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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 June 30, 2013

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	**56-2020050**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
100 North Main Street, Suite 1510 Winston-Salem, North Carolina	**27101**
(Address of principal executive offices)	**(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 July 31, 2013, the registrant had 33,637,011 shares of common stock, $0.001 par value per share, outstanding.

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TARGACEPT, INC.

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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-5619, TC-5214, 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, location, conduct, objective, duration 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, for interactions with regulatory authorities, or, where applicable, for a decision by AstraZeneca as to whether to conduct particular development;
- the benefits that may be derived from any of our product candidates or the commercial opportunity in any target indication;
- the timing or amount of 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:

- whether favorable findings from our completed clinical trial of TC-5619 in patients with schizophrenia will be replicated in our ongoing clinical trial of TC-5619 or potential future clinical trials of TC-5619;
- whether the designs and endpoints of our ongoing clinical trial of TC-5619 and potential future clinical trials of TC-5619 will be deemed by applicable regulatory authorities to be sufficient to support approval of TC-5619 to treat negative symptoms of schizophrenia or cognitive dysfunction in schizophrenia;
- whether findings from nonclinical studies and assessments of TC-5214 and clinical trials of TC-5214 in a different indication will be predictive of a positive outcome in our ongoing Phase 2b clinical trial of TC-5214 in overactive bladder;

- the conduct and results of clinical trials and non-clinical studies and assessments of TC-5619, TC-5214, TC-1734, AZD1446, TC-6987, TC-6499 or any of our other 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 the executive turnover and two workforce reductions that we have previously experienced will have an adverse impact on the development of any of our product candidates or our business generally;
- 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 submit a new drug application for TC-5214 prior to October 1, 2017 or because the applicable statutory provision is re-authorized by the U.S. Congress;
- the control or significant influence that AstraZeneca has over any development of AZD1446, including as to the timing, scope and design of any future clinical trials;
- our ability to establish additional strategic alliances, collaborations or licensing or other comparable 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, 2012 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 or any future strategic alliances, collaborations or licensing or other comparable arrangements that we may enter into.

Item 1. Financial Statements

TARGACEPT, INC.

BALANCE SHEETS
(in thousands, except share and par value amounts)
(unaudited)

	June 30, 2013	December 31, 2012
ASSETS		
Current assets:		
Cash and cash equivalents	$ 63,059	$ 82,240
Investments in marketable securities - short term	37,138	42,721
Receivables from collaborations	108	1,380
Prepaid expenses	1,803	1,402
Assets held for sale	413	—
Total current assets	102,521	127,743
Investments in marketable securities - long term	63,810	59,966
Property and equipment, net	944	1,639
Intangible assets	106	115
Other assets	105	116
Total assets	$ 167,486	$ 189,579
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,207	$ 2,056
Accrued expenses	5,533	6,085
Current portion of long-term debt	866	851
Current portion of deferred revenue	—	2,357
Total current liabilities	8,606	11,349
Long-term debt, net of current portion	699	1,136
Deferred revenue, net of current portion	—	1,179
Total liabilities	9,305	13,664
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.001 par value, 100,000,000 shares authorized and 33,637,011 and 33,615,081 shares issued and outstanding at June 30, 2013 and December 31, 2012, respectively	34	34
Preferred stock, $0.001 par value, 5,000,000 shares authorized and 0 shares issued and outstanding at June 30, 2013 and December 31, 2012	—	—
Capital in excess of par value	412,526	409,608
Accumulated other comprehensive (loss) income	(14)	201
Accumulated deficit	(254,365)	(233,928)
Total stockholders' equity	158,181	175,915
Total liabilities and stockholders' equity	$ 167,486	$ 189,579

See accompanying notes.

TARGACEPT, INC.

STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands, except share and per share amounts)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Operating revenues:				
License fees and milestones from collaborations	$ —	$ 33,487	$ 3,536	$ 56,094
Grant revenue	—	158	—	408
Net operating revenues	—	33,645	3,536	56,502
Operating expenses:				
Research and development (including stock-based compensation of $597 and $1,044 for the three months ended June 30, 2013 and 2012, respectively; and $1,376 and $2,138 for the six months ended June 30, 2013 and 2012, respectively)	9,454	12,512	17,774	30,313
General and administrative (including stock-based compensation of $655 and $2,067 for the three months ended June 30, 2013 and 2012, respectively; and $1,490 and $2,890 for the six months ended June 30, 2013 and 2012, respectively)	3,034	4,587	6,524	7,657
Restructuring charges	—	2,312	—	2,312
Total operating expenses	12,488	19,411	24,298	40,282
(Loss) income from operations	(12,488)	14,234	(20,762)	16,220
Other income (expense):				
Interest income	131	280	355	579
Interest expense	(14)	(22)	(30)	(48)
Total other income (expense)	117	258	325	531
Net (loss) income	$ (12,371)	$ 14,492	$ (20,437)	$ 16,751
Basic net (loss) income per share	$ (0.37)	$ 0.43	$ (0.61)	$ 0.50
Diluted net (loss) income per share	$ (0.37)	$ 0.43	$ (0.61)	$ 0.50
Weighted average common shares outstanding - basic	33,626,980	33,409,341	33,621,691	33,399,814
Weighted average common shares outstanding - diluted	33,626,980	33,638,629	33,621,691	33,701,857
Net (loss) income	$ (12,371)	$ 14,492	$ (20,437)	$ 16,751
Unrealized (loss) gain on available-for-sale securities, net	(202)	(33)	(215)	158
Comprehensive (loss) income	$ (12,573)	$ 14,459	$ (20,652)	$ 16,909

See accompanying notes.

TARGACEPT, INC.

STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2013	**2012**
Operating activities		
Net (loss) income	$(20,437)	$ 16,751
Adjustments to reconcile net (loss) income to net cash used in operating activities:		
Recognition of deferred revenue	(3,536)	(56,502)
Amortization of premium on marketable securities, net	530	477
Depreciation and amortization	383	1,262
Stock-based compensation expense	2,866	5,028
Changes in operating assets and liabilities:		
Receivables from collaborations	1,272	(129)
Other assets	(412)	1,162
Accounts payable and accrued expenses	(401)	(10,724)
Deferred revenue	—	440
Net cash used in operating activities	(19,735)	(42,235)
Investing activities		
Purchase of investments in marketable securities	(35,927)	(76,524)
Proceeds from sale of investments in marketable securities	36,943	83,913
Purchase of property and equipment	(92)	(137)
Net cash provided by investing activities	924	7,252
Financing activities		
Principal payments on long-term debt	(422)	(793)
Proceeds from issuance of common stock, net	52	138
Net cash used in financing activities	(370)	(655)
Net decrease in cash and cash equivalents	(19,181)	(35,638)
Cash and cash equivalents at beginning of period	82,240	107,283
Cash and cash equivalents at end of period	$ 63,059	$ 71,645

See accompanying notes.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS
June 30, 2013

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 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, 2012. 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 and six months ended June 30, 2013 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*).

The valuation techniques required by ASC 820 may be based on either observable or unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, and unobservable inputs reflect the Company's market assumptions. These inputs are classified 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;

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

2. Summary of Significant Accounting Policies (continued)

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 assets.

The following tables present the Company's investments in marketable securities (including, if applicable, those classified on the Company's balance sheet as cash equivalents) that are measured at fair value on a recurring basis as of June 30, 2013 and December 31, 2012, respectively:

June 30, 2013	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
		(in thousands)	
U.S. Treasury and U.S. or state government agency-backed securities	$ 45,310	$ —	$ —
Corporate debt securities	—	46,664	—
Municipal bonds	—	3,510	—
Certificates of deposit	10,000	—	—
Accrued interest	464	—	—
Total cash equivalents and marketable securities	$ 55,774	$ 50,174	$ —

December 31, 2012	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
		(in thousands)	
U.S. Treasury and U.S. or state government agency-backed securities	$ 46,371	$ —	$ —
Corporate debt securities	—	47,173	—
Municipal bonds	—	2,700	—
Certificates of deposit	10,000	—	—
Accrued interest	443	—	—
Total cash equivalents and marketable securities	$ 56,814	$ 49,873	$ —

Corporate debt securities and municipal bonds are valued based on various observable inputs such as benchmark yields, reported trades, broker/dealer quotes, benchmark securities and bids.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

2. Summary of Significant Accounting Policies (continued)

During the three months ended June 30, 2013, the Company determined that certain property and equipment met the criteria for classification as held for sale as established by the subsequent measurement provisions of ASC Topic 360, *Property Plant and Equipment*. As a result, the Company reclassified the assets from property and equipment to held for sale on its balance sheet as of June 30, 2013 and recorded the assets at the lower of carrying value or fair value less cost to sell. Assets classified as held for sale are no longer subject to depreciation. The Company estimated that the fair value of the equipment at June 30, 2013 was equal to its carrying value of $413,000 and, as a result, did not record an impairment charge on the assets held for sale. For $100,000 of the carrying value of the assets held for sale, the Company estimated the respective fair values primarily using terms offered by potential purchasers and also using actual sales that occurred subsequent to June 30, 2013. For the remaining $313,000 of the carrying value of the assets held for sale, the applicable equipment is highly specialized with a limited number of potential buyers, and the Company estimated fair value based on preliminary negotiations, which are Level 3 inputs.

Investments in Marketable Securities

Consistent with its investment policy, the Company invests its cash allocated 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 corporate debt securities and municipal bonds rated at least A quality or equivalent, U.S. Treasury notes and bonds, U.S. and state government agency-backed securities 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 six months ended June 30, 2013 and 2012 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 comprehensive income (loss).

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 comprehensive income (loss) and establishes a new cost basis in the investment.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

2. Summary of Significant Accounting Policies (continued)

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, the consideration received is allocated among the separate units of accounting and the applicable revenue recognition criteria must be applied to each unit. If the arrangement constitutes a single unit of accounting, the revenue recognition policy must be determined for the entire arrangement and the consideration received is recognized over the period of inception through the date on which the last deliverable within the single unit of accounting is expected to be delivered. Revisions to the estimated period of recognition are reflected in revenue prospectively.

Collaboration research and development revenue is earned and recognized as research or development 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 license fees and milestones 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 through the date the deliverable is satisfied.

