UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

	FORM 10-Q		
\boxtimes	QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES 1934	S EXCHANGE ACT OF	
	For the quarterly period ended June 30, 2015		
	or		
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIE 1934	S EXCHANGE ACT OF	
	For the transition period from to		
	Commission File Number: 000-51173		
	Targacept, Inc. (Exact Name of Registrant as Specified in its Charter)		
	Delaware56-202(State or other jurisdiction of incorporation or organization)(I.R.S. En incorporation or organization)	mployer	
	100 North Main Street, Suite 1510 Winston-Salem, North Carolina 271 (Address of principal executive offices) (Zip C		
	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 large the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has already large. Yes ⊠ No □		1934
	Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if sired to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceded that the registrant was required to submit and post such files). Yes \boxtimes No \square		er
See	Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the		у.
Larg	ge accelerated filer \square	Accelerated filer	X
Non	n-accelerated filer \Box (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 27, 2015, the registrant had 34,292,291 shares of common stock, \$0.001 par value per share, outstanding	ıg.	

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:

- our operations, financial position, revenues, costs or expenses; or
- our strategies, prospects, plans, expectations or objectives, including our planned merger with Catalyst Biosciences, Inc.

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," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing," "scheduled" or other comparable words identify forward-looking statements. Actual results, performance or experience may differ materially from those expressed or implied by any forward-looking statement as a result of various important factors, including our critical accounting policies and risks and uncertainties relating, among other things, to:

- our planned merger with Catalyst Biosciences, Inc., and the expected distribution to our stockholders prior to the merger of a dividend consisting of approximately \$37,000,000 in aggregate principal amount of non-interest bearing redeemable convertible notes and approximately \$19 million in cash:
- our ability to protect our intellectual property; and
- our efforts to monetize our product candidates and related assets.

Risks and uncertainties that we face are described in greater detail under the caption "Risk Factors" in Item 1A of Part II of this quarterly report 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, 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, 2015	December 31, 2014
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 78,198	\$ 56,430
Investments in marketable securities - short-term	21,576	50,955
Current receivables	10	141
Prepaid expenses	379	615
Assets held for sale	28	
Total current assets	100,191	108,141
Investments in marketable securities - long-term	828	3,418
Property and equipment, net	149	428
Other assets	6	12
Total assets	\$ 101,174	\$ 111,999
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 347	\$ 405
Accrued expenses	1,296	2,509
Total current liabilities	1,643	2,914
Total liabilities	1,643	2,914
Commitments and contingencies		
Stockholders' equity:		
Common stock, \$.001 par value, 100,000,000 shares authorized at June 30, 2015 and December 31, 2014, respectively; 34,292,291 and 34,306,435 shares issued at June 30, 2015 and December 31, 2014, respectively; 33,915,941 and 33,793,735 shares outstanding at June 30, 2015 and December 31, 2014, respectively;	34	34
Preferred stock, \$0.001 par value, 5,000,000 shares authorized and 0 shares issued and outstanding at June 30, 2015	54	54
and December 31, 2014		
Capital in excess of par value	423,830	422,303
Accumulated other comprehensive income	11	422,505
Accumulated deficit	(324,344)	(313,256)
Total stockholders' equity	99,531	109,085
Total liabilities and stockholders' equity	\$ 101,174	\$ 111,999

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,			ed	
		2015		2014		2015		2014
Operating revenues:	Φ.		Φ.		Φ.			
License fees and milestones from collaborations	\$		\$		\$		\$	400
Grant and other revenue				36		60		123
Net operating revenues				36		60		123
Operating expenses:								
Research and development (including stock-based compensation of \$15 and \$464 for the three months ended June 30, 2015 and 2014, respectively;								
and \$127 and \$848 for the six months ended June 30, 2015 and 2014,								
respectively)		642		5,408		2,982		14,488
General and administrative (including stock-based compensation of \$402								
and \$521 for the three months ended June 30, 2015 and 2014,								
respectively; and \$741 and \$962 for the six months ended June 30, 2015								
and 2014, respectively)		2,747		2,867		6,134		5,630
Reduction in force (including stock-based compensation of \$278 and \$698								
for the three and six months ended June 30, 2015, respectively)		874		_		2,030		
Impairment of furniture and equipment		134				134		
Total operating expenses		4,397		8,275		11,280		20,118
Loss from operations		(4,397)		(8,239)		(11,220)		(19,995)
Other income (expense):								
Interest income		61		154		153		332
Interest expense				(6)				(15)
Total other income (expense)		61		148		153		317
Loss before taxes		(4,336)		(8,091)		(11,067)		(19,678)
Income tax expense				(45)		(21)		(3,457)
Net loss	\$	(4,336)	\$	(8,136)	\$	(11,088)	\$	(23,135)
Basic and diluted net loss per share	\$	(0.13)	\$	(0.24)	\$	(0.33)	\$	(0.69)
Weighted average common shares outstanding—basic and diluted	33,	,887,176	33	,786,686	33	3,842,029	3	3,766,911
Net loss	\$	(4,336)	\$	(8,136)	\$	(11,088)	\$	(23,135)
Unrealized (loss) gain on available-for-sale securities, net		(12)		44		7		23
Comprehensive loss	\$	(4,348)	\$	(8,092)	\$	(11,081)	\$	(23,112)

See accompanying notes.

TARGACEPT, INC.

STATEMENTS OF CASH FLOWS (in thousands) (unaudited)

	Six Months Ended June 30,	
	2015	2014
Operating activities	# (11 000)	Φ (DD 4DE)
Net loss	\$(11,088)	\$(23,135)
Adjustments to reconcile net loss to net cash used in operating activities:		(4.00)
Recognition of deferred revenue	4.60	(123)
Amortization of premium on marketable securities, net	160	451
Depreciation and amortization	105	138
Stock-based compensation expense	1,566	1,810
Impairment of property and equipment	134	
Income tax expense from other comprehensive income	21	45
Changes in operating assets and liabilities:	400	054
Current receivables	123	251
Other assets	406	9
Accounts payable and accrued expenses	(1,271)	(3,353)
Deferred revenue		148
Net cash used in operating activities	(9,844)	(23,759)
Investing activities		
Purchase of investments in marketable securities	—	(7,146)
Proceeds from sale of investments in marketable securities	31,631	16,544
Proceeds from sale of property and equipment	20	21
Net cash provided by investing activities	31,651	9,419
Financing activities		
Principal payments on long-term debt	_	(437)
Excess tax benefits from stock-based compensation	—	3,412
Proceeds from issuance of common stock, net	(39)	297
Net cash (used in) provided by financing activities	(39)	3,272
Net increase (decrease) in cash and cash equivalents	21,768	(11,068)
Cash and cash equivalents at beginning of period	56,430	54,485
Cash and cash equivalents at end of period	\$ 78,198	\$ 43,417

See accompanying notes.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS June 30, 2015

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 that historically has been engaged in the development of novel NNR TherapeuticsTM to treat patients suffering from serious nervous system and gastrointestinal/ genitourinary diseases and disorders. The Company's NNR Therapeutics selectively target a class of receptor known as neuronal nicotinic receptors, which it refers to as NNRs. Its facilities are located in Winston-Salem, North Carolina.

On March 5, 2015 the Company announced entry into a definitive Agreement and Plan of Merger with Catalyst Biosciences, Inc. ("Catalyst"), which was subsequently amended on May 6 and May 13, 2015 (the "Merger Agreement"). Pursuant to the Merger Agreement, among other things, subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, a wholly-owned subsidiary of the Company will be merged with and into Catalyst, with Catalyst continuing as the surviving corporation and a wholly-owned subsidiary of the Company (the "Proposed Merger"). Immediately following the effective time of the Proposed Merger, existing Catalyst equity holders are expected to own approximately 58% of the capital stock of the combined company, and existing Targacept equity holders are expected to own approximately 42% of the capital stock of the combined company. Prior to the closing of the Proposed Merger, the Company also expects to distribute to its stockholders a dividend of approximately \$37,000,000 in aggregate principal amount of non-interest bearing redeemable convertible notes, and approximately \$19,000,000 in cash (the "Pre-Closing Dividend"). The notes would be convertible at the option of the noteholders at any time within thirty months after closing into shares of common stock of the combined company at a conversion rate of \$9.19 per share, which represents 130% of the negotiated per share value of the Company's assets following the anticipated Pre-Closing Dividend, adjusted to reflect the Company's proposed 7-for-1 reverse stock split. If, in the future, the redeemable convertible notes are fully converted into common stock, the Company's stockholders would own approximately 57% of the outstanding capital stock of the combined company on a pro forma basis as of the anticipated closing date.

