



Visterra presents prophylactic and therapeutic efficacy data of VIS410 against the H5N1 (Avian Flu) influenza strain in Hanoi, Viet Nam

— Oral Presentation at ISIRV's Antiviral Group Conference —

Cambridge, MA – October 29, 2012 – Visterra, Inc., developer of novel medicines to prevent and treat infectious and other major diseases, today announced that its Chief Medical Officer, Donna Ambrosino, MD, has been invited by the International Society for Influenza and Other Respiratory Virus Diseases (isirv) to present VIS410 at its Antiviral Group (isirv-AVG) Conference entitled “Severe Influenza: Burden, Pathogenesis and Management” being held in Hanoi, Viet Nam on October 29-31, 2012. The isirv-AVG is an independent and international scientific professional society which has lead responsibility for organizing the largest international conference exclusively devoted to influenza prevention, control and treatment, including seasonal flu and pandemic preparedness.

Utilizing its proprietary structural analyses of proteins, Visterra has identified a unique site on influenza hemagglutinin (HA) that is not only highly conserved across all influenza subtypes, but also may likely be resistant to mutation. Harnessing this analysis and using its novel protein engineering approach, Visterra has designed >50 human antibodies that bind to this site and neutralize Group 1 and 2 influenza A virus strains. Dr. Ambrosino will present nonclinical proof-of-concept data on its lead candidate, VIS410.

VIS410 targets the identified conserved site on HA and demonstrates favorable physiochemical attributes, including solubility, stability, affinity and specificity. Mechanistic studies indicate that VIS410 inhibits HA fusion with the cell membrane, consistent with the design criteria. In vitro, VIS410 demonstrates dose-dependent viral inhibition with an IC₅₀ in the low µg/ml range against both Group 1 and Group 2 virus strains. In vivo, in addition to the data presented at ICAAC last month demonstrating efficacy against both H1N1 and H3N2 influenza strains, Visterra also presented data on VIS410's efficacy against a lethal dose of an H5N1 influenza virus (influenza strain tested: A/Vietnam/1203/2004). In prophylactic studies, 100% of healthy non-infected mice who received a single dose of VIS410 survived subsequent infection with the H5N1 influenza virus. In post-infection therapeutic studies, 100% of mice treated with a single dose of VIS410 survived a lethal viral challenge of the H5N1 influenza virus when the antibody was administered up to 72 hours after infection.

“We are very pleased to have this opportunity to present and discuss VIS410 at this conference of world leaders focused on improving the global clinical management of influenza”, said Donna Ambrosino, M.D., Visterra's Chief Medical Officer. “VIS410's potent efficacy against a broad spectrum of influenza strains, including H5N1, further demonstrates the potential of VIS410 as

both a novel therapeutic and a passive immunoprophylactic agent to combat seasonal and pandemic influenza. These findings also continue to support a framework for the design of a potential universal influenza vaccine.”

About Influenza

Influenza virus infection is one of the most common infectious diseases, typically causing mild to severe illness, which can sometimes lead to death. Influenza epidemics occur yearly during autumn and winter, resulting in about three to five million cases of severe illness, and about 250,000 to 500,000 deaths worldwide. Although the usual strains of influenza that circulate in the annual influenza cycle constitute a substantial public health concern, far more lethal influenza strains have emerged periodically leading to pandemics that kill millions of people. Of the different types of influenza virus, influenza A viruses can replicate and mutate very rapidly, typically involving more serious infections including recent pandemics: H1N1 caused the most deadly global pandemic Spanish flu in 1918, as well as the 2009 swine flu outbreak, H2N2 caused Asian flu in the late 1950s, and H3N2 caused the Hong Kong flu in the late 1960s.

At the general population level, the most effective way to prevent influenza or severe outcomes from the disease is vaccination. However, although safe and effective vaccines have been available and used for more than 60 years, influenza viruses are constantly changing, and the annual vaccine is developed based on an estimation of the three most prominent strains each season. A monoclonal antibody, like VIS410, that is designed to neutralize all influenza A strains, offers potential for both prevention and treatment of seasonal influenza disease. Furthermore, during a pandemic with a new influenza strain, timely production and implementation of an effective vaccine that targets the pandemic strain is not feasible. However, a universally effective monoclonal antibody could be immediately available and would be utilized for prevention in containment strategies as well as treatment for those at highest risk. VIS410 is being developed for clinical studies and expected to enter the clinical stage over the next two years. Finally, the unique epitope that VIS410 targets also holds promise for the development of a universal vaccine. A universal vaccine or therapeutic that targets a common element in all strains of influenza would have significant worldwide impact on addressing both seasonal and pandemic influenza.

About Visterra

Visterra discovers and develops novel drugs for the prevention and treatment of major diseases. The company’s proprietary platform generates unique structural information that identifies novel drug target sites and guides the design of drugs to effectively combat disease. The company’s lead product candidate, VIS410, is a broad spectrum monoclonal antibody for the prevention and treatment of both seasonal and pandemic influenza. The company is building a proprietary pipeline in infectious disease, and continuing to expand its disease area focus through strategic partnerships in infectious and other diseases. Visterra was founded by Dr. Ram Sasisekharan of MIT and is backed by Polaris Venture Partners, Flagship Ventures, and Lux Capital. For more information please visit www.visterrainc.com.

Contact:
Kathryn Morris

October 29, 2012

Kathryn@theyatesnetwork.com

845-635-9828