



## **Visterra Announces Publication in the Journal Cell, Demonstrating Novel Antibody, VIS513, Broadly Neutralizes All Four Serotypes of Dengue Virus in Preclinical Studies**

Cambridge, MA – July 16, 2015 – Visterra, Inc., a clinical-stage biotechnology company that uses its proprietary technology platform to identify unique disease targets and design novel therapeutics for infectious diseases, today announced that new preclinical results with VIS513, Visterra’s novel monoclonal antibody in development for the treatment of dengue, were published online on July 16, 2015 in the journal *Cell* (Robinson et al., 2015, *Cell* 162, 1–12, doi: 10.1016/j.cell.2015.06.057). In the paper titled “Structure-Guided Design of an Anti-Dengue Antibody Directed to a Non-Immunodominant Epitope,” Visterra scientists and scientists at the Massachusetts Institute of Technology (MIT), Duke-National University of Singapore (Duke-NUS), the Singapore-MIT Alliance for Research and Technology (SMART) Center and Nanyang Technological University (NTU) detail preclinical data demonstrating that VIS513 binds and potently neutralizes all four serotypes of dengue virus and protects mice challenged with a lethal dose of dengue virus. 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 solely dependent on effective vector control measures,” said Zach Shriver, PhD, Vice President of Research at Visterra. “We are very encouraged by the ability of a single administration of VIS513 to rapidly reduce and virtually eliminate viremia, and mitigate symptoms of severe dengue infection in multiple mouse models. These new preclinical data further demonstrate the potential of VIS513 to effectively neutralize across all four dengue virus serotypes and provide additional support for Visterra’s plans to advance VIS513 into clinical development.”

### **About VIS513**

Developed using Visterra’s innovative and proprietary technology 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 binds and potently neutralizes all four serotypes of dengue virus and demonstrates protection of animals challenged with a lethal dose of dengue virus. Visterra is currently developing VIS513 as a single administration treatment for dengue virus infection in collaboration with Singapore’s Agency for Science, Technology and Research (A\*STAR).

### **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 biotechnology company that uses its proprietary Hierotope™ Platform to identify unique disease targets and design and engineer effective therapeutics. The company's technology is powered by computational tools and techniques, the core of which is Atomic Interaction Network (AIN) analysis, which uniquely identifies an area, or epitope, on the target site that is fundamental to its structure and function. This ideal epitope, or hierotope, becomes the target against which the company designs a novel therapeutic to effectively and durably combat the disease. The company is currently focused on therapeutics for infectious diseases, and its lead product candidate, VIS410, is a broad spectrum human monoclonal antibody for the prevention and treatment of both seasonal and pandemic influenza. The company's second product candidate, VIS513, is a human monoclonal antibody for the treatment of dengue that has been shown to broadly neutralize all four dengue virus serotypes. Visterra was founded based on scientific work developed in the laboratory of Dr. Ram Sasisekharan and licensed from MIT. For more information, please visit [www.visterrainc.com](http://www.visterrainc.com).

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