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): February 11, 2010

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

	ck 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 isions:
	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))
\neg	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 February 11, 2010, Targacept, Inc. issued a press release announcing its financial results for the fourth quarter and year ended December 31, 2009. 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:

Exhib

Number Description

99.1 Press release dated February 11, 2010

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: February 11, 2010

/s/ Alan A. Musso

Alan A. Musso

Vice President, Chief Financial Officer and Treasurer

EXHIBIT INDEX

Exhibit Number

Description

99.1 Press release dated February 11, 2010

Targacept Reports Fourth Quarter and 2009 Financial Results

Winston-Salem, North Carolina, February 11, 2010 – Targacept, Inc. (NASDAQ: <u>TRGT</u>), a clinical-stage biopharmaceutical company developing novel NNR TherapeuticsTM, today reported its financial results for the fourth quarter and year ended December 31, 2009.

Targacept reported a net loss of \$26.4 million for the fourth quarter of 2009, compared to a net loss of \$5.4 million for the fourth quarter of 2008. For the year ended December 31, 2009, Targacept reported a net loss of \$39.4 million, compared to a net loss of \$25.7 million for 2008. The increased net loss for the fourth quarter and year ended December 31, 2009 was primarily due to a \$16.0 million license fee obligation triggered by Targacept's right to receive a \$200.0 million upfront payment upon the December 2009 effectiveness of its collaboration and license agreement with AstraZeneca AB. As of December 31, 2009, cash, cash equivalents and short-term investments totaled \$111.1 million. In January 2010, after the end of its fiscal year, Targacept received the upfront payment from AstraZeneca.

"2009 was a breakthrough year for Targacept, highlighted by highly favorable Phase 2b clinical trial results of our investigational product TC-5214 that showed its potential as a new mechanistic approach for the treatment of depression for the millions of patients who do not respond well to first-line antidepressant therapy," said J. Donald deBethizy, Ph.D., Targacept's President and Chief Executive Officer. "We enter 2010 with an unmatched portfolio of NNR Therapeutics and a financial position solidified by our recent equity financing and our new collaboration agreement with AstraZeneca. The breadth and diversification in our clinical-stage pipeline is evident, with five distinct NNR Therapeutics in development in therapeutic areas for which the need is great and existing treatments are inadequate."

2009 and Recent Highlights; Program Updates:

TC-5214 and 2009 Collaboration with AstraZeneca

- Targacept reported highly statistically significant results in favor of TC-5214 on the primary outcome measure and all secondary outcome measures in a Phase 2b clinical trial as an add-on therapy in subjects with major depressive disorder who did not respond adequately to first-line treatment with a commonly prescribed antidepressant;
- Targacept entered into a collaboration and license agreement with AstraZeneca for the global development and commercialization of TC-5214
 pursuant to which Targacept received an upfront payment of \$200 million and is eligible to receive up to an additional \$1.04 billion if specified
 development, regulatory, first commercial sale and sales related milestones are achieved, as well as significant stepped double-digit royalties on any
 net sales worldwide;
- Following a February 2010 meeting with FDA, Targacept continues to expect Phase 3 clinical development of TC-5214 to initiate in mid 2010;

2005 Collaboration with AstraZeneca (Cognitive Disorders)

TC-5619

• Targacept initiated a Phase 2 clinical proof of concept study of TC-5619, a product candidate highly selective for the alpha7 NNR, in cognitive dysfunction in schizophrenia in the fourth quarter of 2009; following the completion of the ongoing Phase 2 study, AstraZeneca would have the right to license TC-5619;

AZD3480 (TC-1734)

- Targacept reported statistically significant top-line results in favor of 50mg AZD3480 on the primary outcome measure and a number of secondary outcome measures in a Phase 2 clinical trial in adults with attention deficit/hyperactivity disorder, or ADHD, and received a \$10 million milestone payment from AstraZeneca;
- Targacept continues to expect AstraZeneca to conduct additional Phase 2b development of AZD3480 as a treatment for ADHD, with the next clinical trial anticipated to be in adults with ADHD and initiated in mid 2010;

AZD1446 (TC-6683)

AstraZeneca is currently conducting a number of clinical trials of AZD1446, including, among others, a safety and tolerability study as an add-on
treatment to donepezil in subjects with Alzheimer's disease and a Phase 2 study in adults with ADHD that are expected to be completed in the
second half of 2010;

TC-6987

• Targacept is currently conducting a Phase 1 clinical trial of TC-6987, a product candidate that modulates the activity of the a7 NNR and is under consideration for further development in various target indications;

GlaxoSmithKline Alliance

 Targacept received cumulative payments of \$2.5 million during 2009 for achievement of milestone events in preclinical programs in therapeutic focus areas of the alliance;

