beginning with the quarter ended March 31, 2011.

Comprehensive Income

Comprehensive income is comprised of net income and net other comprehensive income. Net other comprehensive income includes unrealized gains and losses on the Company's available-for-sale securities, which are excluded from net income. The following is a reconciliation of net income to comprehensive income for the periods presented.

	Three Months Ended	
	March 31,	
	2011	2010
	<small>(in thousands)</small>	
Net income	\$12,587	\$6,795
Unrealized gain on marketable securities, net	204	—
Comprehensive income	<u>\$12,791</u>	<u>\$6,795</u>

Intellectual Property

The Company capitalizes the costs of intellectual property acquired or licensed from external sources as intangible assets if, at the time of acquisition, the intellectual property has reached technological feasibility. Intellectual property acquired or licensed from external sources that has not reached technological feasibility at the time of acquisition or that has no expected future use is charged to research and development expense as incurred. The Company records all other charges related to the filing, prosecution and maintenance of patents to expense as incurred.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

3. Investments in Marketable Securities

The following is a reconciliation of amortized cost to fair value of available-for-sale marketable securities held at March 31, 2011:

<u>March 31, 2011</u>	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Fair Value</u>
		(in thousands)		
<i>Security type</i>				
<i>Cash Equivalents</i>				
U.S. Treasury and U.S. government and state government agency securities	\$ 4,000	\$ —	\$ —	\$ 4,000
Corporate debt securities	4,000	—	—	4,000
<i>Marketable Securities - Short term</i>				
U.S. Treasury and U.S. government and state government agency securities	19,695	3	—	19,698
Corporate debt securities	25,618	33	(9)	25,642
Certificates of deposit	13,000	—	—	13,000
Accrued interest	141	—	—	141
<i>Marketable Securities - Long term</i>				
U.S. Treasury and U.S. government and state government agency securities	15,687	70	(9)	15,748
Corporate debt securities - long term	16,919	136	(20)	17,035
Accrued interest	228	—	—	228
Total available-for-sale marketable securities	<u>\$ 99,288</u>	<u>\$ 242</u>	<u>\$ (38)</u>	<u>\$ 99,492</u>

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

3. Investments in Marketable Securities (continued)

<u>December 31, 2010</u>	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Fair Value</u>
	(in thousands)			
<i>Security type</i>				
<i>Cash Equivalents</i>				
U.S. Treasury and U.S. government and state government agency-backed securities	\$ 11,998	\$ 1	\$ —	\$ 11,999
Corporate debt securities	3,999	—	(2)	3,997
<i>Marketable Securities - Short term</i>				
U.S. Treasury and U.S. government and state government agency-backed securities	14,698	2	—	14,700
Corporate debt securities	20,391	18	—	20,409
Certificates of deposit	13,000	—	—	13,000
Accrued interest	59	—	—	59
<i>Marketable Securities - Long term</i>				
U.S. Treasury and U.S. government and state government agency-backed securities	20,689	84	(9)	20,764
Corporate debt securities - long term	17,337	149	(18)	17,468
Accrued interest	255	—	—	255
Total available-for-sale marketable securities	<u>\$102,426</u>	<u>\$ 254</u>	<u>\$ (29)</u>	<u>\$102,651</u>

As of March 31, 2011, the Company held investments in marketable securities with unrealized gains of \$242,000 and unrealized losses of \$38,000. For investments in an unrealized loss position, the duration of the loss was less than 12 months. None of these investments is considered to be other-than-temporarily impaired.

As of March 31, 2011, the Company's investments in marketable securities, including those classified on its balance sheet as cash equivalents, reach maturity between April 1, 2011 and November 7, 2013, with a weighted average maturity date of approximately January 31, 2012.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

4. Income Taxes

For the three months ended March 31, 2011, the Company did not recognize any income tax expense. For the three months ended March 31, 2010, the Company recognized \$626,000 of income tax expense, primarily as a result of the application of ASC 740 to stock-based compensation. Exercises of stock options during the three months ended March 31, 2010 resulted in tax deductions for stock-based compensation in excess of expense recorded for the stock options under GAAP, resulting in income tax benefit of \$622,000. The Company recognized the income tax benefit related to the excess tax deductions as an increase to capital in excess of par value, which based on ASC 740 resulted in an offsetting charge in the same amount to income tax expense. Exercises of stock options in prior periods resulted in \$5,716,000 in tax deductions in excess of expense recorded for the stock options under GAAP. The benefit of these excess tax deductions had not begun to be realized as of March 31, 2011 because the Company has incurred cumulative net operating losses. Accordingly, the tax benefit will not be recognized as an increase to capital in excess of par value until the excess deductions reduce income taxes payable.

Because the Company has incurred cumulative net operating losses since inception, all tax years remain open to examination by U.S. federal, North Carolina and Massachusetts tax authorities. The Company's 2009, 2008, 2007 and 2006 North Carolina income tax returns are under examination.

5. Strategic Alliance and Collaboration Agreements

AstraZeneca AB

Cognitive Disorders

In December 2005, the Company entered into a collaborative research and license agreement with AstraZeneca AB under which the Company granted AstraZeneca exclusive development and worldwide commercialization rights to the Company's product candidate known as AZD3480 (TC-1734) as a treatment for specified conditions characterized by cognitive impairment, including attention deficit/hyperactivity disorder, or ADHD. The Company is eligible to receive license fees and milestone payments under the agreement. The amount of license fees and milestone payments depends on the timing and achievement of development, regulatory, first commercial sale and first detail milestone events.

AstraZeneca paid the Company an initial fee of \$10,000,000 in February 2006. Based on the agreement terms, the Company allocated \$5,000,000 of the initial fee to the research collaboration, which the Company recognized as revenue on a straight-line basis over the four-year term of the research collaboration. The Company deferred recognition of the remaining \$5,000,000 of the initial fee, which was allocated to the AZD3480 license grants, until December 2006, when AstraZeneca made a determination to proceed with further development of AZD3480. As a result, in the first quarter of 2007, the Company began recognizing the \$5,000,000 of the initial fee that it had previously deferred as revenue on a straight-line basis over the estimated five-year development period for AZD3480. In July 2009, based on feedback received from AstraZeneca regarding its development plans for AZD3480 for ADHD, the Company extended its estimate of the development period for AZD3480 to continue through 2013 and began recognizing the part of the \$5,000,000 portion of the initial fee not yet recognized as of April 1, 2009 as revenue on a straight-line basis over the remaining estimated development period. The Company recognized \$145,000 and \$249,000 of the initial fee as revenue for three months ended March 31, 2011 and 2010, respectively.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

5. Strategic Alliance and Collaboration Agreements (continued)

Under the agreement, the Company is also eligible to receive (1) additional payments of up to \$103,000,000 if development, regulatory and first commercial sale milestone events for AZD3480 are achieved only for ADHD or up to \$145,000,000 if development, regulatory and first commercial sale milestone events for AZD3480 are achieved only for Alzheimer's disease, (2) other payments if development, regulatory, first commercial sale and first detail milestone events for AZD3480 are achieved for any other target indication under the agreement and (3) if regulatory approval is achieved for AZD3480 for any particular indication, stepped double-digit royalties on any sales of AZD3480 for that indication or any other indication. Under the terms of a sponsored research agreement and a subsequent license agreement between the Company and University of Kentucky Research Foundation, or UKRF, if the Company receives any of these payments from AstraZeneca related to AZD3480, including royalties, the Company is required to pay a low-single digit percentage of each such payment to UKRF.

