AVI BioPharma to Present at the American Society of Gene Therapy Meeting

5/29/08

Presentations to Highlight AVI's Work with Alternative RNA Splicing and Duchenne Muscular Dystrophy

For Immediate Release

PORTLAND, OR — May 29, 2008 — AVI BioPharma, Inc. (NASDAQ: AVII) today announced that a number of oral presentations, as well as posters, utilizing AVI technology will be presented at the 11th Annual Meeting of the American Society of Gene Therapy, which runs from May 29 to June 1, 2008 in Boston. Amongst the authors of the presentations are Patrick Iversen, Ph.D., Ryszard Kole, Ph.D., Peter Sazani, Ph.D. and Hong Moulton, Ph.D. Most of the presentations will highlight AVI's work with alternative RNA splicing for treatment of Duchenne Muscular Dystrophy (DMD).

Included will be a presentation at Friday's plenary session, regarding AVI's NeuGene® drugs, titled, "Body–Wide Restoration of Dystrophin Expression and Amelioration of Pathology in Dystrophic Dogs Using a Morpholino Cocktail," by Drs. Yokota, Lu, Partridge, Kobayashi, Nadamura, Takeda and Hoffman.

Leading one session, to be presented by our collaborators, will be another presentation: "A Morpholino–Cell–Penetrating Peptide Conjugate Caused Effective Exon–Skipping in Heart and Skeletal Muscles of MDX Mice," by Drs. Jearawiriyapaisarn, Moulton, Buckley, Roberts, Sazani, Fucharoen, Iversen and Kole. This talk will highlight the key finding that AVI's peptide conjugated NeuGene drugs, also termed PPMO, induces body–wide production of dystrophin, including skeletal muscles, diaphragm and heart. These data underscore the potential for NeuGene compounds to address cardiac and pulmonary complications associated with DMD.

Other presentations include:

- "Targeted Restoration of Dystrophin Expression in DMD by Peptide–Conjugated Antisense Oligonucleotides," by Drs. Yin, Scow, Moulton, Iversen, Boutilier, and Wood.
- "Full Rescue of Dystrophin Expression in Cardiac, Smooth and Skeletal Muscles by Antisense Oligonucleotide–Induced Exon Skipping," by Drs. Lu, Lu and Wu.
- "Restoration of Dystrophin Expression in Skeletal and Cardiac Muscles by Systemic Delivery of MorpholinoE23–Vivo Porter Oligonucleotide," by Drs. Wu, Li, Morcos, Doran, Lu and Lu.

About Alternative RNA Splicing Technology

In normal genetic function, gene transcription produces a full–length pre–RNA that is then processed to a much shorter and functional messenger RNA. The mRNA is the template for creating a protein. During pre–RNA processing, packets of useful genetic information, called exons, are snipped out of the full–length RNA and spliced together to make the functional mRNA template. AVI's proprietary third–generation NeuGene chemistry can be used to target splice–joining sites in the pre–RNA, thus forcing the cell machinery to skip over targeted exons, providing altered mRNA, which in turn produces altered proteins. In some diseases, such as DMD, skipping an exon can restore a proper RNA reading frame and restore at least partial function of the protein to overcome the devastating clinical consequences of the mutation.

About Duchenne Muscular Dystrophy

DMD is the most common fatal genetic disorder to affect children around the world. It is a devastating and incurable muscle–wasting disease associated with specific inborn errors in the gene that expresses dystrophin, a protein that is an essential component for striated muscle function. When dystrophin is missing or nonfunctional due to a mutation in coding of the dystrophin gene, as it is in DMD, the result is membrane leakage and fiber damage, ultimately leading to degeneration and death of the muscle fiber. There is no cure or effective treatment for DMD. Approximately one in 3,500 boys is born with DMD, and an estimated 15,000 to 20,000 children are afflicted in the United States alone.

About AVI BioPharma

AVI BioPharma develops therapeutic products for the treatment of life–threatening diseases using third–generation NeuGene® antisense drugs and alternative RNA splicing technology. AVI's alternative RNA splicing technology is initially being applied to potential treatments for Duchenne muscular dystrophy. AVI's NeuGene compounds are also designed to treat cardiovascular restenosis in stent and coronary artery bypass graft (CABG) procedures. 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 Marburg Musoke and Ebola Zaire viruses. More information about AVI is available at www.avibio.com.