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, 2014. 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, 2015, 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.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

2. Summary of Significant Accounting Policies (continued)

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;

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, 2015, and December 31, 2014, respectively:

Àctiv	Quoted Prices in Observ Active Markets Inpu (Level 1) (Leve		In	servable puts evel 3)
		(iii tiiousaiius)		
\$	7,810	\$ —	\$	_
	_	13,870		_
	_	647		_
	77	_		_
\$	7,887	\$ 14,517	\$	_
	Àctiv	\$ 7,810 ————————————————————————————————————	Active Markets (Level 1) Inputs (Level 2) (in thousands) \$ \$ 7,810 \$ - 13,870 - 647 77	Quoted Prices in Active Markets (Level 1) Observable Inputs (Level 2) Unob In (Level 2) (in thousands) \$

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

2. Summary of Significant Accounting Policies (continued)

<u>December 31, 2014</u>	Àcti	ed Prices in ve Markets Level 1)	Other Observable Inputs (Level 2) (in thousands)	Iı	oservable nputs evel 3)
U.S. Treasury and U.S. or state government agency-backed					
securities	\$	22,685	\$ —	\$	_
Corporate debt securities		_	30,372		_
Municipal bonds		_	1,075		_
Accrued interest		241	_		_
Total investments in marketable securities	\$	22,926	\$ 31,447	\$	_

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.

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 and U.S. and state government agency-backed securities.

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, 2015 and June 30, 2014, 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, and 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, 2015

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.

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. 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.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

2. Summary of Significant Accounting Policies (continued)

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. Service revenue is earned and recognized as research or development is performed and related expenses are incurred.

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, 2015, 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 other than income tax expense.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

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 Mon June		Six Months Ended June 30,			
	2015	2015 2014		2014 2015		2014
Basic and diluted:				· <u> </u>		
Net loss	\$ (4,336)	\$ (8,136)	\$ (11,088)	\$ (23,135)		
Weighted average common shares - basic and diluted	33,887,176	33,786,686	33,842,029	33,766,911		
Basic and diluted EPS	\$ (0.13)	\$ (0.24)	\$ (0.33)	\$ (0.69)		

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, 2015, and June 30, 2014, the Company excluded all common share equivalents from the calculation of Diluted EPS because the Company had a net loss in those periods. 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 months ended June 30, 2015 and June 30, 2014, 3,046,993 and 4,785,391 shares, respectively, subject to outstanding stock options may have been included in the calculation of common share equivalents using the treasury stock method. If the Company had been in a net income position for the six months ended June 30, 2015 and June 30, 2014 3,420,839 and 4,873,288 shares, respectively, subject to outstanding stock options may have been included in the calculation of common share equivalents using the treasury stock method.

Common Stock and Stock-Based Compensation

During the six months ended June 30, 2015, the Company issued 31,900 shares of common stock upon the exercise of stock options. The Company issued 75,556 shares of common stock upon the exercise of stock options during the year ended December 31, 2014.

During the six months ended June 30, 2015, the Company granted to employees options to purchase an aggregate of 111,025 shares of common stock, of which 42,588 remain outstanding at June 30, 2015. The remaining stock options have an estimated aggregate fair value, using the Black-Scholes-Merton formula, of \$61,000. 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. During the three months ended June 30, 2015, the Company accelerated the vesting of 47,032 stock options and 61,600 stock awards upon the termination of employment of the respective award recipients resulting in \$278,000 of stock-based compensation expense. During the six months ended June 30, 2015, the Company accelerated the vesting of 142,634 stock options and 125,050 stock awards upon the termination of employment of the respective award recipients resulting in \$698,000 of stock-based compensation expense.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

2. Summary of Significant Accounting Policies (continued)

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, 2015, in thousands.

\$ 4
(12)
(2)
21
\$ 11

Long-lived Assets

Property and equipment consists primarily of laboratory equipment, office furniture and fixtures and leasehold improvements and is recorded at historical cost, net of accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Equipment is typically depreciated over 3 to 5 years, office furniture and fixtures are typically depreciated over 7 years, and leasehold improvements are typically amortized over the lesser of the asset life or the lease term.

The Company capitalizes the costs of intellectual property acquired or licensed from external sources as intangible assets if, at the time of acquisition, the intellectual property has reached technological feasibility. 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.

The Company assesses the net realizable value of its long-lived assets, including capitalized intellectual property, and evaluates these assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment charge would be recognized when the estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. An impairment charge, if recognized, would be based on the excess of the carrying value of the impaired asset over its estimated fair value. As a result of the decision to discontinue development of TC-5214, the Company determined during 2014 the carrying value of the related capitalized intellectual property was not recoverable and, accordingly, recorded an impairment charge for its full carrying value of \$89,000.

For an asset classified as held for sale, the Company considers the asset impaired when its carrying amount exceeds fair value less its cost to sell. Fair value is determined in the same manner as an impaired long-lived asset that is held and used.

The Company entered into the Merger Agreement during the six months ended June 30, 2015 (see Note 1). In preparing for the planned closing of the merger, the Company identified property and equipment that will not be utilized whether or not the Proposed Merger is completed. As a result, the Company has classified certain furniture as "assets held for sale" on its balance sheet as of June 30, 2015, assessed fair value based on Level 2 inputs and recorded an impairment loss of \$134,000 in its statements of comprehensive income for the three and six months ended June 30, 2015.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

2. Summary of Significant Accounting Policies (continued)

Commitments and Contingencies

Under employment agreements with two former executive officers, the Company paid severance equal to each former executive's respective regular base salary as of their respective termination date, for twelve months; their respective target bonus for 2015; and their respective health and life insurance benefits coverage provided to them as of their respective termination date, for twelve months. These payments and benefits, which represent an aggregate amount of \$332,000 and \$699,000 for the three and six months ended June 30, 2015, respectively, were recorded as reduction-in-force expense. In addition, the Company accelerated the vesting of 47,032 and 114,885, employee stock options, respectively, and 40,000 and 85,000 stock awards, respectively, awarded to the former executives, resulting in reduction-in-force expense of \$242,000 and \$560,000, respectively, for the three and six months ended June 30, 2015.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update 2014-09, *Revenue from Contracts with Customers*, or ASU 2014-09. ASU 2014-09 develops a common revenue standard for GAAP and International Financial Reporting Standards and supersedes most current revenue recognition guidance. ASU 2014-09 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and requires a company to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. In July 2015, the FASB deferred for one-year the effective date of the new revenue recognition standard. The new standard will become effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and can be adopted either retrospectively to each prior reporting period presented or as a cumulative effect adjustment as of the date of adoption. The Company is currently evaluating the impact that the implementation of ASU 2014-09 will have on the Company's financial statements.

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

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, 2015, and December 31, 2014:

June 30, 2015	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Security type		(in tho	usands)	
Marketable Securities - Short term				
U.S. Treasury and U.S. or state government agency-backed securities	\$ 7,809	\$ 1	s —	\$ 7,810
Corporate debt securities	13,036	9	(2)	13,043
Municipal bonds	646	1		647
Accrued interest	76	_	_	76
Marketable Securities - Long term				
Corporate debt securities - long term	825	2	_	827
Accrued interest	1	_	_	1
Total available-for-sale marketable securities	\$ 22,393	\$ 13	\$ (2)	\$ 22,404
December 31, 2014	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		Unrealized Gains	Unrealized	Fair Value
Security type		Unrealized Gains	Unrealized Losses	Fair Value
Security type <u>Marketable Securities - Short term</u>	Cost	Unrealized Gains (in tho	Unrealized Losses usands)	
Security type <u>Marketable Securities - Short term</u> U.S. Treasury and U.S. or state government agency-backed securities	Cost \$ 22,677	Unrealized Gains (in tho	Unrealized Losses usands)	\$ 22,685
Security type Marketable Securities - Short term U.S. Treasury and U.S. or state government agency-backed securities Corporate debt securities	\$ 22,677 27,240	Unrealized Gains (in tho	Unrealized Losses usands)	\$ 22,685 27,255
Security type Marketable Securities - Short term U.S. Treasury and U.S. or state government agency-backed securities Corporate debt securities Municipal bonds	\$ 22,677 27,240 780	Unrealized Gains (in tho	Unrealized Losses usands)	\$ 22,685 27,255 781
Security type Marketable Securities - Short term U.S. Treasury and U.S. or state government agency-backed securities Corporate debt securities Municipal bonds Accrued interest	\$ 22,677 27,240	Unrealized Gains (in tho	Unrealized Losses usands)	\$ 22,685 27,255
Security type Marketable Securities - Short term U.S. Treasury and U.S. or state government agency-backed securities Corporate debt securities Municipal bonds Accrued interest Marketable Securities - Long term	\$ 22,677 27,240 780 234	Unrealized Gains (in tho	Unrealized Losses usands) \$ (1) (4)	\$ 22,685 27,255 781 234
Security type Marketable Securities - Short term U.S. Treasury and U.S. or state government agency-backed securities Corporate debt securities Municipal bonds Accrued interest Marketable Securities - Long term Corporate debt securities	\$ 22,677 27,240 780	Unrealized Gains (in tho	### Unrealized Losses ### Unrealized Losses #### Unrealized Losses #################################	\$ 22,685 27,255 781
Security type Marketable Securities - Short term U.S. Treasury and U.S. or state government agency-backed securities Corporate debt securities Municipal bonds Accrued interest Marketable Securities - Long term	\$ 22,677 27,240 780 234	Unrealized Gains (in tho	Unrealized Losses usands) \$ (1) (4)	\$ 22,685 27,255 781 234

As of June 30, 2015, the Company held investments in marketable securities with unrealized gains of \$13,000 and unrealized losses of \$2,000. 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. The Company's investments in marketable securities as of June 30, 2015, will reach maturity between July 2015 and December 2016, with a weighted average maturity date in November 2015.