Revenue for non-refundable payments based on the achievement of milestone events under collaboration agreements is recognized in accordance with ASC 605, Subtopic 28, *Milestone Method*, or ASC 605-28. Milestone events under the Company's collaboration agreements may include research, development, regulatory, commercialization or sales events. Under ASC 605-28, a milestone payment is recognized as revenue when the applicable event is achieved if the event meets the definition of a milestone and the milestone is determined to be substantive. ASC 605-28 defines a milestone event as an event having all of the following characteristics: (1) there is substantive uncertainty regarding achievement of the milestone event at the inception of the arrangement; (2) the event can only be achieved based, in whole or in part, on either the company's performance or a specific outcome resulting from the company's performance; and (3) if achieved, the event would result in additional payment due to the company. The Company also treats events that can only be achieved based, in whole or in part, on either a third party's performance or a specific outcome resulting from a third party's performance as milestone events if the criteria of ASC 605-28 are otherwise satisfied.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

2. Summary of Significant Accounting Policies (continued)

A milestone is considered substantive if it meets all of the following criteria: (A) the payment is commensurate with either the Company's performance to achieve the milestone or with the enhancement of the value of the delivered item; (B) the payment relates solely to past performance; and (C) the payment is reasonable relative to all of the deliverables and payment terms within the arrangement. 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 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. If a reliable estimate of the annual effective tax rate cannot be made, the Company considers the effective tax rate for the year to date to be the best estimate. Accordingly, the income tax provisions for the three and six months ended June 30, 2013 were determined based on the actual year-to-date effective tax rate because a reliable estimate of the annual effective tax rate cannot be made. 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.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

2. Summary of Significant Accounting Policies (continued)

Net Income or Loss Per Share

The Company computes net income or loss per share in accordance with ASC Topic 260, *Earnings Per Share*, or ASC 260. Under the provisions of ASC 260, basic net income or loss per share, or Basic EPS, is computed by dividing net income or loss by the weighted average number of common shares outstanding. Diluted net income or loss per share, or Diluted EPS, is computed by dividing net income or loss by the weighted average number of common shares outstanding plus, in the case of diluted net income per share, 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 June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Basic:				
Net (loss) income	$ (12,371)	$ 14,492	$ (20,437)	$ 16,751
Weighted average common shares - basic	33,626,980	33,409,341	33,621,691	33,399,814
Basic EPS	$ (0.37)	$ 0.43	$ (0.61)	$ 0.50
Diluted:				
Net (loss) income	$ (12,371)	$ 14,492	$ (20,437)	$ 16,751
Weighted average common shares - basic	33,626,980	33,409,341	33,621,691	33,399,814
Common share equivalents	—	229,288	—	302,043
Weighted average common shares - diluted	33,626,980	33,638,629	33,621,691	33,701,857
Diluted EPS	$ (0.37)	$ 0.43	$ (0.61)	$ 0.50

Common share equivalents consist of the incremental common shares that would be outstanding upon the exercise of stock options, calculated using the treasury stock method. For the three- and six-month periods ended June 30, 2013, the Company excluded all common share equivalents from the calculation of Diluted EPS because the Company had a net loss. As a result, Diluted EPS is identical to Basic EPS for those periods. If the Company had been in a net income position for the three and six months ended June 30, 2013, 4,708,306 and 4,743,069 shares subject to outstanding stock options, respectively, may have been included in the calculation of common share equivalents using the treasury stock method.

Shares subject to outstanding stock options that were anti-dilutive for the three and six months ended June 30, 2012, periods for which the Company had net income, and consequently not included in the calculation of common share equivalents totaled 3,793,921 and 3,278,572, respectively, calculated on a weighted average basis.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

2. Summary of Significant Accounting Policies (continued)

Common Stock and Stock-Based Compensation

The Company issued 21,930 shares of common stock upon the exercise of stock options during the six months ended June 30, 2013. The Company issued 231,678 shares of common stock upon the exercise of stock options during the year ended December 31, 2012.

During the six months ended June 30, 2013, the Company granted to employees options to purchase an aggregate of 743,050 shares of common stock. These stock options have an estimated aggregate fair value, using the Black-Scholes-Merton formula, of $2,473,000. The Company is recording this amount, as adjusted for forfeitures, as stock-based compensation on a straight line basis over 16 quarters beginning on the last day of the respective quarters in which the grants were made.

On March 31, 2013, the Company partially accelerated the vesting of, and extended the permitted period for exercise for, some outstanding stock options held by an executive officer who departed the Company. These modifications resulted in incremental compensation cost recorded by the Company for the six months ended June 30, 2013 of $467,000.

Accumulated Other Comprehensive Income or Loss

Accumulated other comprehensive income or loss, as presented in stockholders' equity on the Company's balance sheet, reflects the cumulative net unrealized gains or losses on available-for-sale securities for all periods. The table below reflects changes in accumulated other comprehensive income for the six months ended June 30, 2013, in thousands.

Accumulated other comprehensive income, January 1, 2013	$ 201
Unrealized loss on available-for-sale securities, net	(228)
Net realized gains on available-for-sale securities reclassified from other comprehensive income	13
Accumulated other comprehensive loss, June 30, 2013	$ (14)

Intellectual Property

The Company capitalizes the cost 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. The cost of 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)
June 30, 2013

2. Summary of Significant Accounting Policies (continued)

Commitments and Contingencies

Under an employment agreement with a former executive officer and a related separation agreement and release, the Company has agreed to pay severance equal to the departing executive's regular base salary as of March 31, 2013 for nine months, to pay a pro rata percentage of the departing executive's target bonus for 2013, and to continue the departing executive's health and life insurance benefits coverage provided to him as of March 31, 2013 for nine months. These payments and benefits, which represent an aggregate estimated amount of $306,000, were recorded as general and administrative expense for the six months ended June 30, 2013.

3. Investments in Marketable Securities

The following is a reconciliation of amortized cost to fair value of available-for-sale marketable securities (including those classified on the Company's balance sheet as cash equivalents) held at June 30, 2013 and December 31, 2012:

June 30, 2013	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		(in thousands)		
Security type				
Cash Equivalents				
U.S. Treasury and U.S. or state government agency-backed securities	$ 5,000	$ —	$ —	$ 5,000
Marketable Securities - Short term				
U.S. Treasury and U.S. or state government agency-backed securities	10,702	10	—	10,712
Corporate debt securities	14,872	23	—	14,895
Municipal bonds	1,409	3		1,412
Certificates of deposit	10,000	—	—	10,000
Accrued interest	119	—	—	119
Marketable Securities - Long term				
U.S. Treasury and U.S. or state government agency-backed securities	29,571	48	(21)	29,598
Corporate debt securities - long term	31,745	87	(63)	31,769
Municipal bonds	2,098	5	(5)	2,098
Accrued interest	345	—	—	345
Total available-for-sale marketable securities	$105,861	$ 176	$ (89)	$105,948

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

3. Investments in Marketable Securities (continued)

December 31, 2012	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		(in thousands)		
Security type				
Cash Equivalents				
Corporate debt securities	$ 4,000	$ —	$ —	$ 4,000
Marketable Securities - Short term				
U.S. Treasury and U.S. or state government agency-backed securities	25,412	27	—	25,439
Corporate debt securities	7,193	16	—	7,209
Certificates of deposit	10,000	—	—	10,000
Accrued interest	73	—	—	73
Marketable Securities - Long term				
U.S. Treasury and U.S. or state government agency-backed securities	20,846	86	—	20,932
Corporate debt securities - long term	35,802	177	(15)	35,964
Municipal bonds	2,689	11	—	2,700
Accrued interest	370	—	—	370
Total available-for-sale marketable securities	$106,385	$ 317	$ (15)	$106,687

As of June 30, 2013, the Company held investments in marketable securities with unrealized gains of $176,000 and unrealized losses of $89,000. For the investments in an unrealized loss position, the duration of the loss was less than 12 months and the investments are not considered to be other-than-temporarily impaired. As of June 30, 2013, the Company's investments in marketable securities reach maturity between July 2013 and June 2016 with a weighted average maturity date in September 2014.

4. Income Taxes

For the three and six months ended June 30, 2013 and 2012, the Company did not recognize any income tax expense or benefit. Exercises of stock options may result in tax deductions for stock-based compensation in excess of expense recorded for the stock options under GAAP. For interim periods within years for which taxable net income is forecasted, the Company recognizes 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 results in an offsetting charge in the same amount to income tax expense. As of June 30, 2013, the Company had $7,549,000 of cumulative tax deductions for periods of net loss from exercises of stock options 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 June 30, 2013 because the Company incurred net operating losses in the years the respective stock options were exercised and has incurred cumulative net operating losses since inception. 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.

The Company's 2010 federal income tax return is currently under examination. 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.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

5. Strategic Alliance and Collaboration Agreements

AstraZeneca AB

In December 2005, the Company entered into a collaborative research and license agreement with AstraZeneca AB that was initially focused in cognitive disorders. In March 2013, the Company and AstraZeneca amended the agreement. As amended, the agreement permits AstraZeneca to pursue development and commercialization of compounds that it has licensed from the Company in any therapeutic area.

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 specified 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 a preclinical research collaboration that the Company conducted with AstraZeneca under the agreement, 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 grants of licenses to develop and commercialize the Company's product candidate TC-1734 (formerly known also as AZD3480), until December 2006, when AstraZeneca made a determination to proceed with further development of TC-1734. 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 development period for TC-1734. In September 2010, the Company and AstraZeneca amended the agreement to enable the Company to conduct a clinical trial of TC-1734 in mild to moderate Alzheimer's disease and to provide for respective roles and responsibilities and associated financial terms for such a study. Under the 2010 amendment, the Company received from AstraZeneca $500,000 in October 2010, $2,000,000 in September 2011 and $3,500,000 in December 2011.

In March 2013, AstraZeneca exercised its right to terminate TC-1734 from the collaboration. At that time, the Company was recognizing both the portion of the $5,000,000 of the initial fee attributable to TC-1734 license grants not yet recognized and the payments received under the 2010 amendment into revenue on a straight-line basis over the period of the Company's substantive performance obligations under the agreement as amended. As a result of AstraZeneca's exercise of its termination right for TC-1734, the Company recognized into revenue for the first quarter of 2013 all of the initial fee and payments received under the 2010 amendment that had not yet been recognized as of the date of AstraZeneca's action, totaling $3,142,000. The Company recognized an aggregate of $810,000 of the initial fee and the payments received under the 2010 amendment into revenue for the three months ended June 30, 2012. The Company recognized an aggregate of $3,536,000 and $1,621,000 of the initial fee and the payments received under the 2010 amendment into revenue for the six months ended June 30, 2013 and 2012, respectively.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

5. Strategic Alliance and Collaboration Agreements (continued)

The Company is eligible to receive additional payments from AstraZeneca if specified milestone events under the agreement are achieved for the Company's product candidate AZD1446 (TC-6683). The amounts of the contingent milestone payments vary depending on the applicable indication pursued and range from an additional $7,000,000 to $14,000,000 if development milestone events are achieved, an additional $8,000,000 to $10,000,000 if a regulatory milestone event is achieved, up to an additional $12,000,000 to $49,000,000 if first commercial sale milestone events are achieved and, in specified circumstances, up to an additional $30,000,000 if sales-related milestone events are achieved. If regulatory approval is achieved for AZD1446 for any indication, the Company is also eligible to receive stepped royalties on all sales of AZD1446. If AZD1446 is subsequently developed under the agreement for other indications, the Company would also be eligible to receive contingent milestone payments of up to $35,000,000 for each successive indication, if development, regulatory and first detail milestone events are achieved. Based solely on projected activities and timelines, the Company expects that the earliest that a contingent milestone payment could conceivably be earned with respect to AZD1446 is 2014, in the amount of $2,000,000 if a development milestone event is achieved. The likelihood that the Company will earn that milestone amount or achieve any particular milestone event with respect to AZD1446 in 2014 or in any future period is uncertain, and the Company may not earn any milestone amount or achieve any milestone event with respect to AZD1446 in 2014 or ever.

