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 20, 2011

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 8.01 Other Events.

On December 20, 2011, Targacept, Inc. and AstraZeneca announced via press release top-line results from RENAISSANCE study 2, a Phase 3 clinical trial of TC-5214 as an adjunct to antidepressant therapy for patients with major depressive disorder who do not respond adequately to initial antidepressant treatment. 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	Description
99.1	Press release dated December 20, 2011

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 20, 2011

/s/ Peter A. Zorn

Peter A. Zorn

Senior Vice President, Legal Affairs, General Counsel and Secretary

EXHIBIT INDEX

Exhibit Number	Description
99.1	Press release dated December 20, 2011

Exhibit 99.1

AstraZeneca and Targacept Announce Top-line Results from Second Phase 3 Study of TC-5214 as an Adjunct Treatment in Patients with Major Depressive Disorder

Winston-Salem, NC – December 20, 2011 – AstraZeneca and Targacept, Inc. today announced top-line results from the second of four RENAISSANCE Phase 3 studies investigating the efficacy and tolerability of TC-5214 as an adjunct therapy to an antidepressant in patients with major depressive disorder (MDD) who do not respond adequately to initial antidepressant treatment. The study, RENAISSANCE 2, did not meet its primary endpoint, change in the Montgomery-Asberg Depression Rating Scale (MADRS) total score after eight weeks of adjunct treatment with TC-5214 as compared to placebo.

These results follow the recent announcement of top-line results from RENAISSANCE study 3, which also did not meet its primary endpoint. Both RENAISSANCE 2 and RENAISSANCE 3 were flexible dose trials. The two remaining efficacy studies in the RENAISSANCE Program for TC-5214 are fixed dose trials. Top-line results for both fixed dose trials, as well as for a long-term study designed primarily to evaluate safety, are expected to be available in the first half of 2012.

TC-5214 was overall well tolerated in RENAISSANCE study 2 and showed an adverse event profile generally consistent with prior clinical trials of TC-5214. Analyses of the full data set from the RENAISSANCE study 2 remain ongoing.

Regulatory filing targets will be reviewed following results of the remaining RENAISSANCE Program studies. A potential New Drug Application filing in the United States is planned for the second half of 2012, with a potential EU Marketing Authorization Application filing targeted for 2015.

About the Targacept and AstraZeneca Collaboration

In December 2009, AstraZeneca and Targacept signed a collaboration and license agreement for the global development and commercialization of TC-5214. The initial goal for the collaboration is to develop TC-5214 as an adjunct treatment for MDD in patients with an inadequate response to a selective serotonin reuptake inhibitor (SSRI) or serotonin/norepinephrine reuptake inhibitor (SNRI).

TC-5214 is also being studied in a Phase 2b ‘switch’ monotherapy trial, known as the EXPLORER study, in patients with MDD who do not respond adequately to initial treatment with an SSRI or SNRI.

About MDD

MDD is characterized by one or more major depressive episodes without a history of manic, mixed or hypomanic episodes. The essential feature of a major depressive episode is a period of at least two weeks during which there is depressed mood or the loss of interest or pleasure in nearly all activities. In the large-scale STAR*D study sponsored by the US National Institute of Mental Health between 2001 and 2006, approximately 63 percent of patients with MDD did not achieve study-defined remission with first-line treatment with the SSRI citalopram hydrobromide.

About the RENAISSANCE Program (TC-5214)

The RENAISSANCE Program consists of five randomized, double-blind, placebo controlled Phase 3 studies. In RENAISSANCE study 2, 1,320 patients with MDD were screened at 45 sites in the United States (75% of evaluated patients) and 25 sites in India. Of the patients screened, 710 initially received one of seven SSRIs or SNRIs on an open label basis for eight weeks to determine the extent of therapeutic response. At the end of the eight weeks, 319 patients who did not respond adequately, based on predefined criteria, were randomized into the double blind phase of the study and received either a flexible dose of TC-5214 or placebo, twice daily, while continuing the SSRI or SNRI therapy for an additional eight weeks. The dosage of TC-5214 was initially 2 mg/day and could be increased at the discretion of the investigator to 4 mg/day and 8 mg/day based on tolerability and therapeutic response.

In addition to RENAISSANCE 2 and RENAISSANCE 3 (previously reported), the RENAISSANCE Program includes two fixed dose studies (RENAISSANCE 4 and RENAISSANCE 5) designed to evaluate the efficacy and tolerability of TC-5214 as an adjunct treatment to SSRI/SNRI therapy and RENAISSANCE 7, a long-term study designed primarily to evaluate safety in which patients receive a fixed dose of TC-5214 or placebo, plus a baseline SSRI or SNRI, for one year.

About the Montgomery-Asberg Depression Rating Scale

The Montgomery-Asberg Depression Rating Scale (MADRS) is a commonly used 10-item questionnaire that psychiatrists employ to measure the severity of depressive episodes in patients with mood disorders.

About Targacept

Targacept is developing a diverse pipeline of innovative NNR Therapeutics™ for difficult-to-treat diseases and disorders of the nervous system. NNR Therapeutics selectively modulate the activity of specific neuronal nicotinic receptors, a unique class of proteins that regulate vital biological functions that are impaired in various disease states. Targacept's lead program, TC-5214, is being co-developed with AstraZeneca and is in Phase 3 clinical trials as an adjunct treatment for major depressive disorder. Targacept leverages its scientific leadership and proprietary drug discovery platform Pentad™ to generate novel small molecule product candidates to fuel its pipeline and attract significant collaborations with global pharmaceutical companies. For more information, please visit www.targacept.com.

About AstraZeneca

AstraZeneca is a global, innovation-driven biopharmaceutical business with a primary focus on the discovery, development and commercialization of prescription medicines for gastrointestinal, cardiovascular, neuroscience, respiratory and inflammation, oncology and infectious disease. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide. For more information please visit: www.astrazeneca.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 timing for completion or availability of results from the remaining clinical trials in the Phase 3 RENAISSANCE Program for TC-5214 or for submission or approval of a New Drug Application (NDA) for TC-5214 in the United States or a Marketing Authorization Application (MAA) for TC-5214 in the European Union; the competitive position of or commercial opportunity for TC-5214; 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 risks and uncertainties relating to: Targacept's dependence on the success of its collaboration for TC-5214 with AstraZeneca; the control or significant influence that AstraZeneca has over the development of TC-5214, including over the decision to file an NDA or MAA for TC-5214; the conduct and results of clinical trials and non-clinical studies and assessments of TC-5214, including the performance of third parties engaged to execute such trials, studies and assessments and difficulties or delays in data analysis; whether positive findings from the completed Phase 2b clinical trial of TC-5214 will be replicated in ongoing

or any future clinical trials; the timing and success of submission, acceptance and approval of regulatory filings for TC-5214, including the discretion of the FDA in determining whether to approve any NDA that may be filed for TC-5214; and Targacept's ability to protect its intellectual property covering TC-5214. 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.

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