AVI BioPharma to Present at the UBS Global Life Sciences Conference

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For Immediate Release

CORVALLIS, OR — September 22, 2008 — AVI BioPharma, Inc. (NASDAQ: AVII), a developer of RNA–based drugs, today announced that Dr. Leslie Hudson, AVI's President and CEO, will present an update on the continuing transition of AVI from an antisense pioneer into a leading discoverer and developer of RNA–based drugs. The corporate overview will include an update on AVI's Duchenne muscular dystrophy program (DMD), its biodefense projects (which include significant data from the Company's ongoing Ebola and Marburg virus programs in collaboration with the Department of Defense), its partnership with Cook Medical in the development of a new, innovative drug eluting stent for the prevention of cardiovascular restenosis, and the Company's renewed focus on developing partnerships and collaborations to forward other promising programs based on AVI's proprietary compounds and their novel RNA- based applications.

The Company's update on its DMD program will encompass both its current and planned clinical trials in the UK as well as the latest peer reviewed publications from AVI and its collaborators, including the most recent report in Proceedings of the National Academy of Sciences, which was highlighted in a press release issued by the Muscular Dystrophy Association (MDA) on September 15th. The MDA announced that researchers using AVI's latest generation of drug candidates — coordinated by MDA grantee Qi Long Lu at Carolinas Medical Center in Charlotte, N.C. - showed that an experimental treatment for DMD in preclinical models known as "exon skipping" can now treat the heart, in addition to other muscles affected by DMD.

This is an independent confirmation of data published by AVI researchers earlier this month (September 2008 issue of Molecular Therapy) in which the compound, known as PPMO M23D–B, was used for the systemic treatment of dystrophin–deficient animals and produced high and sustained dystrophin protein production in cardiac, diaphragm and skeletal muscles without detectable toxicity.

Exon skipping is a strategy in which proprietary laboratory–developed chemical sequences known as "PMOs" and "PPMOs" are used to block specific sections (exons) of a gene. These chemical sequences are designed to target a specific exon that contains an error (mutation) and allow the cell to splice together the surrounding normal parts of the gene. Until now, exon skipping has not been effective in the heart of DMD preclinical models. Because balanced de novo dystrophin expression in the heart, diaphragm and skeletal muscles could be important for the most desirable therapeutic outcomes in DMD, these results are a significant extension of the experimental capabilities of the current generation of exon skipping drug candidates.

The UBS Global Life Sciences Conference runs from Monday, September 22 through Thursday, September 25 at the Grand Hyatt Hotel in New York City. Dr. Hudson's presentation is on Thursday, September 25 and is scheduled to begin at 10 a.m. in Ballroom E. UBS will be webcasting the presentation live in audio only format to investors via the www.ibb.ubs.com website.

Slides from Dr. Hudson's presentation can be downloaded here .

About AVI BioPharma

AVI BioPharma is focused on the discovery and development of RNA–based drugs using the company's expanded portfolio of proprietary antisense compounds (PMOs). The company's technology applications leverage distinct mechanisms of action in a range of genetic diseases, genetic disorders and the genetic code of disease–causing organisms. The emerging field of directed alternative RNA splicing represents AVI's newest and most exciting application based on the company's core antisense technology. Functional attributes of this approach may include correcting genetic defects (RNA mutations; which AVI believes could produce promising treatments for Duchenne muscular dystrophy), coding for novel soluble receptors (an exciting and novel approach which could have application in the treatment of inflammatory diseases such as rheumatoid arthritis), and the reduction in activity of immune modulators in disease states (currently being applied to IL–10). AVI's RNA–based drug programs also include blocking mRNA translation. In AVI's biodefense program, this application has been successful against the single–stranded RNA viruses Ebola Zaire and Marburg Musoke in non–human primates and may have value against other viral targets such as HCV, Dengue, Junin, influenza and RSV viruses. This application also will be evaluated in the clinic for the treatment of cardiovascular restenosis by our partner Cook Medical. More information about AVI is available at www.avibio.com.