4. Income Taxes

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. An

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

4. Income Taxes (continued)

examination of the Company's 2010 federal income tax return was completed in 2014 and resulted in an adjustment that increased taxable income for 2010 by \$15,064,000, decreased taxable income for 2011 by \$1,076,000, and decreased taxable income for 2012 by \$13,988,000. The examination adjustment had no cumulative effect on federal net operating loss carryforwards. 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. The examination adjustment to the Company's 2010 federal income tax return resulted in the realization of an additional \$3,412,000 of excess tax deductions and an offsetting charge to income tax expense for the six months ended June 30, 2014.

As of June 30, 2015, the Company had \$3,915,000 remaining 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, 2015, because the Company incurred operating losses in the years in which 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 unless and until the excess deductions reduce income taxes payable.

5. Collaboration Agreement

In December 2005, the Company entered into a collaborative research and license agreement with AstraZeneca AB, or AstraZeneca, that was initially focused in cognitive disorders. In October 2014, AstraZeneca terminated the agreement in its entirety, effective January 2015. When termination of the agreement became effective, all remaining rights and licenses to compounds granted by the Company under the agreement to AstraZeneca were terminated and reverted to the Company, including the rights and license relating to the Company's product candidate TC-6683 (also known as AZD1446).

AstraZeneca paid the Company an initial fee of \$10,000,000 under the agreement in February 2006. The initial fee included \$5,000,000 for grants of licenses to develop and commercialize the Company's product candidate TC-1734 (formerly known also as AZD3480), which the Company recognized 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 cumulative payments of \$6,000,000 during 2010 and 2011. At that time, the Company began recognizing the portion of the \$5,000,000 received for grants of licenses 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.

In March 2013, the Company and AstraZeneca amended the agreement to permit AstraZeneca to pursue development and commercialization of compounds it had licensed from the Company in any therapeutic area. Also in March 2013, AstraZeneca exercised its right to terminate TC-1734 from the collaboration. Under the agreement, AstraZeneca paid the Company an aggregate of \$88,120,000,

TARGACEPT, INC.

NOTES TO UNAUDITED FINANCIAL STATEMENTS (continued) June 30, 2015

5. Collaboration Agreement (continued)

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. This entire amount had been fully recognized into revenue in previous periods.

6. Reduction In Force

In the first quarter of 2015, the Company completed a reduction in force, which reduced the Company's workforce by five employees, or approximately 28%. The Company further reduced its workforce by three employees, or 23%, in the second quarter of 2015. For the three and six months ended June 30, 2015, the Company recorded \$874,000 and \$2,030,000, respectively, in severance and other charges related to the reduction in force, of which none remains to be paid.

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, 2014, 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 in Part I of this quarterly report under the heading "Cautionary Note Regarding Forward-Looking Statements", in Part II, Item 1A of this quarterly report under the heading "Risk Factors," or in other filings that we make with the SEC.

Overview

Background

We are a biopharmaceutical company that historically has been engaged in the development of novel NNR Therapeutics[™] to treat patients suffering from serious nervous system and gastrointestinal/genitourinary diseases and disorders. 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. However, due to the disappointing clinical trial outcomes in our development programs for TC-5214, TC-1734, TC-5619, and, most recently, TC-6499, we have shifted our strategic emphasis to external business opportunities not related to NNRs.

On March 5, 2015, we announced our entry into a definitive Agreement and Plan of Merger (the "Merger Agreement") with Catalyst Biosciences, Inc. ("Catalyst"), which was subsequently amended on May 6, 2015 and May 13, 2015 (the "Merger Agreement"). Pursuant to the Merger Agreement, among other things, and subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, a wholly-owned subsidiary of ours will be merged with and into Catalyst, with Catalyst continuing as the surviving corporation and a wholly-owned subsidiary of ours (the "Proposed Merger"). Immediately following the effective time of the Proposed Merger, existing Catalyst equity holders are expected to own approximately 58% of the capital stock of the combined company, and existing Targacept equity holders are expected to own approximately \$37 million in aggregate principal amount of non-interest bearing redeemable convertible notes and approximately \$19 million in cash. The notes will be convertible into shares of the combined company's common stock at any time within thirty months of closing at the noteholders' discretion, at a conversion rate of \$9.19 per share, which represents 130% of the negotiated per-share value of our assets following the anticipated Pre-Closing Dividend, as adjusted to reflect the Company's planned 7-for-1 reverse stock split. If, in the future, the redeemable convertible notes are fully converted into the combined company's common stock, Targacept stockholders would own approximately 57% of the outstanding capital stock of the combined company on a pro forma basis as of the anticipated closing date.

Catalyst is a clinical-stage biopharmaceutical company focused on creating and developing novel products based on engineered human proteases. Proteases are proteins that enzymatically cleave other proteins and are involved in a variety of biological processes. Proteases regulate several complex biological cascades, or sequenced biochemical reactions, including the coagulation cascade that controls bleeding (hemostasis) in hemophilia and non-hemophilia settings and the complement cascade that causes inflammation and tissue damage in certain diseases. Catalyst's most advanced program is an improved next-generation coagulation Factor VIIa variant, which has completed a Phase 1 clinical trial evaluating safety and tolerability as well as pharmacokinetics, pharmacodynamics and coagulation activity in severe Hemophilia A and B patients. Pfizer, Inc. ("Pfizer") conducted the Phase 1 clinical study pursuant to a research and license agreement with Catalyst, which Pfizer terminated effective June 1, 2015. Catalyst is also developing drug candidates for Hemophilia B (FIX), pro-coagulation (FXa) and complement disorders (anti-C3).

Based on years of focused research in the NNR area, and notwithstanding our clinical development setbacks, we continue to believe that compounds that interact selectively with specific NNR subtypes have the potential to achieve positive medical effects by modulating their activity. We have built a patent estate covering the structure or therapeutic use of small molecules designed to regulate activity in the body by selectively affecting specific NNR subtypes. We do not have current plans to continue developing any of our NNR programs internally. Instead we are seeking to out-license or sell those assets to one or more third parties.

As described briefly below, we have multiple clinical-stage nicotinic product candidates that we believe could address significant medical needs.

- *TC-6499*. TC-6499 is a novel small molecule that modulates the activity of the a3ß4 and other NNRs as an agonist. Our recently completed exploratory study of TC-6499 as a treatment for diabetic gastroparesis, a chronic disorder that slows or stops the passage of food from the stomach to the small intestine, did not meet its primary endpoint. We do not have plans for further development of TC-6499.
- *TC-6683 (formerly AZD1446).* TC-6683 is a novel small molecule that modulates the activity of the a4ß2 NNR. TC-6683 was subject to our collaboration agreement with AstraZeneca terminated effective January 2015. Upon termination of the agreement, all rights to TC-6683 reverted to Targacept. We do not have plans to pursue additional development of TC-6683.
- *TC-5619* and *TC-6987*. TC-5619 and TC-6987 are novel small molecules that are highly selective for the a7 NNR. The a7 NNR has been shown to play a role in a variety of biological pathways associated with various diseases and disorders. We previously conducted clinical studies of TC-5619 as a potential treatment for schizophrenia, Alzheimer's disease and attention deficit hyperactivity disorder and exploratory studies of TC-6987 as a treatment for inflammatory disorders. We do not have plans to pursue additional development of these compounds.
- *TC-1734*. TC-1734 (also referred to in previous filings as AZD3480) is a wholly owned novel small molecule that modulates the activity of the a4£2 NNR. In July 2014, we announced that our Phase 2b clinical trial of TC-1734 as a treatment for mild to moderate Alzheimer's disease did not meet its primary endpoint. We have no further plans for development of TC-1734.
- *TC-5214*. TC-5214 acts as an antagonist on the a3ß4 NNR. We previously conducted clinical studies of TC-5214 as a treatment for major depressive disorder and for overactive bladder. Most recently, in July 2014, we announced that a Phase 2b trial of TC-5214 as a treatment for overactive bladder did not meet one of the trial's two co-primary endpoints. We do not have plans to pursue additional development of this compound.

We were party to a collaboration agreement with AstraZeneca focused on compounds that act on the a4ß2 NNR, which AstraZeneca terminated in October 2014, effective January 2015. Under the agreement AstraZeneca was granted an exclusive license to TC-6683 and an earlier-stage compound that arose from the preclinical research collaboration conducted under the agreement from January 2006 to January 2010. The rights to TC-6683 and the other compound reverted to Targacept upon effectiveness of termination of the collaboration agreement.

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 non-clinical and clinical studies and related manufacturing, regulatory and clinical affairs, as well as intellectual property prosecution.

We completed a reduction in force in the fourth quarter of 2014, decreasing our workforce by 26% to 20 employees. During 2015, we have continued reducing our workforce, and had 10 employees remaining as of June 30, 2015. These reductions were made in order to align our resources with our short-term operating needs.

