

TARGANTA THERAPEUTICS ANNOUNCES POSITIVE TOP-LINE RESULTS FROM ORITAVANCIN PHASE 2 SIMPLIFI TRIAL

-- Single or Infrequent Dosing of Oritavancin Demonstrates Comparable Efficacy to
Phase 3 Three-to-Seven Day Course of Therapy --

CAMBRIDGE, MA –SEPTEMBER 2, 2008 – Targanta Therapeutics Corporation (Nasdaq: TARG) today announced positive top-line results from a Phase 2 clinical trial investigating the efficacy and safety of oritavancin at **Single or Infrequent Doses** for the Treatment of **Complicated Skin and Skin Structure Infections (cSSSI)**, or SIMPLIFI. Oritavancin is Targanta's lead antibiotic candidate targeting gram-positive organisms, including methicillin-resistant *Staphylococcus aureus*, or MRSA. Oritavancin, administered in a single or in an infrequent dosing regimen, demonstrated comparable efficacy and safety to a three-to-seven day course of oritavancin therapy, as administered in two previously conducted Phase 3 clinical trials for the treatment of cSSSI. Each of these Phase 3 clinical trials met their primary endpoint.

These top-line efficacy results from SIMPLIFI are consistent with Targanta's previously published preclinical studies. The SIMPLIFI trial was designed based on oritavancin's unique pharmacokinetic profile and demonstrated concentration-dependent bactericidal activity.

Mark Leuchtenberger, President and CEO of Targanta, commented, "We believe the potential to cure cSSSI with just a single or infrequent dosing regimen could make oritavancin the go-to drug of choice among physicians who are seeking an effective and convenient weapon for their antibiotic armamentarium, and thereby lead to a shift in the treatment paradigm for gram-positive infections. With the SIMPLIFI results in hand, we will begin to design a larger confirmatory trial that could demonstrate oritavancin's potential as the market's first effective single or infrequent intravenous (IV) treatment of cSSSI caused by gram-positive bacteria."

Results of the Phase 2 SIMPLIFI trial will be used to design a Phase 3 study to assess the benefits and risks of a single-dose regimen for the treatment of cSSSI. Targanta expects full data from SIMPLIFI will be presented prior to the end of the year

About SIMPLIFI

The Phase 2 SIMPLIFI trial was an international, multi-center, randomized, double-blind, controlled study of approximately 300 patients with cSSSI, including MRSA. SIMPLIFI measured clinical response to oritavancin (either cure or improvement versus failure) at the first follow-up visit (Test of Cure) in clinically evaluable patients as its primary endpoint. The study examined the safety of oritavancin in all intent-to-treat patients as its secondary endpoint.

Additional details about the SIMPLIFI trial design can be found in a press release dated May 20, 2008, "Targanta Completes Enrollment in Phase 2 Oritavancin Infrequent Dosing Study," found on the Investor Relations section of Targanta's website at www.targanta.com/investors/newsrelease.html

About Oritavancin

Oritavancin is a novel semi-synthetic lipoglycopeptide antibiotic candidate with potent bactericidal (killing) activity against a broad spectrum of gram-positive bacteria. In its intravenous (IV) formulation, the product candidate has been tested in over 2,400 individuals and has completed two Phase 3 studies for the treatment of complicated skin and skin structure infections (cSSSI) in which the primary endpoints were met. Targanta submitted a New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA) in February 2008 seeking to commercialize oritavancin for the treatment of cSSSI; the FDA accepted the NDA submission for standard review, establishing an action date of December 8, 2008. Targanta's Marketing Authorization Application (MAA) for oritavancin was accepted for review by the European Medicines Agency (EMA) in June 2008. Targanta is also developing an oral version of oritavancin for the possible treatment of *Clostridium difficile*-related conditions.

About Targanta Therapeutics

Targanta Therapeutics Corporation (Nasdaq: TARG) is a biopharmaceutical company focused on developing and commercializing innovative antibiotics to treat serious infections in the hospital and other institutional settings. The Company's pipeline includes an intravenous version of oritavancin, a semi-synthetic lipoglycopeptide antibiotic currently awaiting U.S. and EU regulatory approval, and, a program to develop an oral version of oritavancin for the treatment of *Clostridium difficile*. The Company has operations in Cambridge, MA, Indianapolis, IN, and Montreal, Québec, Canada. For more information on Targanta, visit www.targanta.com.

Safe Harbor Statement

This press release contains "forward-looking statements" that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These are statements that are predictive in nature, that depend upon or refer to future events or conditions or that include words such as "potential," "may," "will," "expects," "projects," "anticipates," "estimates," "believes," "intends," "plans," "should," "seeks," "hope" and similar expressions. Such statements include, but are not limited to the potential to cure life-threatening skin diseases with just a single or infrequent infusion regimen of oritavancin; oritavancin becoming the antibiotic drug of choice among physicians; and oritavancin's potential as the market's first effective, single or infrequent intravenous (IV) infusion for treatment of cSSSI. Forward-looking statements involve known and unknown risks and uncertainties that may cause actual future results to differ materially from those projected or contemplated in the forward-looking statements. Forward-looking statements may be significantly impacted by certain risks and uncertainties described in Targanta's filings with the Securities and Exchange Commission. The risks and uncertainties referred to above include, but are not limited to, delays in obtaining or a failure to obtain regulatory approval for Targanta's product candidates; unfavorable clinical trial results; Targanta's potential inability to initiate and complete pre-clinical studies and clinical trials for its product candidates; the possibility that results of pre-clinical studies are not necessarily predictive of clinical trial results; and those other risk factors that are described more fully in the Company's filings with the Securities and Exchange Commission. Targanta does not undertake any obligation to update any of these forward-looking statements to reflect a change in its views or events or circumstances that occur after the date of this release.

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