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REGADENOSON MEETS PRIMARY ENDPOINT IN FIRST PHASE 3 TRIAL

PALO ALTO, Calif. and DEERFIELD, IL, August 10, 2005 – CV Therapeutics, Inc. (Nasdaq: CVTX) and Astellas Pharma US, Inc. announced today that the first of two pivotal Phase 3 studies of regadenoson met its primary endpoint.

The study met its primary endpoint by showing with 95 percent confidence that myocardial perfusion imaging (MPI) studies conducted with regadenoson were comparable to MPI studies conducted with Adenoscan®. Adenoscan® is the leading agent for MPI studies in the United States and is marketed by Astellas.

This multinational, randomized, double-blind pivotal Phase 3 study of 784 patients undergoing MPI studies was designed to evaluate the comparability of MPI studies conducted with regadenoson and Adenoscan®. Regadenoson was generally well tolerated. In this study, the most common adverse events reported in patients who received regadenoson were headache, chest pain, shortness of breath, flushing and gastrointestinal discomfort.

The company plans to present the study results at a future scientific conference.

“We are very pleased with the success of regadenoson in this study and look forward to receiving the results from our other Phase 3 trial, which has the same study design. If successful, we plan to submit a new drug application for regadenoson to the FDA,” said Louis G. Lange, M.D., Ph.D., chairman and chief executive officer of CV Therapeutics.

“If approved by the FDA, regadenoson would represent an important new option for the growing population of patients in the United States who are in need of myocardial perfusion imaging studies,” said Makoto Nishimura, Ph.D., president and chief executive officer of Astellas Pharma US, Inc.

Regadenoson is a selective A_{2A}-adenosine receptor agonist for potential use as a pharmacologic stress agent in MPI studies. Regadenoson has been designed to be delivered rapidly as a bolus and to selectively stimulate the A_{2A}-adenosine receptor, the receptor responsible for coronary vasodilation.

Under a collaboration agreement providing Astellas with exclusive North American rights to regadenoson, CV Therapeutics manages the clinical development program and Astellas is responsible for manufacturing, selling and marketing regadenoson in North America, if the product is approved for marketing. Under the arrangement, Astellas reimburses CV Therapeutics for 75 percent of development costs and CV Therapeutics will receive a royalty on product sales of regadenoson, if approved, and may receive a royalty on another product. CV Therapeutics owns the rights for regadenoson outside of North America.

Myocardial perfusion imaging studies

MPI studies help detect and characterize coronary artery disease by identifying areas of poor blood flow in the heart. In 2002, approximately 7.8 million patients underwent MPI studies in the United States.

Many patients exercise on a treadmill to generate the increase in coronary blood flow necessary to perform an MPI study. However, more than 40 percent of the patients undergoing an MPI study are unable to exercise adequately because of medical conditions such as peripheral vascular disease, arthritis or other limiting medical conditions which prevent them from exercising on the treadmill. For these patients, a pharmacologic agent that temporarily increases coronary blood flow is used to mimic the increase in coronary blood flow caused by exercise. Regadenoson is being studied for potential use as a pharmacologic agent under these circumstances.

Conference Call Information

CV Therapeutics' management will webcast a conference call on August 10, 2005 at 5:00 p.m. EDT, 2:00 p.m. PDT, on the CV Therapeutics website. To access the live webcast, please log on to the CV Therapeutics website at www.cvt.com and go to the Investor Information section. Alternatively, domestic callers may participate in the conference call by dialing (888) 370-6121, and international callers may participate in the conference call by dialing (706) 679-7163. Webcast and telephone replays of the conference call will be available approximately two hours after the completion of the call through Wednesday, August 17, 2005. Domestic callers can access the replay by dialing (800) 642-1687, and international callers can access the replay by dialing (706) 645-9291; the PIN access number is 8632043.

About Astellas

Astellas Pharma US, Inc., a US subsidiary of Tokyo-based Astellas Pharma Inc., is a research-based pharmaceutical company dedicated to improving the health of people around the world through the provision of innovative and reliable pharmaceutical products. Established on April 1, 2005, the company was formed through a merger that combined the outstanding research, development and marketing capabilities of Fujisawa Pharmaceutical Co., Ltd. and Yamanouchi Pharmaceutical Co., Ltd. Astellas ranks among the top 20 pharmaceutical companies in the world and will continue to grow as a competitive company in the world pharmaceutical market. For more information on Astellas Pharma US, Inc., go to www.astellas.com/us.

About CV Therapeutics

CV Therapeutics, Inc., headquartered in Palo Alto, California, is a biopharmaceutical company focused on applying molecular cardiology to the discovery, development and commercialization of novel, small molecule drugs for the treatment of cardiovascular diseases.

CV Therapeutics currently has three programs in commercial or late-stage development: ACEON® (perindopril erbumine) Tablets, Ranexa™ (ranolazine) and regadenoson. CV Therapeutics also has other clinical and preclinical drug development candidates and programs. The company co-promotes ACEON®, an ACE inhibitor with enhanced tissue affinity, for the treatment of essential hypertension in the United States with Solvay Pharmaceuticals, Inc. Ranexa is being developed as a novel potential treatment for chronic angina. Regadenoson is being developed for potential use as a pharmacologic stress agent in myocardial perfusion imaging studies. Ranexa and regadenoson have not been approved for marketing by any regulatory authorities.

Except for the historical information contained herein, the matters set forth in this press release, including statements as to development, clinical studies, regulatory review, and commercialization of products, are forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially, including, early stage of development; regulatory review and approval of our products; the conduct and timing of clinical trials; the dependence on collaborative and licensing agreements; commercialization of products; and other risks detailed from time to time in CV Therapeutics' SEC reports, including its Quarterly Report on Form 10-Q for the quarter ended June 30, 2005. CV Therapeutics disclaims any intent or obligation to update these forward-looking statements.

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