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, 2015, we had an accumulated deficit of \$324.3 million. We expect that we will incur losses in future periods as we incur merger related expenses and ongoing product development related expenses. 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

As of June 30, 2015, we had received \$61.6 million in aggregate upfront fees and milestone payments under our 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 determined by our revenue recognition policy discussed in Note 2 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. 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 were granted \$148,000 in March 2014. Funding for awards under federal grant programs is subject to the availability of funds as determined annually in the federal appropriations process. In September 2014, we entered into a services agreement with a biopharmaceutical company, under which we provided certain clinical development and regulatory consulting services. Under the agreement, we recognized revenue of approximately \$187,000 for our services over the term of the agreement, which expired by operation of its terms on February 28, 2015. We do not expect ongoing revenue from this agreement or other similar agreements.

Research and Development Expenses

Since our inception, we have focused our activities on drug discovery and development programs. Research and development expenses consist principally of charges for third-party services associated with our clinical-stage programs and preclinical research, salaries and other related costs for personnel in research and development functions and depreciation and other facility costs related to research and development functions. We record research and development expenses as they are incurred. Research and development expenses represented approximately 15% and 65% of our total operating expenses for the three months ended June 30, 2015 and June 30, 2014, respectively, and 26% and 72% for the six months ended June 30, 2015 and June 30, 2014, respectively.

We have historically utilized our research and development personnel and infrastructure resources across several programs, and many of our costs have not been 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. Because we are seeking to out-license or sell our NNR programs to one or more third parties, we cannot forecast with any degree of certainty whether any of our product candidates will be subject to future development or the timelines or capital requirements related to any such arrangement. Because of this uncertainty, and because of the numerous uncertainties related to clinical trials and drug development generally, we are unable to determine whether or when we would be able to monetize any of our assets, or for what amount, if any.

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, 2015, and have not paid federal, state or foreign income taxes for any period since our inception. An IRS examination of our 2010 federal income tax return was completed in 2014 and resulted in an adjustment that increased taxable income for 2010 by \$15.1 million, decreased taxable income for 2011 by \$1.1 million and decreased taxable income for 2012 by \$14.0 million. The cumulative adjustment had no effect on our federal net operating loss carryforwards. 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). As an example, 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, which are referred to as excess tax deductions. 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. The examination adjustment to our 2010 federal income tax return resulted in the realization of an additional \$3.4 million of excess tax deductions and an offsetting charge to income tax expense for the six months ended March 31, 2014.

As of June 30, 2015, we had \$3.9 million remaining 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, 2015, 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, 2015, we had net operating loss carryforwards of \$258.6 million for federal income tax purposes and \$241.7 million for state income tax purposes and we had research and development income tax credit carryforwards of \$13.5 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 in all jurisdictions 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, are recorded at quoted market prices or observable market inputs and totaled \$22.4 million at June 30, 2015.

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, 2014, 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, 2014.

Results of Operations

Three Months ended June 30, 2015 and 2014

Net Operating Revenues

	Three Months Ended June 30,			
	2015	2014	Change	
		(in thousands)		
Operating revenues:				
License fees and milestones from collaborations	\$ —	\$ —	\$ —	
Grant and other revenue	_	36	(36)	
Net operating revenues	\$ —	\$ 36	\$ (36)	

Net operating revenues for the three months ended June 30, 2015, decreased by \$36,000 as compared to the three months ended June 30, 2014, as a result of a decrease in grant and other revenue. The grant and other revenue for the three months ended June 30, 2014, reflects funds we were awarded as a subcontractor under a grant to the California Institute of Technology.

Research and Development Expenses

	Three Months Ended June 30,			
	2015	2014	Change	
		(in thousands)		
Research and development expenses	\$ 642	\$ 5,408	\$(4,766)	

Research and development expenses for the three months ended June 30, 2015, decreased by \$4.8 million as compared to the three months ended June 30, 2014. The lower research and development expenses were principally attributable to a decrease of \$2.9 million in costs incurred for third-party services associated with our clinical-stage programs to \$283,000 for the 2015 period, from \$3.2 million for the 2014 period. This decrease was principally due to lower costs related to our Phase 2b study of TC-5214 in overactive bladder and the Phase 2b study of TC-1734 in Alzheimer's disease, both of which we completed in the third quarter of 2014. The decrease was also attributable to lower costs related to our exploratory clinical trial of TC-6499 in diabetic gastroparesis, which we completed in April 2015. The lower research and development expenses were also attributable to a decrease of \$1.7 million in research and development-related operating costs, including infrastructure and compensation-related expenses for research and development personnel, to \$360,000 for the 2015 period, from \$2.1 million for the 2014 period.

The costs that we incurred for the three months ended June 30, 2015, and June 30, 2014, 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,			
	2015	2014	Change	
	'	(in thousands)		
TC-6499	\$ 272	\$ 632	\$ (360)	
TC-5214 overactive bladder	14	2,532	(2,518)	
TC-1734	3	583	(580)	

We completed the exploratory clinical trial of TC-6499 in diabetic gastroparesis in April 2015, and we currently have no additional clinical studies planned. As a result, we expect that our program related research and development expenses for the remainder of 2015 will be substantially lower than expenses for the first half of 2015 and the comparable 2014 periods.

General and Administrative Expenses

		onths Ended ne 30,	
	2015	2014	Change
		(in thousands)	
General and administrative expenses	\$ 2,747	\$ 2,867	\$ (120)

General and administrative expenses for the three months ended June 30, 2015, decreased by \$120,000 as compared to the three months ended June 30, 2014. The lower costs for the 2015 period are primarily due to a decrease of \$343,000 for patent related charges and a decrease of \$529,000 for compensation related expenses for general and administrative personnel, resulting principally from fewer general and administrative employees and a lower value assigned to our stock-based compensation awards that vested during the period. These expenses are partially offset by legal, finance, business development and consulting expenses totaling \$697,000 related to the Proposed Merger.

Reduction in Force

			onths Ended ine 30,	
	_	2015	2014	Change
			(in thousands)	
Reduction in force	9	\$ 874	\$ —	\$ 874

As a result of the reduction in force we completed during the three months ended June 30, 2015, as discussed above, we recorded as expense \$874,000 of severance charges, including \$278,000 of non-cash stock based compensation.

Six Months ended June 30, 2015 and 2014

Net Operating Revenues

	Six Months Ended June 30,		
	2015	2014	Change
		(in thousands)	
Operating revenues:			
License fees and milestones from collaborations	\$ —	\$ —	\$ —
Grant and other revenue	60	123	(63)
Net operating revenues	\$ 60	\$ 123	\$ (63)

Net operating revenues for the six months ended June 30, 2015, decreased by \$63,000 as compared to the six months ended June 30, 2014, as a result of a decrease in grant and other revenue. The grant and other revenue for the six months ended June 30, 2014, reflects funds we were awarded as a subcontractor under a grant to the California Institute of Technology. The grant and other revenue for the six months ended June 30, 2015, reflects revenue earned under a services agreement with a biopharmaceutical company.

Research and Development Expenses

		Six Months Ended June 30.		
	2015	2014	Change	
		(in thousands)		
Research and development expenses	\$2,982	\$14,488	\$(11,506)	

Research and development expenses for the six months ended June 30, 2015, decreased by \$11.5 million as compared to the six months ended June 30, 2014. The lower research and development expenses were principally attributable to a decrease of \$8.3 million in costs incurred for third-party services associated with our clinical-stage programs to \$1.5 million for the 2015 period, from \$9.8 million for the 2014 period. This decrease was principally due to lower costs related to our Phase 2b study of TC-5214 in overactive bladder and our Phase 2b study of TC-1734 in Alzheimer's disease, both of which we completed in the third quarter of 2014. The lower research and development expenses were also attributable to a decrease of \$2.9 million in research and development-related operating costs, including infrastructure and compensation-related expenses for research and development personnel, to \$1.4 million for the 2015 period, from \$4.3 million for the 2014 period, primarily due to the decrease in the number of research and development employees.

The costs we incurred for the six months ended June 30, 2015, and June 30, 2014, 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,		
	2015	2014	Change	
		(in thousands)		
TC-6499	\$1,526	\$1,220	\$ 306	
TC-5214 overactive bladder	13	7,300	(7,287)	
TC-1734	8	1,541	(1,533)	

General and Administrative Expenses

	Six Months Ended June 30,		
	2015	2014	Change
		(in thousands)	
General and administrative expenses	\$6,134	\$5,630	\$ 504

General and administrative expenses for the six months ended June 30, 2015, increased by \$504,000 as compared to the six months ended June 30, 2014. The higher costs for the 2015 period are primarily due to legal, finance, business development and consulting expenses totaling \$1.9 million related to the Proposed Merger. These expenses are partially offset by a decrease of \$482,000 in patent related expenses and a decrease of \$855,000 in compensation related expenses for general and administrative personnel resulting principally from fewer general and administrative employees and a lower value assigned to our stock-based compensation awards that vested during the period.

Income Taxes

		onths Ended une 30,	
	2015	2014	Change
		(in thousands)	
Income taxes	\$ 21	\$ 3,457	\$(3,436)

Income tax expense for the six months ended June 30, 2015, decreased by \$3.4 million as compared to the six months ended June 30, 2014. The lower income tax expense was primarily attributable to an examination adjustment to our 2010 federal income tax return that resulted in the realization of an additional \$3.4 million of excess tax deductions and an offsetting charge to income tax expense for the six months ended June 30, 2014.

