
**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 27, 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
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))
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Item 8.01 Other Events.

On December 27, 2006, Targacept, Inc. issued a press release announcing that its strategic collaborator, AstraZeneca, plans to continue development of AZD3480 (TC-1734) in Alzheimer's disease and cognitive deficits in schizophrenia, a determination that triggers a \$20 million milestone payment to Targacept under the parties' collaboration agreement. The full text of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit Number</u>	<u>Description</u>
99.1	Press release dated December 27, 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.

Date: December 27, 2006

TARGACEPT, INC.

/s/ Alan A. Musso

Alan A. Musso
Vice President, Chief Financial Officer,
Secretary and Treasurer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Press release dated December 27, 2006

**TARGACEPT TO RECEIVE \$20 MILLION MILESTONE PAYMENT AS ASTRAZENECA
PLANS TO CONTINUE DEVELOPMENT OF AZD3480 (TC-1734)**

Winston-Salem, NC – December 27, 2006 – Targacept, Inc. (NASDAQ: TRGT) today announced that AstraZeneca (NYSE: AZN) plans to continue development of AZD3480 (TC-1734) in Alzheimer’s disease and cognitive deficits in schizophrenia. AstraZeneca’s determination to continue development triggers a \$20 million milestone payment to Targacept under the parties’ collaboration agreement. Today’s announcement follows the completion by AstraZeneca of previously disclosed studies of AZD3480 (TC-1734).

“AstraZeneca is committed to developing innovative therapies in the areas of unmet need of Alzheimer’s disease, schizophrenia and other cognitive disorders. Our decision to continue clinical development of AZD3480 demonstrates our belief in the cognitive-enhancing potential of NNR-targeted therapeutics,” said Bob Holland, Vice President and Head of the Neuroscience Therapy Area, AstraZeneca. “In addition to the promise of AZD3480, we are very pleased with our research collaboration with Targacept. We entered into the collaboration excited about the prospects of combining Targacept’s longstanding leadership position in NNR research with our existing strengths, and the progress made in a relatively short time has been impressive.”

“We are delighted with AstraZeneca’s plans to move forward with development of AZD3480 in these two areas where a significant medical need is clear. We believe that the effects on cognition that we observed in our previous nine clinical trials of this product candidate in approximately 400 subjects show its potential as a treatment for cognitive disorders,” said J. Donald deBethizy, Ph.D., President and Chief Executive Officer of Targacept. “We are very pleased that AstraZeneca made the determination to conduct further development of AZD3480 ahead of schedule, demonstrating a strong commitment to the NNR mechanism and an extraordinary ability to execute against aggressive timelines. We look forward to a long and productive collaboration.”

Alzheimer’s disease represents an area of great medical need in the developed and developing world, causing great distress to patients and their caregivers and imposing a major financial burden. Current treatments have limited efficacy and significant side effects in many patients.

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. There is currently no product approved for the treatment of cognitive deficits in schizophrenia.

Collaboration Summary

In December 2005, Targacept and AstraZeneca entered into an exclusive global license and research collaboration agreement for the development and commercialization of Targacept’s proprietary compound TC-1734, which AstraZeneca refers to as AZD3480, to treat Alzheimer’s disease, cognitive deficits in schizophrenia and other cognitive disorders. Targacept received an initial payment of \$10 million from AstraZeneca and, as a result of AstraZeneca’s determination to continue development of AZD3480, a milestone payment of \$20 million from AstraZeneca will become due. In addition, Targacept is eligible to receive other payments of up to \$249 million, contingent upon the achievement of development, regulatory and first commercial sale milestones for AZD3480, as well as stepped double digit royalties dependent on sales achieved following regulatory approval.

Under the agreement, Targacept and AstraZeneca initiated a preclinical research collaboration in January 2006 under which Targacept is utilizing its proprietary drug discovery technology known as Pentad™ to discover additional compounds. Based on the current budget for the research collaboration, Targacept expects to receive approximately \$26.4 million in funding from AstraZeneca over the planned four-year research term.

AstraZeneca is primarily responsible for and has agreed to fund the development and commercialization of AZD3480 and any compounds that arise out of the research collaboration. If compounds that arise out of the research collaboration are selected for advancement, Targacept would be eligible to receive additional payments, contingent upon the achievement of development, regulatory and first commercial sale milestones, as well as royalties dependent on sales achieved following regulatory approval. Targacept has retained an option to co-promote in the United States AZD3480 and any compounds that arise out of the research collaboration and are selected for advancement.

Independent of the research collaboration, the agreement provides for a mechanism by which Targacept can offer to AstraZeneca compounds that act on different NNR subtypes than AZD3480 for development and commercialization for the treatment of Alzheimer's disease, cognitive deficits in schizophrenia, other cognitive disorders or schizophrenia.

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 activity to promote therapeutic effects and limit adverse side effects. Targacept has product candidates in development for Alzheimer's disease and cognitive deficits in schizophrenia, pain and depression, and multiple preclinical programs. Targacept is located in Winston-Salem, North Carolina. For more information about Targacept, please visit www.targacept.com

About AstraZeneca

AstraZeneca is a major international healthcare business engaged in the research, development, manufacture and marketing of prescription pharmaceuticals and the supply of healthcare services. It is one of the world's leading pharmaceutical companies with healthcare sales of \$23.95 billion and leading positions in sales of gastrointestinal, cardiovascular, neuroscience, respiratory, oncology and infection products. 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

In Neuroscience, AstraZeneca is dedicated to providing medicines that have the potential to change patients' lives. The company already markets several products including SEROQUEL and ZOMIG. The AstraZeneca neuroscience pipeline includes leading approaches for the treatment of depression and anxiety, schizophrenia, dementia, pain control and anaesthesia.

Forward Looking Statements

Any statements in this press release about expectations, plans and prospects for Targacept, Inc., including, without limitation, statements regarding the development plans and objectives for AZD3480 (TC-1734), the progress, timing and scope of the research and development program, or related regulatory filings or clinical trials, for AZD3480 or any of our other product candidates 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 development of 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 or AstraZeneca 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.

Pentad™ and NNR Therapeutics™ are trademarks of Targacept, Inc.

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