The Company is exploring a potential additional clinical trial of AZD3480 in Alzheimer's disease. In September 2010, the Company and AstraZeneca amended the agreement to enable the Company potentially to conduct such a trial and to provide for respective roles and responsibilities and associated financial terms. Under the amendment, the Company received \$500,000 from AstraZeneca in October 2010 and is eligible to receive additional payments of up to \$5,700,000 in the aggregate.

With respect to AZD1446, the most advanced product candidate that arose out of the parties' preclinical research collaboration described below, the Company is also eligible to receive payments of up to \$73,000,000, if development, regulatory, first commercial sale and first detail milestone events for AZD1446 are achieved for a single indication under the agreement, and, if regulatory approval is achieved for AZD1446 for any particular indication, stepped royalties on any sales of AZD1446 for that indication or any other indication. The Company would recognize any revenue based on the achievement of any milestone event under the agreement upon achievement of the milestone event if the Company determines that the revenue satisfies the requirements for immediate recognition under its revenue recognition policy (see Note 2).

In October 2007, the Company provided notice under the agreement offering AstraZeneca the right to license its product candidate TC-5619 for specified conditions characterized by cognitive impairment. Based on a subsequent election by AstraZeneca made under the terms of the agreement, AstraZeneca paid the Company \$2,000,000 and the Company agreed to develop TC-5619 independently through completion of Phase 1 clinical development and a Phase 2 clinical proof of concept clinical trial in accordance with a mutually acceptable development plan, following which AstraZeneca would have the right to license TC-5619 on terms specified in the agreement (as it was amended in April 2010 as described below). The Company is recognizing the \$2,000,000 payment as revenue on a straight-line basis over the estimated period of the Company's research and development obligations for TC-5619. Accordingly, the Company recognized \$43,000 and \$122,000 of the payment as revenue for the three months ended March 31, 2011 and 2010, respectively.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

5. Strategic Alliance and Collaboration Agreements (continued)

In April 2010, the Company and AstraZeneca amended the agreement to modify the terms applicable to TC-5619. In conjunction with the amendment, the Company and AstraZeneca agreed to an expanded development program for TC-5619 and the Company received a payment of \$11,000,000 to maintain AstraZeneca's option to license TC-5619. The Company recorded the \$11,000,000 payment as deferred revenue and is recognizing it as revenue on a straight-line basis over the period of the Company's research and development obligations for TC-5619, which were estimated to complete in the second quarter of 2011. The Company recognized \$2,357,000 of the payment as revenue for the three months ended March 31, 2011.

The Company has completed two Phase 2 clinical proof of concept trials, one in cognitive dysfunction in schizophrenia and one in adults with ADHD. The Company also has ongoing specified clinical and non-clinical studies to support the potential advancement of TC-5619 into Phase 2 clinical development for Alzheimer's disease. Under the agreement, AstraZeneca had an option for an exclusive license to TC-5619 for various cognitive disorders. In late April 2011, the Company received notice from AstraZeneca that it had determined not to exercise its license option.

The Company has received payments upon achievement of milestone events under the agreement that it recognized in full as revenue upon achievement because the event met each of the conditions required for immediate recognition under its revenue recognition policy (see Note 2). In particular, the Company received a \$10,000,000 payment from AstraZeneca in July 2009 based on achievement of the objective in a completed Phase 2 clinical trial of AZD3480 in adults with ADHD, a milestone event under an amendment to the agreement. The Company made a payment of \$350,000 to UKRF in January 2010 as a result of the \$10,000,000 payment received from AstraZeneca. The Company has also received cumulative payments from AstraZeneca of \$2,600,000 based on the achievement of milestone events related to the development of product candidates arising under the parties' completed preclinical research collaboration, including AZD1446.

TC-5214

In December 2009, the Company entered into a collaboration and license agreement with AstraZeneca AB for the global development and commercialization of TC-5214. Under the agreement, AstraZeneca made an upfront payment to the Company of \$200,000,000 and the Company is eligible to receive cumulative payments of up to an additional \$540,000,000 if specified development, regulatory and first commercial sale milestone events for TC-5214 are achieved, cumulative payments of up to an additional \$500,000,000 if specified sales related milestone events for TC-5214 are achieved and significant stepped double-digit royalties on net sales of TC-5214 worldwide. The Company recorded the upfront payment made by AstraZeneca as deferred revenue and is recognizing the payment as revenue on a straight-line basis over the estimated period of the Company's substantive performance obligations under the agreement, or approximately 33 months. The Company recognized \$17,893,000 of the upfront payment as revenue for the each of the three months ended March 31, 2011 and 2010. The Company would recognize as revenue the full amount of each payment received based on the achievement of milestone events under the agreement upon its achievement if the Company determines that the revenue satisfies the requirements for immediate recognition under its revenue recognition policy (see Note 2).

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

5. Strategic Alliance and Collaboration Agreements (continued)

The Company and AstraZeneca have jointly designed a program for the global development of TC-5214. The initial program includes development of TC-5214 as an adjunct therapy and as a “switch” monotherapy, in each case in patients with major depressive disorder who do not respond adequately to initial antidepressant treatment. AstraZeneca is responsible for 80% and the Company is responsible for 20% of the costs of the initial program, except that AstraZeneca is responsible for 100% of development costs that are required only to obtain or maintain regulatory approval in countries outside the United States and the European Union. The Company has the right to terminate its obligation to fund its share of the costs of the initial program once it has funded a specified amount. In addition, for each of the Company and AstraZeneca, costs that were not contemplated at execution to be part of the initial program may in some cases be excluded from the cost-sharing arrangement. If the Company funds the specified amount and terminates its obligation to fund its share of further costs of the initial program, any future milestones and royalties payable to the Company under this agreement would be reduced by the amount of the Company’s unfunded share plus interest at a specified rate, subject to a maximum reduction that may be applied to any one payment. In addition, if the Company and AstraZeneca mutually agree to develop TC-5214 for any indication other than major depressive disorder or in any formulation other than those contemplated by the initial program, the same cost-sharing arrangement would apply, except that the Company would have the immediate right to terminate its obligation to fund its share of development costs for the other indication or formulation. If the Company terminates its obligation to fund its share of these other development costs, any future milestones and royalties payable to the Company under this agreement would be reduced by the amount of the Company’s unfunded share plus interest at a specified rate, subject to a maximum reduction that may be applied to any one payment, but only from and after the occurrence of a specified event to be agreed upon by the parties.

