

First Patient Treated in Aastrom's U.S. Phase 2 Catheter Clinical Trial in Dilated Cardiomyopathy

ANN ARBOR, Mich., May 17, 2010 (GLOBE NEWSWIRE) -- Aastrom Biosciences, Inc. (Nasdaq:ASTM), the leading developer of autologous cellular therapies for the treatment of severe cardiovascular diseases, today announced that the first patient has been treated in the company's U.S. Phase 2 catheter-based clinical trial to treat dilated cardiomyopathy (DCM). Treatment was performed by interventional cardiologist Timothy D. Henry, M.D., FACC, at the Minneapolis Heart Institute[®] at Abbott Northwestern Hospital in Minneapolis, MN.

This prospective, randomized, controlled, multi-center clinical trial is designed to determine the safety and tolerability of Aastrom's tissue repair cells (TRCs), administered via catheter, in the treatment of patients with heart failure due to DCM. The trial seeks to enroll 12 ischemic DCM and 12 non-ischemic DCM patients. Within each group patients are randomized to receive either TRC treatment along with standard-of-care, or control treatment (standard-of-care only) in a 2:1 ratio. While the primary objective of the trial is to assess safety in patients with DCM, efficacy measures including cardiac dimensions, heart failure stage and other measures of cardiac function will be monitored.

"There are currently very limited effective treatment options for DCM aside from heart transplant," said Dr. Henry. "This condition is associated with significant mortality and the prognosis for most patients is usually grim. My hope is that Aastrom's TRCs will become an important new addition to our treatment options for DCM."

Patients with DCM typically experience symptoms of reduced heart pumping function and impaired blood circulation. These patients may have symptoms of congestive heart failure including severe limitations in physical stamina and shortness of breath. DCM generally occurs in patients who have ischemic heart failure due to multiple heart attacks, though it can also be found in patients with non-ischemic heart failure caused by hypertension, viral infection or alcoholism.

This catheter-based clinical trial is the second Phase 2 trial in the company's cardiac program. An earlier Phase 2 trial, designated IMPACT-DCM, was designed to investigate the safety and tolerability of TRCs in the treatment of DCM via surgical delivery. The final patient treatment in that fully enrolled trial occurred in March 2010. The company expects to report 6-month interim data on all patients enrolled in the IMPACT-DCM trial by the end of 2010.

"The catheter-based delivery of our TRCs is occurring in conjunction with the development of a surgical delivery approach to offer patients the most appropriate treatment option based on their clinical circumstances," said Tim Mayleben, CEO and president of Aastrom. "Because catheter delivery tends to be less invasive than surgical delivery, having this additional delivery option means that more patients can potentially be treated with TRCs."

TRCs are produced from a small sample of bone marrow taken directly from the patient. Aastrom's technology significantly expands the natural populations of early stem and progenitor cells for delivery directly to the damaged cardiac tissues of the same patient.

For more information about this trial, including enrollment criteria, visit http://clinicaltrials.gov/ct2/show/NCT01020968.

About Aastrom Biosciences

Aastrom Biosciences is developing autologous cellular therapies for use in the treatment of severe cardiovascular diseases. The company's proprietary cell-processing technology enables the production of cellular therapies using a patient's own bone marrow that can be delivered directly to damaged tissues. Aastrom has advanced this technology into late-stage clinical development and is conducting two Phase 2 clinical trials to treat dilated cardiomyopathy and a Phase 2b clinical trial to treat critical limb ischemia. For more information, please visit Aastrom's website at www.aastrom.com.

The Aastrom Biosciences, Inc. logo is available at http://www.globenewswire.com/newsroom/prs/?pkgid=3663

This document contains forward-looking statements, including without limitation, statements concerning clinical trial plans, objectives and expectations, clinical activity timing, intended product development, disease treatment and progression, patient symptoms and responses to treatment, treatment options and expected timing of collecting and analyzing treatment data, all of which involve certain risks and uncertainties. These statements are often, but are not always, made through the use of words or phrases such as "anticipates," "intends," "estimates," "plans," "expects," "we believe," "we intend," and similar words or

phrases, or future or conditional verbs such as "will," "would," "should," "potential," "could," "may," or similar expressions. Actual results may differ significantly from the expectations contained in the forward-looking statements. Among the factors that may result in differences are the inherent uncertainties associated with clinical trial and product development activities, regulatory approval requirements, competitive developments, and the availability of resources and the allocation of resources among different potential uses. These and other significant factors are discussed in greater detail in Aastrom's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission. These forward looking statements reflect management's current views and Aastrom does not undertake to update any of these forward-looking statements to reflect a change in its views or events or circumstances that occur after the date of this release except as required by law.

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