



Increased Defense-Related Funding of AVI BioPharma Approved

1/4/06

\$11 Million Allocated for Development of Therapeutics for Ebola, Marburg and Dengue Viruses, and for Countermeasures for Anthrax and Ricin Toxins

PORTLAND, Ore.--(BUSINESS WIRE)--Jan. 4, 2006--AVI BioPharma, Inc. (Nasdaq:AVII), today announced that President Bush has approved the final version of the 2006 defense appropriations act, which includes an allocation of \$11 million to fund AVI's ongoing defense-related programs. AVI's NEUGENE(R) technology is being used to develop therapeutic agents against Ebola, Marburg and dengue viruses, as well as to develop countermeasures for anthrax exposure and antidotes for ricin toxin.

"This funding allocation is evidence of the success of our antiviral and biodefense programs," said Alan P. Timmins, president and COO of AVI. "We're pleased that the government has increased the funding of our programs so substantially over last year's allocation. While this allocation is less than the Senate Appropriations Committee announced in early October, the difference is understandable given the huge financial impact of Hurricane Katrina. Still, this final funding level more than doubles the funding we received through the congressional defense spending bill for FY2005, and thus demonstrates the ongoing commitment to our programs."

In 2004, AVI received a \$5 million allocation for fiscal year 2005 through the Department of Defense. The funds were used to evaluate AVI's NEUGENE antisense agents against Ebola and Marburg viruses and anthrax and ricin toxins in collaboration with the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). AVI also signed a collaborative research agreement with the Centers for Disease Control and Prevention (CDC) last year to test the company's NEUGENE antisense agents against all four serotypes of the dengue virus. This successful program will continue under the funding allocation for 2006.

NEUGENE antisense compounds are synthetic polymers that mirror a critical portion of a disease-causing organism's genetic code, which bind to specific portions of the target genetic sequence. Like a key in a lock, NEUGENE compounds are designed to match up perfectly with a specific gene or viral sequence, blocking the function of the target gene or virus.

About Ebola Zaire and Marburg Viruses

Ebola hemorrhagic fever is a severe, often-fatal disease in humans and nonhuman primates (monkeys, gorillas and chimpanzees) that has appeared sporadically since its initial recognition in 1976. The disease is caused by infection with Ebola virus, named after a river in the Democratic Republic of Congo (formerly Zaire) in Africa, where it was first recognized. Ebola virus and Marburg virus are the only two members of a family of RNA viruses called the Filoviridae.

Researchers have hypothesized that the first patient becomes infected through contact with an infected animal. After the first patient in an outbreak setting is infected, the virus can be transmitted in several ways. People can be exposed to Ebola virus from direct contact with the blood and/or secretions of an infected person.

The disease is a National Institute of Allergy and Infectious Disease (NIAID) priority A pathogen and a bioterrorism suspect agent of interest to the Department of Defense and Project BioShield. There are currently no approved treatments for Ebola.

Marburg virus was first recognized in 1967, when outbreaks of hemorrhagic fever occurred simultaneously in laboratories in Marburg and Frankfurt, Germany, and in what is now Serbia. Marburg hemorrhagic fever is a rare, severe type of hemorrhagic fever that affects both humans and nonhuman primates. It is caused by a genetically unique animal-borne RNA virus, whose recognition led to the creation of this virus family.

The most recent outbreak of Marburg virus started in October 2004 in Angola. According to the World Health Organization (WHO), as of Aug. 23, 2005, the Ministry of Health (MOH) of Angola had reported a total of 374 cases of Marburg hemorrhagic fever with 329 fatalities. The toll far exceeds the previous worst outbreak recorded in Angola's neighbor, the Democratic Republic of Congo, in 1998, when 123 died.

About Ricin Toxin

Ricin, a plant toxin from the seeds of the castor bean, is one of the most poisonous naturally occurring substances known and is poisonous to people, animals and insects.

Ricin inhibits protein synthesis by specifically and irreversibly inactivating ribosomes. These ribosome-inactivating proteins are typically monomers. However, in order to bind to the cell surface and enter the cell to reach the ribosomes, ricin requires a second monomer. Ricin, therefore, is a heterodimeric protein where the ribosome-inactivating enzyme, known as the A chain, is linked to the cell-surface-binding peptide, called the B chain. The ricin A chain of the heterodimer is the enzyme that binds and inactivates ribosomal RNA. Just a single ricin molecule that enters the cell can inactivate over 1,500 ribosomes per minute and kill the cell.

About Anthrax

Anthrax is an acute infectious disease caused by the spore-forming bacterium *Bacillus anthracis*. *Bacillus anthracis* is an encapsulated gram-positive, nonmotile, aerobic, spore-forming bacterial rod. Anthrax is most common in agricultural regions, where it occurs in animals. When anthrax affects humans, it is usually due to an occupational exposure to infected animals or their products.

Three virulence factors account for majority of the clinical manifestations of *B. anthracis*: edema toxin, lethal toxin, and an antiphagocytic capsular

antigen. The lethal toxin is the most important in pathogenesis and is primarily responsible for the primary clinical manifestations of hemorrhage, edema and necrosis.

In terms of bioterrorism, inhalation anthrax is the greatest concern. Case-fatality rates for inhalation anthrax are high, even with appropriate antibiotics and supportive care. Among the 18 cases of inhalation anthrax in the United States during the 20th century, the overall case fatality was greater than 75%. Following the bioterrorist attack in fall 2001, the case-fatality rate among patients with inhalation disease (all of whom received antibiotic therapy) was 45% (five of 11).

About AVI BioPharma

AVI BioPharma develops therapeutic products for the treatment of life-threatening diseases using third-generation NEUGENE antisense drugs. AVI's lead NEUGENE antisense compound is designed to target cell proliferation disorders, including cardiovascular restenosis, cancer and polycystic kidney disease. In addition to targeting specific genes in the body, AVI's antiviral program uses NEUGENE antisense compounds to combat disease by targeting single-stranded RNA viruses, including West Nile virus, hepatitis C virus, dengue virus and Ebola virus. AVI has introduced a NEUGENE-based exon-skipping technology called ESPRIT therapy. More information about AVI is available on the company's Web site at <http://www.avibio.com>.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: The statements that are not historical facts contained in this release are forward-looking statements that involve risks and uncertainties, including, but not limited to, the results of research and development efforts, the results of preclinical and clinical testing, the effect of regulation by the FDA and other agencies, the impact of competitive products, product development, commercialization and technological difficulties, and other risks detailed in the company's Securities and Exchange Commission filings.

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