The Company’s portion of the costs of the initial program for the three months ended March 31, 2011 and 2010 was \$7,096,000 and \$545,000, respectively. AstraZeneca’s allocable portion of the initial program costs paid by the Company for the three months ended March 31, 2011 and 2010 was \$60,000 and \$610,000, respectively, which is reflected in the Company’s financial statements as a reduction to research and development expense.

AstraZeneca is responsible under the agreement for executing and funding the costs of global commercialization of TC-5214. The Company has retained an option to co-promote TC-5214 to a specified target physician audience in the United States. If the Company exercises its co-promotion option, AstraZeneca would compensate the Company on a per detail basis. AstraZeneca is also responsible under the agreement for the manufacture and supply of TC-5214.

Under the terms of an existing license agreement, the Company paid \$16,000,000 to University of South Florida Research Foundation, or USFRF, in February 2010 based on the Company’s receipt of the upfront payment from AstraZeneca and would be required to pay to USFRF a percentage of each milestone payment that may be received from AstraZeneca, after deducting from the milestone payment the unexhausted portion of the Company’s projected share of the costs of the initial development program for TC-5214, as well as royalties on any future TC-5214 product sales. The percentage of each milestone payment, net of any deduction, that the Company would be required to pay would be at least 10% and could be greater in specified circumstances. Based on the terms of the license agreement with USFRF and the terms of another existing license agreement with Yale University, the Company expects to pay royalties at an effective worldwide rate in the low single digits and that the effective royalty rate could in some circumstances reach the mid single digits.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)

March 31, 2011

5. Strategic Alliance and Collaboration Agreements (continued)

GlaxoSmithKline

On July 27, 2007, the Company entered into a product development and commercialization agreement with SmithKline Beecham Corporation, doing business as GlaxoSmithKline, and Glaxo Group Limited, which are referred to together as GlaxoSmithKline, that sets forth the terms of an alliance designed to discover, develop and market product candidates that selectively target specified NNR subtypes in five therapeutic focus areas: pain, smoking cessation, addiction, obesity and Parkinson's disease. In February 2011, the Company received notice of termination of its product development and commercialization agreement with GlaxoSmithKline. By the terms of the agreement, the termination becomes effective in late May 2011.

Under the agreement and a related stock purchase agreement, GlaxoSmithKline made an initial payment to the Company of \$20,000,000 and purchased 1,275,502 shares of the Company's common stock for an aggregate purchase price of \$15,000,000 on July 27, 2007. The purchase price paid by GlaxoSmithKline reflected an aggregate deemed premium of \$3,521,000, based on the closing price of the Company's common stock on the trading day immediately preceding the date that agreements were signed and announced. The Company deferred recognition of both the initial payment made by GlaxoSmithKline and the deemed premium paid for the shares of the Company's common stock purchased by GlaxoSmithKline and was recognizing both amounts into revenue on a straight-line basis over the nine-year period of the Company's research and early development obligations estimated at inception of the agreement. The Company recognized \$653,000 of the initial payment and deemed premium as revenue for the three months ended March 31, 2010.

In December 2007, the Company received a \$6,000,000 payment from GlaxoSmithKline upon the achievement of a specified milestone event under the agreement. The Company determined the payment did not meet each of the conditions of its revenue recognition policy (see Note 2) required for recognition of the full amount into revenue upon achievement of the milestone. Specifically, based on the progress of this product candidate as of inception of the agreement, achievement of this milestone was reasonably assured within the meaning of the Company's revenue recognition policy. Accordingly, the Company recorded the payment as deferred revenue and was recognizing it into revenue on a straight-line basis over the remaining portion of the nine-year period of the Company's research and early development obligations estimated at inception of the agreement. The Company recognized \$173,000 of the payment as revenue for the three months ended March 31, 2010.

As a result of its receipt in February 2011 of notice of termination of the agreement, the Company recognized the remaining \$18,421,000 of the payments discussed above not previously recognized into revenue for the first quarter of 2011 in accordance with its revenue recognition policy (see Note 2).

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

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes included in this quarterly report and our audited financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2010, which is on file with the SEC. In addition to historical information, the following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results, performance or experience could differ materially from what is indicated by any forward-looking statement due to various important factors, risks and uncertainties, including, but not limited to, those set forth under "Cautionary Note Regarding Forward-Looking Statements" in Part I of this quarterly report and under "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2010 and other filings that we make with the SEC.

Overview

Background

We are a biopharmaceutical company engaged in the design, discovery and development of novel NNR Therapeutics for the treatment of diseases and disorders of the nervous system. Our NNR Therapeutics selectively target a class of receptors known as neuronal nicotinic receptors, which we refer to as NNRs. NNRs are found on nerve cells throughout the nervous system and serve as key regulators of nervous system activity.

We have multiple clinical-stage product candidates and preclinical programs in areas in which we believe there are significant medical need and commercial potential, as well as proprietary drug discovery technologies. We also have two collaboration agreements with AstraZeneca. One is for the global development and commercialization of TC-5214 as a treatment for major depressive disorder, or MDD, and we refer to that agreement in this quarterly report as our "TC-5214 agreement with AstraZeneca." The other is focused in cognitive disorders, and we refer to that agreement in this quarterly report as our "cognitive disorders agreement with AstraZeneca."

Our most advanced product candidates are described briefly below:

- *TC-5214.* TC-5214 is a nicotinic channel modulator that is thought to derive antidepressant activity by modulating the activity of various NNR subtypes. We are co-developing TC-5214 with AstraZeneca under our TC-5214 agreement with AstraZeneca as an adjunct, or add-on, therapy for patients with MDD who do not respond adequately to initial antidepressant treatment. Phase 3 clinical trials of TC-5214 are ongoing. We and AstraZeneca are also conducting a Phase 2b clinical trial of TC-5214 as a "switch" monotherapy in patients with MDD who do not respond adequately to initial antidepressant treatment.
- *TC-5619.* TC-5619 is a novel small molecule that modulates the activity of the $\alpha 7$ NNR. We have completed two Phase 2 clinical trials of TC-5619, one in cognitive dysfunction in schizophrenia and one in adults with attention deficit/hyperactivity disorder, or ADHD. In addition, we are conducting ongoing clinical and non-clinical studies to support potential future Phase 2 clinical development of TC-5619 in Alzheimer's disease.

