Visterra Announces Publication in the Journal *PLOS Neglected Tropical Diseases* Demonstrating that Novel Antibody, VIS513, Broadly Neutralizes Antibody-Enhanced Dengue Infection in Preclinical Studies

Cambridge, MA – February 12, 2018 – Visterra, Inc., a clinical-stage biotechnology company, announced that new preclinical results with VIS513, its novel monoclonal antibody in development for the treatment of dengue, were published online in the journal *PLOS Neglected Tropical Diseases* (Y. Budigi et al., PLoS Negl Trop Dis 12(2): e0006209. https://doi.org/10.1371/journal.pntd.0006209). In the paper titled "Neutralization of antibody-enhanced dengue infection by VIS513, a pan serotype reactive monoclonal antibody targeting domain III of the dengue E protein," Visterra scientists and scientists at the National University of Singapore (NUS), the Singapore-MIT Alliance for Research and Technology (SMART) Center, and Duke-National University of Singapore (Duke-NUS) describe preclinical data demonstrating that VIS513 potently neutralized dengue virus at clinically relevant viral loads. More importantly, dengue virus neutralization by VIS513 was demonstrated in the presence of natural antibody that can potentially enhance dengue infection and lead to more severe disease. These data support the continued development of VIS513 as a single administration treatment for dengue virus infection.

"Dengue is the most common mosquito-transmitted viral disease in the world, currently with no specific treatment, and prevention is solely dependent on effective mosquito control measures," said Zach Shriver, PhD, Chief Scientific Officer at Visterra. "These new preclinical data further demonstrate the ability of VIS513 to effectively neutralize dengue virus, independent of serotype, with potentially lower likelihood of the virus developing resistance to VIS513. In addition, these results differentiate VIS513 from what others have shown – in vitro and in animal models – that at certain concentrations, other antibodies bind, but do not neutralize, the dengue virus and consequently enhance, or worsen, dengue virus infection. We are especially encouraged by these preclinical data demonstrating that VIS513 broadly neutralizes antibody-enhanced dengue infection."

About VIS513

Developed using Visterra's Hierotope platform, VIS513 is an engineered humanized antibody that targets a conserved region on dengue virus domain III of the E protein that is present across all dengue virus serotypes. In preclinical studies, VIS513 has demonstrated that it potently neutralized all four serotypes of dengue virus and protected animals challenged with a lethal dose of dengue virus. VIS513 is being developed under a collaboration with the Serum Institute of India, who expects to initiate clinical trials of VIS513 in 2018.

About Dengue

Dengue is a mosquito-borne viral infection found in tropical and sub-tropical regions around the world. There are four distinct, but related, serotypes of the virus, each of which can cause dengue. The virus infects cells of the human immune system and other cell types, leading to symptoms that include high fever, severe headache, severe pain behind the eyes, joint pain, muscle and bone pain,

rash, and mild bleeding. In severe cases, plasma leaks out of the circulatory system and can be fatal. There is currently no specific treatment for dengue and prevention depends solely on effective vector control measures. The global incidence of dengue has grown dramatically in recent decades. About half of the world's population is at risk for dengue and a recent study estimates that approximately 390 million people are infected each year. The World Health Organization estimates that 500,000 people with severe dengue require hospitalization each year, a large proportion of whom are children, and more than 20,000 of those affected die each year.

About Visterra

Visterra is a clinical-stage biopharmaceutical company focused on applying its novel Hierotope® platform to identify unique disease targets and to design and engineer precision antibody-based biological medicines against such targets that are not adequately addressed with conventional approaches. Visterra's technology is uniquely capable of engineering biological medicines for infectious diseases that provide broad coverage across viral strains, including mutated strains, and in the case of endogenous targets, selectively modify the activity of targets that have limited surface area, are hard to access, have dynamic structures, and/or are similar to other proteins in the body that should be avoided. Visterra's lead product candidate, VIS410, is a monoclonal antibody in development as a single-dose administration for the treatment of hospitalized patients with influenza A, regardless of the viral strain. The company's other product candidates are VIS649, a monoclonal antibody in development for the treatment of IgA nephropathy, VIS513, a monoclonal antibody in development as a single-dose administration for the treatment of dengue, and VIS705, an antibody-drug conjugate being developed as a single-dose curative therapy, engineered to kill all strains of the deadly Pseudomonas aeruginosa bacteria. In addition, Visterra has applied its Hierotope platform to develop novel modifications to the Fc region of an antibody, to enhance half-life by as much as ten-fold while maintaining and often improving effector function. These capabilities, called ViStar™ antibody Fc engineering, support the development of long-acting monoclonal antibodies for the extended protection in infectious diseases and less frequent administration in chronic diseases. For more information, visit www.visterrainc.com.

###

Media Contact:
Kathryn Morris
The Yates Network
kathryn@theyatesnetwork.com
Tel: 914-204-6412