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): August 9, 2006

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 IdentificationNo.)

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)								
	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 August 9, 2006, Targacept, Inc. issued a press release relating to its financial results for the second quarter ended June 30, 2006. 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 and Exchange Act of 1934 (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 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 99.1 Description
Press release dated August 9, 2006

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: August 9, 2006

/s/ Alan A. Musso

Alan A. Musso Vice President, Chief Financial Officer, Secretary and Treasurer (Principal Financial and Accounting Officer) EXHIBIT INDEX

Exhibit Number 99.1

Description
Press release dated August 9, 2006



Winston-Salem, North Carolina, August 9, 2006 – Targacept, Inc. (Nasdaq: TRGT), a clinical-stage biopharmaceutical company focused on a new class of drugs that selectively target neuronal nicotinic receptors, or NNRs, to treat central nervous system diseases and disorders, today reported its financial results for the second quarter ended June 30, 2006.

Targacept reported a net loss of \$4.6 million for the second quarter of 2006, compared to a net loss of \$8.1 million for the second quarter of 2005. For the six months ended June 30, 2006, Targacept reported a net loss of \$9.9 million, compared to a net loss of \$15.5 million for the comparable period in 2005. As of June 30, 2006, cash, cash equivalents and short-term investments totaled \$63.5 million.

"We are pleased with the progress made in our collaboration with AstraZeneca and anticipate that the safety and product characterization studies of TC-1734 that it is conducting should be completed according to our previously disclosed timeframe," said J. Donald deBethizy, Ph.D., Targacept's President and Chief Executive Officer. "In addition to our collaboration with AstraZeneca, we are encouraged by the advancements we have made this year with our portfolio of NNR-selective product candidates. We expect to initiate clinical development of TC-2216, a novel product candidate that has shown promise in a number of therapeutic areas where there is significant unmet need, later this year."

Recent Highlights:

Collaboration with AstraZeneca

• AstraZeneca continued to progress its safety and product characterization studies of TC-1734 (AZD3480). In an annual business review presentation made in June, AstraZeneca's Vice President for Clinical Neuroscience commented that this product candidate "continues to show great promise as a treatment for cognitive dysfunction." He also noted that it remains AstraZeneca's intent to develop TC-1734 (AZD3480) initially for the indications of Alzheimer's disease and cognitive deficits in schizophrenia.

Internal Product Development Pipeline

- Resumed a Phase I multiple rising dose clinical trial of TC-2696, Targacept's product candidate for acute post-operative pain.
- Advanced late preclinical product candidates TC-2216, a novel compound that has shown positive activity in models of depression, anxiety and
 obesity, and TC-5619, a novel compound selective for the alpha7 NNR, toward the planned initiation of Phase I clinical development in 2H06 and
 1H07, respectively.
- Completed the dosing phase of Targacept's ongoing Phase II trial of mecamylamine hydrochloride as an add-on therapy for depression in August. Targacept believes that the results of the trial, which are expected to be available in the fourth quarter of 2006, may provide valuable insights that can be applied to the development of TC-2216.

Corporate Developments

• Initiated innovative research in collaboration with the California Institute of Technology and the University of Colorado at Boulder on NNR-based approaches to smoking cessation. This research is being supported by a grant from the National Institute on Drug Abuse, part of the National Institutes of Health.

- Amended Targacept's equipment financing facility to provide \$2.0 million in additional borrowing capacity available before the end of June 2007.
- Honored by the North Carolina Council for Entrepreneurial Development for "Deal of the Year" for public companies in a ceremony in Durham, North Carolina

Financial Results

Targacept reported a net loss of \$4.6 million for the second quarter of 2006, compared to a net loss of \$8.1 million for the second quarter of 2005. Targacept's net loss for both periods reflected its adoption of Statement of Financial Accounting Standard No. 123(R), relating to stock-based compensation expense, effective January 1, 2005. Targacept had non-cash, stock-based compensation expense of \$158,000 for the second quarter of 2006 and \$107,000 for the second quarter of 2005.

Revenue totaled \$589,000 for the second quarter of 2006, compared to \$300,000 for the comparable period in 2005. This increase was principally due to the recognition of \$313,000 in revenue received under Targacept's collaboration agreement with AstraZeneca in the 2006 period. For the six months ended June 30, 2006, Targacept reported revenue of \$1.2 million, compared to \$603,000 for the comparable period in 2005.

Research and development expense totaled \$4.6 million for the second quarter of 2006, compared to \$7.3 million for the comparable period in 2005. Research and development expense for the 2006 period reflected a decrease of \$2.3 million in spending relating to TC-1734 (AZD3480) as a result of the assumption by AstraZeneca of development costs under the collaboration agreement and a decrease of \$561,000 in spending relating to TC-2696 due to the temporary suspension of the ongoing Phase I clinical trial of that product candidate. These expense reductions were partially offset by increased spending to progress TC-2216 and TC-5619, Targacept's most advanced preclinical product candidates, in preparation for the planned initiation of clinical development, increased salary and benefit expense for research and development personnel and increased third-party service, supply and infrastructure costs in connection with the ongoing preclinical research collaboration with AstraZeneca. Research and development expense was \$9.4 million for the six months ended June 30, 2006, compared to \$12.4 million for the comparable period in 2005.

General and administrative expense totaled \$1.3 million for the second quarter of both 2006 and 2005 and \$2.5 million for both the six months ended June 30, 2006 and 2005.