Reduction in Force

		Six Months Ended June 30,		
	2015	2014	Change	
		(in thousands)		
Reduction in force	\$2,030	\$ —	\$2,030	

As a result of the reduction in force we completed during the six months ended June 30, 2015, as discussed above, we recorded as expense \$2.0 million of severance charges, including \$698,000 of non-cash stock based compensation.

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.

In November 2013, we filed a shelf registration statement on Form S-3 with the Securities and Exchange Commission that became effective December 11, 2013. Pursuant to this Form S-3, we may sell shares of common stock and other forms of securities having an aggregate offering price of up to \$200.0 million. Under an At-the-Market Issuance Sales Agreement, or ATM, with MLV & Co., LLC, filed concurrently with the Form S-3, we may offer and sell shares of common stock having an aggregate offering price of up to \$40.0 million.

Our cash, cash equivalents and investments in marketable securities were \$100.6 million as of June 30, 2015, and \$110.8 million as of December 31, 2014. As of June 30, 2015, we had \$67.8 million of cash in bank depository accounts and institutional money market funds at Branch Banking and Trust Company, PNC Bank and Wells Fargo & Company. The majority of our remaining cash, cash equivalents and investments were invested as of June 30, 2015 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.

Cash Flows

	Six Months Ended June 30,		
	2015	2014	Change
		(in thousands)	
Net cash used in operating activities	\$ (9,844)	\$(23,759)	\$13,915
Net cash provided by investing activities	31,651	9,419	22,232
Net cash (used in) provided by financing activities	(39)	3,272	(3,311)
Net increrase (decrease) in cash and cash equivalents	\$21,768	\$(11,068)	

Net cash used in operating activities for the six months ended June 30, 2015, decreased by \$13.9 million as compared to the six months ended June 30, 2014. For the six months ended June 30, 2015, net cash used in operating activities was principally attributable to \$9.0 million in payments made for research and development and general and administrative charges, which includes \$1.7 million for amounts paid related to the Proposed Merger, and \$1.3 million in severance and related payments. These payments are partially offset by \$345,000 of amortization of premiums paid for available-for-sale securities, interest income from available-for-sale securities and other investment-related operating activities. For the six months ended June 30, 2014, net cash used in operating activities was principally attributable to \$21.5 million in payments made for research and development and general and administrative charges and realization of \$3.4 million of excess tax deductions for the six months ended June 30, 2014, recorded upon the completion, during 2014, of an examination of our 2010 federal income tax return. These cash outflows were partially offset by \$831,000 of amortization of premiums paid for available-for-sale securities, interest income from available-for-sale securities and other investment-related operating activities.

Net cash provided by investing activities for the six months ended June 30, 2015, increased by \$22.2 million over the same period in 2014. 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 or dispositions. Our net sales of investments in marketable securities were \$31.6 million and \$9.4 million for the 2015 period and 2014 period, respectively.

Net cash provided by financing activities for the six months ended June 30, 2015 decreased by \$3.3 million. The change reflects the realization of \$3.4 million of stock-based compensation excess tax deductions for the six months ended June 30, 2014.

Funding Requirements

As of June 30, 2015, we had an accumulated deficit of \$324.3 million and our cash and investments in marketable securities totaled \$100.6 million. We currently expect our existing capital resources to be sufficient to fund our operations through the completion of the Proposed Merger. We do not plan to use our existing capital resources to fund the completion of the development of any of our product candidates. Our future capital requirements as a stand-alone company, if the Proposed Merger were not to be completed, are difficult to forecast and will depend on many factors, including:

• whether we pursue other significant corporate transactions, and, if we do, the associated terms in each case, or whether we establish additional strategic alliances, collaborations and licensing or other comparable arrangements;

- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending patents and other intellectual property rights; and
- the extent and nature of our general and administrative expenses and close-out costs related to our most recently completed clinical trials.

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 utilizing our currently effective registration statement on Form S-3, including our ATM, or otherwise). Our access in the future to additional equity or debt financing, on acceptable terms or at all, is uncertain. Additionally, any future equity funding may significantly dilute the ownership of our stockholders.

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, 2015, we had cash, cash equivalents and investments in marketable securities of \$100.6 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, 2015, would not have a material impact on the total fair value of our portfolio.

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, 2015, that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1A. Risk Factors

The following risk factors section amends, restates and supersedes the risk factors section included in Part I, Item 1A of our 2014 Annual Report on Form 10-K. Our business, financial condition and operating results can be affected by a number of factors, whether currently known or unknown, including but not limited to those described below, any one or more of which could, directly or indirectly, cause our actual results of operations and financial condition to vary materially from past, or from anticipated future, results of operations and financial condition. Any of these factors, in whole or in part, could materially and adversely affect our business, financial condition, results of operations and common stock price. Further, the following risk factors do not include all risk factors that may be faced by the combined company, should the Proposed Merger be completed. A more comprehensive set of risk factors relating to the combined company is included in the Form S-4 filed with the SEC by us in connection with the Proposed Merger.

The following discussion of risk factors contains forward-looking statements. These risk factors may be important to understanding any statement in this quarterly report or elsewhere. The following information should be read in conjunction with the condensed consolidated financial statements and related notes in Part I, Item 1, "Financial Statements" and Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this quarterly report.

Because of the following factors, as well as other factors affecting our financial condition and operating results, past financial performance should not be considered to be a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods.

Risks Related to the Proposed Merger

The market price of our common stock following the Proposed Merger may decline as a result of the transaction.

The market price of our common stock may decline as a result of the Proposed Merger for a number of reasons, including if:

- investors react negatively to the prospects of the combined company's business and prospects; or
- the performance of the combined company's business or its future prospects are not consistent with the expectations of financial or industry analysts.

Our stockholders will have a reduced ownership and voting interest in, and will exercise less influence over the management of, the combined company following the completion of the Proposed Merger.

After the completion of the Proposed Merger, the current stockholders of Targacept will own a significantly smaller percentage of the combined company than their ownership of Targacept prior to the Proposed Merger. At the effective time of the Proposed Merger, our stockholders will collectively own approximately 42% of the outstanding shares of the combined company, based on shares of Targacept and Catalyst capital stock outstanding as of July 15, 2015 and assuming Catalyst's net cash at closing meets the target set forth in the Merger Agreement. In addition, the seven-member Board of Directors of the combined company will initially be comprised of four current Catalyst directors and three current Targacept directors. Consequently, our stockholders will be able to exercise less influence over the management and policies of Targacept.

Our stockholders may not realize a benefit from the Proposed Merger commensurate with the ownership dilution they will experience in connection with the Proposed Merger.

If the combined company is unable to realize the full strategic and financial benefits anticipated from the Proposed Merger, our stockholders will have experienced substantial dilution of their ownership interests without receiving any commensurate benefit, or only receiving part of the commensurate benefit to the extent the combined company is able to realize only part of the strategic and financial benefits currently anticipated from the Proposed Merger.

Pfizer's termination of its research and license agreement with Catalyst has delayed the originally anticipated schedule for the closing of the Proposed Merger from the second quarter of 2015 to the third quarter of 2015. This delay will result in additional operating costs that will reduce the amount of the originally anticipated cash dividend to our stockholders in connection with the Proposed Merger. The Pfizer termination may also have other effects on the Proposed Merger and the combined company's shareholders.

As we reported on April 6, 2015, Catalyst notified Targacept on April 1, 2015, that Pfizer would be exercising its right to terminate in its entirety the June 29, 2009, research and license agreement between Catalyst and Wyeth LLC (a wholly owned subsidiary of Pfizer), which governs the development and commercialization of Catalyst's leading human Factor VIIa product candidate for the treatment of hemophilia and surgical bleeding indications, known as CB 813d/PF-05280602. On April 2, 2015, Pfizer provided Catalyst with its formal written notice of termination of the research and license agreement.

This development has delayed the anticipated closing date of the Proposed Merger, from the second quarter of 2015 to the third quarter of 2015. Targacept had originally anticipated a cash dividend to its shareholders, prior to the closing of the merger, of approximately \$20.0 million. Given

the delay in the closing date of the merger and associated operating costs incurred in the interim, the amount of this cash dividend is now likely to be approximately \$19.0 million. This development may also require the combined company to raise additional financing in the capital markets sooner than originally planned, resulting in additional dilution to the combined company's stockholders.

Failure to complete the Proposed Merger may adversely affect our common stock price and our future business and operations.

If the Proposed Merger is not completed, we are subject to the following risks:

- if the Merger Agreement is terminated under certain circumstances, we will be required to pay Catalyst a termination fee of \$3.22 million, and/or to reimburse Catalyst for up to \$1.25 million in certain transaction expenses;
- the attention of our management will have been diverted to the Proposed Merger instead of being directed solely to our own operations and the pursuit of other opportunities that may have been beneficial to us;
- the loss of our time and resources;
- the price of our stock may decline and remain volatile; and
- costs related to the Proposed Merger, such as legal, accounting and transaction agent fees, some of which must be paid even if the Proposed Merger is not completed.

In addition, if the Merger Agreement is terminated and our board of directors determines to seek another business combination, there can be no assurance that we will be able to find a transaction that is superior or equal in value to the Proposed Merger.

We may fail to realize the anticipated benefits of the Proposed Merger.