Scientific Leadership

- Targacept scientists authored 13 publications in leading scientific journals discussing research findings and new learning regarding the role of
 specific NNR subtypes in inflammatory and neuroprotective pathways, as well as the design of novel NNR Therapeutics and their potential
 application to a wide variety of diseases such as Alzheimer's disease, diabetes, depression and schizophrenia;
- One such paper, regarding the potential of targeting the alpha7 NNR to treat diabetes, was named #1 in the Pharmacology and Drug Discovery
 Hidden Jewels Top 10 and was the #1 most viewed in Pharmacology and Drug Discovery of 'F1000 Biology' the expert guide to the most
 important advances in biology;

Targacept was awarded two grants from The Michael J. Fox Foundation for Parkinson's Research, one to fund research to test the potential of NNR
Therapeutics to address Levodopa-induced abnormal involuntary movements, known as dyskinesias, and the other to fund research to identify
biomarkers relevant to Parkinson's disease;

Corporate Developments and Recognition

- Targacept completed a public offering of 2.2 million shares of common stock at a price to the public of \$21.00 per share, generating net proceeds to Targacept of \$44.4 million, in October 2009;
- Targacept was added to the NASDAQ Biotechnology Index in November 2009; and
- Targacept was recognized as one of the Top 30 Companies in The Scientist magazine's "Best Places to Work in Industry" in 2009 for the third consecutive year.

Financial Results

Targacept reported a net loss of \$26.4 million for the fourth quarter of 2009, compared to a net loss of \$5.4 million for the fourth quarter of 2008. For the year ended December 31, 2009, Targacept reported a net loss of \$39.4 million, compared to a net loss of \$25.7 million for 2008. The increased net loss for the fourth quarter and year ended December 31, 2009 was primarily due to a \$16.0 million license fee payable to the University of South Florida Research Foundation, or USFRF. The amount payable recorded by Targacept reflects the portion of the \$200.0 million upfront payment received from AstraZeneca that is payable to USFRF based on the terms of a license agreement. These results also include non-cash, stock-based compensation charges of \$755,000 and \$546,000 for the fourth quarters of 2009 and 2008, respectively, and \$2.5 million and \$2.1 million for the years ended December 31, 2009 and 2008, respectively.

Net operating revenues totaled \$3.4 million for the fourth quarter of 2009, compared to \$6.5 million for the fourth quarter of 2008. The lower net operating revenues were primarily attributable to a decrease of \$3.0 million in milestone payments received from collaborations. In the fourth quarter of 2008, Targacept recognized a \$2.0 million payment received from AstraZeneca upon initiation of Phase 1 clinical development of AZD1446 and \$1.0 million in aggregate payments received from GlaxoSmithKline upon the achievement of milestone events related to progress in preclinical programs.

For the year ended December 31, 2009, net operating revenues totaled \$25.1 million, compared to \$20.1 million for 2008. The higher net operating revenues were primarily attributable to an increase of \$8.8 million in milestones and license fees from collaborations, partially offset by a decrease of \$3.7 million in collaboration research and development revenue. The increase in milestones and license fees from collaborations was principally attributable to a \$10.0 million payment received from AstraZeneca based on the achievement of the objective in the completed Phase 2 trial of AZD3480 in adults with ADHD and the timing of the achievement of other milestone events under our 2005 collaboration agreement with AstraZeneca and under our strategic alliance agreement with GlaxoSmithKline. The decrease in collaboration research and development revenue reflected reduced services rendered by Targacept in its preclinical research collaboration with AstraZeneca as a result of progress previously made towards meeting the objectives of the research plan.

Research and development expenses totaled \$10.4 million for the fourth quarter of 2009, compared to \$10.7 million for the fourth quarter of 2008. The lower research and development expenses for the 2009 period were primarily attributable to a decrease of \$319,000 in costs incurred for third-party research and

development services in connection with our clinical-stage product candidates. For the 2009 period, third-party costs related to our clinical-stage product candidates totaled \$2.5 million and were incurred principally with respect to preparatory activities for Phase 3 development of TC-5214 and activities with respect to the Phase 2 clinical proof of concept trial of TC-5619 in cognitive dysfunction in schizophrenia and the Phase 1 clinical trial of TC-6987.

For the year ended December 31, 2009, research and development expenses totaled \$40.2 million, compared to \$41.0 million for 2008. The lower research and development expenses for the 2009 period were primarily attributable to a decrease of \$908,000 in costs incurred for third-party research and development services in connection with our clinical-stage product candidates. This decrease was partially offset by an increase of \$310,000 in costs incurred for third-party research and development services in connection with our preclinical programs, primarily in the therapeutic focus areas of our alliance with GlaxoSmithKline. For the 2009 period, third-party costs in connection with our clinical-stage product candidates totaled \$10.3 million and were primarily incurred for TC-5214, TC-5619 and TC-6987.

General and administrative expenses totaled \$3.7 million for the fourth quarter of 2009, compared to \$1.5 million for the fourth quarter of 2008. For the year ended December 31, 2009, general and administrative expenses totaled \$8.2 million, compared to \$6.5 million for 2008. The higher general and administrative expenses for both 2009 periods were principally attributable to increased employee compensation and related expenses primarily as a result of a special bonus paid to employees in December 2009 and increased legal and professional fees associated with the December 2009 collaboration and license agreement with AstraZeneca.

