



Avila Therapeutics Presents New AVL-192 Data at the 5th International Workshop on Hepatitis C: Resistance and New Compounds

--Covalent Inhibition Achieves Superior Potency Against Drug-Resistant Mutants of the Hepatitis C Virus Protease in Preclinical Studies --

BOSTON, MA and WALTHAM, MA – June 25, 2010 – Avila Therapeutics™, Inc., a biotechnology company developing targeted covalent drugs that treat diseases through protein silencing, today announced results of preclinical studies that demonstrate its covalent drug candidate, AVL-192, achieves superior potency against drug-resistant mutations of the Hepatitis C Virus (HCV) protease when compared to protease inhibitors currently in clinical testing. These new data were presented Friday, June 25, 2010 at the 5th International Workshop on Hepatitis C: Resistance and New Compounds in Boston, MA.

HCV protease (also known as NS3) is a promising target of intervention for the treatment of hepatitis C infection. However, medicines currently in late stages of clinical development are vulnerable to drug-resistant mutations. AVL-192 is a novel, orally-available compound that can rapidly and completely silence the HCV protease through highly selective, irreversible covalent bonding to the target protein. Preclinical data have demonstrated that AVL-192 achieves very high potency and selectivity for NS3 and also potently and effectively inhibits the drug-resistant mutations observed clinically.

Avila's covalent approach to silencing the NS3 protein has resulted in a product candidate with a potential best-in-class profile due to the ability to retain potency against clinically-arising resistance mutations, potential breadth of activity across HCV genotypes, and anticipated once-per-day dosing.

In an oral presentation at the workshop, entitled, "Covalent Irreversible Inhibition Achieves Superior Potency Against Drug Resistant Mutants," Margit Hagel, Senior Scientist, Avila Therapeutics, presented data from preclinical studies that evaluated the efficacy of AVL-192 in biochemical and cell culture studies. Highlights of the data demonstrate:

- By bonding with a unique amino acid in NS3 that is conserved across all known HCV genotypes and clinically-arising mutations, Cys159, AVL-192 has potential as a pan-genotype therapeutic that can overcome drug resistance;
- In biochemical assays, AVL-192 retains excellent potency against NS3 mutants through time-dependent inactivation;
- AVL-192 demonstrates potent cellular activity in mutant HCV replicon cultures (EC_{50} values): wildtype (genotype 1b), 3 nM; A156S, 6 nM; A156T, 45 nM; D168A, 58 nM; and R155K, 6 nM;

- AVL-192 shows prolonged duration of action on clinically-relevant NS3 mutants in cells expressing the HCV replicon, with 80% inhibition of wild-type NS3 and 70% inhibition of the R155K mutation even 24 hours after removal of drug.

“These new data show the potential of targeted covalent drugs, such as AVL-192, to be best-in-class, pan-genotype HCV therapeutics due to their unique mechanism of action with superior selectivity and potency,” said Juswinder Singh, Ph.D., Avila’s Founder and Chief Scientific Officer. “All of these characteristics are critical to delivering a more complete solution for patients battling hepatitis C..”

About Covalent Drugs

The covalent bonding mechanism of Avila Therapeutics’ drugs has unique properties to effectively ‘silence’ disease-causing proteins. Avila drugs establish a strong and enduring ‘bond’ – exceeding the more temporary ‘binding’ of conventional drugs – to completely shut down the activity of, and silence, a disease-causing protein. Avila’s covalent drugs have unique therapeutic benefits because they are exquisitely targeted, are effective against mutations and have long duration of action.

About Avila Therapeutics™, Inc.

Avila focuses on design and development of targeted covalent drugs to achieve best-in-class outcomes that cannot be achieved through traditional chemistries. This approach is called “protein silencing”. The company’s product pipeline has been built using its proprietary Avilomics™ platform and is currently focused on viral infection, cancer and autoimmune disease. Avila is funded by leading venture capital firms: Abingworth, Advent Venture Partners, Atlas Venture, Novartis Option Fund, and Polaris Venture Partners. For additional information, please visit <http://www.avilatx.com>.