AVI BioPharma Receives Major Research and Development Grant From Charley's Fund for Duchenne Muscular Dystrophy

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$2.45 Million Will Fund Research and Product Development Program

PORTLAND, Ore., & SOUTH EGREMONT, Mass.--(BUSINESS WIRE)--Oct. 15, 2007--AVI BioPharma, Inc. (Nasdaq:AVII), and Charley's Fund, Inc., today announced that AVI has been awarded a $2.45 million research grant from Charley's Fund, a nonprofit organization that funds drug development and discovery initiatives specific to Duchenne muscular dystrophy (DMD). This award, the largest grant ever made by Charley's Fund and the largest received by AVI from a nonprofit foundation, will support a new product development program using proprietary exon skipping technologies developed by AVI and its partner, Ercole Biotech, Inc., to overcome the effects of certain genetic errors in the dystrophin gene. The award will allow AVI to accelerate its development of new therapeutics for DMD, a top priority for the company.

"The technologies developed by AVI and its collaborators have incredible promise in addressing the fundamental cause of DMD: the lack of functioning dystrophin protein," said Benjamin Seckler, M.D., president of Charley's Fund. "Exon skipping offers the greatest hope for thousands of boys whose futures are in question because of this aggressive disease. We are optimistic that this research collaboration will lead to a human clinical trial in the United States to treat this generation of children with DMD."

DMD is a devastating and incurable muscle-wasting disease associated with specific in-born errors in the gene that expresses dystrophin. Dystrophin is a protein that plays an important structural role in muscle fibers. When dystrophin is missing or nonfunctional due to a mutation in 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. In two-thirds of DMD cases, the genetic mistake is hereditary, but one-third of cases arise spontaneously.

"The directors of Charley's Fund take their mission to find a cure for DMD very seriously. We at AVI are also passionate about this goal and are extremely honored by their recognition of AVI's progress with exon skipping technology," said K. Michael Forrest, interim chief executive officer of AVI. "With excellent preclinical data in hand, we believe our ESPRIT exon skipping technology holds great promise for developing products to treat this devastating disease. We look forward to getting started on the research and product development program immediately."

The focus of the funded program will be to select and develop a lead molecule, based on AVI's proprietary NEUGENE(R) chemistry, that is designed to skip dystrophin exon 50 to restore the proper RNA reading frame and production of functional dystrophin in patients with a particular type of mutation. This therapeutic approach is similar to that of AVI-4658, in development to potentially treat DMD patients with mutations that could benefit from skipping exon 51 of the dystrophin gene.

Funding under the Charley's Fund grant is anticipated over the next several quarters. The exon 50 candidate will be developed by AVI and its cross-licensing and collaboration partner, Ercole Biotech, under an agreement signed by the two companies in May 2007. The program brings together experts on exon skipping from around the world in a significant collaboration that may benefit the DMD population worldwide.

The technologies developed by Ercole and AVI allow manipulation of the RNA splicing process and the production by cells of clinically desirable variants of relevant proteins. AVI refers to its therapeutic approach as ESPRIT (Exon Skipping Pre-RNA Interference Technology). Ercole uses the term Splice Switching Oligonucleotide (SSO) in referring to its drug discovery platform to redirect mRNA splicing. AVI believes that its NEUGENE chemistry is particularly well-suited to modify RNA splicing.

About Duchenne Muscular Dystrophy

DMD is the most common fatal genetic disorder to affect children around the world. Children with DMD cannot produce dystrophin, a protein necessary for muscle strength and function. As a result, every skeletal muscle in the body deteriorates. 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 Charley's Fund

Charley's Fund is a not-for-profit foundation that finances therapeutics development for Duchenne muscular dystrophy. The foundation's mission is to expedite a treatment or cure in time to help this generation of children who suffer from DMD. Charley's Fund targets translational research--research that moves science from the lab into human clinical trials. The 501 (c)(3) public charity was co-founded in 2004 by Benjamin Seckler, M.D. and Tracy Kramer Seckler, whose 6-year-old son Charley has Duchenne muscular dystrophy. To learn more about Charley's Fund, visit www.charleysfund.org.

About Ercole Biotech

Ercole Biotech creates and develops oligonucleotide-based RNA therapeutics that direct alternative splicing of messenger RNA, an essential cellular mechanism responsible for control of gene expression. Splice switching oligonucleotide drugs promise to become a major new class of pharmaceuticals, capable of inducing production of therapeutic proteins by the patient's own body, as well as silencing the expression of undesired proteins. Ercole's SSO technology is based on pioneering discoveries and inventions related to oligonucleotide-induced modulation of alternative splicing and RNA repair originating from the laboratory of Professor Ryszard Kole, Ph.D., at the University of North Carolina School of Medicine. See www.ercolebiotech.com for more information about the company and its drug discovery platform.

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 ESPRIT technology is initially being applied to potential treatments for Duchenne muscular dystrophy. AVI's

lead NEUGENE 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 dengue virus, Ebola virus and H5N1 avian influenza virus. 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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