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- *AZD3480 (TC-1734)*. AZD3480 is a novel small molecule that modulates the activity of the $\alpha 4\beta 2$ NNR and is subject to our cognitive disorders agreement with AstraZeneca. AstraZeneca or we have conducted several clinical studies of AZD3480 in various cognitive disorders and we are in discussions with AstraZeneca regarding potential additional development of the product candidate as a treatment for ADHD. Whether AstraZeneca will decide to conduct any additional development of AZD3480 in ADHD is uncertain in light of reservations about the adequacy of the therapeutic margin to support development across the broad ADHD patient population. We expect AstraZeneca to make its decision in the second half of 2011. In addition, we are progressing plans for a Phase 2 study of AZD3480 in mild to moderate Alzheimer's disease and anticipate initiating the study in the second half of 2011 following planned interactions with applicable European regulatory authorities.
- *AZD1446 (TC-6683)*. AZD1446 is a novel small molecule that modulates the activity of the $\alpha 4\beta 2$ NNR and is under consideration for further development as a treatment for Alzheimer's disease under our cognitive disorders agreement with AstraZeneca. We expect AstraZeneca to make an advancement decision in the third quarter of 2011.
- *TC-6987*. TC-6987 is a novel small molecule that modulates the activity of the $\alpha 7$ NNR and is in development as a treatment for inflammatory disorders. We are conducting two ongoing Phase 2 clinical studies that are planned to help guide the selection of indications for which TC-6987 is best suited for later-stage development. One of the studies is in asthma and the other is in Type 2 diabetes.
- *TC-6499*. TC-6499 is a novel small molecule that modulates the activity of the $\alpha 4\beta 2$ and $\alpha 3\beta 4$ NNRs. The $\alpha 3\beta 4$ NNR is located in the gastrointestinal tract, and we believe TC-6499 may have potential as a treatment for one or more gastrointestinal disorders. We have completed an exploratory four-week study of TC-6499 in 24 subjects with constipation-predominant irritable bowel syndrome and are currently considering possible future development plans.

Under our TC-5214 agreement with AstraZeneca, we and AstraZeneca have jointly designed an initial development program that is planned to include development of TC-5214 as an adjunct therapy and as a "switch" monotherapy, in each case in patients with MDD who do not respond adequately to initial antidepressant treatment. AstraZeneca is responsible for 80% and we are responsible for 20% of the costs of the initial program, except that AstraZeneca is responsible for 100% of development costs that are required only to obtain or maintain regulatory approval in countries outside the United States and the European Union. We have the right to terminate our obligation to fund our share of the costs of the initial program once we have funded a specified amount. In addition, for each of us and AstraZeneca, costs that were not contemplated at execution to be part of the initial program may in some cases be excluded from the cost-sharing arrangement. If we fund the specified amount and terminate our obligation to fund our share of further costs of the initial program, any future milestones and royalties payable to us under the agreement would be reduced by the amount of our unfunded share plus interest at a specified rate, subject to a maximum reduction that may be applied to any one payment. AstraZeneca is responsible for executing and funding the costs of global commercialization of TC-5214.

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Under our cognitive disorders agreement with AstraZeneca:

- AstraZeneca has an exclusive license to AZD3480, AZD1446 and earlier-stage compounds that arose from the preclinical research collaboration conducted under the agreement;
- except as discussed in the next bullet, AstraZeneca is responsible for substantially all current and future development costs for AZD3480, AZD1446 and each other compound arising from the preclinical research collaboration described below that it elects to advance;
- we are progressing plans for a potential additional clinical trial of AZD3480 in Alzheimer's disease and have agreed with AstraZeneca on respective roles and financial and non-financial responsibilities for such a study; we have received \$500,000 and, if an Alzheimer's disease study proceeds, we would be responsible for funding the study but would be entitled to receive up to \$5.7 million in additional payments from AstraZeneca, with the last tranche being payable upon first dosing in the United States and Europe; and
- from January 2006 to January 2010, we and AstraZeneca conducted a preclinical research collaboration under the agreement to discover and develop compounds that act on the a4ß2 NNR as treatments for conditions characterized by cognitive impairment; AstraZeneca paid us research fees, based on a reimbursement rate specified under the agreement, for research services rendered in the preclinical research collaboration.

Our TC-5214 agreement with AstraZeneca can be terminated by AstraZeneca in whole or in part at various times and under various circumstances as discussed under the caption "Business – Strategic Alliances and Collaborations – AstraZeneca AB – TC-5214 – Termination" in Item 1 of Part I of our Annual Report on Form 10-K for the year ended December 31, 2010. Our cognitive disorders agreement with AstraZeneca can be terminated by AstraZeneca for an uncured material breach by us or upon 90 days notice given at any time.

In addition to our two collaboration agreements with AstraZeneca, we entered into a product development and commercialization agreement with GlaxoSmithKline in July 2007 that was designed to discover, develop and market product candidates that selectively target specified NNR subtypes in five therapeutic focus areas. In February 2011, we received notice of termination of the agreement from GlaxoSmithKline. By the terms of the agreement, the termination becomes effective in late May 2011.

We trace our scientific lineage to a research program initiated by R.J. Reynolds Tobacco Company in 1982 to study the activity and effects of nicotine in the body. We were incorporated in 1997 as a wholly owned subsidiary of RJR. In August 2000, we became an independent company when we issued and sold stock to venture capital investors. Since our inception, we have had limited revenue from product sales and have funded our operations principally through public and private offerings of equity securities, payments under collaboration and alliance agreements, grants and equipment financing. We have devoted substantially all of our resources to the discovery and development of our product candidates and technologies, including the design, conduct and management of preclinical and clinical studies and related manufacturing, regulatory and clinical affairs, as well as intellectual property prosecution.

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We generated net income for the three months ended March 31, 2011 due primarily to recognition into revenue of a portion of the upfront payment received under our TC-5214 agreement with AstraZeneca and the remaining \$18.4 million in payments received from GlaxoSmithKline not previously recognized. We have also generated net income for some other periods due primarily to recognition into revenue of a portion of the upfront payment received under our TC-5214 agreement with AstraZeneca or to the achievement of a single milestone event related to AZD3480 under our cognitive disorders agreement with AstraZeneca. Except for these periods, we have not been profitable and we may incur losses in future periods as our clinical-stage and preclinical product candidates advance into later-stage development and as we progress our programs, invest in additional product opportunities and grow our business. As of March 31, 2011, we had an accumulated deficit of \$205.8 million. Clinical trials and preclinical studies are time-consuming, expensive and may never yield a product that will generate revenue.

As a clinical-stage company, our revenues, expenses and results of operations are likely to fluctuate significantly from quarter to quarter and year to year. We believe that period-to-period comparisons of our results of operations should not be relied upon as indicative of our future performance.

Revenue

In January 2010, we received a \$200.0 million upfront payment under our TC-5214 agreement with AstraZeneca, which we recorded as deferred revenue and are recognizing into revenue on a straight-line basis over the estimated development period for TC-5214 to submission of a new drug application to the FDA. As of March 31, 2011, we had \$109.1 million of the upfront payment remaining to be recognized into revenue. We are eligible under our TC-5214 agreement with AstraZeneca to receive additional payments of over \$1.0 billion if development, regulatory, first commercial sale and specified sales related milestone events for TC-5214 are achieved and stepped double-digit royalties on any future TC-5214 product sales.