Interest income totaled \$722,000 for the second quarter of 2006, compared to \$306,000 for the comparable period in 2005. The increase was principally attributable to a substantially higher average cash balance during the 2006 period following completion of Targacept's initial public offering in April 2006. Interest income was \$1.0 million for the six months ended June 30, 2006, compared to \$598,000 for the comparable period in 2005.

Conference Call

As previously announced, Targacept will be hosting a conference call and webcast today, August 9, 2006, at 5:00 p.m. ET. A live webcast of the conference call will be available on the Investor Relations section of Targacept's website at www.targacept.com. An archived version of the webcast will also be available on the Event Calendar page of the Investor Relations section of Targacept's website for at least two weeks following the call.

The conference call may be accessed by dialing 866-700-7477 for domestic participants and 617-213-8840 for international callers (reference passcode 24521695). A replay of the conference call may be accessed through August 23, 2006 by dialing 888-286-8010 for domestic callers and 617-801-6888 for international callers (reference passcode 43487609).

About Targacept

Targacept is a biopharmaceutical company engaged in the design, discovery and development of a new class of drugs to treat multiple diseases and disorders of the central nervous system by selectively targeting neuronal nicotinic receptors, or NNRs. NNRs are found on nerve cells throughout the nervous system and serve as key regulators of nervous system activity. Targacept's product candidates are designed to selectively target specific NNR subtypes to promote therapeutic effects and limit adverse side effects. Targacept has a marketed product, Inversine® (mecamylamine hydrochloride), product candidates in development for Alzheimer's disease and cognitive deficits in schizophrenia, pain and depression, and multiple preclinical programs. Targacept's news releases are available on its website at www.targacept.com.

Forward-Looking Statements

Any statements in this press release about expectations, plans and prospects for Targacept, Inc., including, without limitation, statements regarding the timing for completion of additional safety and product characterization studies of TC-1734 (AZD3480) conducted by AstraZeneca, the progress, timing and scope of research and development programs and related regulatory filings and clinical trials, and all other statements that are not purely historical in nature, constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Without limiting the foregoing, the words "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "promise," "continue," "ongoing" and similar expressions are intended to identify forward-looking statements. Actual results may differ materially from those expressed or implied by forward-looking statements as a result of various important factors, including our critical accounting policies and risks and uncertainties relating to: the amount and timing of resources that AstraZeneca devotes to the conduct of its safety and product characterization studies of TC-1734 (AZD3480) and to any subsequent development of TC-1734 (AZD3480); AstraZeneca's right to terminate our collaboration agreement based on the results of the safety and product characterization studies and all other available information with respect to TC-1734 (AZD3480); AstraZeneca's right in the future to terminate the preclinical research collaboration that we and AstraZeneca are currently conducting prior to the end of the planned four-year term; the results of nonclinical studies and assessments and clinical trials with respect to our current and future product candidates in development; the conduct of clinical trials, including the performance of third parties that we engage to execute the trials and difficulties or delays in the completion of patient enrollment or data analysis; and the timing and success of submission, acceptance and approval of regulatory filings. These and other risks and uncertainties are described in greater detail under the heading "Risk Factors" in our most recent Quarterly Report on Form 10-Q and in other filings that we make 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. We caution you not to place undue reliance on any forward-looking statement.

In addition, any forward-looking statements in this release represent our views only as of the date of this release and should not be relied upon as representing our views as of any subsequent 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, whether as a result of new information, future events or otherwise, 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.

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TARGACEPT, INC

Condensed Statements of Operations

(Unaudited, in thousands, except share and per share amounts)

		Three Months Ended			Six Months Ended			
		June 30, 2006		e 30, 005	June 30, 2006		June 30, 2005	
Total operating revenues	\$	589	\$	300	\$	1,195	603	
Operating expenses								
Research and development		4,595		7,288		9,356	12,382	
General and administrative		1,331		1,253		2,499	2,462	
Transaction charge		_		_		_	1,635	
Cost of product sales		(22)		98		169	120	
Total operating expenses		5,904		8,639		12,024	16,599	
Operating loss		(5,315)	(3,339)		(10,829)	(15,996)	
Interest income (expense), net		698		234		974	453	
Net loss		(4,617)	(3,105)		(9,855)	(15,543)	
Preferred stock accretion		(529)	(2,809)		(3,333)	(5,610)	
Net loss attributable to common stockholders	\$	(5,146)	\$ (1	0,914)	\$	(13,188)	\$ (21,153)	
Net loss per share attributable to common stockholders—basic and diluted	\$	(0.33)	\$ (41.80)	\$	(1.65)	\$ (81.32)	
Weighted average common shares outstanding- basic and diluted	15,5	595,020	26	1,095	7,	976,519	260,140	

TARGACEPT, INC

Condensed Balance Sheets

(Unaudited, in thousands)

	June 30, 2006	Dece	ember 31, 2005 (1)
Cash, cash equivalents and short-term investments	\$ 63,489	\$	24,851
Prepaid expenses and other current assets	2,387		890
Property and equipment, net	2,153		1,747
Other assets, net	494		513
Total assets	\$ 68,523	\$	28,001
Current liabilities	\$ 6,741	\$	5,210
Noncurrent liabilities	9,390		1,644
Redeemable convertible preferred stock	_		183,628
Total stockholders' equity (deficit)	52,392		(162,481)
Total liabilities, redeemable preferred stock and stockholders' equity (deficit)	\$ 68,523	\$	28,001

⁽¹⁾ Condensed balance sheet at December 31, 2005 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements.