FOR IMMEDIATE RELEASE

Avila Presents Preclinical Data on its Novel, Orally-Available, Pan-Genotype Protease Inhibitor, AVL-181, Demonstrating Protein Silencing of Hepatitis C Virus

In Vivo Data Demonstrates Covalent Modification Achieved for Prolonged Duration of Action

NICE, FRANCE and WALTHAM, MA – October 5, 2009 – Avila Therapeutics™, Inc., a biotechnology company developing novel covalent drugs that treat diseases through protein silencing, presented results of preclinical studies on its highly selective, pan-genotype, small molecule Hepatitis C Virus (HCV) protease inhibitor, AVL-181. The data showed that AVL-181 bonds selectively, covalently and irreversibly to HCV protease (also known as "NS3/4A"), thus silencing a key protein necessary for successful viral replication resulting in a prolonged duration of action.

Furthermore, the data demonstrate that the amount of HCV protease silenced by AVL-181 can be measured in a dose- and time-dependent manner in an animal model using Avila's novel translational technology known as a covalent probe. With this novel technology, Avila demonstrated that AVL-181 successfully blocked HCV protease enzyme activity and that the HCV protease target was covalently bonded and silenced *in vivo*. These data were presented today at the 16th International Symposium on HCV and Related Viruses in Nice, France.

"In addition to the ability of AVL-181 to provide sustained inhibition across multiple genotypes and drug-resistant mutations of the HCV protease, these data now demonstrate a unique translational advantage. With Avila's covalent probe technology, efficacy and target occupancy can be directly correlated and measured, which is a powerful tool for drug development," said Katrine Bosley, Chief Executive Officer, Avila. "These data provide further support for the clinical evaluation of AVL-181, and we are planning to advance into clinical development next year."

In the study, *"Protein Silencing of Hepatitis C Virus NS3/4A Protease In Vitro and In Vivo Using a Novel Drug Design Strategy"* (Poster P203), the data demonstrate that the orally available, novel HCV protease inhibitor, AVL-181:

- Potently and irreversibly silences wild-type and drug-resistant HCV proteases;
- Durably inhibited the HCV protease, including drug resistant mutants, for more than 24 hours after a single exposure as measured in a novel *in vivo* model in which NS3/4A is expressed and active in the mouse liver; this prolonged inhibition correlates with the protease half-life and contrasts with the need for nearly

continuous exposure required by the reversible HCV protease inhibitors currently in late-stage clinical trials;
- Occupies the HCV protease target for several hours after the drug had been cleared, as measured with a novel covalent probe technology; this protease occupancy correlated directly with sustained inhibition of the protease, and the return of protease activity was correlated with new synthesis of NS3 protease; and
- Has excellent pharmacokinetic properties, including excellent oral bioavailability in rats as measured in both plasma and liver.

About the Avilomics™ Platform and Covalent Drugs

The Avilomics platform is Avila's powerful approach to design and develop covalent drugs that strongly, selectively, and resiliently bond to disease-causing proteins, thereby silencing their activity and producing superior pharmacological outcomes. The approach with covalent drugs inherently provides prolonged duration of action through this silencing of the disease target. Covalent drugs can also solve the critical therapeutic challenges of drugging difficult targets and addressing resistance mutations. The three components of Avilomics are:

- Compositions: Innovative chemical structures for forming highly selective, not indiscriminate, covalent bonds
- Design: Proprietary informatics to uniquely identify sites amenable to selective covalent modification and target silencing
- Testing: Empirical methods to demonstrate covalent specificity at both target and proteomic levels

Together, these components provide a platform for efficient design and testing of covalent drugs. Avilomics opens up the broad potential of covalent drugs across target classes and disease areas, as demonstrated with the company's emerging pipeline of novel, protein-silencing covalent drugs.

About Avila Therapeutics™, Inc.

Avila focuses on design and development of covalent drugs to achieve best-in-class outcomes that cannot be achieved through traditional chemistries. This approach is called "protein silencing". The company is developing a pipeline of novel, protein-silencing covalent drugs with a current focus on viral infection, cancer and autoimmune disease. Avila is funded by leading venture capital firms: Abingworth, Advent Venture Partners, Atlas Ventures, Novartis Option Fund, and Polaris Venture Partners. For additional information, please visit http://www.avilatx.com.

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