AVI BioPharma Announces Initiation of Clinical Trial of Next Generation Drug Eluting Stent by Partner Global Therapeutics

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Device Utilizes AVI's New Class of RNA Therapeutic Agent

For Immediate Release

PORTLAND, OR — November 10, 2008 — AVI BioPharma, Inc. (NASDAQ: AVII), a developer of RNA–based drugs, today announced that its partner Global Therapeutics, a Cook Medical company, has initiated the world's first clinical trial of a drug eluting stent that uses a PPMO (peptide–conjugated morpholino phosphorodiamidate oligomer)-based RNA therapeutic agent aimed at silencing C–MYC, one of the genes responsible for causing arteries to reclose after stenting (restenosis).

"The initiation of this first clinical trial of a drug eluting stent utilizing our RNA–based therapeutic agent is a significant milestone for AVI BioPharma and demonstrates a novel and promising application of our new generation of translation–suppressing oligomers," said Leslie Hudson, Ph.D., President and Chief Executive Officer of AVI. "We look forward to the advancement of this program and are excited by its potential to usher in a new generation of drug eluting stents."

Global Therapeutics' GTX bare metal stent, which is already marketed in Europe, is coated with AVI's latest generation antisense compound coupled with a non–polymer, biodegradable excipient to release the AVI compound after stent implantation. The GTX cobalt chromium stent is designed for optimal ease of deliverability, radial strength and clinical performance.

"Based on our preliminary work with this class of drug, the delivery system, and the stent platform, we are extremely excited to begin what we hope will be a ground–breaking trial that advances the science of treating coronary artery disease beyond what current technologies can achieve," explained Joseph B. Horn, president, Global Therapeutics, a Cook Group company. "With the help of our European colleagues, we eagerly anticipate a successful outcome to this landmark trial in 2009."

The AVI drug used in the GTX DES device, AVI–5126, is an enhanced antisense agent that targets a key regulatory gene involved in cardiovascular restenosis, silencing the gene before the biochemical events leading to restenosis can be triggered. The enhanced antisense compound has increased potency and bioavailability compared with its predecessors, allowing for a DES system with less drug. Once implanted, the stent sheds its drug and excipient coating, leaving behind a bare metal stent after 24 hours. The drug stays resident in the tissue for over two weeks.

The feasibility study is a prospective, open label, multi–center trial being performed in Germany. As many as 90 patients will be enrolled and all subjects will undergo clinical follow–up at 30 days and 6 months. Angiographic results will be reported at 6 months using quantitative coronary angioplasty (QCA) and intravascular ultrasound (IVUS). The primary endpoint for the study is composite safety — Major Adverse Cardiac Events (MACE) — at 30 days. Other endpoints include performance criteria such as in–stent and in–segment late loss, binary restenosis, and target lesion revascularization. Data from the study will be compared to historical controls of both bare and drug eluting stents.

About AVI BioPharma

AVI BioPharma is focused on the discovery and development of RNA–based drugs utilizing proprietary derivatives of its antisense chemistry (morpholino–modified phosphorodiamidate oligomers or PMOs) that can be applied to a wide range of diseases and genetic disorders through several distinct mechanisms of action. Unlike other RNA therapeutic approaches, AVI's antisense technology has been used to directly target both messenger RNA (mRNA) and its precursor (pre–mRNA), allowing for both up- and down–regulation of targeted genes and proteins. AVI's RNA–based drug programs are being evaluated for the treatment of Duchenne muscular dystrophy as well as for the treatment of cardiovascular restenosis through our partner Global Therapeutics, a Cook Group Company. AVI's antiviral programs have demonstrated promising outcomes in Ebola Zaire and Marburg Musoke virus infections and may prove applicable to other viral targets such as HCV or Dengue viruses. For more information, visit www.avibio.com.

About Cook Medical

Cook Medical was one of the first companies to help popularize interventional medicine, pioneering many of the devices now commonly used worldwide to perform minimally invasive medical procedures. Today, the company integrates minimally invasive medical device design, biopharma, gene and cell therapy and biotech to enhance patient safety and improve clinical outcomes in the fields of aortic intervention; interventional cardiology; critical care medicine; gastroenterology; radiology, peripheral vascular, bone access and oncology; surgery and soft tissue repair; urology; and assisted reproductive technology, gynecology and high–risk obstetrics. Founded in 1963 and operated as a family–held private corporation, Cook is a past winner of the prestigious Medical Device Manufacturer of the Year Award from Medical Device & Diagnostic Industry magazine. For more information, visit www.cookmedical.com.