AVI BioPharma Announces Hepatitis C Virus Clinical Study Modification

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PORTLAND, Ore.--(BUSINESS WIRE)--July 20, 2006--AVI BioPharma, Inc. (Nasdaq:AVII) announced today that it has entered patients to fill two new cohorts to extend the duration of treatment with AVI-4065 in its hepatitis C virus (HCV) clinical trial. One cohort will be treated twice daily for 28 days and the second will receive therapy twice daily for 56 days. This extension of the treatment duration from 14 days to 28 days and 56 days is the first of several variables that the company is considering.

This extension of duration of treatment is based on pharmacokinetic indications from previous cohorts, including normal subjects and HCV patients, after evaluation of preliminary data released May 2006 at the International Conference on Antiviral Research. It is designed to potentially enhance the pharmacokinetics and viral and clinical response to treatment with AVI's proprietary NEUGENE(R) antisense compound, AVI-4065, in patients with HCV.

"Since preclinical models of HCV are rarely predictive of chronic active HCV in patients, we anticipated that some modifications to the protocol might be required to optimize the pharmacokinetics and potential efficacy of the drug," said Denis R. Burger, Ph.D., chief executive officer of AVI. "We are fortunate that the safety profile of our NEUGENE antisense platform easily allows for changes such as this, including potential increases in duration of therapy, dosage modification, combination targeting, and enhanced delivery options. We continue to be pleased with the progress of this program and are actively moving forward. We believe that, just as we did with the development of drug candidates for the Ebola virus after reviewing initial data, we can fine-tune development leading to a viable drug therapy."

In previous studies, AVI-4065 exhibited favorable safety and tolerability profiles in all patients, and there were no drug-related adverse events or tolerability issues reported during either the 14 days of treatment or the 28 days of follow-up. Preliminary data from the first three cohorts of normal subjects were reported in January 2006 and the trial was completed in March 2006. Those cohorts included 31 healthy volunteers who received 14 consecutive days of treatment with AVI-4065 at one of three dosage levels. Clinical and viral response data from the previous cohorts of HCV patients treated for 14 days with AVI-4065 are expected to be reported by the end of the third quarter of 2006.

HCV is a single-stranded RNA virus. Because HCV and other single-stranded RNA viruses have relatively simple genetic structures, they are attractive targets for AVI's NEUGENE antisense, which is designed to target conserved portions of the viral genetic code. This approach is intended to reduce the opportunity for the virus to evolve resistance to the therapy over time.

About Hepatitis C Virus Infection

Chronic HCV infection causes an inflammation of the liver that can result in the development of cirrhosis, liver cancer or liver failure. According to the World Health Organization, approximately 170 million people worldwide are chronically infected with HCV. It is the most common chronic blood-borne infection in the developed world and the leading cause of liver transplants in the U.S. The Centers for Disease Control and Prevention estimates that approximately 3.9 million Americans have been infected with HCV, of whom 2.7 million are chronically infected.

The Hepatitis Foundation International estimates that between 8,000 and 10,000 people die annually in the U.S. from HCV-related cirrhosis or liver cancer. The current treatment for HCV, 24 weeks to 48 weeks of therapy with pegylated interferon alpha and ribavirin, is successful in less than half the patients infected with genotype 1 HCV, the most common form of the virus in the U.S. Furthermore, this treatment has numerous side effects, some of them severe, which make it difficult for nearly half of initially treated patients to tolerate the recommended dosages and duration of treatment.

About AVI BioPharma

AVI BioPharma develops therapeutic products for the treatment of life-threatening diseases using third-generation NEUGENE antisense drugs. AVI's lead NEUGENE antisense compound is designed to target cell proliferation disorders, including cardiovascular restenosis, cancer and polycystic kidney disease. 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 hepatitis C virus, influenza A virus, West Nile virus, dengue virus and Ebola virus. AVI has introduced a NEUGENE-based exon-skipping technology called ESPRIT therapy. 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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