UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 3, 2012

TARGACEPT, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-51173 (Commission File Number) 56-2020050 (IRS Employer Identification No.)

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

27101 (Zip Code)

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

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	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition.

On May 3, 2012, Targacept, Inc. issued a press release announcing its financial results for the first quarter ended March 31, 2012. The full text of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Current Report on Form 8-K (including Exhibit 99.1) shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibit is furnished with this report:

Exhibit Number Description

99.1 Press release dated May 3, 2012

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 hereunto duly authorized.

TARGACEPT, INC.

Date: May 3, 2012

/s/ Alan A. Musso

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

EXHIBIT INDEX

 $\frac{\text{Exhibit Number}}{99.1}$

Description Press release dated May 3, 2012

Targacept Reports First Quarter 2012 Financial Results

Winston-Salem, North Carolina, May 3, 2012 – Targacept, Inc. (NASDAQ: <u>TRGT</u>), a clinical-stage biopharmaceutical company developing novel NNR TherapeuticsTM, today reported its financial results for the first quarter ended March 31, 2012.

Targacept reported net income of \$2.3 million for the first quarter of 2012, compared to \$12.6 million for the corresponding 2011 period. As of March 31, 2012, cash and investments in marketable securities totaled \$223.7 million.

"We have recently implemented a reduction in force in order to align our resources more closely with nearer-term value creation opportunities," said J. Donald deBethizy, Ph.D., Targacept's President and Chief Executive Officer. "We will continue to pursue opportunities to collaborate while at the same time executing our strategy of advancing our innovative pipeline of clinical-stage compounds. We are particularly enthusiastic about the wholly owned, alpha7 NNR-targeted TC-5619, which is in ongoing clinical studies as a treatment for negative symptoms and cognitive dysfunction in schizophrenia and for inattentive-predominant ADHD. Our ADHD study is recruiting well, and we are on track to announce top-line results in the second half of this year."

Targacept is currently conducting a Phase 2b study of TC-5619 as a treatment for negative symptoms and cognitive dysfunction in schizophrenia, a Phase 2 study of TC-5619 in adults with inattentive-predominant attention deficit/hyperactivity disorder and a Phase 2b study of AZD3480 as a treatment for mild to moderate Alzheimer's disease, as well as evaluating potential additional development of TC-6987 as a treatment for asthma. In addition, AstraZeneca has informed Targacept that it plans to progress the development of AZD1446 as a treatment for mild to moderate Alzheimer's disease. Targacept is also evaluating a late preclinical product candidate as a treatment for Parkinson's disease and related disorders supported by grant funding from The Michael J. Fox Foundation for Parkinson's Research.

Financial Results

Targacept reported net income of \$2.3 million for the first quarter of 2012, compared to net income of \$12.6 million for the first quarter of 2011. The lower net income for the 2012 period was primarily due to an overall decrease of \$16.3 million in deferred revenue recognition, partially offset by a decrease in research and development expenses. Non-cash, stock-based compensation charges of \$1.9 million and \$2.2 million were recorded for the first quarter of 2012 and 2011, respectively.

Net operating revenues totaled \$22.9 million for the first quarter of 2012, compared to \$39.0 million for the first quarter of 2011. The lower net operating revenues for the 2012 period were primarily attributable to decreases of \$18.4 million in recognition of deferred revenues associated with a now concluded alliance with GlaxoSmithKline and \$2.4 million in recognition of deferred revenues from payments previously received from AstraZeneca related to the development of Targacept's product candidate TC-5619. These decreases were partially offset by an increase of \$3.9 million in recognition of the \$200.0 million payment previously received from AstraZeneca as a result of a change in the estimated period of Targacept's performance obligations related to its product candidate TC-5214.

Research and development expenses totaled \$17.8 million for the first quarter of 2012, compared to \$23.5 million for the first quarter of 2011. The lower research and development expenses for the 2012 period were principally attributable to decreases of \$5.0 million in costs incurred for third-party research and development services in connection with clinical-stage product candidates and \$646,000 in costs incurred for third-party research and development services in connection with preclinical programs. The lower costs incurred for third-party research and development services in connection with clinical-stage product candidates for the 2012 period were principally due to a decreased level of activities for TC-5214 as the Phase 3 development program (for which Targacept shares costs with AstraZeneca) wound down to completion and the conclusion of activities conducted to enable potential Phase 2 development of TC-5619 in Alzheimer's disease. For TC-5619 and for TC-6987, research and development expenses for both periods included comparable spending for Phase 2 clinical trials of such product candidate.

General and administrative expenses totaled \$3.1 million for the first quarter of 2012, compared to \$3.2 million for the first quarter of 2011. The lower general and administrative expenses were principally attributable to lower stock-based compensation, salary and other compensation-related expenses for general and administrative personnel.

Updated Financial Guidance

Targacept is updating its financial guidance for 2012 to reflect the recently announced reduction in force and associated costs, as well as adjustments to planned spending for pipeline programs. Targacept now expects its operating expenses for the year ending December 31, 2012 to be in the range of \$65 million to \$75 million and its cash, cash equivalents and investments balance to be at least \$175 million at December 31, 2012. Targacept also now expects its cash resources to be sufficient to meet its operating requirements through at least the end of 2015. Targacept continues to expect its net operating revenues for the year ending December 31, 2012 to be in the range of \$50 million to \$60 million. This financial guidance includes both cash and non-cash revenue and expense items.

