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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM 8-K**

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**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 9, 2006**

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**TARGACEPT, INC.**

(Exact name of registrant as specified in its charter)

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**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

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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 November 9, 2006, Targacept, Inc. issued a press release announcing results of its Phase II clinical trial of mecamylamine hydrochloride as an augmentation treatment for major depression. The trial evaluated the effects of mecamylamine taken with citalopram hydrobromide, a treatment combination known as TRIDMAC™, in patients who did not respond adequately to citalopram alone. 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

Exhibit  
Number  
99.1

Description

Press release dated November 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: November 9, 2006

/s/ Alan A. Musso

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

**EXHIBIT INDEX**

**Exhibit  
Number**  
99.1

**Description**  
Press release dated November 9, 2006

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## Targacept Announces Positive Results of Phase II Clinical Trial in Major Depression

*Top Line Data Suggest Potential of TRIDMAC™ in Non-Responsive Patients*

**Winston-Salem, North Carolina, November 9, 2006** – Targacept, Inc. (NASDAQ: TRGT) today reported positive results from a double blind, placebo controlled Phase II clinical trial of mecamylamine hydrochloride as an augmentation treatment for major depression. The trial (n=184) evaluated the effects of mecamylamine taken with citalopram hydrobromide, a treatment combination known as TRIDMAC, in patients who did not respond adequately to citalopram alone. Citalopram hydrobromide is a commonly prescribed treatment for depression marketed as Celexa® in the United States.

On one of two primary endpoints in the trial, patients receiving TRIDMAC showed greater improvement on symptoms of depression, as measured by group mean change from baseline on the Hamilton Depression Rating Scale (HAM-D), than patients receiving placebo with continued citalopram therapy. This result was statistically significant on an intent to treat basis (p=0.041) and showed a strong trend on a per protocol basis (p=0.059). HAM-D is a commonly used 17-item scale that evaluates depressed mood and other symptoms of depression and anxiety. The result on the trial's other primary endpoint, achievement of remission, favored the TRIDMAC group over the placebo group, although this result did not reach statistical significance. In addition, the trial included five other rating scales as secondary measures. The results on all five rating scales favored the TRIDMAC group over the placebo group with statistical significance (p<0.05) on a per protocol basis. On an intent to treat basis, the results on three of the five rating scales were statistically significant.

“The TRIDMAC study indicates the potential for a new treatment option for the millions of patients suffering from major depression for whom current treatment modalities are inadequate. The large-scale STAR\*D trial funded by The National Institute of Mental Health has clearly demonstrated both this significant societal need and the value of combining treatments,” commented Ranga Krishnan M.D., Chairman of Department of Psychiatry, Duke University Medical Center.

“We are very pleased with the outcome of our TRIDMAC trial. These results add to the large body of clinical and scientific evidence supporting the promise of NNRs as therapeutic targets for treating depression and other mood disorders. They also reflect the breadth of our pipeline of NNR Therapeutics™, with TRIDMAC representing a potential late-stage opportunity as a treatment for depression in addition to our clinical candidates in development for cognitive disorders and pain,” commented J. Donald deBethizy, Ph.D., President and Chief Executive Officer of Targacept. “Our near-term objectives include defining plans for further development in our depression program following dialogue with the Food and Drug Administration,” deBethizy added.

TRIDMAC was generally well tolerated in the trial. There was one serious adverse event reported in each of the TRIDMAC and placebo groups. In the TRIDMAC group, a patient experienced an upper respiratory tract infection and irregular heartbeat and discontinued participation in the trial.

Targacept intends to present the full data from the trial at an appropriate scientific forum.

