Abzyme Awarded Highly Competitive Department of Defense Phase II SBIR Contract

Royersford, PA, November 16, 2017. Abzyme Therapeutics LLC, a biotech company focused on developing antibodies for diagnostic and therapeutic application, has been awarded a $1,000,000 Small Business Innovation Research (SBIR) Phase II Contract by the US Department of Defense (DoD) to continue development of therapeutic antibodies against equine encephalitis viruses and to advance them into clinical trials.

The DOD SBIR program is a highly competitive program for early stage small businesses that are seeking to commercialize innovative technologies with military and civilian applications. Regarding the biomedical research, the program helps small businesses participate in federal research and development, develop life-saving technologies, and create jobs. In Phase I of this project, Abzyme has successfully demonstrated the feasibility of its antibody development platform with self-diversifying antibody libraries in generating broadly reactive single domain camelid VHH antibodies against E3E2 proteins of Eastern, Western and Venezuelan equine encephalitis viruses (EEV). In addition, VHH antibodies against human transferrin receptor TfR have been isolated. Obtained EEV E3E2/E2 and TfR antibodies will serve as a foundation for developing bispecific EEVxTfR capable of traversing the blood brain barrier or BBB and effective as countermeasures for live EEV exposure in small animal studies (phase II). Therapeutic antibodies broadly reactive to equine encephalitis viruses and capable of overcoming the BBB could find application by military and civilian entities as safe medical countermeasures for treatment of viral induced encephalitis.

Unique to Abzyme is its proprietary eukaryotic in vitro antibody discovery/optimization platform based on yeast display self-diversifying libraries, rapid target-directed antibody maturation, and a FACS single cell sorting approach to identify desired antibodies. These combined technologies enable Abzyme Therapeutics to shorten typical monoclonal antibody development/optimization times from 4.5 – 6 months to 6 – 10 weeks. Abzyme's antibody discovery platform incorporates the ability to select for key properties such as epitopic diversity, binding affinity, expressibility, solubility, developability, broad-reactivity and target-specificity into real-time screening.

"We are extremely pleased to be recognized with this highly competitive award from the DoD SBIR program and are grateful for the continued support towards our mission of developing therapeutic antibodies for treatment of various human diseases" said Dr. Tran, CEO and co-founder of Abzyme. "This SBIR grant plays a vital role in expanding our antibody development capabilities".

For further information, please contact:

Abzyme Therapeutics LLC

Steve Manobianco
Director of Business Development
Phone: 610-990-7531
E-mail: manobianco@abzymetx.com