Pursuant to an April 2010 amendment to our cognitive disorders agreement with AstraZeneca related to an expansion of the development program for TC-5619, we received an \$11.0 million payment in May 2010, which we recorded as deferred revenue and are recognizing into revenue on a straight-line basis over the estimated period of our research and development obligations for TC-5619. Pursuant to a September 2010 amendment to our cognitive disorders agreement with AstraZeneca related to a potential additional clinical trial of AZD3480 in Alzheimer's disease, we received a \$500,000 payment in October 2010, which we recorded as deferred revenue and are recognizing into revenue on a straight-line basis over the estimated period of our obligations with respect to the potential study.

As of March 31, 2011, we had received \$82.6 million in aggregate upfront fees and milestone payments under our cognitive disorders agreement with AstraZeneca and recognized an additional \$26.5 million in collaboration research and development revenue for research services that we provided in the preclinical research collaboration conducted under that agreement. We deferred recognition of an aggregate of \$23.5 million of the amounts received under our cognitive disorders agreement with AstraZeneca and are recognizing these deferred amounts into revenue over the periods discussed in Note 5 to our unaudited financial statements included in this quarterly report. As of March 31, 2011, we had \$4.4 million of the deferred amounts remaining to be recognized into revenue in future periods.

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As of March 31, 2011, we had also received \$45.0 million in aggregate payments under our alliance agreement with GlaxoSmithKline. Of that amount, we initially deferred recognition of \$29.5 million, which we were recognizing into revenue over the period discussed in Note 5 to our unaudited financial statements included in this quarterly report. As a result of our receipt in February 2011 of notice of termination of the agreement, we recognized the remaining \$18.4 million into revenue for the first quarter of 2011.

From time to time we seek and are awarded grants or perform work under grants awarded to third-party collaborators from which we derive revenue. As of March 31, 2011, we have been awarded two grants from The Michael J. Fox Foundation for Parkinson's Research, or MJFF. One of the grants is to fund preclinical research involving the use of compounds that modulate NNRs to address Levodopa-induced abnormal involuntary movements, known as dyskinesias, and we have received aggregate payments of \$641,000 from MJFF since August 2009 in connection with this grant. The other grant is to fund research to identify NNR-related biomarkers relevant to Parkinson's disease, and we have received an aggregate of \$304,000 from MJFF in connection with this grant.

Research and Development Expenses

Since our inception, we have focused our activities on our drug discovery and development programs. We record research and development expenses as they are incurred. Research and development expenses represented approximately 88% and 85% of our total operating expenses for the three months ended March 31, 2011 and 2010, respectively.

We utilize our research and development personnel and infrastructure resources across several programs. We currently have clinical, preclinical and discovery-stage programs, and many of our costs are not specifically attributable to a single program. Instead, these costs are directed to broadly applicable research efforts. Accordingly, we cannot state precisely our total costs incurred on a program-by-program basis.

We have not received FDA or foreign regulatory marketing approval for any of our product candidates that are in development. Our current and future expenditures on preclinical and clinical development programs are subject to numerous uncertainties in timing and cost to completion. In addition, our strategy includes entering into alliances and collaborations with third parties to participate in the development and commercialization of some of our product candidates. Where a third party has responsibility for or authority over any or all of the non-clinical or clinical development of a particular product candidate, the estimated completion date may be largely under the control of that third party and not under our control. We cannot forecast with any degree of certainty whether any of our product candidates will be subject to future alliances or collaborations or how any such arrangement would affect our development plans or capital requirements. Because of this uncertainty, and because of the numerous uncertainties related to clinical trials and drug development generally, we are unable to determine the duration and completion costs of our research and development programs or whether or when we will generate revenue from the commercialization and sale of any of our product candidates in development.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and other related costs for personnel in executive, finance, business development, legal and human resource functions. Other general and administrative expenses include expenses associated with stock options granted to

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personnel in those functions, depreciation and other facility costs not otherwise included in research and development expenses, patent-related costs, insurance costs and professional fees for consulting, legal, accounting and public and investor relations services.

Income Taxes

We have incurred cumulative operating losses through December 31, 2010 and have not paid federal, state or foreign income taxes for any period. For the three months ended March 31, 2011 we did not recognize any income tax expense. For the three months ended March 31, 2010, we recognized \$626,000 of income tax expense primarily as a result of the application of Accounting Standards Codification Topic 740, *Income Taxes*, or ASC 740, to stock-based compensation. Exercises of stock options during the three months ended March 31, 2010 resulted in tax deductions for stock-based compensation in excess of expense recorded for the stock options under U.S. generally accepted accounting principles, or GAAP, resulting in income tax benefit of \$622,000. We recognized the income tax benefit related to the excess tax deductions as an increase to capital in excess of par value, which based on ASC 740 resulted in an offsetting charge in the same amount to income tax expense. Tax deductions in excess of recorded expense are only recognized for quarterly periods within years in which annual net income is forecasted.

As of March 31, 2011, we had net operating loss carryforwards of \$65.8 million for federal income tax purposes and \$90.0 million for state income tax purposes. We also had research and development income tax credit carryforwards of \$10.1 million for federal income tax purposes and \$1.1 for state income tax purposes as of March 31, 2011. The federal net operating loss carryforwards begin to expire in 2021. The state net operating loss carryforwards begin to expire in 2016. The federal and state research and development tax credits begin to expire in 2021. As a result of various factors, including the subjectivity of measurements used in the calculation of particular tax positions taken or that may in the future be taken in our tax returns, it is uncertain whether or to what extent we will be eligible to use the tax credits.

Utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to ownership change limitations provided by Section 382 of the Internal Revenue Code of 1986, as amended, and similar state provisions. When an ownership change, as defined by Section 382, occurs, an annual limitation is imposed on a company's use of net operating loss and credit carryforwards attributable to periods before the change. A series of stock issuances gave rise to such an ownership change in December 2004. As a result, an annual limitation is imposed on our use of net operating loss and credit carryforwards that are attributable to periods before the change. In addition, a portion of the net operating loss carryforwards described above may potentially not be usable by us if we experience further ownership changes in the future. For financial reporting purposes, we have recorded a valuation allowance to fully offset the deferred tax assets related to the carryforwards and the tax credits because it is uncertain whether we will be eligible to use or realize any benefit from them.

