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): December 8, 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**	**27101**
(Address of principal executive offices)	**(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 8.01 Other Events.

On December 8, 2008, Targacept, Inc. issued a joint press release with its strategic collaborator AstraZeneca announcing top-line results from the Phase 2b clinical trial of AZD3480 (TC-1734) in cognitive dysfunction in schizophrenia conducted by AstraZeneca and a press release announcing a conference call to be held by Targacept to discuss the results and provide an update regarding Targacept's business outlook and announcing updated guidance. The full texts of the press releases are attached as Exhibits 99.1 and 99.2 to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
99.1	Press release dated December 8, 2008 announcing top-line results
99.2	Press release dated December 8, 2008 announcing conference call and updating guidance

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: December 8, 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 December 8, 2008 announcing top-line results
99.2	Press release dated December 8, 2008 announcing conference call and updating guidance

Exhibit 99.1

AstraZeneca and Targacept Announce Top-Line Results
from Phase IIb Study of AZD3480 in Cognitive Dysfunction in Schizophrenia

London, UK and Winston-Salem, NC—December 8, 2008—AstraZeneca (NYSE: AZN) and Targacept, Inc. (NASDAQ: TRGT) today announced top-line results from a Phase IIb clinical trial of AZD3480 (TC-1734) conducted by AstraZeneca in cognitive dysfunction in schizophrenia (CDS), known as the HALO trial.

AZD3480 did not meet the trial's criteria for statistical significance on the primary endpoints, improvement on various cognitive domains measured by the IntegNeuro computerized test battery. AZD3480 was generally well tolerated in the study. AstraZeneca and Targacept do not expect to progress AZD3480 into Phase III studies for CDS.

In addition to the HALO trial, AstraZeneca and Targacept previously announced top-line results from a Phase IIb study of AZD3480 in mild to moderate Alzheimer's disease, known as the Sirocco trial, and are currently evaluating AZD3480 in a Phase II exploratory study in attention deficit/hyperactivity disorder (ADHD) in adults. A decision by AstraZeneca with respect to potential further development of AZD3480 in Alzheimer's disease or ADHD is now expected in the first half of 2009, pending completion of the adult ADHD study and other ongoing evaluations.

"While this trial outcome did not meet our objectives, we continue to pursue medicines that target neuronal nicotinic receptors (NNRs) with Targacept to treat cognitive disorders," said Bob Holland, Vice President and Head of the Neuroscience Therapy Area, AstraZeneca.

Targacept and AstraZeneca also announced that the lead compound arising out of the parties' preclinical research collaboration is poised to enter the clinic. AstraZeneca plans by the end of 2008 to initiate a Phase I trial of AZD1446 (TC-6683), a product candidate selective for the alpha4beta2 NNR. Under the terms of the parties' collaboration agreement, AstraZeneca has agreed to make a $2.0 million milestone payment to Targacept.

"We are obviously disappointed that AZD3480 did not meet our goals in the HALO trial," commented J. Donald deBethizy, Ph.D., President and Chief Executive Officer of Targacept. "We thank AstraZeneca for its commitment to AZD3480 and its investment in this pioneering work in an emerging area considered to be critical in the treatment of patients with schizophrenia. We look forward to continuing our cognition-focused collaboration with AstraZeneca."

Study Design

The Phase IIb HALO trial was conducted by AstraZeneca under the terms of an exclusive global license and research collaboration agreement. The trial was a multi-center, randomized, double blind, placebo controlled, dose-finding study conducted at approximately 70 enrolling sites in the United States and Canada. Subjects (n = 445)

between 18 and 55 years of age who were active smokers and taking medication from the class of drugs known as atypical anti-psychotics were randomly assigned to one of three dose groups of AZD3480 or to placebo and dosed over a 12-week period. The primary endpoints of the trial were change from baseline after 12 weeks on various domains of cognition as measured by the IntegNeuro computerized test battery[1].

