



SHANTHA BIOTECHNICS LTD
Health Care People

InViragen and Shantha Biotechnics Announce Dengue Vaccine Manufacturing Agreement

Fort Collins, CO.

November 1, 2006

Contact: Dr. Dan Stinchcomb, (970) 372-4754

InViragen has entered into an agreement with Shantha Biotechnics (Hyderabad, India) for the manufacture of InViragen's proprietary dengue vaccine for human clinical trials. InViragen will use materials made under this agreement to complete preclinical studies and initiate testing of the vaccine for safety and efficacy in human volunteers.

Dengue viruses threaten over 1/3 of the world's population and cause an estimated 100 – 150 million cases of dengue fever every year. InViragen's dengue vaccine was designed by collaborators at the Centers for Disease Control and Prevention (CDC) to protect against all four of the dengue viruses. The vaccine has been shown to be safe and effective in preclinical animal models.

"We are pleased to collaborate with Shantha Biotechnics on the development of this needed vaccine", said Dr. Dan Stinchcomb, InViragen's Chief Executive Officer. "Shantha is a world class vaccine manufacturer with the scientific expertise and manufacturing controls required to produce InViragen's recombinant viral vaccine to exacting specifications."

"Shantha Biotechnics is excited to be a partner in the development of a promising vaccine for dengue fever," said Dr. Varaprasad Reddy, Managing Director of Shantha Biotechnics. "InViragen and the CDC are using innovative recombinant technologies to create a novel vaccine that could protect against a disease that has significant impact in India and worldwide. "

About InViragen

Over 15 million people worldwide die each year of infectious diseases and vaccines to prevent these diseases are the most cost effective solutions to improving global health. Co-founded by Dr. Jorge Osorio and Dr. Dan Stinchcomb, InViragen is developing life-saving

vaccines to protect against emerging infectious diseases worldwide. InViragen's lead vaccine is intended to protect against dengue fever. Dengue fever is a major public health problem in Southeast Asia, the Pacific Islands, the Caribbean, Mexico, Central and South America and parts of Africa. The disease is a serious risk for travelers to those regions as well. InViragen also is developing a vaccine to protect against West Nile disease, a vaccine to protect against avian influenza and a biodefense vaccine to simultaneously protect against plague and smallpox. InViragen has offices in Fort Collins, Colorado and Madison, Wisconsin.

About Shantha Biotechnics, Ltd.

Shantha Biotechnics was the first Indian company to develop, manufacture and market a recombinant human healthcare product in India. Shantha is committed to breaking new ground in modern biotechnology to address critical healthcare needs of the developing world. Shantha is currently focusing its R&D efforts in the development of generic biologicals, novel therapeutic antibodies, proteins and vaccines. SHANVAC- B is the first Indian Hepatitis-B vaccine to be pre-qualified by the WHO for supplying to UN agencies globally. Recently, SHANTETRA, a DTP and Hep B combination vaccine, also received pre-qualification by the WHO. Today, Shantha supplies major international markets in Asia-Pacific, Africa, Central and Eastern Europe, and Latin America in addition to international agencies such as UNICEF and PAHO.