



## AVI BioPharma's NEUGENE Shows Success Against Deadly Ebola Virus

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Results Published in Online Journal Public Library of Science (PLoS) Pathogens

PORTLAND, Ore.--(BUSINESS WIRE)--Jan. 13, 2006--AVI BioPharma, Inc. (Nasdaq:AVII), today announced publication of significant research carried out in collaboration with the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). The report, published today in Public Library of Science (PLoS) Pathogens, a peer-reviewed monthly journal published by the Public Library of Science, demonstrates success using AVI's proprietary NEUGENE(R) antisense technology as a countermeasure to Ebola virus infection.

"Gene-Specific Countermeasures against Ebola Virus Based on Antisense Phosphorodiamidate Morpholino Oligomers" is publicly available and can be accessed from the PLoS Pathogens Web site at <http://pathogens.plosjournals.org>.

The extensive study results showed that a combination of Ebola-specific NEUGENE agents protected rodents in both pre- and post-exposure therapeutic regimens. In addition, in a proof-of-principle trial the investigators showed that administration of Ebola-specific NEUGENE agents before lethal exposure to the Ebola virus protected 75 percent of rhesus macaque monkeys in the trial.

"This is the first successful antiviral intervention against this class of viruses in nonhuman primates," said Patrick L. Iversen, Ph.D., senior vice president of research and development at AVI. "These findings serve as the basis for development of a whole class of gene-specific drugs that can be quickly produced in response to known, emerging or genetically engineered bioterrorism threats."

Earlier this month, AVI announced that President Bush has approved the final version of the 2006 Department of Defense Appropriations Act, which includes an allocation of \$11 million to fund AVI's ongoing defense-related programs. AVI's NEUGENE 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.

"We are making great strides in building the credibility for our third-generation NEUGENE antisense as a highly specific gene-targeting therapy," said Alan P. Timmins, president and COO of AVI. "Today's report shows not only how effective this approach can be, but it is also encouraging for our work in treating additional viral diseases, such as chronic hepatitis C infection, which currently affects an estimated 170 million people worldwide."

NEUGENE antisense compounds are synthetic polymers designed to mirror a critical portion of a disease-causing organism's genetic code and 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

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.

Ebola Zaire 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 infection.

### 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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