

AlphaRx Presents Positive Preclinical Data on Zysolin™ Inhalable Nanoparticles at Controlled Release Society Annual Meeting

Markham, Ontario, Canada – July 23, 2009 ---- AlphaRx, Inc. (OTCBB: ALRS) announced positive preclinical results which demonstrated that an inhaled tobramycin nanoparticle (Zysolin™) formulation was a more effective treatment in animal models of acute *Pseudomonas aeruginosa* pneumonia when compared to inhaled and injected conventional tobramycin solutions. The data was presented recently in an oral podium session at the 36th Annual Meeting and Exposition of the Controlled Release Society in Copenhagen, Denmark.

"These are very encouraging results, as they suggest that Zysolin™ employed in this route of administration may be more effective, providing significant advantages over conventional drug formulations," stated Joseph Schwarz, Ph.D., Chief Scientist of AlphaRx. "We believe that building on this data, additional research will lead us toward the development of a drug that targets and eradicates intracellular pathogens, which to date, have proven to be very difficult to treat clinically."

The study results demonstrate that Zysolin™ is significantly efficacious in acute pneumonia animal models induced by gram negative pathogens including *P. aeruginosa*. In these lethality-based studies, Zysolin™ consistently increased survival rate to 50% over a Tobramycin treatment group, wherein all untreated animals died within 24 hours after infection. *P. aeruginosa* is one of the most common and lethal pathogens responsible for ventilator-associated pneumonia in intubated patients, being directly responsible for death rates approaching 40%. This data suggests that the nanoparticulate formulation of Zysolin™ may utilize a unique mechanism of action differentiating it from conventional formulations, enhancing antimicrobial activity against gram negative pathogens. Zysolin™ has the potential to be a first-in-class anti-infective nanomedicine.

The Controlled Release Society (CRS) is an international organization consisting of 3,000 members from more than fifty countries. Two-thirds of CRS membership are from the pharmaceutical industry and one-third consist of academic and government members. The CRS is the premier multidisciplinary society dedicated to the promotion of the science, technology, and innovative delivery of bio-actives for the benefit of the society.

About Zysolin™

Zysolin™ is a Tobramycin compound, encapsulated in AlphaRx's Nano Drug Delivery Platform, intended for the adjunctive treatment of Gram-negative pneumonia in intubated and mechanically-ventilated patients. Zysolin™ improves the intracellular activity of Tobramycin - in layman's term, increasing the drug concentration of Tobramycin inside human macrophages, thus improving its antibacterial activity against intracellular *Klebsiella*, *Pseudomonas aeruginosa* and *Staphylococcus* bacterial strains in pneumonia patients. The active ingredient in Zysolin™, Tobramycin, has a long-standing and proven clinical treatment record. Delivered by inhalation, using proprietary nanotechnology developed by AlphaRx, the company believes Zysolin™ will have an attractive safety, tolerability and efficacy profile when compared to injectible Tobramycin.

About AlphaRx Inc.

AlphaRx is a specialty pharmaceutical company dedicated to developing proven therapies by reformulating FDA approved and marketed drugs which through the application of its proprietary site-specific nano drug delivery technology, offers improved medical benefits and a potential for significant commercial product development.

Forward Looking Statements:

This release contains forward-looking statements within the meaning and pursuant to the Safe Harbor provisions of the Securities Litigation Reform Act of 1995 and involve risks and uncertainties that may individually or mutually impact the matters herein described, including but not limited to product development and acceptance, manufacturing, competition, regulatory and/or other factors, which are outside the control of the companies.

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