About Cognitive Dysfunction in Schizophrenia

Schizophrenia is a chronic, severe and disabling form of psychosis that, in addition to symptoms such as delusions and hallucinations, is often marked by impairments in cognitive functions such as attention, vigilance, memory and reasoning. These cognitive impairments play a primary role in the inability of schizophrenic patients to function normally. It has been estimated that there are 7.9 million schizophrenic patients in the world's seven major pharmaceutical markets and that the majority of all schizophrenic patients are cognitively impaired.

About AstraZeneca

AstraZeneca is a major international healthcare business engaged in research, development, manufacturing and marketing of prescription pharmaceuticals and supplier for healthcare services. AstraZeneca is one of the world's leading pharmaceutical companies with healthcare sales of US $29.55 billion and is a leader in gastrointestinal, cardiovascular, neuroscience, respiratory, oncology and infection product sales. AstraZeneca is listed in the Dow Jones Sustainability Index (Global) as well as the FTSE4Good Index. For more information about AstraZeneca, please visit: www.astrazeneca.com/

About Targacept

Targacept is a clinical-stage biopharmaceutical company that discovers and develops NNR Therapeutics (TM), 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 timing for a decision by AstraZeneca as to whether to conduct further development of AZD3480 in Alzheimer's disease or ADHD, the initiation of clinical development of AZD1446 or the timing for such initiation, or

[1] IntegNeuro is a computerized test battery that assesses multiple domains of cognitive function. Five of the domains, Attention/Vigilance, Working Memory, Verbal Learning, Speed of Processing and Reasoning and Problem Solving, were considered primary endpoints in the HALO trial.

Targacept's plans, expectations, 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, risks and uncertainties relating to: the significant control that AstraZeneca has over the development of AZD3480, including as to whether to conduct any further development of AZD3480 in Alzheimer's disease or ADHD, and over the development of AZD1446; the conduct and results of the ongoing clinical trial of AZD3480 in ADHD in adults and other studies ongoing being conducted by AstraZeneca, including the amount and timing of resources that AstraZeneca devotes to them, the performance of third parties engaged to execute them and difficulties or delays in the completion of subject enrollment or data analysis; and the risks that successful results in a particular clinical trial of AZD3480 may not be replicated in other clinical trials or that successful results in clinical trials of AZD3480 in a particular condition characterized by one degree of cognitive impairment may not be predictive of successful results in clinical trials of AZD3480 in a condition characterized by more severe cognitive impairment or in cognitive impairment resulting from a different condition. 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 statements in this release represent Targacept's views only as of the date of this release and should not be relied upon as representing its views as of any subsequent date. Targacept anticipates that subsequent events and developments may cause its views to change. Although Targacept may elect to update these forward-looking statements publicly at some point in the future, it specifically disclaims any obligation to do so, except as required by applicable law.

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Exhibit 99.2

Targacept Announces Conference Call to be Held Today at 5:30 p.m. and Updates Guidance

Winston-Salem, NC – December 8, 2008—Targacept, Inc. (NASDAQ: TRGT), a clinical-stage biopharmaceutical company developing a new class of drugs known as NNR Therapeutics (TM), announced that it will conduct a conference call and audio webcast today at 5:30 p.m. Eastern Standard Time to discuss the results of the Phase 2b clinical trial of AZD3480 in cognitive dysfunction in schizophrenia and provide an update regarding Targacept's business outlook. Participants from Targacept will include J. Donald deBethizy, Ph.D., President and Chief Executive Officer, and Alan A. Musso, Vice President and Chief Financial Officer.

Targacept also announced that it now expects to end 2008 with cash, cash equivalents and short-term investments of at least $86.0 million. Targacept is in the process of finalizing a 2009 operating plan that it expects will enable it to meet its operating requirements at least through the first half of 2011 with its current resources.

The conference call may be accessed by dialing (866) 713-8567 for domestic participants and (617) 597-5326 for international callers (reference passcode 20580744). A replay of the conference call may be accessed at least through December 23, 2008 by dialing (888) 286-8010 for domestic callers and (617) 801-6888 for international callers (reference passcode 47353256).

A live 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 Targacept's website for at least two weeks following the call.

About Targacept

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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 TC-5214 and Targacept's other 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; Targacept's ability to establish additional strategic alliances, collaborations and licensing or other arrangements on favorable terms; 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.

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