The success of the Proposed Merger will depend on, among other things, the combined company's ability to achieve its business objectives, including the development and commercialization of its product candidates. If the combined company is not able to achieve these objectives, the anticipated benefits of the Proposed Merger may not be realized fully, may take longer to realize than expected, or may not be realized at all.

Targacept and Catalyst have operated and, until the completion of the Proposed Merger, will continue to operate independently. It is possible that the integration process could result in the loss of key employees, the disruption of each company's ongoing business, or inconsistencies in standards, controls, procedures or policies that could adversely affect our ability to comply with reporting obligations as a public company, to satisfy our obligations to third parties or to achieve the anticipated benefits of the Proposed Merger. Integration efforts between the two companies will also divert management's attention and resources. Any delays in the integration process or inability to realize the full extent of the anticipated benefits of the Proposed Merger could have an adverse effect on our business and the results of our operations. Such an adverse effect on our business may impact the value of the shares of the combined company's common stock after the completion of the Proposed Merger.

In addition, Catalyst could be materially adversely affected prior to the closing of the Proposed Merger, which could have a material adverse effect on the combined company if we are required to complete the Proposed Merger. For example, we are required under the Merger Agreement to complete the Proposed Merger despite any changes in general economic or political conditions or the capital or securities markets in general, to the extent they do not disproportionately affect Catalyst; any changes in or affecting the industries in which Catalyst operates, to the extent they do not disproportionately affect Catalyst; any changes, effects or circumstances resulting from the announcement or pendency of the Merger Agreement or the completion of the contemplated transactions or compliance with the terms of the Merger Agreement; any changes in laws or applicable accounting principles, or interpretations thereof; and the commencement, continuation or escalation of war, terrorism or hostilities, or natural disasters or political events. If any such adverse changes occur and the Proposed Merger is still completed, the combined company's stock price may suffer. This in turn may reduce the value of the Proposed Merger to our stockholders.

During the pendency of the Proposed Merger, we may not be able to enter into a business combination with another party at a favorable price because of restrictions in the Merger Agreement, which could adversely affect our business.

Covenants in the Merger Agreement generally prohibit Targacept and Catalyst from entering into certain extraordinary transactions with any third party, including mergers, purchases or sales of assets, or other business combinations, subject to certain exceptions relating to fiduciary duties, or from completing other transactions that are not in the ordinary course of business pending completion of the Proposed Merger, including transactions that may be favorable to the companies or their stockholders. As a result, if the Proposed Merger is not completed, our stockholders may be adversely impacted by our inability to pursue other beneficial opportunities during the pendency of the Proposed Merger.

Provisions of the Merger Agreement may discourage third parties from submitting alternative acquisition proposals, including proposals that may be superior to the Proposed Merger.

The terms of the Merger Agreement prohibit us from soliciting alternative takeover proposals or cooperating with persons making unsolicited takeover proposals, except in limited circumstances when our board of directors determines in good faith that an unsolicited alternative takeover proposal constitutes, or is reasonably likely to result in, a superior acquisition proposal, and that failure to pursue such proposal would be considered a breach of the board's fiduciary duties. If we terminate the Merger Agreement because we enter into an alternative superior transaction, we would be required to pay a termination fee of \$3.22 million to Catalyst. Such termination fee may discourage third parties from submitting alternative takeover proposals to us, and may cause the board of directors to be less inclined to recommend an alternative proposal.

The lack of a public market for Catalyst shares makes it difficult to determine the fair market value of Catalyst, and the merger consideration to be issued to Catalyst securityholders may exceed the actual value of Catalyst.

The outstanding capital stock of Catalyst is privately held and is not traded on any public market, which makes it difficult to determine the fair market value of Catalyst. There can be no assurances that the merger consideration to be issued to Catalyst securityholders will not exceed the actual value of Catalyst.

If the redeemable convertible notes are redeemed for cash instead of converted for stock, the combined company may need to raise additional dilutive capital.

In connection with the Proposed Merger, our stockholders will receive a Pre-Closing Dividend, which consists in part of approximately \$37.0 million in aggregate principal amount of non-interest bearing redeemable convertible notes. The notes will be convertible at the option of the noteholders, at any time within 30 months following the closing into shares of the combined company at a conversion price of \$9.19 per share, which represents 130% of the negotiated per-share value of our assets following the anticipated Pre-Closing Dividend, as adjusted to reflect our planned 7-for-1 reverse stock split. The combined company is expected to have a cash balance, exclusive of our close-out costs, of approximately \$77.0 million upon closing of the Proposed Merger, including \$37.0 million to be held in escrow for the benefit of the noteholders and the combined company. If all of the notes are redeemed for cash or are repaid upon maturity and not converted into stock of the combined company, the approximately \$37.0 million of cash required to satisfy the redemption will not be available to fund the ongoing operations of the combined company. We cannot predict when or to what extent noteholders will elect to redeem or convert the principal under the notes, and decisions by noteholders by will be influenced by a variety of factors, including the trading price of the combined company's common stock during the 30 months following the closing. If a substantial amount of the cash balance of the combined company is required to satisfy note redemptions, the combined company may need to raise additional capital in the future to fund operations sooner than it otherwise would.

Additional capital required in the future may cause dilution of the stockholders of the combined company.

Many factors could prevent the combined company's stock from being valued at the conversion price of the redeemable convertible notes during the 30-month period following the closing of the Proposed Merger, including delays in obtaining results from planned clinical studies, which would make the conversion of the notes economically unattractive.

Unless the value of the combined company's stock increases by at least 30% above the negotiated per-share-value of the combined company's common stock (as adjusted for the planned 7-for-1 reverse stock split) within thirty months following the closing of the Proposed Merger, the conversion of the redeemable convertible notes will not be economically attractive to the noteholder. Numerous factors could reduce the value of the combined company's stock or, at least, prevent it from increasing at all, let alone to 30% above the conversion rate. These factors include the failure to complete, or delays in completing, clinical studies, or to achieve other milestones over the 30-month term of the notes. This may also result in the notes having less value over the course of their term.

If the Proposed Merger is not completed, the Pre-Closing Dividend will not be distributed to our stockholders.

Distribution of the Pre-Closing Dividend to our stockholders is contingent upon the completion of the Proposed Merger. If the Proposed Merger does not occur, we will not distribute the Pre-Closing Dividend, and there is no assurance our board of directors will declare or distribute any dividends on our common stock in the future.

We may not be able to complete the Proposed Merger and may elect to pursue another strategic transaction similar to the Proposed Merger, which may not occur on commercially reasonably terms or at all.

We cannot assure you that we will complete the Proposed Merger in a timely manner or at all. The Merger Agreement is subject to many closing conditions and termination rights, including the right by either party to terminate if the Proposed Merger has not been completed by September 30, 2015, the condition that Targacept stockholders give the requisite approval to complete the merger and any of the transactions contemplated by the Merger Agreement at the Targacept stockholders' meeting, and the right of either party to terminate based on a definitive agreement to effect a superior competing proposal. If the Merger Agreement is terminated under certain circumstances, Targacept or Catalyst will be required to pay the other party a termination fee of \$3.22 million or \$2.275 million, respectively. Our assets currently consist primarily of cash, cash equivalents and marketable securities, and our listing on the NASDAQ Global Select Market. If we do not complete the Proposed Merger, our board of directors may elect to attempt to complete another strategic transaction similar to the Proposed Merger. Such attempts will likely be costly and time consuming, and we cannot make any assurances that a future strategic transaction will occur on commercially reasonable terms or at all.

If the Proposed Merger is not completed, we may elect to liquidate our remaining assets, and there can be no assurances as to the amount of cash available to distribute to stockholders after paying our debts and other obligations.

If we do not complete the Proposed Merger, the board of directors may elect to take the steps necessary to liquidate all of our remaining assets in light of the risks of reestablishing an operating business. The process of liquidation may be lengthy and we cannot make any assurances regarding the timing of completing such a process. In addition, we would be required to pay all of our debts and contractual obligations, and to set aside certain reserves for potential future claims. There can be no assurance as to the amount of available cash that will be available to distribute to stockholders after paying our debts and other obligations and setting aside funds for reserves, nor as to the timing of any such distribution.

We will incur substantial transaction-related costs in connection with the Proposed Merger.

We have incurred, and expect to continue to incur, a number of non-recurring transaction-related costs associated with completing the Proposed Merger and combining the two companies. These fees and costs have been, and will continue to be, substantial. Non-recurring transaction costs include, but are not limited to, fees paid to legal, financial and accounting advisors, severance and benefit costs, filing fees and printing costs. Additional unanticipated costs may be incurred in the integration of our business with Catalyst's business, which may be higher than expected and could have a material adverse effect on the combined company's financial condition and operating results.

A failure by us to comply with the initial listing standards of the NASDAQ Global Select Market may subject our stock to delisting from the NASDAQ Global Select Market, which listing is a condition to the completion of the Proposed Merger.