The Company considers that each of the potential milestone events under the agreement with respect to AZD1446 would be substantive because the applicable criteria of its revenue recognition policy (see Note 2) would be satisfied.

AstraZeneca has paid the Company an aggregate of $88,120,000 under the agreement since its inception, including the initial fee and payments upon the achievement of milestone events, to maintain option rights and for research services rendered in the completed preclinical research collaboration. As of June 30, 2013, this entire amount had been fully recognized into revenue.

Prior Collaboration Agreement

In December 2009, the Company entered into a collaboration and license agreement with AstraZeneca AB for the global development and commercialization of TC-5214 as a treatment for major depressive disorder. Under the agreement, AstraZeneca made an upfront payment to the Company of $200,000,000. The Company recorded the upfront payment made by AstraZeneca as deferred revenue and began 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 after the agreement date. The Company recognized $32,676,000 and $54,473,000 of the upfront payment as revenue for the three and six months ended June 30, 2012.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

5. Strategic Alliance and Collaboration Agreements (continued)

Under the agreement, AstraZeneca was responsible for 80% and the Company was responsible for 20% of the costs of the global development program for TC-5214 in major depressive disorder, except that AstraZeneca was responsible for 100% of development costs that were required only for countries outside the United States and the European Union. In addition, for each of the Company and AstraZeneca, costs that were not contemplated at execution to be part of the program were in some cases excluded from the cost-sharing arrangement.

The Company's portion of the costs of the program was $1,369,000 and $4,779,000, for the three and six months ended June 30, 2012, respectively. AstraZeneca's allocable portion of the program costs paid by the Company was $6,000 and $127,000 for the three and six months ended June 30, 2012, respectively. AstraZeneca's allocable portion of the program costs paid by the Company is reflected in the Company's financial statements as a reduction to research and development expense.

In the first quarter of 2012, the Company and AstraZeneca announced that, based on the totality of the results of the Phase 3 development program for TC-5214, a regulatory filing for TC-5214 as an adjunct therapy for major depressive disorder would not be pursued. Also in the first quarter of 2012, the Company reported that the Company and AstraZeneca determined to discontinue a Phase 2b clinical trial of TC-5214 as a "switch" monotherapy. These determinations resulted in a change in the estimated period of the Company's substantive performance obligations under the agreement, and the Company revised the revenue recognition period for the upfront payment previously received accordingly. As a result, the entire upfront payment was recognized into revenue by June 30, 2012. In April 2012, the Company received notice of termination of the agreement from AstraZeneca. By the terms of the agreement, the termination became effective in May 2012.

6. Reduction in Force

On April 25, 2012, the Company announced a reduction in force as part of a plan to focus its resources on its more advanced programs. The restructuring was completed in the second quarter of 2012. The Company recorded as expense and paid $2,312,000 in severance and other charges related to the reduction in force for the three and six months ended June 30, 2012. Upon the completion of the restructuring, the Company's workforce was reduced by 65 employees, or approximately 46%.

On October 8, 2012, the Company announced a further reduction in force and the closing of its laboratory operations. Both of these actions were completed in the fourth quarter of 2012. The Company recorded as expense and paid $1,406,000 in severance and other charges related to the reduction in force for the three months ended December 31, 2012. Upon the completion of the restructuring, the Company's workforce was further reduced by 27 employees, or approximately 38%.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued)
June 30, 2013

6. Reduction in Force (continued)

Following the closing of laboratory operations and two reductions in force, the Company sold laboratory equipment and office furniture and fixtures with a book value of $1,534,000, resulting in cumulative gain of $55,000. During the three months ended June 30, 2013, the Company committed to a plan to sell additional laboratory equipment and office furniture and fixtures. These assets, which have a fair value of $413,000, are classified as held for sale on the Company's balance sheet as of June 30, 2013. See the *Fair Value Measurement* accounting policy discussion in 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, 2012, 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 or under "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2012 or other filings that we make with the SEC.

Overview

Background

We are a biopharmaceutical company engaged in the 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 in areas in which we believe there are significant medical need and commercial potential.

Our most advanced product candidates are described briefly below.

- *TC-5619*. TC-5619 is a novel small molecule that modulates the activity of the a7 NNR. We are currently conducting a Phase 2b clinical trial of TC-5619 as a treatment for negative symptoms and cognitive dysfunction in schizophrenia. We are also currently evaluating potential additional Phase 2 development of TC-5619 as a treatment for Alzheimer's disease.
- *TC-5214.* TC-5214 modulates the activity of the a3ß4 NNR. We initiated a Phase 2b clinical trial of TC-5214 as a treatment for overactive bladder in the second quarter of 2013.
- *TC-1734*. TC-1734 (formerly known also as AZD3480) is a novel small molecule that modulates the activity of the a4ß2 NNR. We are currently conducting a Phase 2b clinical trial of TC-1734 as a treatment for mild to moderate Alzheimer's disease.
- *AZD1446 (TC-6683).* AZD1446 is a novel small molecule that modulates the activity of the a4ß2 NNR and is subject to an ongoing collaboration agreement with AstraZeneca. Development decisions and activities for AZD1446 are substantially within the control of AstraZeneca.

- *TC-6987*. TC-6987 is a novel small molecule that modulates the activity of the a7 NNR. We have previously evaluated TC-6987 in two Phase 2 exploratory studies and are evaluating potential future development options for this product candidate.
- *TC-6499*. TC-6499 is a novel small molecule that modulates the activity of the a4ß2 and a3ß4 NNRs. We are evaluating potential future development options for this product candidate as a treatment for gastrointestinal disorders.

We have an ongoing collaboration agreement with AstraZeneca focused on compounds that act on the a4ß2 NNR, including AZD1446. Under the agreement:

- AstraZeneca has an exclusive license to AZD1446 and earlier-stage compounds that arose from the preclinical research collaboration conducted under the agreement described below;
- AstraZeneca is responsible for substantially all current and future development costs for AZD1446 and each other compound arising from the preclinical research collaboration described below that it elects to advance; 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 ongoing collaboration agreement with AstraZeneca can be terminated by AstraZeneca for an uncured material breach by us or upon 90 days' notice given at any time.

Under a second collaboration agreement with AstraZeneca, which we refer to in this quarterly report as our "MDD agreement with AstraZeneca," we had been co-developing TC-5214 as a treatment for major depressive disorder, or MDD. Under the agreement, we received a $200.0 million upfront payment. Thereafter, AstraZeneca was responsible for 80% and we were responsible for 20% of the cost of the completed clinical program for TC-5214 in MDD, except that AstraZeneca was responsible for 100% of development costs that were required only for countries outside the United States and the European Union. In addition, for each of us and AstraZeneca, costs that were not contemplated at execution to be part of the program were in some cases excluded from the cost-sharing arrangement. Following completion of a Phase 3 clinical program for TC-5214 conducted under the agreement, we and AstraZeneca announced that a regulatory filing for TC-5214 as an adjunct therapy for MDD would not be pursued and we reported the discontinuation of a "switch" monotherapy trial. AstraZeneca subsequently terminated the agreement effective in May 2012. As a result of the termination, all rights and licenses for TC-5214 that we granted under the agreement to AstraZeneca terminated and reverted to us.

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 historically 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.

In the second quarter of 2012, we completed a reduction in force as part of a plan to focus our resources on our more advanced programs. In October 2012, we announced a second reduction in force, as well as our plan to close our laboratory operations. We completed the second reduction in force and the laboratory closings in December 2012 and are no longer devoting resources to drug discovery or preclinical programs. We sold much of our laboratory equipment after we closed our laboratories in December 2012 and, as of June 30, 2013, committed to a plan to sell additional laboratory equipment and office furniture and fixtures.

Except for a small number of periods in which we generated net income due primarily to the recognition into revenue of amounts received under collaboration agreements, we have not been profitable. As of June 30, 2013, we had an accumulated deficit of $254.4 million. We expect that we will incur losses in future periods as our product candidates advance into later-stage development and as we progress our programs and invest in additional product opportunities. Drug development, including clinical trials in particular, is 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 the $200.0 million upfront payment under our MDD agreement with AstraZeneca, which we recorded as deferred revenue and began recognizing into revenue on a straight-line basis over the estimated period of our substantive performance obligations under the agreement.

In the first quarter of 2012, we and AstraZeneca announced that, based on the totality of the results of the Phase 3 program, a regulatory filing for TC-5214 as an adjunct therapy for MDD would not be pursued and we reported the discontinuation of a “switch” monotherapy trial. These events resulted in a change in the estimated period of our substantive performance obligations under our MDD agreement with AstraZeneca. Accordingly, we revised the revenue recognition period for the upfront payment that we previously received and began recognizing the portion of the upfront payment not yet recognized into revenue on a straight-line basis over the remainder of the revised period. We recognized the full amount of the upfront payment into revenue by June 30, 2012.

Pursuant to a September 2010 amendment to our ongoing collaboration agreement with AstraZeneca related to a clinical trial of TC-1734 in mild to moderate Alzheimer’s disease, we received a $500,000 payment in the fourth quarter of 2010 and cumulative payments of $5.5 million in the second half of 2011. We recorded all of these payments as deferred revenue and began recognizing them into revenue on a straight-line basis over the estimated period of our obligations with respect to the study. As a result of AstraZeneca’s exercise of its right to terminate TC-1734 from the collaboration in March 2013, we recognized the remaining unrecognized deferred amount of $3.5 million into revenue for the first quarter of 2013.

As of June 30, 2013, we had received $61.6 million in aggregate upfront fees and milestone payments under our ongoing collaboration 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 immediately recognized an aggregate of $32.6 million of the amounts received under the agreement for achievement of milestone events, because each event met the conditions required for immediate recognition under our revenue recognition policy. We deferred recognition of an aggregate of $29.0 million received under the agreement and have fully recognized these deferred amounts into revenue over the respective periods discussed in Note 5 to our unaudited financial statements included in this quarterly report.

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. During the third quarter of 2011, we were awarded a third grant from The Michael J. Fox Foundation for Parkinson's Research, or MJFF. Based on the terms of the grant, we received $250,000 upon inception of the grant term and an additional $250,000 in March 2012. In addition, we are a subcontractor under a grant awarded to The California Institute of Technology by the National Institute on Drug Abuse, or NIDA, part of the National Institutes of Health, to fund research on innovative NNR-based approaches to the development of therapies for smoking cessation. Based on the terms of this arrangement, we received $191,000 in May 2012. Funding for awards under federal grant programs is subject to the availability of funds as determined annually in the federal appropriations process.

Research and Development Expenses

Since our inception, we have focused our activities on drug discovery and development programs. We record research and development expenses as they are incurred. Research and development expenses represented approximately 76% and 64% of our total operating expenses for the three months ended June 30, 2013 and 2012, respectively, and 73% and 75% of our total operating expenses for the six months ended June 30, 2013 and 2012, respectively. Restructuring charges represented 12% and 6% of our total operating expenses for the three and six months ended June 30, 2012, respectively.