Fair Value

The carrying amounts of our cash and cash equivalents, investments in marketable securities, accounts receivable, accounts payable and accrued expenses are considered to be representative of their respective fair values due to their short-term natures and, in the case of short-term investments, their market interest rates. Likewise, the carrying amounts of our long-term debts are considered to be representative of their fair value due to their market interest rates. Cash that we do not expect to

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need to fund our short-term liquidity requirements is invested in U.S. Treasury notes and bonds, U.S. and state agency-backed certificates, corporate debt securities that are rated at least A quality or equivalent and certificates of deposit. Our investments in marketable securities of \$99.5 million at March 31, 2011, which include marketable securities classified on our balance sheet as cash equivalents, are recorded at quoted market prices.

Critical Accounting Policies and Estimates

Our Management's Discussion and Analysis of Financial Condition and Results of Operations is based on our unaudited financial statements, which have been prepared in accordance with GAAP for interim financial information. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an ongoing basis, we evaluate these estimates and judgments. We base our estimates on historical experience and on various assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities and the recording of revenues and expenses that are not readily apparent from other sources. Actual results and experiences may differ materially from these estimates. In addition, our reported financial condition and results of operations could vary if new accounting standards are enacted that are applicable to our business.

Our significant accounting policies are described in Note 2 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2010 and in the notes to our financial statements included in this quarterly report. We believe that our accounting policies relating to revenue recognition, accrued expenses and stock-based compensation are the most critical to understanding and evaluating our reported financial results. We have identified these policies as critical because they both are important to the presentation of our financial condition and results of operations and require us to make judgments and estimates on matters that are inherently uncertain and may change in future periods. These policies are described under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Estimates" in our Annual Report on Form 10-K for the year ended December 31, 2010.

Results of Operations

Three Months ended March 31, 2011 and 2010

Net Operating Revenues

	Three Months Ended March 31,		Change
	2011	2010	
	(in thousands)		
Operating revenues:			
Milestones and license fees from collaborations	\$38,922	\$19,090	\$19,832
Grant revenue	72	428	(356)
Net operating revenues	<u>\$38,994</u>	<u>\$19,518</u>	<u>\$19,476</u>

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Net operating revenues for the three months ended March 31, 2011 increased by \$19.5 million as compared to the three months ended March 31, 2010. The higher net operating revenues for the 2011 period were primarily attributable to an increase of \$19.8 million in milestones and license fees from collaborators. The increase in milestones and license fees from collaborators was principally attributable to our receipt of notice of termination of our product development and commercialization agreement with GlaxoSmithKline, resulting in the recognition into revenue of the remaining \$18.4 million in payments previously received from GlaxoSmithKline, recorded initially as deferred revenue and not yet recognized. We recognized \$826,000 of these payments into revenue for the 2010 period. The increase in milestones and license fees from collaborations for the 2011 period was also due to recognition of \$2.4 million of the \$11.0 million payment received under an April 2010 amendment to our cognitive disorders agreement with AstraZeneca to modify the terms applicable to TC-5619.

We did not recognize any milestone-based revenue for the three months ended March 31, 2011. We expect that the amount of any milestone-based revenue that we generate may vary from period to period.

Research and Development Expenses

	Three Months Ended March 31,		<u>Change</u>
	<u>2011</u>	<u>2010</u> (in thousands)	
Research and development expenses	\$23,517	\$10,607	\$12,910

Research and development expenses for the three months ended March 31, 2011 increased by \$12.9 million as compared to the three months ended March 31, 2010. The higher research and development expenses were principally attributable to:

- an increase of \$10.5 million in costs incurred for third-party services in connection with clinical and non-clinical activities for our clinical-stage product candidates to \$13.4 million for the 2011 period, from \$2.9 million for the 2010 period; this increase was principally due to an increase in the level of activities in the Phase 3 development program for TC-5214, for which we share costs with AstraZeneca, the conduct of Phase 2 clinical development of TC-5619 for two indications, the conduct of Phase 2 clinical development of TC-6987 and activities in preparation of a potential additional Phase 2 clinical trial of AZD3480 in Alzheimer's disease;
- an increase of \$1.3 million in costs incurred for third-party research and development services in connection with our preclinical programs to \$1.5 million for the 2011 period, from \$255,000 for the 2010 period; and
- an increase of \$1.1 million in other research and development expenses, including stock-based compensation, salary and other compensation-related expenses for research and development personnel and infrastructure costs to \$8.6 million for the 2011 period, from \$7.5 million for the 2010 period; the largest component of this increase was stock-based compensation expense and was primarily due to a significantly higher weighted average fair value for stock options that vested during the 2011 period as compared to the 2010 period.

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The costs that we incurred for the three months ended March 31, 2011 and 2010 for third-party services in connection with research and development of clinical-stage product candidates are shown in the table below:

	Three Months Ended March 31,		<u>Change</u>
	<u>2011</u>	<u>2010</u> (in thousands)	
TC-5214	\$ 7,096	\$ 545	\$6,551
TC-5619	3,092	1,371	1,721
TC-6987	2,217	805	1,412
AZD3480	925	—	925
TC-6499	62	137	(75)
AZD1446	—	—	—

We expect our research and development expenses for the year ending December 31, 2011 to increase as compared to the year ended December 31, 2010, principally due to an increase in the level of activities in the Phase 3 development program for TC-5214, the conduct of two Phase 2 clinical trials of TC-6987 and, potentially, the conduct of a Phase 2 clinical trial of AZD3480 in Alzheimer's disease.

General and Administrative Expenses

	Three Months Ended March 31,		<u>Change</u>
	<u>2011</u>	<u>2010</u> (in thousands)	
General and administrative expenses	\$ 3,175	\$ 1,822	\$1,353

General and administrative expenses for the three months ended March 31, 2011 increased by \$1.4 million as compared to the three months ended March 31, 2010. The higher general and administrative expenses were principally attributable to increases of \$837,000 in other general and administrative expenses, including infrastructure costs, insurance costs and patent-related costs, to \$1.4 million for the 2011 period, from \$601,000 for the 2010 period and \$513,000 in stock-based compensation, salary and other compensation-related expenses for general and administrative personnel to \$1.7 million for the 2011 period, from \$1.2 million for the 2010 period. The largest component of the increase was stock-based compensation expense, which was primarily due to a significantly higher weighted average fair value for stock options that vested during the 2011 period as compared to the 2010 period.

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Interest Income and Interest Expense

	Three Months Ended March 31,		Change
	2011	2010 (in thousands)	
Interest income	\$ 316	\$ 374	\$ (58)
Interest expense	31	42	(11)

Interest income for the three months ended March 31, 2011 decreased by \$58,000 as compared to the three months ended March 31, 2010. The decrease reflected lower average cash and investment balances. Interest expense for the three months ended March 31, 2011 decreased by \$11,000 as compared to the three months ended March 31, 2010.

Income Tax Expense

	Three Months Ended March 31,		Change
	2011	2010 (in thousands)	
Income tax expense	\$ —	\$ 626	\$ (626)

There was no income tax expense for the three months ended March 31, 2011 as compared to income tax expense of \$626,000 for the three months ended March 31, 2010. The change was primarily due to tax deductions for stock-based compensation for the 2010 period in excess of expense recorded under GAAP for the corresponding stock options. Tax deductions in excess of recorded expense are only recognized for quarterly periods within years in which annual net income is forecasted.