Conference Call

As previously announced, Targacept will be hosting a conference call and webcast today, May 3, 2012, at 5:00 p.m. Eastern Time. The conference call may be accessed by dialing (866) 362-5158 for domestic participants and (617) 597-5397 for international callers (reference passcode 84119507). A replay of the conference call may be accessed from approximately 8:00 p.m. Eastern Time on May 3, 2012 through May 17, 2012 by dialing (888) 286-8010 for domestic callers and (617) 801-6888 for international callers (reference passcode 27578978).

A live audio webcast of the conference call will be accessible from the Investor Relations page of Targacept's website, www.targacept.com. To ensure a timely connection to the webcast, it is recommended that users register at least 15 minutes prior to the scheduled start time. An archived version of the webcast will also be available on the Investor Calendar section of the Investor Relations page of Targacept's website for at least two weeks following the call.

About Targacept

Targacept is developing a diverse pipeline of innovative NNR Therapeutics™ for difficult-to-treat diseases and disorders of the nervous system. NNR Therapeutics selectively modulate the activity of specific neuronal nicotinic receptors, unique proteins that regulate vital biological functions that are impaired in various disease states. Targacept's clinical pipeline includes multiple Phase 2 product candidates, all representing first-in-class opportunities. Targacept leverages its scientific leadership and proprietary drug discovery platform Pentad™ to fuel its pipeline and attract significant collaborations with global pharmaceutical companies. For more information, please visit www.targacept.com.

TARGACEPT

Building Health, Restoring Independence®

Forward-Looking Statements

This press release includes "forward-looking statements" made under the provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements, other than statements of historical fact, regarding without limitation Targacept's plans, expectations or future operations, financial position, revenues, costs or expenses. 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 without limitation Targacept's critical accounting policies and risks and uncertainties relating to: Targacept's dependence on the success of its collaboration with AstraZeneca focused in cognitive disorders; the impact of AstraZeneca's restructuring initiatives in neuroscience research and development announced in February 2012; the effect of Targacept's reduction in force on its future cash operating expenses; the amount of severance and related costs related to the reduction in force; the control or significant influence that AstraZeneca has over the development of AZD3480 and AZD1446, including as to the timing, scope and design of any future clinical trials and as to the conduct at all of further development of AZD1446 or of AZD3480 beyond the ongoing trial in Alzheimer's disease; the conduct and results of clinical trials and non-clinical studies and assessments of TC-5619, TC-6987, AZD3480, AZD1446 and any other Targacept product candidate, including the performance of third parties engaged to execute such trials, studies and assessments, delays resulting from any changes to the applicable protocols and difficulties or delays in the completion of subject enrollment or data analysis; whether positive findings from particular completed clinical trials of TC-5619 or TC-6987 will be replicated in any ongoing or future clinical trials of that product candidate; Targacept's ability to protect its intellectual property; and the timing and success of submission, acceptance and approval of regulatory filings. Risks and uncertainties that Targacept faces are described in greater detail under the heading "Risk Factors" in Targacept's most recent Annual Report on Form 10-K and in other filings that it makes with the Securities and Exchange Commission. As a result of the risks and uncertainties, the results or events indicated by the forward-looking statements may not occur. Targacept cautions you not to place undue reliance on any forward-looking statement.

In addition, any forward-looking statement in this press release represents Targacept's views only as of the date of this press release and should not be relied upon as representing its views as of any subsequent date. Targacept disclaims any obligation to update any forward-looking statement, except as required by applicable law.

NNR TherapeuticsTM, PentadTM and Building Health, Restoring Independence® are trademarks or service marks of Targacept, Inc. Any other service marks, trademarks and trade names appearing in this press release are the properties of their respective owners.

Contacts

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TARGACEPT, INC

Unaudited Condensed Statements of Operations (in thousands, except share and per share amounts)

		Three Months Ended			
		Marc 2012		ch 31, 2011	
Net operating revenues	\$	22,857	\$	38,994	
Operating expenses:	•	,	•	,	
Research and development		17,801		23,517	
General and administrative		3,070		3,175	
Total operating expenses		20,871		26,692	
Operating income		1,986		12,302	
Interest income, net of interest expense		273		285	
Net income	\$	2,259	\$	12,587	
Basic net income per share	\$	0.07	\$	0.43	
Diluted net income per share	\$	0.07	\$	0.41	
Weighted average common shares outstanding - basic	33	,390,286	28	3,996,060	
Weighted average common shares outstanding - diluted	33	,822,010	30),399,750	

TARGACEPT, INC

Unaudited Condensed Balance Sheets (in thousands)

	March 31, 2012	December 31, 2011
Cash, cash equivalents and investments	\$223,737	\$ 249,270
Collaboration receivables and other current assets	2,786	3,689
Property and equipment, net	4,453	5,035
Other assets, net	128	132
Total assets	\$231,104	\$ 258,126
Current portion of deferred revenue	\$ 35,917	\$ 57,714
Other current liabilities	12,278	20,897
Deferred revenue, net of current portion	2,431	3,241
Long-term debt, net of current portion	1,776	1,986
Total stockholders' equity	178,702	174,288
Total liabilities and stockholders' equity	\$231,104	\$ 258,126