We utilize our research and development personnel and infrastructure resources across several programs, and many of our costs are not specifically attributable to a single program. 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. Our current and future expenditures on 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 development programs or whether or when we will generate revenue from the commercialization and sale of any of our product candidates.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and other related costs for personnel in executive, finance, business development, legal, information technology and human resource functions. Other general and administrative expenses include expenses associated with stock options granted to 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 net operating losses through June 30, 2013 and have not paid federal, state or foreign income taxes for any period. The application of U.S. generally accepted accounting principles, or GAAP, may for some periods result in non-cash income tax expense or benefit being reflected in our Statement of Comprehensive Income (Loss). Exercises of stock options in periods of net income may result in tax deductions for stock-based compensation in excess of expense recorded for the stock options under GAAP. For interim periods within years for which net income is forecasted, we recognize the income tax benefit related to the excess tax deductions as an increase to capital in excess of par value and, based on Accounting Standards Codification ASC Topic 740, *Income Taxes*, record an offsetting charge in the same amount to income tax expense. As of June 30, 2013, we had $7.5 million of cumulative tax deductions for periods of net loss from exercises of stock options 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 June 30, 2013 because we have incurred cumulative net operating losses since inception. This benefit will not be recognized as an increase to capital in excess of par value until the excess deductions reduce income taxes payable.

As of June 30, 2013, we had net operating loss carryforwards of $208.8 million for federal income tax purposes and $197.6 million for state income tax purposes and we had research and development income tax credit carryforwards of $12.9 million for federal income tax purposes and $587,000 for state income tax purposes. The federal net operating loss carryforwards begin to expire in 2024. The state net operating loss carryforwards begin to expire in 2019. 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 by us 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 tax credits discussed above until it is more likely than not that we will 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 use to fund our short-term liquidity requirements is invested in corporate debt securities and municipal bonds rated at least A quality or equivalent, U.S. Treasury notes and bonds, U.S. and state government agency-backed certificates and certificates of deposit. Our investments in marketable securities, which include marketable securities classified on our balance sheet as cash equivalents, are recorded at quoted market prices or observable market inputs and totaled $105.9 million at June 30, 2013.

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, 2012 and in the notes to our unaudited 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, 2012.

Results of Operations

Three Months ended June 30, 2013 and 2012

Net Operating Revenues

	Three Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
Operating revenues:			
License fees and milestones from collaborations	$ —	$ 33,487	$(33,487)
Grant revenue	—	158	(158)
Net operating revenues	$ —	$ 33,645	$(33,645)

Net operating revenues for the three months ended June 30, 2013 decreased by $33.6 million as compared to the three months ended June 30, 2012. The lower net operating revenues for the 2013 period were primarily attributable to a decrease of $33.5 million in license fees and milestones from collaborations. License fees and milestone from collaborations for the 2012 period reflected recognition of $32.7 million of the upfront payment previously received under our MDD agreement with AstraZeneca and $810,000 of the payments previously received under our ongoing collaboration agreement with AstraZeneca. The upfront payment for our MDD agreement with AstraZeneca became fully recognized into revenue during the three months ended June 30, 2012 and the payments previously received under our ongoing collaboration agreement with AstraZeneca became fully recognized into revenue for the first quarter of 2013.

We expect our net operating revenues for the year ending December 31, 2013 to be substantially lower than for the year ended December 31, 2012, primarily due to the upfront payment under our MDD agreement with AstraZeneca becoming fully recognized in 2012. We have no deferred amounts remaining to be recognized into revenue for payments previously received under any current or former collaboration agreement.

Research and Development Expenses

	Three Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
Research and development expenses	$9,454	$12,512	$(3,058)

Research and development expenses for the three months ended June 30, 2013 decreased by $3.1 million as compared to the three months ended June 30, 2012. The lower research and development expenses were principally attributable to decreases of:

- $4.6 million in research and development-related operating costs, including infrastructure costs and stock-based compensation and other compensation-related expenses for research and development personnel, to $2.7 million for the 2013 period, from $7.3 million for the 2012

period; this decrease resulted primarily from the two reductions in force completed in the second and fourth quarters of 2012 that reduced our workforce by approximately 65% and from the closing of our laboratory operations in the fourth quarter of 2012;

- $1.4 million in costs incurred for the Phase 3 development program for TC-5214 as a treatment for MDD, which completed in 2012; and
- $485,000 in costs incurred for third-party research and development services in connection with preclinical programs, as we focused our resources in the 2013 period on our clinical programs.

These decreases were partially offset by an increase of $3.4 million in costs incurred for third-party services associated with our ongoing clinical-stage programs to $6.7 million for the 2013 period, from $3.3 million for the 2012 period. This increase was principally due to costs related to the initiation of our Phase 2b study of TC-5214 in overactive bladder and increased costs related to our ongoing Phase 2b studies of TC-5619 in negative symptoms and cognitive dysfunction in schizophrenia and TC-1734 in mild to moderate Alzheimer's disease, which both became fully enrolled in April 2013.

The costs that we incurred for the three months ended June 30, 2013 and 2012 for third-party services in connection with research and development of clinical-stage product candidates are shown in the table below.

	Three Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
TC-5619	$ 3,226	$ 2,534	$ 692
TC-5214 overactive bladder	2,021	—	2,021
TC-1734	1,381	1,015	366
TC-6499	28	12	16
TC-5214 major depressive disorder	—	1,413	(1,413)

We expect our research and development expenses for the year ending December 31, 2013 to decrease as compared to the year ended December 31, 2012, principally due to the 2012 completion of the Phase 3 development program for TC-5214 as a treatment for MDD and our two reductions in workforce implemented in 2012. We also expect, however, to incur higher research and development expenses for the remainder of 2013 as compared to the six months ended June 30, 2013, primarily as a result of the conduct of our Phase 2b clinical trial of TC-5214 in overactive bladder, which we initiated during the three months ended June 30, 2013.

General and Administrative Expenses

	Three Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
General and administrative expenses	$ 3,034	$ 4,587	$(1,553)

General and administrative expenses for the three months ended June 30, 2013 decreased by $1.6 million as compared to the three months ended June 30, 2012. The lower general and administrative expenses were primarily attributable to a decrease of $1.5 million in stock-based compensation, salary and other compensation-related expenses for general and administrative personnel. The decrease in stock-based compensation, salary and other compensation-related expenses for general and administrative personnel for the 2013 period was primarily due to the previously disclosed $1.8 million in severance and stock-based compensation expenses recorded for the 2012 period, including $1.3 million of non-cash charges. Exclusive of stock-based compensation, salary and other compensation-related expenses, general and administrative expenses decreased by $37,000 for the 2013 period as compared to the corresponding 2012 period.

Restructuring Charges

	Three Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
Restructuring charges	$ —	$ 2,312	$(2,312)

Restructuring charges for the three months ended June 30, 2012 reflected severance and other charges related to a reduction in force announced and implemented in that period as part of a plan to focus our resources on our more advanced programs. Upon the completion of the restructuring, our workforce was reduced by 65 employees, or approximately 46%.

Six Months ended June 30, 2013 and 2012

Net Operating Revenues

	Six Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
Operating revenues:			
License fees and milestones from collaborations	$3,536	$56,094	$(52,558)
Grant revenue	—	408	(408)
Net operating revenues	$3,536	$56,502	$(52,966)

Net operating revenues for the six months ended June 30, 2013 decreased by $53.0 million as compared to the six months ended June 30, 2012. The lower net operating revenues for the 2013 period were primarily attributable to a decrease of $52.6 million in license fees and milestones from collaborations. The lower license fees and milestones from collaborations for the 2013 period primarily resulted from the recognition into revenue for the 2012 period of the remaining unrecognized portion of the upfront payment previously received under our MDD agreement with AstraZeneca, totaling $54.5 million, partially offset by $1.9 million in increased recognition into revenue for the 2013 period of payments related to TC-1734 previously received under our ongoing collaboration agreement with AstraZeneca. We recognized into revenue for the 2013 period the remaining unrecognized portion of the payments related to TC-1734 previously received under our ongoing collaboration agreement with AstraZeneca, totaling $3.5 million.

Research and Development Expenses

	Six Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
Research and development expenses	$17,774	$30,313	$(12,539)

Research and development expenses for the six months ended June 30, 2013 decreased by $12.5 million as compared to the six months ended June 30, 2012. The lower research and development expenses were principally attributable to decreases of:

- $9.9 million in research and development-related operating costs, including infrastructure costs and stock-based compensation and other compensation-related expenses for research and development personnel, to $5.9 million for the 2013 period, from $15.8 million for the 2012 period; this decrease resulted primarily from the two reductions in force completed in the second and fourth quarters of 2012 that reduced our workforce by approximately 65% and from the closing of our laboratory operations in the fourth quarter of 2012;
- $4.8 million in costs incurred for the Phase 3 development program for TC-5214 as a treatment for major depressive disorder, which completed in 2012; and
- $1.4 million in costs incurred for third-party research and development services in connection with preclinical programs.

These decreases were partially offset by an increase of $3.6 million in costs incurred for third-party services associated with our clinical-stage product candidates (excluding costs for the completed program in MDD discussed above) to $11.8 million for the 2013 period, from $8.2 million for the 2012 period. This increase was principally due to costs related to the initiation of our Phase 2b study of TC-5214 in overactive bladder, increased costs related to our ongoing Phase 2b study of TC-5619 in negative symptoms and cognitive dysfunction in schizophrenia and the completion in the 2012 period of two exploratory Phase 2 clinical studies of TC-6987.

The costs that we incurred for the six months ended June 30, 2013 and 2012 for third-party services in connection with research and development of clinical-stage product candidates are shown in the table below.

	Six Months Ended June 30, 2013	2012	Change
	(in thousands)		
TC-5619	$6,636	$4,621	$ 2,015
TC-5214 overactive bladder	2,901	—	2,901
TC-1734	2,220	1,784	436
TC-6499	28	4	24
TC-5214 major depressive disorder	—	4,824	(4,824)
TC-6987	—	1,815	(1,815)

General and Administrative Expenses

	Six Months Ended June 30, 2013	2012	Change
	(in thousands)		
General and administrative expenses	$6,524	$7,657	$(1,133)

General and administrative expenses for the six months ended June 30, 2013 decreased by $1.1 million as compared to the six months ended June 30, 2012. The lower general and administrative expenses were primarily attributable to a decrease of $791,000 in stock-based compensation, salary and other compensation-related expenses for general and administrative personnel. The decrease in stock-based compensation, salary and other compensation-related expenses for general and administrative personnel for the 2013 period was primarily due to the previously disclosed $1.8 million in severance and stock-based compensation expenses recorded for the 2012 period, including $1.3 million of non-cash charges; partially offset by $467,000 in non-cash stock-based compensation charges resulting from the partial accelerated vesting of, and extended exercise periods for, some outstanding stock options held by a former executive officer who departed Targacept in March 2013 and $309,000 in severance and other charges resulting from the departure of the former executive officer. Exclusive of stock-based compensation, salary and other compensation-related expenses, general and administrative expenses decreased by $342,000 for the 2013 period as compared to the corresponding 2012 period.

Restructuring Charges

	Six Months Ended June 30, 2013	2012	Change
	(in thousands)		
Restructuring charges	$—	$ 2,312	$(2,312)

Restructuring charges for the six months ended June 30, 2012 reflected severance and other charges related to a reduction in force announced and implemented in the second quarter of 2012.