## About the TRIDMAC Trial

The TRIDMAC trial included two phases and was conducted at one site in the U.S. and nine sites in India under an Investigational New Drug Application and the analogous Indian regulatory process. In the first phase, patients with a diagnosis of Major Depressive Disorder (n=450) were given open label citalopram hydrobromide over six weeks and evaluated based on their improvement on two scales — HAM-D and the Clinical Global Impression subscale for severity of illness (CGI-SI) — to determine the extent of any response. Partial and non-responders based on scores on the two scales at the end of the six-week dosing period (HAM-D  $\geq 14$  and CGI-SI  $\geq 4$ ) were enrolled in the second phase (n=184), which was double blind and placebo-controlled. In the second phase, patients received either mecamylamine or placebo, together with continued citalopram therapy, for an additional eight weeks. Patients in the mecamylamine dose group initially received 5mg daily, titrating up to 10mg over the dosing period at the clinician's discretion based on tolerability and therapeutic response. The primary endpoints of the trial were group mean change from baseline and achievement of remission, in each case as measured by HAM-D and compared to continued citalopram therapy plus placebo. The secondary outcome measures for the trial included rating scales to assess symptoms of depression and anxiety, disability, irritability, global improvement or severity of illness. Data from the trial were evaluated on both an intent to treat and per protocol basis. The intent to treat data set (n=160) includes all patients who received at least one dose of blinded study medication and were assessed using HAM-D at least once post baseline. The per protocol data set (n=151) includes patients who were at least 80% compliant with the dosing regimen called for by the protocol and were assessed using HAM-D at the end of the dosing period.

## About Depression

Major depression is a severe psychiatric mood disorder. It is characterized by a wide range of symptoms that cause significant impairment in the ability to work, study, sleep, eat, and enjoy once pleasurable activities. These symptoms include persistent despondence, loss of interest in normal activities, changes in appetite, difficulty in sleeping, agitation, apathy or feelings of guilt.

According to the National Institute of Mental Health:

- Each year, 9.5 percent of the population, or about 20.9 million American adults, will struggle with depressive illness.
- Major depression is a recurring and chronic illness, frequently returning for two or more episodes, with episodes that often last two years or more.
- Depression is currently the fourth most disabling illness worldwide, and, according to the World Health Organization, it will be the second leading cause of disability by the year 2020.
- About 10 percent of men and up to 25 percent of women will experience depression in their lifetime.
- Depression is responsible for up to 70 percent of psychiatric hospitalizations and about 40 percent of suicides.
- The cost of depression in the United States in the year 2000 was estimated to be \$83 billion, including both \$26 billion in costs of treatment and \$57 billion in losses such as absenteeism, reduced productivity at work, and the value of lifetime earnings lost due to suicide-related deaths.

## About STAR\*D

The Sequenced Treatment Alternatives to Relieve Depression (STAR\*D) study funded by the National Institute of Mental Health was a nationwide public health clinical trial, the purpose of which was to determine the effectiveness of different treatments for patients with major depression who do not respond to initial treatment with an antidepressant. Over a seven-year period, STAR\*D enrolled more than 4,000 outpatients, aged 18-75 years. In the first phase of STAR\*D, patients were dosed with citalopram. Only about 33% of these patients achieved remission and only 10-15% more responded at all, leaving more than half of the patients without symptomatic relief. Subsequent phases of STAR\*D evaluated the effect

in non-responsive patients of switching treatments or augmenting existing treatments with additional treatments. For more information on STAR\*D, see <http://www.nimh.nih.gov/healthinformation/stard.cfm>.

## **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.

## **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 TRIDMAC, the projected prevalence of depression and market for depression therapies 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," "near-term" 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 risks and uncertainties relating to: the receptivity of applicable regulatory authorities to a treatment combination that includes mecamylamine, which is a racemic compound, as opposed to one of its constituent enantiomers such as TC-5214; and AstraZeneca's right to terminate our collaboration agreement based on the results of its safety and product characterization studies and all other available information with respect to TC-1734 (AZD3480). Other risks and uncertainties that we face are described 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.

*TRIDMAC™ and NNR Therapeutics™ are trademarks of Targacept. Celexa® is a trademark of Forest Pharmaceuticals, Inc.*

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