

## AstraZeneca and Targacept Form Global Collaboration and License Agreement for Late-stage Investigational Product TC-5214 for the Treatment of Major Depressive Disorder

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AstraZeneca and Targacept, Inc. today announced a collaboration and license agreement for the global development and commercialization of TC-5214, Targacept's late-stage investigational product for major depressive disorder (MDD). TC-5214, which recently completed a Phase 2b clinical trial, is a nicotinic channel blocker that is thought to treat depression by modulating the activity of various neuronal nicotinic receptor (NNR) subtypes.

Major Depressive Disorder is a common illness, affecting approximately 42 million people worldwide, and the global antidepressant market is valued at over \$20 billion. Serotonin reuptake inhibitors (SSRIs) are the most commonly prescribed class of drugs for depression, but many patients fail to respond adequately. The NIMH STAR\*D study suggests that approximately 63 percent of patients do not achieve remission with first-line SSRI treatment.

Under the agreement, AstraZeneca will make an upfront payment to Targacept of \$200 million upon effectiveness and up to an additional \$540 million if specified development, regulatory and first commercial sale milestones are achieved. Targacept will also be eligible to receive up to \$500 million if specified sales related milestones are achieved as well as significant stepped double-digit royalties on net sales worldwide. Targacept has retained an option for a co-promotion of TC-5214 to a limited target physician audience in the US. Effectiveness of the agreement is contingent on expiration or termination of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act.

AstraZeneca and Targacept will jointly design a global Phase 3 clinical program anticipated to begin in mid 2010 with the goal of filing a new drug application (NDA) with the US Food and Drug Administration (FDA) in 2012. TC-5214 is being developed as an adjunct to antidepressant therapy in adults with MDD who do not respond adequately to first-line antidepressant treatment. The companies will also initiate a Phase 2 study exploring TC-5214 as a monotherapy for MDD. AstraZeneca will be responsible for 80% of the cost of the initial global development program, with Targacept responsible for the remaining 20%. AstraZeneca will be responsible for and will fund the costs of global commercialization of TC-5214, and will assume Targacept's manufacturing and supply agreements with third parties in relation to TC-5214. The agreement also provides for a specified period for the parties to negotiate a potential multi-year research program that would be conducted by Targacept to identify and develop additional NNR Therapeutics for MDD and possibly other indications.

David Brennan, Chief Executive Officer of AstraZeneca said: "The opportunity to improve treatment in depression is a large one, both commercially and in terms of benefits for patients. It's an area both AstraZeneca and Targacept know well and I'm pleased to be adding another late stage project to our pipeline."

J. Donald deBethizy, Ph.D., President and Chief Executive Officer of Targacept, said: "We are delighted to have selected AstraZeneca to work with us to meet our goal of advancing TC-5214 into late-stage development and bringing a new mechanistic approach for the treatment of depression to the millions of patients who do not respond well to first-line antidepressant therapy and need relief. Targacept and AstraZeneca have an established track record of successful collaboration and today's agreement demonstrates our shared dedication

to excellence in the field of neuroscience.”

Targacept and AstraZeneca previously entered into a global collaboration focused on cognitive disorders in 2005. Three product candidates in the collaboration are currently in clinical development; including AZD3480 for attention deficit/hyperactivity disorder (ADHD), AZD1446 planned for Alzheimer’s disease, and TC-5214, for cognitive dysfunction in schizophrenia.

### **About TC-5214**

Scientific evidence suggests that depressive symptoms are associated with an overstimulation of NNRs and other receptors in the brain that are activated by the neurotransmitter acetylcholine. This overstimulation is referred to as increased cholinergic tone. TC-5214 has properties that modulate forms of NNR subtypes thought to be involved in the increased cholinergic tone associated with depression. In particular, TC-5214 blocks certain NNR channels. TC-5214 is the subject of issued patents that expire in the US and all major EU markets in 2020 and 2019, respectively. Additional patent term may be available via applicable patent term restoration laws. Targacept would be required to pay a percentage of amounts received from AstraZeneca under the agreement with respect to TC-5214 to the University of South Florida Research Foundation under the terms of an existing license agreement.

### **About TC-5214 Phase 2b data**

The recently completed Phase 2 trial for TC-5214 in subjects who did not respond adequately to first-line treatment with the SSRI citalopram alone showed the primary outcome measure [mean change between treatment (TC-5214 + citalopram) and placebo (Placebo + citalopram) from baseline on the HAM-D\*] and all secondary measures were statistically significant in favor of TC-5214 on an intent to treat basis. During this Phase 2 trial, the most frequent adverse events were headache, dizziness and constipation. There was no clinically significant difference between the dose groups in discontinuations due to adverse events.

### **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, in support of its vision of building health and restoring independence for patients. Targacept has clinical-stage product candidates in development for major depressive disorder, attention deficit/hyperactivity disorder, Alzheimer’s disease and cognitive dysfunction in schizophrenia, as well as multiple preclinical programs. In addition to its collaboration with AstraZeneca, Targacept has a strategic alliance with GlaxoSmithKline. Targacept’s news releases are available on its website at [www.targacept.com](http://www.targacept.com).

NNR Therapeutics (TM) is a trademark of Targacept, Inc.

### **About AstraZeneca**

AstraZeneca is a major international healthcare business engaged in the research, development, manufacturing and marketing of meaningful prescription medicines and supplier for healthcare services. AstraZeneca is one of the world’s leading pharmaceutical companies with healthcare sales of US\$ 31.6 billion and is a leader in gastrointestinal, cardiovascular, neuroscience, respiratory, oncology and infectious disease medicines. For more information about AstraZeneca, please visit: [www.astrazeneca.com](http://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 upfront or other payments that Targacept may receive from AstraZeneca; the progress, scope or duration of the development of TC-5214, such as the size, design, conduct or objective of any clinical trial and the timing for initiation or completion of or availability of results from any clinical trial; the timing for filing of a new drug application for TC-5214; the benefits that may be derived from TC-5214; and the indication(s)

for which TC-5214, AZD3480, AZD1446 or TC-5619 may be developed. 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: AstraZeneca's right to terminate the collaboration and license agreement for TC-5214 prior to effectiveness if expiration or termination of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act does not occur by March 1, 2010, whether due to the September 30, 2012 NDA submission deadline under Section 505(u) of the Federal Food, Drug, and Cosmetic Act to enable the election of TC-5214 as a new chemical entity entitled to five years of marketing exclusivity or for any other reason; the risk of any delay to the initiation of further clinical development of TC-5214 arising from discussions with regulatory authorities; Targacept's dependence on the success of its collaboration with AstraZeneca for TC-5214; the conduct and results of clinical trials and non-clinical studies and assessments of TC-5214, including the performance of AstraZeneca or 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; reliance on third party contract manufacturers for the manufacture and supply of TC-5214 and clinical trial material for development of TC-5214; 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.

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