Isis Pharmaceuticals Achieves $3.75 Million Development Milestone In HepaSense Joint Venture With Elan Corporation

April 25, 2002

CARLSBAD, Calif., April 25 /PRNewswire-FirstCall/ -- Isis Pharmaceuticals, Inc. (Nasdaq: ISIS) announced today that it has achieved a development milestone in its HepaSense™ Ltd. joint venture with Elan Corporation, plc. (NYSE: ELN) of Dublin, Ireland, triggering a $3.75 million equity purchase by Elan of Isis Common Stock at $29.74 per share. This is the second equity purchase by Elan as part of the companies' HepaSense collaboration initiated in January 2000. HepaSense was created to develop ISIS 14803, an antisense drug designed to inhibit Hepatitis C Virus (HCV) replication.

The milestone is related to HepaSense's successful completion of a nine-month toxicology study and the demonstration of acceptable safety and reduction of HCV viral titer, or levels of virus in blood, in an initial Phase I/II clinical trial.

In March 2002, HepaSense initiated a Phase II clinical trial which is planned to enroll 40 patients at six sites across the U.S. The study will evaluate the safety and tolerability of two dosing regimens of ISIS 14803 administered by intravenous infusion (IV) over 12 weeks. In June 2001, HepaSense reported preliminary data from a small group of patients in a Phase I/II clinical trial in which ISIS 14803 demonstrated antiviral activity by reducing viral titers in patients with drug-resistant chronic HCV. Patients in the study received escalating doses of ISIS 14803 by IV for one month. All patients in the report had the most common and drug-resistant form of HCV, genotype 1, and all but one patient had failed previous interferon-based therapy. HepaSense is considering future clinical trials of ISIS 14803 using Elan's MEDIPAD™ Drug Delivery System, a minimally invasive microinfusion pump.

Hepatitis C causes chronic inflammation of the liver that can go undetected for months or years but is frequently progressive, resulting in life-threatening impairment of liver function. Persistent liver inflammation causes ongoing injury to the cells of the liver. It can lead to liver scarring called cirrhosis, liver failure, possibly liver cancer and death due to the complications of these hepatic insults. Liver complications of chronic HCV infections are the most frequent indication for liver transplants.

According to the National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK), HCV is one of the most important causes of chronic liver disease in the U.S. It accounts for approximately 20 percent of acute viral hepatitis, 60 to 70 percent of chronic hepatitis, and 30 percent of cirrhosis, end-stage liver disease, and liver cancer. Nearly four million Americans, or 1.8 percent of the U.S. population, have antibody to HCV (anti-HCV), indicating ongoing or previous infection with the virus. HCV causes an estimated 8,000 to 10,000 deaths annually in the U.S.

Isis Pharmaceuticals, Inc. is exploiting its expertise in RNA to discover and develop novel human therapeutic drugs. The company has commercialized its first product, Vitravene® (fomivirsen), to treat CMV-induced retinitis in AIDS patients. In addition, Isis has 13 antisense products in its development pipeline, with two in late-stage development and six in Phase II human clinical trials. Affinitac™ (formerly called LY900003 and ISIS 3521), an inhibitor of PKC-alpha, is in Phase III trials for non-small cell lung cancer, and alicaforsen (ISIS 2302), an ICAM-1 inhibitor, is in Phase III human clinical trials for Crohn's disease. Isis has a broad patent estate, as the owner or exclusive licensee of more than 900 issued patents worldwide. Isis' GeneTrove™ division uses antisense to assist pharmaceutical industry partners in validating and prioritizing potential gene targets through customized services. Ibis Therapeutics™ is a division focused on the discovery of small molecule drugs that bind to RNA. Additional information about Isis is available at www.isispharm.com .

This press release contains forward-looking statements concerning HepaSense and the profile and development of ISIS 14803 and its prospects, planned development activities and therapeutic potential for our pipeline products and the potential value of the company's functional genomics and drug discovery platform. Any statement describing a goal, expectation, intention or belief of the company is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics and financing such activities. Actual results could differ materially from those projected in this release. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Isis' research and development programs are described in additional detail in the company's Annual Report on Form 10-K, for the period ended December 31, 2001, which is on file with the U.S. Securities and Exchange Commission, copies of which are available from the company.

SOURCE Isis Pharmaceuticals, Inc.
Web site: http: //www.isispharm.com
CONTACT: Kristina Peterson of Isis Pharmaceuticals, Inc., +1-760-603-2521