

Abzyme Awarded NIH Contract for Strategies to Improve HIV Envelope Protein Expression and Yield

Royersford, PA, May 29, 2019. Abzyme Therapeutics LLC, a biotech company focused on developing antibodies for diagnostic and therapeutic applications, has been awarded a \$299,808 Small Business Innovation Research (SBIR) Phase I Contract by the National Institute of Allergy and Infectious Diseases for implementation of strategies to improve HIV envelope protein expression and yield.

The National Institutes of Health (NIH) SBIR program is a highly competitive program for small businesses that seeks to commercialize innovative technologies with biomedical applications. This highly competitive program helps small businesses participate in federal research and development, develop life-saving technologies, and create jobs.

The promising efficacy seen in the clinical trials of HIV-1 vaccine RV144 creates a critical need for new strategies/technologies that enable development of high yielding GMP manufacturing processes for HIV antigens. Current production processes are low yielding and commercially difficult. Using its proprietary antibody generation platform, Abzyme Therapeutics will develop camelid VHH antibodies that are capable of enhancing gp120 production when they are co-expressed. The effort in Phase II will be to develop stable VHH-assisted gp120 protein production CHO-cell lines with significant improvement in yield for HIV vaccine manufacturing.

Following a thorough evaluation of Abzyme's proposal the NIH review panel awarded the application a Highly Innovative SBIR application rating. According to the NIH review panel, this innovative technology is expected to have high potential impact on recombinant vaccine development.

"We are extremely pleased to be recognized with this highly competitive award from the NIH SBIR program and are grateful for the continued support towards our mission of developing biologics for treatment of various human diseases" said Dr. Tran, CEO and cofounder of Abzyme. "This SBIR Contract plays a vital role in expanding the application of our technology capabilities".

About Abzyme Therapeutics:

Abzyme Therapeutics is a biopharmaceutical company focused on developing modular single domain VHH antibody fragments for immunotherapy using proprietary antibody generation platforms. Unique to Abzyme is its proprietary and highly engineered eukaryotic in vitro antibody discovery/optimization platform based on yeast display self-diversifying libraries, rapid target-directed antibody affinity maturation in combination with a FACS single cell sorting approach to identify desired antibodies. Abzyme's modular antibody discovery platform incorporates a real-time screening ability to select for key properties such as epitopic diversity, binding affinity, expressibility, solubility, developability, broad-reactivity and target-specificity.

Today, the Company has over 60 proprietary and partnered programs in development in therapeutic and diagnostic areas including infectious diseases, immuno-oncology, ophthalmology, inflammation and central nervous system disorders.

For further information, please contact:

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