AVI BioPharma Announces Positive Pre-Clinical Study Results Presented at the 26th Annual Meeting of the American Society for Virology

7/17/07

PORTLAND, Ore.--(BUSINESS WIRE)--July 17, 2007--AVI BioPharma, Inc. (Nasdaq:AVII), announced today the results of five pre-clinical studies using NEUGENE(R) antisense against a variety of viral diseases. The results were discussed this week at the 26th Annual Meeting of the American Society for Virology at Oregon State University (OSU) in Corvallis, Ore, July 14-18, 2007.

"Our infectious disease program encompasses research collaborations with investigators worldwide on more than 50 different viruses, nearly all the viral families known to cause disease in humans," said Patrick L. Iversen, Ph.D., senior vice president of research and development at AVI. "Studies like these continue to advance our knowledge of how NEUGENE agents may be used against a variety of viruses, and how we may continue to make them even more effective inhibitors of disease. Activity in these early stage models permits us to select from the most promising candidates for the eventual development of potential clinical leads."

The following are short summaries of presentations by AVI BioPharma and collaborators. More information and article abstracts can be obtained at the OSU Web site http://oregonstate.edu/conferences/asv2007.

Workshop Presentations

Inhibition of measles virus (MV) by antisense morpholino oligomers

There are currently no antivirals available for the treatment of measles. The most promising NEUGENE produced a 2 log decrease in viral titer in plaque assays. This same NEUGENE was found to significantly inhibit replication of measles virus in cell culture.

Antiviral effects of antisense morpholino oligomers in murine hepatic and pulmonary coronavirus infection models

The results showed a strong antiviral effect against a Coronavirus, Murine Hepatitis Virus, in several mouse models. With further development, these results suggest this NEUGENE agent may become an effective therapeutic against a broad range of coronavirus infections.

Treatment of AG129 mice with antisense morpholino oligomers increases survival times following challenge with dengue 2 virus

The NEUGENE used in this study demonstrated considerable antiviral efficacy against the dengue 2 virus in the AG129 mouse model. These results suggest that early NEUGENE treatment may be critical to extending survival times.

Poster Presentations

Peptide-conjugated phosphorodiamidate morpholino oligomers inhibit alphavirus replication and prevent lethal encephalitis in VEEV-infected mice

In this study a NEUGENE agent achieved inhibition in cell culture against both the Sindbis virus and a variety of VEE (Venezuelan equine encephalomyelitis) virus, a potential bioterror agent. The NEUGENE agent also prevented lethal encephalitis in a VEEV mouse model.

Inhibition of Influenza A virus replication in mice with a "NEU" drug. AVI antisense compounds in seven-week-old BalbC mice infected with H3N8 A/Eq/Miami/63 virus

The results of this influenza A study showed at least a 1.3 log reduction in virus growth in mice, a 1.25 point reduction in illness score and a trend for reduced weight loss when compared with untreated mice.

About AVI BioPharma

AVI BioPharma develops therapeutic products for the treatment of life-threatening diseases using third-generation NEUGENE antisense drugs and ESPRIT exon skipping technology. AVI's lead NEUGENE antisense compound is designed to target cell proliferation disorders, including cardiovascular restenosis. 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, Ebola virus and influenza A virus. AVI's NEUGENE-based ESPRIT technology will initially be applied to potential treatments for Duchenne muscular dystrophy. 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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