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RIB-X PHARMACEUTICALS INITIATES PHASE 2 TRIAL FOR RX-3341 IN COMPLICATED SKIN AND SKIN STRUCTURE INFECTIONS

-- Company Reports Favorable Phase 1 RX-3341 Results --

New Haven, CT – July , 2008 – Rib-X Pharmaceuticals, Inc. (“Rib-X” or the “Company”), a development-stage company focused on the discovery and development of novel antibiotics for the treatment of antibiotic-resistant infections, today announced the initiation of a Phase 2 clinical trial for an intravenous form of antibiotic compound RX-3341 in the treatment of complicated skin and skin structure infections (cSSSIs). The safety and efficacy study will be conducted at 35 sites across the United States. As a precursor to this news the Company also announced positive results of a two-part Phase 1 study with the same candidate.

“We have made significant progress in advancing this next-generation broad spectrum antibiotic further toward clinical use,” said Dr. Susan Froshauer, President and CEO of Rib-X. “We intend to rapidly move forward with the development of our IV dosage form to meet the need for a broad-spectrum antibiotic in the hospital setting, particularly one that is active against quinolone-resistant MRSA. We also hope to further progress our oral dosage form to ensure a greater diversity of use in the treatment of serious infections in a number of settings.”

Phase 2 Study Design

This Phase 2 double-blind study (study RX-3341-201) will evaluate the safety and efficacy of RX-3341 at two different doses administered intravenously to hospitalized cSSSI patients every 12 hours for 5 to 14 days, as compared to tigecycline (Tygacil™). The study’s primary endpoint is the assessment of RX-3341 efficacy, safety and tolerability at the two different doses compared to that of tigecycline’s standard dosing regimen. A secondary endpoint for the study is the assessment of clinical efficacy of RX-3341 compared to tigecycline in patients with cSSSIs caused by methicillin-resistant *Staphylococcus aureus* (MRSA).

Phase I Results

The two-part Phase 1 study (RX-3341-103) compared the safety, tolerability and pharmacokinetics of two intravenous formulations of RX-3341. Part 1 of the study was designed to compare the safety and pharmacokinetics of the two IV formulations, with

the purpose of optimizing the formulation of the IV dosage form. Twelve individuals received one dose of each of the formulations in a cross-over design. The two formulations were thus shown to be comparable in terms of exposure.

Part 2 of the study was designed to assess the safety, tolerability and pharmacokinetics of the optimized intravenous RX-3341 formulation. Results showed that the chosen intravenous RX-3341 formulation was well tolerated using multiple doses for 14 days.

About RX-3341

RX-3341 is a novel, broad spectrum fluoroquinolone antibiotic which has shown increased activity against gram-positive organisms compared to other quinolones, and similar or better activity to that of ciprofloxacin against gram-negative organisms in *in-vitro* studies and twelve Phase I and two Phase 2 clinical trials of the oral dosage form.

About Rib-X Pharmaceuticals, Inc.

Rib-X Pharmaceuticals, Inc. is a product-driven small molecule drug discovery and development company focused on the structure-based design of new classes of antibiotics. The Company's underlying drug discovery engine capitalizes on its proprietary high-resolution crystal structure of the ribosome, which performs an essential role in the fundamental process of protein synthesis. Many known, commercially valuable antibiotics bind to the ribosome, including those used to treat both community-acquired and hospital-acquired pathogens. The Company's integrated research strategy, which combines state of the art, proprietary computational analysis, X-ray crystallography, medicinal chemistry, microbiology and biochemistry, allows it to rapidly synthesize new agents designed to avoid typical antibiotic resistance mechanisms. Rib-X's iterative intelligent engine has yielded several distinctive new antibiotic classes. The Company currently has two programs in human clinical trials, the RX-1741 designer oxazolidinone program as an oral/IV agent to treat serious hospital Gram-positive infections and the RX-3341 program, a next generation fluoroquinolone, active against a broad spectrum of bacteria, including methicillin-resistant *Staphylococcus aureus*. Additionally, the Company has multiple drug discovery programs. The first of these programs is focused on design and development of an orally active macrolide for community use for treatment of skin infections, including those caused by MRSA. The second discovery program is directed towards identifying a new chemical class of antibiotics active against multi-drug resistant Gram-negative bacteria.

For more information on the ribosome and the Rib-X mission, please visit the Company website at www.rib-x.com.

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