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.

Our cash, cash equivalents and investments in marketable securities were $164.0 million as of June 30, 2013 and $184.9 million as of December 31, 2012. As of June 30, 2013, we had $56.9 million of cash in bank depository accounts and institutional money market funds at Branch Banking and Trust Company, PNC Bank and Wells Fargo & Company. Substantially all of our remaining cash, cash equivalents and investments were invested as of June 30, 2013 in corporate debt securities and municipal bonds rated at least A quality or equivalent, U.S. Treasury notes and bonds, U.S. and state government agency-backed securities and certificates of deposit.

We are eligible to receive additional payments under our ongoing collaboration agreement with AstraZeneca, contingent on the achievement of specified milestone events relating to AZD1446. The likelihood that we will achieve any particular milestone event in any particular period is uncertain, and we may not ever achieve any future milestone event with respect to AZD1446. We do not expect our ongoing collaboration agreement with AstraZeneca to be a significant source of future funds and we are not relying on the agreement as a source for any future funds.

Our MDD agreement with AstraZeneca was terminated effective in May 2012 and is no longer a potential source of future funds.

We have borrowed amounts under a loan agreement with a bank that we entered into in July 2010 to fund the purchase of equipment, furnishings, software and other fixed assets. As of June 30, 2013, the aggregate outstanding principal balance under the loan facility was $1.6 million and there is no additional borrowing capacity remaining available to us.

Cash Flows

	Six Months Ended June 30,		
	2013	2012	Change
	(in thousands)		
Net cash used in operating activities	$(19,735)	$(42,235)	$22,500
Net cash provided by investing activities	924	7,252	(6,328)
Net cash used in financing activities	(370)	(655)	285
Net decrease in cash and cash equivalents	$(19,181)	$(35,638)	

Net cash used in operating activities for the six months ended June 30, 2013 decreased by $22.5 million as compared to the six months ended June 30, 2012. For the six months ended June 30, 2013, net cash used in operating activities was primarily attributable to $21.8 million in payments made for third-party research and development services in connection with clinical-stage product candidates and personnel and infrastructure costs. These cash payments were partially offset by $1.0 million in proceeds received in January 2013 from the sale of laboratory equipment and office

furniture and fixtures in December 2012 and $863,000 of investment-related cash receipts. For the six months ended June 30, 2012, net cash used in operating activities was primarily attributable to $41.3 million in payments made for third-party research and development services in connection with clinical-stage product candidates and preclinical programs, as well as personnel and infrastructure costs, and $2.3 million in payments associated with our reduction in force announced in April 2012; partially offset by $1.1 million of investment-related cash receipts and $440,000 of grant related payments. The decrease of $19.5 million in payments made for third-party research and development services and personnel and infrastructure costs for the 2013 period as compared to the 2012 period was principally the result of: the wind-down during 2012 of the Phase 3 development program for TC-5214 as a treatment for major depressive disorder, for which we paid $13.0 million during the 2012 period; the decision in the second quarter of 2012 to focus our resources on our more advanced programs; and the closing of our laboratories and completion of two workforce reductions during 2012.

Net cash provided by investing activities for the six months ended June 30, 2013 decreased by $6.3 million as compared to the six months ended June 30, 2012. Cash provided by or 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 sales of investments in marketable securities for the 2013 period were $1.0 million and occurred primarily as a result of the timing of maturities and subsequent reinvestment in marketable securities. Our net sales of investments in marketable securities for the 2012 period were $7.4 million and occurred primarily to fund our short-term liquidity requirements.

Net cash used in financing activities for the six months ended June 30, 2013 decreased by $285,000 as compared to the six months ended June 30, 2012. The lower cash used in financing activities for the 2013 period was primarily due to the scheduled repayment in full of outstanding term loans on their respective maturity dates during 2012.

Funding Requirements

As of June 30, 2013, we had an accumulated deficit of $254.4 million. We may require additional capital in future periods as our product candidates advance into later-stage development and as we progress our programs and invest in additional product opportunities. However, we may generate positive cash flow for any particular reporting period as a result of the timing of milestone events that may be achieved under our ongoing collaboration agreement with AstraZeneca or any potential future collaboration agreement that we enter into and the timing and extent of costs incurred related to development of our product candidates. Our future capital requirements are difficult to forecast and will depend on many factors, including:

- the scope, progress, duration, results and cost of clinical trials, as well as non-clinical studies and assessments, of our product candidates and programs;
- whether we establish additional strategic alliances, collaborations and licensing or other comparable arrangements, or whether we pursue and complete any merger, acquisition or other significant corporate transaction, and, if we do, the associated terms in each case;
- the costs to satisfy our obligations under potential future alliances, collaborations or licensing or other comparable arrangements;

- the extent to which we retain development or commercialization rights or responsibilities for our product candidates and incur associated development costs, manufacturing costs or costs to establish sales and marketing functions;
- whether and to what extent milestone events are achieved for AZD1446 under our ongoing collaboration agreement with AstraZeneca;
- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending patents and other intellectual property rights;
- the number and characteristics of product candidates that we pursue and programs that we conduct;
- the costs of manufacturing-related services for our product candidates in development;
- the costs, timing and outcomes of regulatory reviews or other regulatory actions;
- the timing, receipt and amount of sales or royalties, if any, from our potential products;
- the extent of our general and administrative expenses; and
- the rate of technological advancements for the indications that we target.

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 through at least the end of 2015. 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.

To the extent our capital resources are insufficient to meet future capital requirements or to the extent the conditions for raising capital are favorable, we may seek to finance future cash needs through public or private equity or debt offerings or other financings (whether using our currently effective Registration Statement on Form S-3 or otherwise). Our access in the future to additional equity or debt financing, on acceptable terms or at all, is uncertain. We may also seek to finance future cash needs through alliances, collaborations or licensing or other comparable arrangements. Strategic alliances, collaborations or licensing or other comparable 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 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 significantly dilute the ownership of our stockholders.

We cannot determine precisely the completion dates and related costs of our 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 development programs or establish strategic alliances, collaborations or licensing or other arrangements for our product candidates. Our failure, or the failure of any of our present or future 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 June 30, 2013, we had cash, cash equivalents and investments in marketable securities of $164.0 million. Our cash, cash equivalents and investments in marketable securities may be subject to interest rate risk and could fall in value if market interest rates increase. However, because our cash is invested in accounts with market interest rates and because our cash equivalents and 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 June 30, 2013 would not have a material impact on the total fair value of our portfolio.

We sometimes contract for the conduct of clinical trials or other research and development and manufacturing activities with contract research organizations, clinical trial sites and contract manufacturers in Europe or elsewhere outside of the United States. We may be subject to exposure to fluctuations in foreign currency exchange rates in connection with these agreements. If the average exchange rate between the currency of our payment obligations under any of these agreements and the U.S. dollar were to strengthen or weaken by 10% against the corresponding exchange rate as of June 30, 2013, 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 our 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 our 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 our 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 June 30, 2013 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.

Targacept® and NNR Therapeutics™ are trademarks of Targacept, Inc. 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: August 7, 2013

/s/ Stephen A. Hill
Stephen A. Hill
President and Chief Executive Officer
(*Principal Executive Officer*)

Date: August 7, 2013

/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

Exhibit Number	Description
10.1+	Targacept, Inc. 2006 Stock Incentive Plan, as amended and restated through March 9, 2011 and further amended on December 7, 2012, March 13, 2013 and April 10, 2013 (incorporated by reference to Exhibit 99 to the Company's Registration Statement on Form S-8, as filed with the SEC on June 6, 2013 (Registration No. 333-189143)).
10.2+	Employment Agreement, effective as of June 28, 2013, by and between the Company and David A. Hosford (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on June 28, 2013).
10.3+	Employment Agreement, effective as of June 28, 2013, by and between the Company and Steven M. Toler.
31.1	Certification of the Principal 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 Principal 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 Principal 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 Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101*	The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, formatted in XBRL (eXtensible Business Reporting Language): (i) the Balance Sheets as of June 30, 2013 and December 31, 2012 (Unaudited); (ii) the Statements of Comprehensive Income (Loss) for the three and six months ended June 30, 2013 and 2012 (Unaudited); (iii) the Statements of Cash Flows for the six months ended June 30, 2013 and 2012 (Unaudited); and (iv) the Notes to Unaudited Financial Statements.

+ Denotes management contract, compensatory plan or arrangement.

* Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files in Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

Exhibit 10.3

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this "**Agreement**") is made effective as of June 28, 2013 (the "**Effective Date**") by and between Targacept, Inc., a Delaware corporation ("**Employer**" or the "**Company**"), and Steven M. Toler, Ph.D., an individual resident of North Carolina ("**Employee**").

RECITALS:

WHEREAS, Employer considers the availability of Employee's services to be important to the management and conduct of Employer's business and desires to secure the continued availability of Employee's services; and

WHEREAS, Employee is willing to continue to make his services available to Employer on the terms and subject to the conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. Employment. For the Term (as defined in Section 2), Employee shall be employed as Vice President, Clinical Pharmaceutical Sciences of Employer. Employee will be located at Employer's principal executive offices in Winston-Salem, North Carolina or such other location as may be approved by Employer's chief executive officer. Employee hereby accepts and agrees to such employment. Employee shall perform such duties and shall have such powers, authority and responsibilities as are customary for one holding the position of Vice President, Clinical Pharmaceutical Sciences of a business similar to Employer and shall additionally render such other services and duties as may be reasonably assigned to him from time to time by Employee's assigned manager, Employer's chief executive officer or Employer's Board of Directors (the "**Board**").

2. Term of Employment. Employee's employment with Employer shall continue until terminated as provided in Section 6 or Section 7 (the period from the Effective Date to the effective date of such termination, the "**Term**"). Any termination of Employee's employment with Employer or this Agreement shall not affect the parties' continuing obligations under Section 5, which shall survive any such termination.

3. Compensation.

(a) For all services rendered by Employee to Employer under this Agreement, Employer shall pay to Employee, during the Term, an annual base salary of not less than $257,500 ($21,458.33 per month), payable in arrears in accordance with the customary payroll practices of Employer. During the Term, Employee's annual base salary shall be reviewed and subject to increase in accordance with Employer's standard policies and procedures.

(b) Employee shall be eligible to earn an annual bonus during the Term of up to 30% of Employee's annual base salary or such higher amount as may be determined by the Board (or a compensation committee thereof) from time to time (Employee's "**Target Annual Bonus**"). Eligibility for the Target Annual Bonus shall be based upon the achievement of performance objectives established by, or in a manner approved by, the Board (or a compensation committee thereof) in consultation with Employer's chief executive officer and shall be payable within thirty (30) days after the end of each fiscal year.

(c) All amounts payable hereunder shall be subject to such deductions and withholdings as shall be required by law, if any.