Our common stock is currently listed for trading on the NASDAQ Global Select Market. Immediately prior to the completion of the Proposed Merger, we will be required to meet the initial listing requirements to maintain the listing and continued trading of our shares on the NASDAQ Global Select Market. These initial listing requirements are more difficult to achieve than the continued listing requirements under which we are now trading. Based on information currently available to us, we anticipate that we will be unable to meet the \$4.00 minimum bid price initial

listing requirement at the closing of the Proposed Merger unless we effect our planned 7-for-1 reverse stock split. If we are unable to satisfy these requirements, NASDAQ may notify us that our stock will be subject to delisting from the NASDAQ Global Select Market. It is a condition to Catalyst's obligation to complete the Proposed Merger that Targacept maintain the listing of its common stock on NASDAQ. In addition, oftentimes a reverse stock split will not result in a trading price for the affected common stock that is proportional to the ratio of the split. We believe that a reverse stock split will be in the best interest of the combined company and our stockholders. However, we cannot assure you that the implementation of the reverse stock split will have a positive impact on the price of our common stock.

We may become involved in securities class action litigation that could divert management's attention and harm the company's business, and insurance coverage may not be sufficient to cover all costs and damages.

In the past, securities class action or shareholder derivative litigation often follows certain significant business transactions, such as the sale of a business division or announcement of a merger. The combined company may become involved in this type of litigation in the future. Litigation often is expensive and diverts management's attention and resources, which could adversely affect the combined company's business.

Following the Proposed Merger, the concentration of the combined company's capital stock ownership with its executive officers and directors, and their respective affiliates, will limit your ability to influence corporate matters.

Significant stockholders of the combined company, acting together, after completion of the Proposed Merger, will have the ability to affect matters submitted to its stockholders for approval, including the approval of significant transactions. This concentration of ownership may have the effect of delaying, deferring or preventing a strategic transaction, even if such a transaction would benefit other stockholders. As a result, the market price of the combined company's common stock could be adversely affected.

Risks Related to our Business

Our clinical trial failures have resulted in significant clinical pipeline attrition, we have closed our laboratory operations, and we no longer have the capability to discover new product candidates internally.

In 2012, we completed two workforce reductions and closed our laboratory operations. Following these actions, we do not have internal discovery and research capabilities to identify and discover new product candidates. We have no current plan to resume discovery or research activities. Without internal discovery and research capability, we will not be able to expand our pipeline with internal candidates.

A small number of our stockholders beneficially own a substantial amount of our common stock and have substantial control over us; therefore, your ability to influence corporate matters may be limited.

Certain stockholders of ours collectively beneficially own or control approximately 41% of Targacept's outstanding common stock as of July 15, 2015 and, acting together, have the ability to affect matters submitted to our stockholders for approval, including the approval of significant

transactions, like the Proposed Merger. This concentration of ownership may have the effect of delaying, deferring or preventing a strategic transaction, even if such a transaction would benefit other stockholders.

Our ability to use net operating loss and tax credit carryforwards and certain built-in losses to reduce future tax payments is limited by provisions of the Internal Revenue Code, and may be subject to further limitation as a result of prior or future offerings of our stock or other transactions.

Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, contain rules that limit the ability of a company that undergoes an ownership change, which is generally an increase in the ownership percentage of certain stockholders in the stock of a company by more than 50 percent over a three-year period, to utilize its net operating loss and tax credit carryforwards and certain built-in losses recognized in years after the ownership change. These rules generally operate by focusing on ownership changes involving stockholders owning directly or indirectly 5% or more of the stock of a company and any change in ownership arising from a new issuance of stock by the company. Generally, if an ownership change as defined by Section 382 occurs, the yearly taxable income limitation on the use of net operating loss and tax credit carryforwards and certain built-in losses is equal to the product of the applicable long term tax exempt rate and the value of the company's stock immediately before the ownership change. The Proposed Merger may result in such an ownership change. If any of our past or future transactions are determined to have caused one or more Section 382 ownership changes, we generally would not be able to use our pre-change loss or credit carryovers or certain built-in losses prior to such ownership change to offset future taxable income in excess of the annual limitations imposed by Sections 382 and 383, which may result in the expiration of a portion of our tax attributes before utilization.

Risks Related to Our Financial Results

We have a substantial accumulated deficit and expect to continue to incur losses for future periods.

As of June 30, 2015, we had an accumulated deficit of \$324.3 million. We had a net loss of \$11.1 million for the six months ended June 30, 2015, and net losses of \$32.6 million and \$46.7 million for the years ended December 31, 2014 and December 31, 2013, respectively. Our losses for other periods have historically resulted principally from costs incurred in connection with our research and development activities, including clinical trials, and from general and administrative expenses associated with our operations. We expect to continue to incur losses for future periods. As a result, following the completion of the Proposed Merger, the combined company will need to generate significant revenues to achieve profitability in the future or, if it does achieve profitability for any particular period, to sustain or grow our profitability on a quarterly or annual basis.

We derived a substantial portion of our revenue in past years from our strategic alliances and collaborations, which have all terminated. We do not currently have any source of product revenue.

Risks Related to Our Intellectual Property

If we are unable to protect our intellectual property effectively, our competitors may develop and market similar products and the value of our technology and our ability to monetize our NNR assets would be damaged.

We depend significantly on our ability to obtain and maintain meaningful intellectual property protection for our product candidates, technology and know-how. We generally seek to protect our compounds and technologies by, among other methods, filing U.S. and foreign patent applications related to our proprietary technology that is important to the development of our business. We file patent applications directed to our product candidates in an effort to establish intellectual property positions regarding new chemical entities, pharmaceutical compositions, formulations and uses in the treatment of diseases and disorders.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our ability to maintain and solidify our proprietary position for our product candidates and technology will depend on the success that we have in obtaining valid patent claims and enforcing claims that are granted. We do not know whether any of our patent applications or those patent applications that we license will result in the issuance of any patents. Our issued patents and those that may issue in the future, or those licensed to us, may be challenged, invalidated, rendered unenforceable or circumvented, any of which could limit our ability to stop competitors from marketing related products. In addition, the rights granted under any issued patents may not provide us with competitive advantages against competitors with similar compounds or technologies. Furthermore, our competitors may independently develop similar technologies in a manner that does not infringe our patents or other intellectual property. If we are unable to obtain, enforce or defend the patents with respect to our product candidates, our ability to monetize our product candidates would be materially and adversely affected.

Although we own or otherwise have rights to a number of patents, these patents may not effectively exclude competitors from engaging in activities that could compete with our NNR assets. Furthermore, the issuance of a patent is not conclusive as to its validity or enforceability, and third parties may challenge the validity or enforceability of our patents. The Leahy-Smith America Invents Act was signed into U.S. law September 26, 2011, and includes significant changes to patent law. One of the most notable changes is the transition from a "first-to-invent" to a "first-inventor-to-file" patent system. This is effective for patent applications filed on or after March 16, 2013. Because patent applications in the United States and many foreign countries are confidential for a period of time after filing, and because publications of discoveries in the scientific literature often lag behind actual discoveries, we cannot be certain that we were the first to invent the inventions claimed in our issued U.S. patents or patent applications filed on or before March 16, 2013, or that we were or will be the first to file for protection of the inventions claimed in any of our U.S. patent applications filed after March 16, 2013 or in any of our issued foreign patents or pending foreign patent applications. It is possible that a competitor may successfully challenge our patents or that challenges will result in the elimination or narrowing of patent claims and, therefore, reduce our patent protection.

Because of the extensive time required for development, testing and regulatory review of a new drug, it is possible that any patent covering one of our product candidates may expire before the product candidate can be commercialized or remain in force for only a short period following initial commercialization. In either case, any advantages of the patent would be limited. The patent laws of various foreign countries may not protect our intellectual property to the same extent as the laws of the United States. Changes either in patent laws or in interpretations or enforcement of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection.

If we are unable to protect the confidentiality of our proprietary information and know-how, the commercial value of our technology and product candidates could be reduced.

In addition to patents, we rely on protection of trade secrets, know-how and confidential and proprietary information to maintain our competitive position. For example, we generally do not seek patent protection for the computer-based molecular design technologies that form part of Pentad and instead seek to maintain those technologies as trade secrets.

To maintain the confidentiality of trade secrets and proprietary information, we generally enter into confidentiality agreements with our employees, consultants, contractors and collaborators upon the commencement of our relationship with them. These agreements typically require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. However, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. Even if obtained, these agreements may not provide meaningful protection for our trade secrets or other proprietary information or an adequate remedy in the event of their unauthorized use or disclosure. The loss or exposure of our trade secrets or other proprietary information could impair our competitive position.

We also typically enter into agreements with employees that provide that inventions conceived by them in the course of rendering services to us are our exclusive property and, where appropriate, we enter into similar agreements with consultants and contractors. To the extent that our employees, consultants or contractors use technology or know-how owned by others in their work for us, disputes may arise as to the rights in related inventions.

If we fail to comply with our obligations in our intellectual property licenses with third parties, we could lose license rights that support our NNR assets and, if we have sublicensed our license rights to a third party, the loss of the license rights may breach our obligations to our sublicensee.

We are a party to various license agreements. As an example, we license patent rights covering the pharmaceutical composition and methods of use of TC-5214 from University of South Florida Research Foundation. Our existing licenses impose, and we expect future licenses will impose, various diligence, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with these obligations, whether as a result of actions or inactions by us or by any potential future collaborator of ours to which we out-license patent rights that we have in-licensed from a third party, the licensor may have the right to terminate the license, in which event we may not be able to market any product that is covered by the licensed patents.

