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): November 6, 2008

TARGACEPT, INC.
(Exact name of registrant as specified in its charter)

Delaware	**000-51173**	**56-2020050**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(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)

☐ 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 November 6, 2008, Targacept, Inc. issued a press release relating to its financial results for the third quarter ended September 30, 2008. 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 (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	Description
99.1	Press release dated November 6, 2008

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: November 6, 2008

/s/ Alan A. Musso

Alan A. Musso

Vice President, Chief Financial Officer and Treasurer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Press release dated November 6, 2008

Exhibit 99.1

Targacept Reports Third Quarter 2008 Financial Results

Winston-Salem, North Carolina, November 6, 2008 – Targacept, Inc. (NASDAQ: TRGT), a clinical-stage biopharmaceutical company developing a new class of drugs known as NNR Therapeutics™, today reported its financial results for the third quarter ended September 30, 2008.

Targacept reported a net loss of $7.6 million for the third quarter of 2008, compared to a net loss of $7.4 million for the third quarter of 2007. For the nine months ended September 30, 2008, Targacept reported a net loss of $20.2 million, compared to a net loss of $20.4 million for the corresponding period in 2007. As of September 30, 2008, cash, cash equivalents and short-term investments totaled $93.7 million.

“In the third quarter, we continued to execute on our programs and build upon our leadership position in the NNR field. We are fortunate to have a broad pipeline of NNR Therapeutics, as well as deals with two global pharmaceutical companies that support our research and development efforts and provide opportunities to capitalize on our proven drug discovery abilities,” said J. Donald deBethizy, Ph.D., Targacept’s President and Chief Executive Officer. “We look forward to the results of the Phase 2b clinical trial of AZD3480 in cognitive dysfunction in schizophrenia and AstraZeneca’s decisions regarding the potential future development of AZD3480 expected later this year.”

Update on AZD3480 Status

On September 15, 2008, Targacept and AstraZeneca announced top-line results from a Phase 2b study of AZD3480 (TC-1734) in mild to moderate Alzheimer’s disease, known as the Sirocco trial. The Sirocco trial was the first time AZD3480 has been studied in patients with Alzheimer’s disease, and Targacept and AstraZeneca plan to present and publish more detailed results from the trial over the coming months.

Since September 15, additional analysis of data from the Sirocco trial has been completed and Targacept and AstraZeneca have met with four internationally-recognized leaders in Alzheimer’s disease research to review the results. The consensus feedback received was that the results on key secondary endpoints of the Sirocco trial were encouraging and could support additional clinical development of AZD3480 in Alzheimer’s disease. Targacept and AstraZeneca are currently considering the additional analysis and the input received in evaluating potential next steps with regard to the development of AZD3480 in Alzheimer’s disease.

Top-line results from a separate double blind, placebo controlled Phase 2b trial of AZD3480 in cognitive dysfunction in schizophrenia, which is known as the HALO trial and has enrolled over 400 subjects, are expected in December 2008.

Under the terms of the parties’ collaboration agreement, AstraZeneca has the right to determine whether to conduct any further development of AZD3480. A decision by AstraZeneca with respect to potential further development of AZD3480 in one or both of Alzheimer’s disease and cognitive dysfunction in schizophrenia is expected by the end of the year, following the availability of top-line results from the HALO trial.

Recent Highlights

AstraZeneca Collaboration and Cognitive Disorders

- Enrolled 21 of an expected 24 subjects into a Phase 2 exploratory clinical trial of AZD3480 (TC-1734) in adults with attention deficit/hyperactivity disorder, or ADHD, as of November 4, 2008;
- Completed dosing in a Phase 1 multiple rising dose clinical trial of TC-5619, a highly-selective alpha7 NNR-targeted product candidate planned for development for cognitive dysfunction in schizophrenia and potentially one or more other conditions characterized by cognitive impairment;

TC-5214

- Enrolled 200 subjects into the open label phase of a Phase 2b clinical trial of TC-5214, a broad spectrum NNR antagonist in development as an augmentation therapy for major depressive disorder, as of November 4, 2008; the trial is expected to enroll approximately 560 subjects into the open label phase, of which approximately 220 subjects are expected to qualify for the trial's double blind, placebo controlled phase;

GlaxoSmithKline Alliance and Pain

- Initiated dosing in a Phase 1 multiple rising dose clinical trial of TC-6499, an alpha4beta2 NNR-targeted product candidate planned for development in neuropathic pain; the trial is expected to be completed by the end of the year;
- Achieved preclinical milestone events in Targacept's smoking cessation and pain programs in October, triggering $1.0 million in payments under the alliance agreement with GlaxoSmithKline; and

Corporate Developments

- Received, together with GlaxoSmithKline and AstraZeneca, the 2008 Deal of Distinction Award from the Licensing Executive Society (LES) Health Care Sector.