(d) Employee shall also be entitled during the Term to holidays, sick leave and other time off and to participate in those life, health or other insurance plans and other employee retirement and welfare benefit programs, plans, practices and benefits generally made available from time to time to similarly situated executives of Employer; provided that nothing herein shall obligate Employer to continue any of such programs, plans, practices or benefits for Employee if discontinued for all other similarly situated executives of Employer. Without limiting the foregoing, Employee shall be entitled to paid vacation during each fiscal year of the Term of not less than twenty (20) days.

4. Reimbursement of Expenses. Employer shall pay or reimburse Employee for all reasonable travel and other expenses incurred by Employee in performing the duties of his employment under this Agreement and also, to the extent consistent with Employer's policy, for any dues and costs of membership for appropriate professional organizations and continuing professional education, in each case subject to such reasonable documentation and substantiation as Employer shall require.

5. Covenants of Employee.

(a) Covenant Not to Compete. Employee covenants that during the Noncompetition Period (as defined in Section 5(g)) and within the Noncompetition Area (as defined in Section 5(h)), he shall not, directly or indirectly, as principal, agent, officer, director, shareholder, member, employee, consultant or trustee, or through the agency of any person, firm, corporation, partnership, limited liability company, association or other entity (collectively, "**Entity**"), engage in the Business (as defined in Section 5(i)). Without limiting the generality of the foregoing, Employee agrees that during the Noncompetition Period and within the Noncompetition Area, he shall not be (i) the owner of the outstanding capital stock or other equity interests of any Entity (other than Employer or its affiliates) that, directly or indirectly, engages in the Business; or (ii) an officer, director, partner, manager, member, consultant or employee of any Entity that, directly or indirectly, engages in the Business; provided that this Section 5(a) shall not prevent Employee from (A) being an executive or otherwise working in the same or similar capacity for any area or division of any Entity to the extent that such area or division does not, directly or indirectly, engage in the Business or (B) beneficially owning less than 1% of the stock of a corporation traded on a national securities exchange (including, without limitation, the NASDAQ Stock Market).

(b) Nondisclosure Covenant. The parties acknowledge that Employer and its affiliates are enterprises the success of which is attributable largely to the ownership, use and development of certain valuable confidential and proprietary information ("**Proprietary Information**") and that Employee's employment with Employer will involve access to and work with Proprietary Information. Employee acknowledges that his relationship with Employer is a confidential relationship and agrees that he shall: (i) keep and maintain all Proprietary Information in strictest confidence; (ii) not, either directly or indirectly, use any Proprietary Information for his own benefit; and (iii) not, either directly or indirectly, divulge, disclose or communicate any Proprietary Information in any manner whatsoever to any person or Entity, other than to employees or agents of Employer having a need to know such Proprietary Information to perform their responsibilities on

behalf of Employer or to other persons or Entities in the normal course of Employer's business. This nondisclosure obligation shall apply to all Proprietary Information, whether or not Employee participated in the development thereof. Upon termination of his employment with Employer for any reason, Employee will return to Employer all Proprietary Information in any medium and all other documents, data, materials or property of Employer (including any copies thereof) in his possession. For purposes of this Agreement, the term "Proprietary Information" shall include any and all information related to the business of Employer, any of its affiliates or any third party whose information Employee had access to by virtue of his employment with Employer, or to any of their respective products, services, sales or operations, that is not generally known to the public, specifically including, but without limitation: trade secrets; processes; formulae; compounds and properties thereof; data; files; research results; computer programs or related source codes or object codes; improvements; inventions; techniques; business, operating, marketing, partnering or merger and acquisition plans; strategies; forecasts; copyrightable material; suppliers; vendors; methods and manner of operations; information relating to the identity, needs and location of all past, present and prospective customers; and information with respect to the internal affairs of Employer and its affiliates. Such Proprietary Information may or may not contain legends or other written notice that it is of a confidential or proprietary nature. The parties stipulate that, as between them, the above-described matters are important and confidential and gravely affect the successful conduct of the business of Employer and its affiliates and that any breach of the terms of this Section 5(b) shall be a material breach of this Agreement.

(c) Nonsolicitation Covenant. Employee covenants that during the Noncompetition Period he shall not, directly or indirectly, on behalf of himself or any Entity, solicit, induce or encourage any person to leave the employ of Employer.

(d) Inventions. All inventions, designs, formulae, processes, discoveries, drawings, improvements and developments made by Employee, either solely or in collaboration with others, during his employment with Employer, whether or not during working hours, and relating to any methods, apparatus, products, compounds, services or deliverables that are made, furnished, sold, leased, used or developed by Employer or its affiliates or that pertain to the business of Employer (the "**Developments**") shall become and remain the sole property of Employer. Employee shall disclose promptly in writing to Employer all such Developments. Employee acknowledges and agrees that all Developments shall be deemed "works made for hire" within the meaning of the United States Copyright Act, as amended. If, for any reason, such Developments are not deemed works made for hire, Employee hereby assigns to Employer all of his right, title and interest (including, but not limited to, copyright and all rights of inventorship) in and to such Developments. At the request and expense of Employer, whether during or after employment with Employer, Employee shall make, execute and deliver all application papers, assignments or instruments, and perform or cause to be performed such other lawful acts as Employer may deem necessary or desirable in making or prosecuting applications, domestic or foreign, for patents (including reissues, continuations and extensions thereof) and copyrights related to such Developments or in vesting in Employer full legal title to such Developments. Employee shall assist and cooperate with Employer or its representatives in any controversy or legal proceeding relating to such Developments or any patents, copyrights or trade secrets with respect thereto. If for any reason Employee refuses or is unable to assist Employer in obtaining or enforcing its rights with respect to such Developments, he hereby irrevocably designates and appoints Employer and its duly authorized agents as his agents and attorneys-in-fact to execute and file any documents and to do all other lawful acts necessary to protect Employer's rights in the Developments. Employee expressly acknowledges that the special foregoing power of attorney is coupled with an interest and is therefore irrevocable and shall survive (i) his death or incompetency, (ii) the termination of his employment with Employer and (iii) the termination of this Agreement.

(e) Independent Covenants. Each of the covenants on the part of Employee contained in Sections 5(a), (b), (c) and (d) shall be construed as an agreement independent of each other such covenant. The existence of any claim or cause of action of Employee against Employer, whether predicated on this Agreement or otherwise, shall not constitute a defense to the enforcement by Employer of any such covenant.

(f) Reasonableness; Injunction. Employee acknowledges that his covenants contained in this Section 5 are reasonably necessary for the protection of Employer, its affiliates and their respective businesses and that such covenants are reasonably limited with respect to the activities prohibited, the duration thereof, the geographic area thereof, the scope thereof and the effect thereof on Employee and the general public. Employee further acknowledges that violation of the covenants would immeasurably and irreparably damage Employer and its affiliates and, by reason thereof, Employee agrees that for violation or threatened violation of any of the provisions of this Agreement, Employer shall, in addition to any other rights and remedies available to it at law or otherwise, be entitled to an injunction to be issued by any court of competent jurisdiction enjoining and restraining Employee from committing any violation or threatened violation of this Agreement. Employee consents to the issuance of such injunction. Furthermore, Employer shall, in addition to any other rights or remedies available to it, at law or otherwise, be entitled to reimbursement of court costs, attorneys' fees and other expenses incurred as a result of a breach of this Agreement. Employee agrees to reimburse Employer for such expenses promptly following a final determination that he has breached this Agreement.

(g) Noncompetition Period. "**Noncompetition Period**" shall mean the period commencing on the Effective Date and continuing until (i) nine (9) months following termination of Employee's employment with Employer, unless clause (ii) applies, or (ii) if applicable, the last day of the Severance Period pursuant to Section 7(d)(A).

(h) Noncompetition Area. The "**Noncompetition Area**" shall consist of the entire world, North America, the United States and Europe.

(i) Business. For the purposes of this Agreement, the "**Business**" shall mean the business of developing, manufacturing, marketing or selling any therapeutic product: (i) that contains or is comprised of, in whole or in part, a chemical compound that modulates or otherwise affects any nicotinic acetylcholine receptor in humans; or (ii) that is substantially similar to, or competitive with, any product candidate in development, or any product manufactured, marketed or sold, by Employer during Employee's employment with Employer; provided, however, that during the portion of the Noncompetition Period after termination of Employee's employment, no product or product candidate will be considered competitive with the Company's products or product candidates unless it is substantially similar to, or competitive with, a product candidate in development, or a product manufactured, marketed or sold, by Employer during the five (5)-year period ending on the date of termination of Employee's employment.

6. Disability. Upon the "disability" of Employee, this Agreement and the employment relationship hereunder may be terminated by action of the Board upon thirty (30) days prior written notice (the "**Disability Notice**"), such termination to become effective only if such disability continues. If, prior to the effective time of the Disability Notice, Employee shall recover from such

disability and return to the full-time active discharge of his duties, then the Disability Notice shall be of no further force and effect and Employee's employment shall continue as if the same had been uninterrupted. If Employee shall not so recover from his disability and return to his duties, then his employment with Employer and this Agreement shall terminate at the effective time of the Disability Notice. Such termination shall not prejudice any benefits payable to Employee that are fully vested as of the date of such termination. Prior to the effective time of the Disability Notice, Employee shall continue to earn all compensation to which Employee would have been entitled as if he had not been disabled, such compensation to be paid at the time, in the amounts, and in the manner provided in Section 3(a). A "disability" of Employee shall be deemed to exist at all times that Employee is considered by the insurer which has issued any policy of disability insurance owned by Employer or for which premiums are paid by Employer (the "**Employer Policy**") to be totally disabled under the terms of such policy. In the event there is no Employer Policy, "disability" shall mean the inability, by reason of physical or mental incapacity, impairment or infirmity, of Employee to perform, upon request, his regular duties for six (6) consecutive months and the determination of the existence or nonexistence of disability shall be made by a medical doctor who is licensed to practice medicine in the State of North Carolina mutually acceptable to the Board and to Employee (or, if Employee is incapacitated, his spouse).

7. Termination.

(a) If Employee shall die during the Term, this Agreement and the employment relationship hereunder will automatically terminate on the date of death, which date shall be the last day of the Term; provided that such termination shall not prejudice any benefits payable to Employee or Employee's beneficiaries that are fully vested as of the date of death.

(b) Employer may terminate this Agreement and the employment relationship hereunder at any time, with or without Just Cause, effective at such time as may be determined by Employer's chief executive officer or the Board; provided that any termination with Just Cause shall require written notice to Employee. "**Just Cause**" shall mean: (i) Employee's willful and material breach of this Agreement and his continued failure to cure such breach to the reasonable satisfaction of the Board within thirty (30) days following written notice of such breach to Employee from the Board; (ii) Employee's conviction of, or entry of a plea of guilty or nolo contendere to a felony or a misdemeanor involving moral turpitude; (iii) Employee's willful commission of an act of fraud, breach of trust, or dishonesty including, without limitation, embezzlement, that results in material damage or harm to the business, financial condition or assets of Employer; (iv) Employee's intentional damage or destruction of substantial property of Employer; (v) Employee's violation of Employer's policies prohibiting employment discrimination or workplace harassment; or (vi) Employee's commission of any act (or omission) contrary to the ethical or professional standards generally expected of Employer or Employee's profession. Just Cause shall be determined by the Board in its reasonable discretion and the particulars of any determination shall be provided to Employee in writing. At any time within ninety (90) days of receipt by Employee in writing of such determination, Employee may object to such determination in writing and submit the determination to arbitration in accordance with Section 9(j). If such determination is overturned in arbitration, Employee will be treated as having been terminated without Just Cause and shall be entitled to the benefits of Section 7(d).