Liquidity and Capital Resources

Sources of Liquidity

We have historically financed our operations and internal growth principally through public and private offerings of equity securities, payments received under collaboration and alliance agreements, grants and equipment financing. We discontinued our only approved product, Inversine, in 2009. The net contribution from Inversine sales was not historically a significant source of cash.

Our cash, cash equivalents and investments were \$230.3 million as of March 31, 2011 and \$252.5 million as of December 31, 2010. As of March 31, 2011, we held \$125.7 million of cash in bank depository accounts and institutional money market funds at Branch Banking and Trust Company, RBC Bank and Wells Fargo & Company. Substantially all of our remaining cash, cash equivalents and investments were invested as of March 31, 2011 in U.S. Treasury notes and bonds, U.S. and state agency-backed securities, corporate debt securities that are rated at least A quality or equivalent and certificates of deposit.

In December 2009, we entered into our TC-5214 agreement with AstraZeneca for the global development and commercialization of TC-5214. We received a \$200.0 million upfront payment from AstraZeneca in January 2010. Under the terms of an existing license agreement, we paid \$16.0 million to University of South Florida Research Foundation, or USFRF, in January 2010 based on our receipt of the upfront payment from AstraZeneca. We are eligible to receive substantial

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additional payments under our TC-5214 agreement with AstraZeneca, contingent on the achievement of specified milestone events related to TC-5214, and under our cognitive disorders agreement with AstraZeneca, contingent on the achievement of specified milestone events relating to AZD3480 and AZD1446. There is no assurance that we will achieve any particular milestone event under either of our agreements with AstraZeneca in 2011, in any future period or at all.

In July 2010, we entered into a loan agreement with a bank that provides aggregate borrowing capacity of \$4.0 million to be provided in up to three individual term loans that we may take at any time on or prior to June 30, 2011 to fund the purchase of equipment, furnishings, software and other fixed assets. In September 2010, we borrowed \$1.2 million under this loan facility at a fixed interest rate of 3.4% per annum. We were obligated only to pay interest through the remainder of 2010. Beginning January 1, 2011 and continuing through the maturity date of December 1, 2014, the loan is repayable in equal monthly installments of \$28,000. We granted to the bank a first priority security interest in the assets acquired with the proceeds of the loan. Any future loan under the facility would, at our discretion on a loan-by-loan basis, bear interest at either a variable rate equal to the thirty-day LIBOR plus 2.15%, adjusted monthly on the first day of each month, or a fixed rate equal to the bank's fixed rate cost of funds index corresponding to the term of the loan plus 2.15%. Any such future loan would be interest only through June 30, 2011 and then would be re-payable in equal monthly installments of principal and interest over the 48 months after June 30, 2011. As of March 31, 2011, the outstanding principal balance under the loan facility was \$1.2 million. As of March 31, 2011, we had \$2.8 million of borrowing capacity remaining under the loan agreement.

In March 2008, we entered into a loan agreement with a bank that provided borrowing capacity of \$5.3 million to fund the purchase of equipment, furnishings, software and other fixed assets and enabled the refinancing of a previous loan facility that we had with R.J. Reynolds Tobacco Holdings, Inc. We borrowed \$4.8 million upon entering into the loan agreement and borrowed the remaining \$489,000 in September 2008. Pursuant to the loan agreement, we granted a first priority security interest in favor of the bank in the assets acquired with the proceeds of the loan facility. The March 2008 loan bears interest at a fixed rate of 5.231% per annum and is repayable in equal monthly installments of \$112,000 beginning April 1, 2008 and continuing through the maturity date of March 1, 2012. The September 2008 loan bears interest at a fixed rate of 6.131% per annum and is repayable in equal monthly installments of \$11,000 beginning October 1, 2008 and continuing through the maturity date of September 1, 2012. As of March 31, 2011, the outstanding principal balance under the loan facility was \$1.5 million. There is no additional borrowing capacity remaining available to us under the loan agreement.

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Cash Flows

	Three Months Ended March 31,		Change
	2011	2010 (in thousands)	
Net cash (used in) provided by operating activities	\$(22,045)	\$174,349	\$(196,394)
Net cash used in investing activities	(5,539)	(17,169)	11,630
Net cash provided by financing activities	567	861	(294)
Net (decrease) increase in cash and cash equivalents	\$(27,017)	\$158,041	

Net cash used in operating activities for the three months ended March 31, 2011 was \$22.0 million and net cash provided by operating activities for the three months ended March 31, 2010 was \$174.3 million, a difference of \$196.4 million.

For the three months ended March 31, 2011 net cash used in operating activities was primarily the result of aggregate payments of \$22.4 million made for operating charges. These payments primarily included costs incurred for third-party research and development services in connection with clinical-stage product candidates and preclinical programs, as well as personnel and infrastructure costs.

For the three months ended March 31, 2010, net cash provided by operating activities was principally the result of the \$200.0 million upfront payment received under our TC-5214 agreement with AstraZeneca in January 2010, partially offset by:

- our payment in January 2010 of \$16.0 million to USFRF based on our receipt of the \$200.0 million upfront payment under our TC-5214 agreement with AstraZeneca; and
- aggregate payments of \$11.8 million made for operating charges, including costs incurred for third-party research and development services in connection with clinical-stage product candidates and preclinical programs and personnel and infrastructure costs.

Net cash used in investing activities for the three months ended March 31, 2011 was \$5.5 million as compared to \$17.2 million for the three months ended March 31, 2010. Cash used in investing activities reflects the portion of our cash that we allocate to, and the timing of purchases and maturities of, our investments in marketable securities and equipment purchases. Our net purchases of investments in marketable securities for the three months ended March 31, 2011 were \$4.9 million. The net purchases of investments in marketable securities for the three months ended March 31, 2010 were \$16.0 million and occurred primarily as a result of our receipt of the upfront payment under our TC-5214 agreement with AstraZeneca.

Net cash provided by financing activities for the three months ended March 31, 2011 decreased by \$294,000 to \$567,000 for the three months ended March 31, 2011 to \$861,000 for the three months ended March 31, 2010. Cash provided by investing activities for the 2011 period reflects \$987,000 received from stock option exercises, partially offset by \$420,000 of payments on long-term debt. Cash provided by investing activities for the 2010 period reflects \$1.2 million received from stock option exercises and the related income tax impact, partially offset by \$354,000 of payments on long-term debt.