Financial Results

Targacept reported a net loss of $7.6 million for the third quarter of 2008, compared to a net loss of $7.4 million for the third quarter of 2007. For the nine months ended September 30, 2008, Targacept reported a net loss of $20.2 million, compared to a net loss of $20.4 million for the corresponding period in 2007. Operating revenues increased in each of the 2008 periods compared to the corresponding 2007 periods, primarily as a result of revenues derived from Targacept's collaboration with AstraZeneca and alliance with GlaxoSmithKline. The increases in operating revenues for both 2008 periods were offset by increased research and development expenses. The results included non-cash, stock-based compensation expense of $493,000 and $414,000 for the third quarter of 2008 and 2007, respectively, and $1.5 million and $2.3 million for the nine months ended September 30, 2008 and 2007, respectively.

Net operating revenues totaled $4.1 million for the third quarter of 2008, compared to $3.1 million for the third quarter of 2007. The higher net operating revenues were principally attributable to an increase of $586,000 in milestones and license fees from collaborations, which reflects greater recognition of deferred license fee revenue from payments received from GlaxoSmithKline in July 2007 and from GlaxoSmithKline and AstraZeneca in the fourth quarter of 2007, and to an increase of $361,000 in

collaboration research and development revenue, which reflects additional services rendered by Targacept in its preclinical research collaboration with AstraZeneca.

For the nine months ended September 30, 2008, net operating revenues totaled $13.6 million, compared to $8.0 million for the corresponding period in 2007. The higher net operating revenues were principally attributable to an increase of $3.4 million in milestones and license fees from collaborations and an increase of $2.1 million in collaboration research and development revenue. The increase in milestones and license fees from collaborations resulted principally from the achievement of milestone events related to progress in Targacept's smoking cessation program under its agreement with GlaxoSmithKline and to the progression of a product candidate in the preclinical research collaboration with AstraZeneca resulting in $700,000 in aggregate payments to Targacept, as well as recognition of an additional $2.7 million of deferred license fee revenue from payments received from GlaxoSmithKline in July 2007 and from GlaxoSmithKline and AstraZeneca in the fourth quarter of 2007.

Research and development expenses totaled $10.7 million for the third quarter of 2008, compared to $9.4 million for the third quarter of 2007. The higher research and development expenses were principally attributable to an increase of $1.2 million in costs for third-party preclinical research and development services incurred primarily in connection with the research collaboration with AstraZeneca and programs in the therapeutic focus areas of the alliance with GlaxoSmithKline. The higher research and development expenses also reflected an increase of $160,000 in costs for third-party research and development services incurred for clinical-stage product candidates. For the 2008 period, these third-party costs totaled $3.3 million and were incurred principally for TC-5214, TC-5619 and TC-6499.

For the nine months ended September 30, 2008, research and development expenses totaled $30.3 million, compared to $24.7 million for the corresponding period in 2007. The higher research and development expenses were principally attributable to an increase of $2.8 million in salary and benefit expenses, occupancy costs and supply and infrastructure costs resulting from an increased number of research and development personnel and an increase of $2.1 million in costs for third-party preclinical research and development services incurred primarily in connection with the research collaboration with AstraZeneca and programs in the therapeutic focus areas of the alliance with GlaxoSmithKline. The higher research and development expenses also reflected an increase of $769,000 in costs for third-party research and development services incurred for clinical-stage product candidates. For the 2008 period, these third-party costs totaled $8.3 million and were incurred principally for TC-5214, TC-5619 and TC-6499.

General and administrative expenses totaled $1.4 million for the third quarter 2008, compared to $1.9 million for the third quarter of 2007. The lower general and administrative expenses were principally attributable to a reduction of $355,000 in compensation-related expenses, primarily as a result of reduced accrual for employee bonuses.

For the nine months ended September 30, 2008, general and administrative expenses totaled $5.0 million, compared to $5.9 million for the corresponding period in 2007. The lower general and administrative expenses were primarily attributable to reduced stock-based compensation expense, a non-cash item, resulting from compensatory stock option grants partially offset by greater occupancy costs, compensation-related expenses and recruitment costs. The increase in occupancy costs, compensation-related expenses and recruitment costs for the nine-month period in 2008 was partially offset by reduced accrual for employee bonuses.

Interest income, net of interest expense, totaled $514,000 for the third quarter of 2008, compared to $1.0 million for the third quarter of 2007. For the nine months ended September 30, 2008, interest income, net of interest expense, totaled $2.1 million, compared to $2.7 million for the corresponding period in 2007. The decrease for both 2008 periods was principally attributable to lower short-term interest rates and

increased indebtedness under loan facilities used to finance equipment, furnishings, software and other fixed assets.