(c) Employee may voluntarily terminate his employment with Employer on thirty (30) days prior written notice to Employer.

(d) Upon any termination pursuant to this Section 7, Employee shall be entitled to receive a lump sum equal to (i) any base salary earned and due but not yet paid through the effective date of termination plus (ii) any bonus or other compensation earned and due pursuant to the express terms of any Company plan or program but not yet paid through the effective date of termination, such lump sum to be payable within thirty (30) days after such effective date of termination.

In addition, if this Agreement and Employee's employment hereunder is terminated by Employer (or its successor) other than for Just Cause (and, for clarity, other than as a result of Employee's death), or by Employee within one (1) year following the first occurrence of Good Reason, Employee shall be entitled to the following:

(A) severance, payable monthly, in an amount and for a period as follows: (1) if such termination occurs concurrent with or within twelve (12) months following, or in connection with but prior to, a Change in Control, the sum of Employee's then current monthly base salary plus one-twelfth (1/12th) of Employee's Target Annual Bonus, for twelve (12) months following such termination; or (2) if otherwise, Employee's then current monthly base salary for nine (9) months following such termination (the time period in clause (1) or clause (2), whichever is applicable, the "**Severance Period**"); provided that, in the event the aggregate amount payable in the Severance Period based on the foregoing would exceed the greater of:

(x) two times the lesser of:

(aa) the sum of Employee's annualized compensation based upon his annual base salary for his taxable year preceding his taxable year in which his employment hereunder terminates (adjusted for any increase during that year that was expected to continue indefinitely if Employee's employment had not terminated); or

(bb) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Internal Revenue Code of 1986, as amended (the "**Code**"), for the year in which Employee's employment hereunder is terminated; or

(y) the maximum amount that would be exempt under Section 409A of the Code;

then, Employer (or its successor) shall pay the amount of such excess to Employee in a lump sum on the date that is two and one-half months following the end of Employer's (or its successor's) taxable year during which the termination of Employee's employment occurs.

(B) if such termination occurs concurrent with or within twelve (12) months following, or in connection with but prior to, a Change in Control, full acceleration of vesting for unvested options to purchase capital stock, and restricted stock or other equity-based awards (if any), of Employer (or its successor) held by Employee and outstanding as of the effective date of termination; and otherwise six (6) months acceleration of vesting for unvested options to purchase capital stock, and restricted stock or other equity-based awards (if any), of Employer (or its successor) held by Employee and outstanding as of the effective

date of termination. The terms of this clause (B) shall be deemed incorporated into each option or similar agreement evidencing an award made to Employee before or after the Effective Date.

(C) continuation of (1) the life insurance benefits coverage and (2) the health care (including medical and dental) benefits coverage, in each case provided to Employee (and, if applicable, his spouse and dependents) at his date of termination at the same level and in the same manner as if his employment had not terminated (subject to the customary changes in such coverages if Employee reaches age 65 or similar events), for the Severance Period; provided that (x) Employer shall have no obligation under the foregoing clause (2) unless Employee shall have made a timely election of continuation under the Consolidated Omnibus Budget Reconciliation Act of 1985 (commonly referred to as "COBRA") and (y) the same percentage of the total cost for such life insurance or health care coverage as Employee was paying at the time of termination shall continue during the Severance Period to be paid by Employee. If the terms of any of Employer's group health, dental or term life insurance plans referred to in this section do not permit continued participation by Employee or if permitting such continued participation would result in the imposition of an excise tax against Employer under Section 4980D (or any successor section) of the Code, then Employer will arrange for other coverage providing substantially similar benefits at the same contribution level of Employee.

(D) outplacement counseling services selected by Employee, up to a maximum of $10,000 and provided that (1) such expense is incurred by Employee on or before the second anniversary of December 31 of the year during which the termination of Employee's employment occurs and (2) such amount is paid by Employer on or before the third anniversary of December 31 of the year during which the termination of Employee's employment occurs.

(e) If Employer (or its successor) terminates Employee's employment for Just Cause, Employee shall forfeit any unexercised vested or unvested stock options (and other equity-based awards, to the extent unvested, if any) at the date of termination. If Employee terminates his employment or if Employer (or its successor) terminates Employee's employment without Just Cause, Employee shall have, with respect to each vested stock option, until the earlier of (i) three (3) months from the date of termination or (ii) the last day of the applicable option period/term to exercise such vested stock option.

(f) For purposes of this Agreement:

"**Change in Control**" shall be deemed to have occurred on the earliest of the following dates:

(i) the date any entity or person shall have become the beneficial owner of, or shall have obtained voting control over, more than fifty percent (50%) of the outstanding Common Stock of Employer;

(ii) the date of the consummation of: (A) a merger, consolidation, reorganization or similar business transaction of Employer with or into another corporation or other business entity (each, a "corporation"), in which Employer is not the continuing or surviving entity or pursuant to which any shares of Common Stock of Employer would be

converted into cash, securities or other property of another entity, other than a transaction of Employer in which holders of Common Stock immediately prior to the transaction continue to own at least 50% of the outstanding Common Stock, or if Employer is not the surviving entity, the common stock (or other voting securities) of the surviving entity immediately after the transaction as immediately before; or (B) the sale or other disposition of all or substantially all of the assets of Employer; or

(iii) the date on which the Continuing Directors (as defined below) do not constitute a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term "**Continuing Director**" means at any date a member of the Board (A) who was a member of the Board on the date of this Agreement, or (B) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (B) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board.

(For the purposes herein, the term "person" shall mean any individual, corporation, partnership, group, association or other person, as such term is defined in Section 13(d)(3) or Section 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), other than Employer, a subsidiary of Employer or any employee benefit plan(s) sponsored or maintained by Employer or any subsidiary thereof, and the term "beneficial owner" shall have the meaning given the term in Rule 13d-3 under the Exchange Act.)

The Board shall have full and final authority, in its discretion, to determine whether a Change in Control of Employer has occurred pursuant to the above definition, the date of the occurrence of such Change in Control and any incidental matters relating thereto.

"**Good Reason**" shall mean the occurrence of any of the following events without Employee's express written consent:

(i) the material breach by Employer (or its successor) of any material provision of this Agreement;

(ii) any purported termination of the employment of Employee by Employer (or its successor) that is not effected in accordance with this Agreement;

(iii) any failure of Employer (or its successor) to pay Employee any amounts of salary or bonus compensation that have become due and payable to Employee within thirty (30) days after Employee has given Employer (or its successor) notice of demand therefor;

(iv) a reduction in Employee's annual base salary unless the reduction is part of, and at the same percentage as, an across-the-board salary reduction for all similarly-situated executives;

(v) any material diminution in Employee's duties, responsibilities, authority, reporting structure, status or title, unless approved in writing by Employee; or

(vi) being required by Employer to relocate to a location more than fifty (50) miles from Employer's corporate offices as of the Effective Date (Winston-Salem, North Carolina);

provided that Good Reason pursuant to any of clauses (i), (ii), (iii), (iv), (v) or (vi) above shall be conditional on (A) Employee having provided written notice to Employer (or its successor) of the initial existence of any or all of the foregoing events within ninety (90) days of the initial existence of such event and (B) such event continuing to exist thirty (30) days after the date of such written notice from Employee.

(g) Except as otherwise provided in this Section 7, upon termination of this Agreement for any reason, Employee shall not be entitled to any form of severance benefits, including benefits otherwise payable under any of Employer's regular severance plans or policies, or any other payment whatsoever. Employee agrees that (i) the payment of any severance or other benefits pursuant to this Section 7 shall be contingent on the delivery by Employee to Employer of a release and waiver of legal claims related to the employment relationship between Employee and Employer in a form reasonably acceptable to Employer and (ii) the payments and benefits provided hereunder, subject to the terms and conditions hereof, shall be in full satisfaction of any rights which he might otherwise have or claim by operation of law, by implied contract or otherwise, except for rights which he may have under any employee benefit plan of Employer. Notwithstanding anything to the contrary in this Section 7, any release referenced in this Section 7(g) must be executed and provided to Employer, and the period for revoking same must have expired, before the forty-fifth (45th) day following the effective date of termination of employment (or shall otherwise be structured in a manner so that all payments under this Section 7 are exempt from or made in compliance with Section 409A of the Code). Specifically but without limitation, if any payments made under this Section 7 are not exempt from Section 409A of the Code and if the forty-five (45) day period described in the preceding sentence begins in one tax year and extends into a second tax year, such payments shall commence during the second tax year.

(h) To the extent applicable, Employer and Employee intend that this Agreement comply with Section 409A of the Code. The parties hereby agree that this Agreement shall at all times be construed in a manner to comply with Section 409A and that should any provision be found not in compliance with Section 409A, the parties are hereby contractually obligated to execute any and all amendments to this Agreement deemed necessary and required by legal counsel to achieve compliance with Section 409A. In the event amendments are required to be made to this Agreement to comply with Section 409A, Employer shall use its best efforts to provide Employee with substantially the same payments he would have been entitled to pursuant to this Agreement had Section 409A not applied, but in a manner that is compliant with Section 409A. The manner in which the immediately preceding sentence shall be implemented shall be the subject of good faith negotiations of the parties. The parties also agree that in no event shall any payment required to be made pursuant to this Agreement that is considered deferred compensation within the meaning of Section 409A be accelerated in violation of Code Section 409A.

(i) Notwithstanding anything in this Agreement to the contrary, in the event it shall be determined that (i) any payment, award, benefit or distribution (or any acceleration of any

payment, award, benefit or distribution) by Employer (or its successor) or any entity which effectuates a Change in Control (or any of its affiliated entities) to or for the benefit of Employee (whether pursuant to the terms of this Agreement or otherwise) (the "**Payments**") would be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), and (ii) the reduction of the amounts payable to Employee under this Agreement to the maximum amount that could be paid to Employee without giving rise to the Excise Tax (the "**Safe Harbor Cap**") would provide Employee with a greater after-tax amount than if such amounts were not reduced, then the amounts payable to Employee under this Agreement shall be reduced (but not below zero) to the Safe Harbor Cap. Unless Employer (or its successor) and Employee agree otherwise, the reduction of the amounts payable hereunder, if applicable, shall be made to the extent necessary in the following order: (i) first, any such Payments that became fully vested prior to the Change in Control and that pursuant to paragraph (b) of Treas. Reg. § 1.280G-1, Q/A 24, are treated as contingent compensation payments solely by reason of the acceleration of their originally scheduled dates of payment will be reduced, by cancellation of the acceleration of their vesting; (ii) second, any severance payments or benefits, performance-based cash or equity incentive awards, or other contingent compensation payments the full amounts of which are treated as contingent on the Change in Control where paragraphs (b) and (c) of Treas. Reg. § 1.280G-1, Q/A 24 do not apply, will be reduced; and (iii) third, any cash or equity incentive awards, or nonqualified deferred compensation amounts, that vest solely based on Employee's continued service with Employer (or its successor), and that pursuant to paragraph (c) of Treas. Reg. § 1.280G-1, Q/A 24, are treated as contingent on the Change in Control because they become vested as a result of the Change in Control, will be reduced, first by cancellation of any acceleration of their originally scheduled dates of payment (if payment with respect to such items is not treated as automatically occurring upon the vesting of such items for purposes of Section 280G of the Code) and then, if necessary, by canceling the acceleration of their vesting. In each case, the amounts of the contingent compensation payments will be reduced in the inverse order of their originally scheduled dates of payment or vesting, as applicable, and will be so reduced only to the extent necessary to achieve the required reduction. For purposes of reducing the Payments to the Safe Harbor Cap, only amounts payable under this Agreement (and no other Payments) shall be reduced. If the reduction of the amounts payable hereunder would not result in a greater after-tax result to Employee, no amounts payable under this Agreement shall be reduced pursuant to this provision.

