

Atox Bio Publishes Data Demonstrating the Broad Therapeutic Effect of its Flagship Product in Treating “Flesh Eating Bacteria”

- Findings published in the Journal of Infectious Diseases -

Ness Ziona, Israel April 9, 2013 – Atox Bio announced new data in an animal model of necrotizing soft tissue infection (NSTI), commonly known as “flesh eating bacteria” demonstrating that administration of a single dose of AB103, given several hours after infection even without any antibiotics, increased survival in animals, and reduced tissue necrosis, inflammation and bacterial burden at the site of infection without compromising the immune response. NSTI or flesh eating bacteria is a life-threatening bacterial infection with significant morbidity and no currently approved therapies.

These findings are significant as they suggest that AB103 has a broad therapeutic window and could be used even in cases of antibiotic ineffectiveness such as with antibiotic resistant bacteria. The data were published in a paper titled “A peptide antagonist of CD28 signaling attenuates toxic shock and necrotizing soft tissue infection induced by *Streptococcus pyogenes*” that was published in the March issue of the *Journal of Infectious Diseases*.

This new research supports the positive results obtained in the recently completed Phase 2a clinical trial with AB103 in 40 patients with NSTI conducted at 6 leading medical centers across the U.S. The randomized, double-blind, placebo-controlled study demonstrated that patients treated with AB103 had a meaningful improvement across multiple endpoints in NSTI caused by different types of pathogens, including gram positive bacteria, gram negative bacteria and mixed infections. Patients treated with AB103 had a faster resolution of organ dysfunction, spent fewer days in the intensive care unit, required fewer days of assisted ventilation and needed fewer surgical procedures to remove infected tissue. AB103 has received an orphan drug status from the FDA in October 2011 and a fast track status in August 2012.

Alan S. Cross, M.D., Professor of Medicine at University of Maryland in Baltimore, Center for Vaccine Development, and the Paper’s lead co-author, stated, “The results with AB103 are impressive. Unlike the case with other agents assessed in animal models, AB103 is highly effective even when given several hours after infection.”

Raymond Kaempfer, Ph.D., Professor of molecular biology and cancer research at the Faculty of Medicine of The Hebrew University of Jerusalem, Israel, Atox Bio’s Chief Scientist and the Paper’s second lead co-author, said, “Our insight into how an excessive inflammatory response is generated via the newly identified bottleneck of the CD28 co-stimulatory receptor, now allows for more effective treatment of live bacterial infection.”

About AB103

AB103, a novel immunomodulator, is a rationally designed, short peptide that modulates the host’s inflammatory response through binding to the CD28 dimer interface. This approach of targeting the host immune response rather than the pathogen precludes the development of antibiotic resistance and provides a broad spectrum solution to bacterial infections, independent

of pathogen type. AB103 provides protection from lethal bacterial infections in experimental models of a wide range of bacterial pathogens, both gram-positive and gram-negative and from bacterial superantigen toxins.

About NSTI

Necrotizing soft tissue infections (NSTI) are fast progressing infections that represent the most severe forms of skin and soft tissue infections, resulting in extensive tissue destruction that could lead to amputation and systemic signs, including multi-organ failure. Management of patients with NSTI focuses on rapid and extensive surgical debridement of all necrotic tissue and treatment with broad-spectrum antibiotics. There are currently no approved therapies for specifically treating NSTI. In the U.S. alone, there are an estimated 21,000 new NSTI cases each year.

About Atox Bio

Established in 2003 by Prof. Raymond Kaempfer and Dr. Gila Arad from the faculty of Medicine of the Hebrew University of Jerusalem and Yissum, the technology transfer company of the Hebrew University, Atox Bio is a clinical stage biotechnology company that develops novel immunomodulators in areas of high unmet need with a focus on critical care. AB103, Atox Bio's lead product, is being developed for necrotizing soft tissue infections and other severe infections and has received orphan drug and fast track status from the FDA. Atox Bio is included as one of the portfolio companies of Integra Holdings, a holding company formed by Yissum.

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