Update to 2008 Financial Guidance

Targacept also updated its financial guidance for 2008. Based on current operating plans, Targacept now expects net operating revenues for the year ending December 31, 2008 to be in the range of $18 million to $20 million, operating expenses for the year ending December 31, 2008 to be in the range of $50 million to $53 million and to have a balance of at least $82 million in cash, cash equivalents and short-term investments at December 31, 2008. This financial guidance includes both cash and non-cash revenue and expense items and does not include amounts that Targacept is entitled to receive from AstraZeneca or GlaxoSmithKline if milestone events are achieved for AZD3480 (TC-1734) or TC-6499 in 2008.

Conference Call

As previously announced, Targacept will be hosting a conference call and webcast today, November 6, 2008, at 5:00 p.m. Eastern Standard Time. A live webcast of the conference call will be available on the Investor Relations page of Targacept's website, www.targacept.com. 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.

The conference call may be accessed by dialing 866-578-5801 for domestic participants and 617-213-8058 for international callers (reference passcode 91046070). A replay of the conference call may be accessed at least through November 20, 2008 by dialing 888-286-8010 for domestic callers and 617-801-6888 for international callers (reference passcode 42586408).

About Targacept

Targacept is a clinical-stage biopharmaceutical company that discovers and develops NNR Therapeutics™, a new class of drugs for the treatment of central nervous system diseases and disorders. Targacept's product candidates selectively modulate neuronal nicotinic receptors that serve as key regulators of the nervous system to promote therapeutic effects and limit adverse side effects. Targacept has product candidates in development for Alzheimer's disease, cognitive dysfunction in schizophrenia, pain and depression, as well as multiple preclinical programs. Targacept also has a cognition-focused collaboration with AstraZeneca and a strategic alliance with GlaxoSmithKline. Targacept's news releases are available on its website at www.targacept.com.

Forward-Looking Statements

Statements in this press release that are not purely historical in nature constitute "forward-looking statements" made under the provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, statements regarding the progress or scope of the research and development of Targacept's product candidates, such as the number of subjects to be enrolled in or the timing for initiation or completion of any of its clinical trials, the indication for which any of its product candidates may be developed, or the timing for reporting of results from AstraZeneca's Phase 2b clinical trial of AZD3480 (TC-1734) in cognitive dysfunction in schizophrenia or for a decision by AstraZeneca whether to conduct additional clinical development of AZD3480 (TC-1734), and statements regarding Targacept's plans, expectations or future operations, financial position, revenues, costs or expenses. Actual results may differ materially from those expressed or implied by forward-looking statements 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 and its alliance with GlaxoSmithKline; the amount and timing of

resources that AstraZeneca devotes to completion of its Phase 2b clinical trial of AZD3480 (TC-1734) in cognitive dysfunction in schizophrenia; the significant control that AstraZeneca has over the development of AZD3480 (TC-1734); the risk that successful results in clinical trials of AZD3480 (TC-1734) in a particular condition characterized by one degree of cognitive impairment may not be predictive of successful results in clinical trials of AZD3480 (TC-1734) in a condition characterized by more severe cognitive impairment or in cognitive impairment resulting from a different condition; the results of clinical trials and non-clinical studies and assessments of Targacept's product candidates; the conduct of such trials, studies and assessments, including the performance of third parties engaged to execute them and difficulties or delays in the completion of subject 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 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.

Contacts:
Alan Musso, VP and CFO
Targacept, Inc.
Tel: (336) 480-2186
Email: alan.musso@targacept.com

Michelle Linn
Linnden Communications
Tel: (508) 362-3087
Email: michelle@linndencom.com

TARGACEPT, INC

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2008	2007	2008	2007
Net operating revenues	$ 4,135	$ 3,126	$ 13,567	$ 8,019
Operating expenses				
Research and development	10,717	9,436	30,316	24,706
General and administrative	1,397	1,920	4,982	5,886
Cost of product sales	183	173	565	544
Total operating expenses	12,297	11,529	35,863	31,136
Operating loss	(8,162)	(8,403)	(22,296)	(23,117)
Interest income, net	514	1,032	2,064	2,690
Net loss	$ (7,648)	$ (7,371)	$ (20,232)	$ (20,427)
Basic and diluted net loss per share	$ (0.31)	$ (0.37)	$ (0.82)	$ (1.05)
Weighted average common shares outstanding - basic and diluted	24,945,523	20,096,528	24,563,371	19,463,627

TARGACEPT, INC

Unaudited Condensed Balance Sheets
(in thousands)

	September 30, 2008	December 31, 2007
Cash, cash equivalents and short-term investments	$ 93,748	$ 87,040
Collaboration receivables and other current assets	4,923	5,373
Property and equipment, net	6,775	6,115
Other assets, net	409	437
Total assets	$ 105,855	$ 98,965
Current liabilities	$ 14,233	$ 15,196
Noncurrent liabilities	29,365	32,185
Total stockholders' equity	62,257	51,584
Total liabilities and stockholders' equity	$ 105,855	$ 98,965