We may be involved in lawsuits to protect or enforce our patents that could be expensive and time-consuming.

We may initiate patent litigation against third parties to protect or enforce our patent rights and we may similarly be sued by third parties. We may also become subject to interference, review or opposition proceedings conducted in the patent and trademark offices of various countries to determine our entitlement to patents. The defense and prosecution of intellectual property suits,

interference proceedings and related legal and administrative proceedings, regardless of their merit, lack of merit or eventual outcome, would be costly and a significant diversion of our technical personnel's and management's attention from conducting our business, which would harm our business. Moreover, we may not prevail in any of these suits. An adverse determination of any litigation or proceeding could put our patents at risk of being invalidated or narrowly interpreted and our patent applications at risk of not being issued and could prevent us from protecting our rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

Risks Related to Employees

If we lose our key personnel or are unable to attract and retain additional skilled personnel, we may be unable to successfully complete the Proposed Merger or pursue other strategic opportunities not related to NNRs.

Our performance depends substantially on the performance of our senior management team, including our President and Chief Executive Officer, Stephen A. Hill, as well as our other managerial personnel. Our key personnel, including Dr. Hill, can terminate their employment with us at any time. The loss of the services of any of our senior management team or other key personnel may significantly delay or prevent the completion of the Proposed Merger and other business objectives.

Successful completion of the Proposed Merger or other strategic transaction will depend on our ability to identify and retain the appropriate personnel. We face intense competition for skilled executives and individuals with relevant technical expertise in our industry, and this competition is likely to continue. We may not be able to continue to retain personnel with the advanced qualifications necessary for the success of Proposed Merger or other strategic transaction.

Risks Related to Our Common Stock

The market price of our common stock has historically been highly volatile and the Proposed Merger may result in significant stock price and trading volume fluctuations.

The trading price of our common stock has historically been highly volatile, and the Proposed Merger may result in significant stock price and trading volume fluctuations. We cannot predict precisely the impact the announcement, pendency or completion of the Proposed Merger will have on our stock price. Additionally, the stock market in general has experienced extreme price and volume fluctuations. The market prices of securities of pharmaceutical, biopharmaceutical and biotechnology companies in particular have been extremely volatile and have experienced fluctuations that have often been unrelated or disproportionate to operating performance.

$Fluctuations\ in\ our\ operating\ results\ could\ adversely\ affect\ the\ price\ of\ our\ common\ stock.$

Our operating results are likely to fluctuate significantly from quarter to quarter and year to year. These fluctuations could cause our stock price to decline. Some of the factors that may cause our operating results to fluctuate on a period-to-period basis include:

whether we pursue and complete any merger, acquisition or other significant corporate transaction, and, if we do, the associated terms in each case;

- restructuring costs;
- implementation or termination of collaborations, licensing, manufacturing or other material agreements with third parties, and any non-recurring revenue or expenses under any such agreement;
- the extent of our general and administrative expenses;
- general and industry-specific economic conditions; and
- general conditions in the pharmaceutical, biopharmaceutical or biotechnology industries or in the U.S. or global credit or financial markets.

Due to fluctuations in our operating results, a period-to-period comparison of our results of operations may not be meaningful, and investors should not rely on them as a good indication of our future performance. Fluctuations in our operating results may not meet the expectations of securities analysts or investors. Failure to meet these expectations may cause the price of our common stock to decline.

If our stockholders sell a substantial number of shares of our common stock in the public market, our stock price may decline.

Our current trading volumes are modest, and sales of a substantial number of shares of our common stock in the public market, or the perception that these sales could occur, could cause the market price to decline. Such sales also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. If there are more shares of our common stock offered for sale than buyers are willing to purchase, the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares and sellers remain willing to sell the shares. The number of shares of our common stock owned by our stockholders and available for sale in the public market is limited only to the extent provided under applicable federal securities laws. In addition, we may, in the future, issue additional shares of our common stock as compensation to our employees, directors or consultants, in connection with strategic alliances, collaborations, acquisitions or other transactions or to raise capital. Accordingly, sales of a substantial number of shares of our common stock in the public market could occur at any time.

Anti-takeover provisions of our charter documents and provisions of Delaware law may make an acquisition more difficult and could result in the entrenchment of management.

We are incorporated in Delaware. Anti-takeover provisions of Delaware law and our charter documents may make a change in control or efforts to remove management more difficult. Also, under Delaware law, our board of directors may adopt additional anti-takeover measures. The existence of the following provisions of Delaware law and our restated certificate of incorporation and amended and restated bylaws could limit the price that investors might be willing to pay in the future for shares of our common stock.

Our restated certificate of incorporation authorizes our board of directors to issue up to 5,000,000 shares of preferred stock and to determine the terms of those shares of stock without any further action by our stockholders. If the board of directors exercises this power to issue preferred stock, it could be more difficult for a third party to acquire a majority of our outstanding voting stock and vote the stock they acquire to remove management or directors.

Our restated certificate also provides staggered terms for the members of our board of directors, and that directors may be removed by stockholders only by vote of the holders of 66 2/3% of voting shares then outstanding. In addition, our amended and restated bylaws do not permit stockholders to call special or annual meetings of stockholders, or to act by written consent without a meeting. These provisions may prevent stockholders from replacing the entire board in a single proxy contest, making it more difficult for a third party to acquire control without the consent of our board of directors. These provisions could also delay the removal of management by the board of directors with or without cause.

As a Delaware corporation, we are also subject to certain Delaware anti-takeover provisions. Under Delaware law, a publicly-held corporation may not engage in a business combination with any holder of 15% or more of its voting stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Our board of directors could rely on Delaware law to prevent or delay an acquisition.

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 property of their respective owners.

Date: July 31, 2015

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: July 31, 2015 /s/ Stephen A. Hill

Stephen A. Hill

President and Chief Executive Officer

(Principal Executive Officer)

/s/ Mauri K. Hodges

Mauri K. Hodges

Vice President, Finance and Administration, Chief Financial Officer and

Treasurer

(Principal Financial and Accounting Officer)

EXHIBIT INDEX

Exhibit Number	Description
2.1(a)	Agreement and Plan of Merger dated as of March 5, 2015, by and among Targacept, Catalyst Biosciences, Inc. and Talos Merger Sub, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K, as filed with the SEC on March 6, 2015)
2.1(b)	Amendment No. 1 to Agreement and Plan of Merger by and among Targacept, Talos Merger Sub, Inc., and Catalyst dated May 6, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on May 12, 2015)
2.1(c)	Amendment No. 2 to Agreement and Plan of Merger by and among Targacept, Talos Merger Sub, Inc., and Catalyst dated May 13, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on May 14, 2015)
3.1	Bylaws of Targacept, as amended (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, as filed with the SEC on March 6, 2015)
10.1	Form of Targacept Voting Agreement dated as of March 5, 2015, entered into by and among Targacept, Catalyst and certain stockholders of Targacept (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on March 6, 2015)
10.2	Form of Catalyst Voting Agreement dated as of March 5, 2015, entered into by and among Catalyst, Targacept and certain stockholders of Catalyst (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, as filed with the SEC on March 6, 2015)
10.3	Form of Lock-Up Agreement dated as of March 5, 2015, entered into by and among Catalyst, Targacept and certain stockholders of Catalyst (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, as filed with the SEC on March 6, 2015)
10.4	Form of Targacept Voting Agreement dated as of May 13, 2015 entered into by and among Targacept, Catalyst and certain stockholders of Targacept, as amended (incorporated by reference to Exhibit 10.2 to the Targacept's Current Report on Form 8-K, as filed with the SEC on May 14, 2015)
10.5	Form of Catalyst Voting Agreement dated as of May 13, 2015 entered into by and among Catalyst, Targacept and certain stockholders of Catalyst, as amended (incorporated by reference to Exhibit 10.3 to the Targacept's Current Report on Form 8-K, as filed with the SEC on May 14, 2015)
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.
- The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, formatted in XBRL (eXtensible Business Reporting Language): (i) the Balance Sheets as of June 30, 2015 and December 31, 2014 (Unaudited); (ii) the Statements of Comprehensive Income (Loss) for the three and six months ended June 30, 2015 and 2014 (Unaudited); (iii) the Statements of Cash Flows for the six months ended June 30, 2015 and 2014 (Unaudited); and (iv) the Notes to Unaudited Financial Statements.

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: July 31, 2015

/s/ Stephen A. Hill

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

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, Mauri K. Hodges, 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: July 31, 2015

/s/ Mauri K. Hodges

Mauri K. Hodges

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

(Principal Financial and Accounting Officer)

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

In connection with the Quarterly Report on Form 10-Q of Targacept, Inc. (the "Company") for the period ended June 30, 2015 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: July 31, 2015

/s/ Stephen A. Hill

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

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

In connection with the Quarterly Report on Form 10-Q of Targacept, Inc. (the "Company") for the period ended June 30, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mauri K. Hodges, 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: July 31, 2015

/s/ Mauri K. Hodges

Mauri K. Hodges

Vice President, Finance and Administration, Chief Financial Officer and

Treasurer

(Principal Financial and Accounting Officer)