(A) All determinations required to be made under this Section 7(i) shall be made by the public accounting firm that is retained by Employer (or its successor) as of the date immediately prior to the Change in Control (the "**Accounting Firm**"), which shall provide detailed supporting calculations both to Employer (or its successor) and Employee within fifteen (15) business days of the receipt of notice from Employer (or its successor) or Employee that there has been a Payment, or such earlier time as is requested by Employer (or its successor). Notwithstanding the foregoing, in the event (i) the Board shall determine prior to the Change in Control that the Accounting Firm is precluded from performing such services under applicable auditor independence rules or (ii) the Audit Committee of the Board determines that it does not want the Accounting Firm to perform such services because of auditor independence concerns or (iii) the Accounting Firm is serving as accountant or auditor for the person(s) effecting the Change in Control, the Board shall appoint another nationally recognized public accounting firm to make the determinations required hereunder (which accounting firm shall then be referred to as the Accounting Firm hereunder). All fees, costs and expenses (including, but not limited to, the costs of retaining experts) of the Accounting Firm shall be borne by Employer (or its successor). If payments are reduced to the Safe Harbor Cap or the Accounting Firm determines that no Excise Tax is payable by Employee without a reduction in payments, the Accounting Firm shall provide a written opinion to Employee to such

effect, that Employee is not required to report any Excise Tax on Employee's federal income tax return, and that the failure to report the Excise Tax, if any, on Employee's applicable federal income tax return will not result in the imposition of a negligence or similar penalty. The determination by the Accounting Firm shall be binding upon Employer (or its successor) and Employee (except as provided in Section 7(i)(B) below).

(B) If it is established pursuant to a final determination of a court or an Internal Revenue Service (the "**IRS**") proceeding, which has been finally and conclusively resolved, that Payments have been made to, or provided for the benefit of, Employee by Employer (or its successor), which are in excess of the limitations provided in this Section 7(i) (referred to hereinafter as an "**Excess Payment**"), Employee shall repay the Excess Payment to Employer (or its successor) on demand, together with interest on the Excess Payment at the applicable federal rate (as defined in Section 1274(d) of the Code) from the date of Employee's receipt of such Excess Payment until the date of such repayment. As a result of the uncertainty in the application of Section 4999 of the Code at the time of the determination, it is possible that Payments which will not have been made by Employer (or its successor) should have been made (an "**Underpayment**"), consistent with the calculations required to be made under this Section 7(i). In the event that it is determined (i) by the Accounting Firm, Employer (or its successor) (which shall include the position taken by Employer (or its successor), or together with their consolidated group, on their federal income tax returns) or the IRS or (ii) pursuant to a determination by a court, that an Underpayment has occurred, Employer (or its successor) shall pay an amount equal to such Underpayment to Employee within ten (10) days of such determination together with interest on such amount at the applicable federal rate from the date such amount would have been paid to Employee until the date of payment. Employee shall cooperate, to the extent Employee's expenses are reimbursed by Employer (or its successor), with any reasonable requests by Employer (or its successor) in connection with any contests or disputes with the IRS in connection with the Excise Tax or the determination of the Excess Payment. Notwithstanding the foregoing, in the event that amounts payable under this Agreement were reduced pursuant to Section 7(i) and the value of stock options is subsequently re-determined by the Accounting Firm within the context of Treasury Regulation §1.280G-1 Q/A 33 that reduces the value of the Payments attributable to such options, Employer (or its successor) shall promptly pay to Employee any amounts payable under this Agreement that were not previously paid solely as a result of Section 7(i), subject to the Safe Harbor Cap.

(j) To the extent required by law or by any policy, plan or agreement (as each may be in effect from time to time) of Employer, Employer may require Employee to repay to Employer any bonus or other incentive-based or equity-based compensation paid to Employee and to comply with any equity retention policy, stock ownership guidelines or similar guidelines or policies as may be established by Employer, and Employee hereby expressly agrees to comply with any such requirements.

8. Best Efforts of Employee. Employee agrees that he will at all times during the Term faithfully, industriously and to the best of his ability, experience and talents perform all the duties that may be required of him pursuant to the express and implicit terms hereof to the reasonable satisfaction of Employer, commensurate with his position. Such duties shall be rendered at such place as Employer designates and Employee acknowledges that he may be required to travel as shall reasonably be required to promote the business of Employer. To the extent reasonably required by the duties assigned to him, Employee shall during the Term devote substantially all his professional time, attention, knowledge and skills to the business and interest of Employer, and Employer shall be entitled to all the benefits, profits and other issue arising from or incident to all work, service and

advice of Employee. During the Term, Employee shall not be interested, directly or indirectly, in any manner as partner, manager, officer, director, shareholder, member, adviser, consultant, employee or in any other capacity in any other business; provided, that nothing herein contained shall be deemed to prevent or limit the right of Employee to beneficially own less than 1% of the stock of a corporation traded on a national securities exchange (including, without limitation, the NASDAQ Stock Market) as long as such passive investment does not interfere with or conflict with the performance of services to be rendered hereunder.

9. Miscellaneous.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of North Carolina, without regard to conflicts of law principles thereof.

(b) This Agreement constitutes the entire Agreement between Employee and Employer with respect to the subject matter hereof and supersedes in their entirety any and all prior oral or written agreements, understandings or arrangements between Employee and Employer or any of its affiliates relating to the terms of Employee's employment by Employer; provided that (i) notwithstanding the foregoing, the Proprietary Information, Inventions and Non-Competition Agreement dated September 4, 2007 between Employee and Employer (the "**PIIN Agreement**"), the Retention Award Agreement dated October 14, 2012 between Employee and Employer and all written agreements evidencing stock options granted prior to the Effective Date by Employer to Employee shall continue in full force and effect in accordance with their respective terms and (ii) to the extent of any conflict between the PIIN Agreement and this Agreement, this Agreement shall control from and after the Effective Date. Except as provided in the preceding proviso, any and all such agreements, understandings and arrangements are hereby terminated and of no force or effect and Employee hereby expressly disclaims any rights under any and all such agreements, understandings and arrangements. This Agreement may not be amended or terminated except by an agreement in writing signed by both parties or, for clarity in the case of termination, as provided in Section 6 or Section 7.

(c) This Agreement may be executed in two counterparts, each of which shall be deemed and original and both of which, taken together, shall constitute one and the same instrument.

(d) Any notice or other communication required or permitted under this Agreement shall be effective only if it is in writing and delivered in person or by nationally recognized overnight courier service or deposited in the mails, postage prepaid, return receipt requested, addressed as follows:

To Employer:

Targacept, Inc.
100 North Main Street, Suite 1510
Winston-Salem, North Carolina 27101
Attn: Chief Executive Officer
Attn: General Counsel

To Employee:

Steven M. Toler
4256 Saddlewood Forest Drive
Winston-Salem, North Carolina 27106

Notices given in person or by overnight courier service shall be deemed given when delivered in person or the day after delivery to the courier addressed to the address required by this Section 9(d), and notices given by mail shall be deemed given three (3) days after deposit in the mails. Either party may designate by written notice to the other party in accordance herewith any other address to which notices addressed to such designating party shall be sent.

(e) The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. It is understood and agreed that no failure or delay by Employer or Employee in exercising any right, power or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder.

(f) This Agreement may not be assigned by Employee without the written consent of Employer. This Agreement shall be binding on any heirs, representatives, successors or assigns of either party.

(g) For purposes of this Agreement, employment of Employee by any affiliate of Employer shall be deemed to be employment by Employer hereunder, and a transfer of employment of Employee from one such affiliate to another shall not be deemed to be a termination of employment of Employee by Employer or a cessation of the Term, it being the intention of the parties hereto that employment of Employee by any affiliate of Employer shall be treated as employment by Employer and that the provisions of this Agreement shall continue to be fully applicable following any such transfer.

(h) The respective rights and obligations of the parties hereunder (including, without limitation, under Section 7(d)) shall survive any termination of this Agreement or Employee's employment with Employer to the extent necessary to preserve such rights and obligations for their stated durations.

(i) In the event that it shall become necessary for either party to retain the services of an attorney to enforce any terms under this Agreement, the prevailing party, in addition to all other rights and remedies hereunder or as provided by law, shall be entitled to reasonable attorneys' fees and costs of suit.

(j) Except as otherwise provided in this Section 9(j), any controversy or claim arising out of or relating to this Agreement shall be settled by arbitration in accordance with Commercial Arbitration Rules of the American Arbitration Association then in effect, and judgment upon the award rendered by the arbitration panel, which shall consist of three members, may be entered in any court having jurisdiction. Any arbitration shall be held in Winston-Salem, North Carolina, unless otherwise agreed in writing by the parties. One arbitrator shall be selected by Employee, one arbitrator shall be selected by Employer, and the third arbitrator shall be selected by the two arbitrators selected by Employee and Employer. Notwithstanding the foregoing, any claim

or dispute with respect to or arising out of any of the covenants in Section 5 or the covenant in Section 8 related to Employee's interest in other businesses, or any statutory or common law claim of patent infringement, misappropriation of trade secrets, unfair competition, unfair or deceptive trade practices, interference with contract, or interference with actual or prospective economic or business relations, shall be excluded from this Section 9(j).

[*remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the respective dates set forth below, effective as of the Effective Date.

Targacept, Inc.

By: /s/ Stephen A. Hill
Name: S.A. Hill
Title: CEO

Date: 6/28/13

/s/ Steven M. Toler
Steven M. Toler, Ph.D.

Date: 21-Jun-2013

Exhibit 31.1

CERTIFICATION 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

I, Stephen A. Hill, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: August 7, 2013

/s/ Stephen A. Hill
Stephen A. Hill
President and Chief Executive Officer
(*Principal Executive Officer*)

Exhibit 31.2

CERTIFICATION 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

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

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

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

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

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

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

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

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

Date: August 7, 2013

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

Exhibit 32.1

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 June 30, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Stephen A. Hill, 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: August 7, 2013

/s/ Stephen A. Hill
Stephen A. Hill
President and Chief Executive Officer
(*Principal Executive Officer*)

Exhibit 32.2

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 June 30, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Alan A. Musso, 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: August 7, 2013

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