Funding Requirements

As of March 31, 2011, we had an accumulated deficit of \$205.8 million. We may incur operating losses or require additional capital in future periods as our clinical-stage and preclinical product candidates advance into later-stage development and as we progress our programs, invest in additional product opportunities and grow our business. However, we may generate operating income for any particular reporting period as a result of the recognition into revenue of amounts previously received under our agreements with AstraZeneca, including in particular our TC-5214 agreement with AstraZeneca, the timing of milestone events that may be achieved under our agreements with AstraZeneca and the timing of costs incurred related to development of our clinical-stage and preclinical product candidates. Our future capital requirements are difficult to forecast and will depend on many factors, including:

- whether and to what extent milestone events are achieved for TC-5214 under our TC-5214 agreement with AstraZeneca and for AZD3480 and AZD1446 under our cognitive disorders agreement with AstraZeneca;
- the progress of, and outcomes from, Phase 3 clinical development of TC-5214 and the amount and timing of development costs for TC-5214 payable by us;
- the scope, progress, duration, results and cost of clinical trials, as well as non-clinical studies and assessments, of our other product candidates;
- the extent to which we retain development or commercialization rights or responsibilities for our product candidates that are not subject to our collaborations with AstraZeneca and incur associated development costs, manufacturing costs or costs to establish sales and marketing functions;
- whether we establish strategic alliances, collaborations and licensing or other arrangements and the applicable terms;
- the costs, timing and outcomes of regulatory reviews or other regulatory actions;
- the number and characteristics of product candidates that we pursue;
- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending patents and other intellectual property rights;
- the costs of manufacturing-related services for our product candidates in clinical and late preclinical development;
- the rate of technological advancements for the indications that we target;

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- the costs to satisfy our obligations under existing and potential future alliances and collaborations;
- the timing, receipt and amount of sales or royalties, if any, from our potential products; and
- the extent and scope of our general and administrative expenses.

Our existing capital resources may not be sufficient to enable us to fund the completion of the development of any of our product candidates. We currently expect our existing capital resources to be sufficient to fund our operations at least through the end of 2013, without taking into account any amounts that we would be entitled to receive if milestone events are achieved under either of our collaboration agreements with AstraZeneca. However, our operating plan may change as a result of many factors, including those described above, and we may need additional funds sooner than planned to meet operational needs and capital requirements for product development.

To the extent our capital resources are insufficient to meet future capital requirements, we may need to finance future cash needs through alliances, collaborations or licensing or other arrangements, public or private equity or debt offerings or other financings. Our access in the future to additional equity or debt financing, on acceptable terms or at all, may be impacted by unpredictable global credit and financial markets. Also, additional strategic alliances, collaborations or licensing or other arrangements may not be available on acceptable terms or at all. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate our research and development programs or obtain funds through arrangements with collaborators or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently. Additionally, any future equity funding may dilute the ownership of our stockholders.

We cannot determine precisely the completion dates and related costs of our research and development programs due to inherent uncertainties in outcomes of clinical trials and regulatory approvals of our product candidates. We cannot be certain that we will be able to successfully complete our research and development projects or establish strategic alliances, collaborations or licensing or other arrangements for our product candidates. Our failure, or the failure of any of our licensees or collaborators, to complete research and development programs for our product candidates could have a material adverse effect on our financial position or results of operations.

To date, inflation has not had a material effect on our business.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The primary objectives of our investment activities are to preserve our capital and meet our liquidity needs to fund operations. We also seek to generate competitive rates of return from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of cash equivalents and investments in a variety of securities that are of high credit quality based on ratings from commonly relied upon rating agencies. As of March 31, 2011, we had cash, cash equivalents and investments in marketable securities of \$230.3 million. Our investments may be subject to interest rate risk and could fall in value if market interest rates increase. However, because our cash equivalents are invested in accounts with market interest rates and are short term in nature and our investments in marketable securities are traded in active markets, we believe that our exposure to interest rate risk is not significant and estimate that an immediate and uniform 10% increase in market interest rates from levels as of March 31, 2011 would not have a material impact on the total fair value of our portfolio.

We contract for the conduct of some of our clinical trials and other research and development and manufacturing activities with contract research organizations, clinical trial sites and contract manufacturers in Europe and India. We may be subject to exposure to fluctuations in foreign currency exchange rates in connection with these agreements. If the average Euro/U.S. dollar or Indian Rupee/U.S. dollar exchange rate were to strengthen or weaken by 10% against the corresponding exchange rate as of March 31, 2011, we estimate that the impact on our financial position, results of operations and cash flows would not be material. We do not hedge our foreign currency exposures.

We have not used derivative financial instruments for speculation or trading purposes.

Item 4. Controls and Procedures

(a) *Evaluation of Disclosure Controls and Procedures.* Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures in accordance with Rule 13a-15 under the Exchange Act as of the end of the period covered by this quarterly report. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and our management necessarily applied its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of the end of the period covered by this quarterly report, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is (a) accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure and (b) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

(b) *Changes in Internal Controls.* No change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) occurred during the quarter ended March 31, 2011 that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 6. Exhibits

The exhibits listed in the accompanying exhibit index are filed as part of this quarterly report.

Our trademarks and service marks include Targacept[®], Inversine[®], Pentad[™], NNR Therapeutics[™], TRIDMAC[™] and Building Health, Restoring IndependenceSM. Any other service marks, trademarks and trade names appearing in this quarterly report are the properties of their respective owners.

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.

TARGACEPT, INC.

Date: May 9, 2011

/s/ J. Donald deBethizy
J. Donald deBethizy
President and Chief Executive Officer
(*Principal Executive Officer*)

Date: May 9, 2011

/s/ Alan A. Musso
Alan A. Musso
Senior Vice President, Finance and Administration,
Chief Financial Officer and Treasurer
(*Principal Financial and Accounting Officer*)

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
10.1	Targacept, Inc. 2006 Stock Incentive Plan, as amended and restated through March 9, 2011 (incorporated by reference to Exhibit 10.4(a) to the Company's Annual Report on Form 10-K for the Year ended December 31, 2010).
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

CERTIFICATION

I, J. Donald deBethizy, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Targacept, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2011

/s/ J. Donald deBethizy
J. Donald deBethizy
President and Chief Executive Officer

CERTIFICATION

I, Alan A. Musso, certify that:

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

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2011

/s/ Alan A. Musso

Alan A. Musso

Senior Vice President, Finance and Administration, Chief Financial
Officer and Treasurer

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

In connection with the Quarterly Report on Form 10-Q of Targacept, Inc. (the "Company") for the period ended March 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, J. Donald deBethizy, President and Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

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

Date: May 9, 2011

/s/ J. Donald deBethizy
J. Donald deBethizy
President and Chief Executive Officer

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

In connection with the Quarterly Report on Form 10-Q of Targacept, Inc. (the "Company") for the period ended March 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Alan A. Musso, Senior Vice President, Finance and Administration, Chief Financial Officer and Treasurer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

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

Date: May 9, 2011

/s/ Alan A. Musso
Alan A. Musso
Senior Vice President, Finance and Administration, Chief Financial
Officer and Treasurer