Interest income, net of interest expense, totaled \$210,000 for the fourth quarter of 2009, compared to \$419,000 for the fourth quarter of 2008. For the year ended December 31, 2009, interest income, net of interest expense, totaled \$833,000, compared to \$2.5 million for 2008. The decrease for both 2009 periods was primarily attributable to lower short-term interest rates.

2010 Financial Guidance

Based on current operating plans, including expectations related to Targacept's two collaborations with AstraZeneca and its alliance with GlaxoSmithKline, Targacept expects net operating revenues for the year ending December 31, 2010 to be in the range of \$80 million to \$90 million, operating expenses for the year ending December 31, 2010 to also be in the range of \$80 million to \$90 million, and to have a balance of at least \$230 million in cash, cash equivalents and investments at December 31, 2010. This financial guidance includes both cash and non-cash revenue and expense items. In addition, Targacept expects that its current cash resources will be sufficient to meet its operating requirements at least through the end of 2013.

Conference Call

As previously announced, Targacept will be hosting a conference call and webcast today, February 11, 2010, at 5:00 p.m. Eastern Standard Time. The conference call may be accessed by dialing 800-901-5259 for domestic participants and 617-786-4514 for international callers (reference passcode 38398075). A replay of the conference call may be accessed from approximately 8:00 p.m. Eastern Standard Time on February 11, 2010 through February 25, 2010 by dialing 888-286-8010 for domestic callers and 617-801-6888 for international callers (reference passcode 37258517).

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 a clinical-stage biopharmaceutical company with a vision of building health and restoring independence for patients. Targacept has leveraged its leadership position in NNR research to build a diverse pipeline of NNR Therapeutics™ in development to treat an array of central nervous system diseases and disorders, including major depressive disorder, attention deficit/hyperactivity disorder, Alzheimer's disease and cognitive dysfunction in schizophrenia. In addition, Targacept has alliances with the global pharmaceutical companies AstraZeneca and GlaxoSmithKline. Targacept's news releases are available on its website at www.targacept.com.

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: the progress or scope of development of TC-5214, AZD3480, AZD1446, TC-5619, TC-6987 or any of Targacept's other product candidates or programs, such as the size, design, population, conduct, duration or objective of any clinical trial, the timing for initiation or completion of any clinical trial, for availability of results from any clinical trial, for submission or approval of any regulatory filing or for meeting with regulatory authorities, or the indication(s) for which a product candidate may be developed; the competitive position of any particular Targacept product candidate or the commercial opportunity in any particular indication; any payments that AstraZeneca or GlaxoSmithKline may make to Targacept; or 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 the risks and uncertainties relating to: Targacept's dependence on the success of its collaborations with AstraZeneca; the significant control that AstraZeneca has over the development of TC-5214, AZD3480 and AZD1446, including as to the conduct of any further development of AZD3480 in ADHD or AZD1446 in Alzheimer's disease and the scope and design of any future clinical trial of AZD3480 or AZD1446; the conduct and results of clinical trials and non-clinical studies and assessments of TC-5214, AZD3480, AZD1446, TC-5619, TC-6987 and Targacept's other product candidates, 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; and the timing of discussions with regulatory authorities 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, in its subsequently filed Quarterly Reports on Form 10-Q 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 is a trademark 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 December 31,				Year Ended December 31,		
		2009 2008			2009		2008	
Net operating revenues	\$	3,428	\$	6,518	\$	25,062	\$	20,085
Operating expenses:								
Research and development		10,360		10,665		40,179		40,981
General and administrative		3,690		1,517		8,167		6,499
License fees		16,000		_		16,350		_
Cost of product sales		_		184		691		749
Total operating expenses		30,050		12,366		65,387		48,229
Operating loss		(26,622)		(5,848)		(40,325)		(28,144)
Interest income, net		210		419		833		2,483
Loss before income taxes		(26,412)		(5,429)		(39,492)		(25,661)
Income tax benefit		5		_		88		_
Net loss	\$	(26,407)	\$	(5,429)	\$	(39,404)	\$	(25,661)
Basic and diluted net loss per share	\$	(0.96)	\$	(0.22)	\$	(1.54)	\$	(1.04)
Weighted average common shares outstanding - basic and diluted	2	7,465,720	24	1,964,373	2	5,636,420	2	24,664,169

TARGACEPT, INC

Unaudited Condensed Balance Sheets (in thousands)

	December 31, 2009	December 31, 2008
Cash, cash equivalents and short-term investments	\$ 111,066	\$ 88,363
Collaboration receivables and other current assets	203,363	3,603
Property and equipment, net	4,783	6,401
Other assets, net	167	184
Total assets	\$ 319,379	\$ 98,551
Current liabilities	\$ 101,160	\$ 13,792
Noncurrent liabilities	149,228	27,386
Total stockholders' equity	68,991	57,373
Total liabilities and stockholders' equity	\$ 319,379	\$ 98,551