June 6, 2012

Ixmyelocel-T Shown to Protect Heart From Damage in Murine Model of Heart Failure

Data Showing Treatment With Ixmyelocel-T Resulted in Decreased Infarct Size Presented in Poster Presentation at the 18th Annual International Society for Cellular Therapy Meeting

ANN ARBOR, Mich., June 6, 2012 (GLOBE NEWSWIRE) -- Aastrom Biosciences, Inc. (Nasdaq:ASTM), the leading developer of patient-specific, expanded multicellular therapies for the treatment of severe, chronic cardiovascular diseases, today announced results from a preclinical study demonstrating the ability of ixmyelocel-T to protect the ischemic heart from damage in a murine model of heart failure. Results were presented at the 18th Annual International Society for Cellular Therapy Meeting in a poster presentation entitled "Ixmyelocel-T protects the heart from damage in a murine model of heart failure."

In a blinded, vehicle-controlled study, a murine model of non-acute left anterior descending (LAD) coronary artery occlusion was used to evaluate ixmyelocel-T as a potential treatment for dilated cardiomyopathy (DCM). Hearts were analyzed four weeks following injection and those in the treated group experienced a significant decrease in infarct length compared to the vehicle control group. The results were consistent between two lots of ixmyelocel-T (Lot 1: 2.72+/- 0.77 vs. 6.14+/- 0.43, $P < 0.001$; Lot 2: 3.80+/- 0. 37 vs. 7.34+/- 0.47, $P < 0.001$). Animals treated with ixmyelocel-T demonstrated a reduced mortality compared to control (22% vs. 44%) and decreased infarct size and increased survival when compared to a vehicle control group.

Ixmyelocel-T therapy is a patient-specific, expanded multicellular therapy comprised of a mixture of cell types cultured from bone marrow mononuclear cells (BMMNCs). Early studies have shown ixmyelocel-T may have positive effects on activities such as tissue remodeling, immunomodulation and the promotion of angiogenesis, which can contribute to severe, chronic cardiovascular diseases.

DCM is a progressive disease of heart muscle. It is the third most common cause of heart failure and the most frequent cause of heart transplantation. The ability of ixmyelocel-T to promote tissue salvage in preclinical trials indicates that the therapy may be protective to the ischemic heart, a cause of DCM. There is currently no accepted preclinical model for DCM.

About Aastrom Biosciences

Aastrom Biosciences is the leader in developing patient-specific, expanded multicellular therapies for use in the treatment of patients with severe, chronic cardiovascular diseases. The company's proprietary cell-processing technology enables the manufacture of ixmyelocel-T, a patient-specific multicellular therapy expanded from a patient's own bone marrow and delivered directly to damaged tissues. Aastrom has advanced ixmyelocel-T into late-stage clinical development, including a Phase 3 clinical program to study patients with critical limb ischemia and a planned Phase 2b clinical trial in patients with ischemic dilated cardiomyopathy. For more information, please visit Aastrom's website at www.aastrom.com. For more information on the pivotal REVIVE Phase 3 clinical trial, please visit the trial website at www.revivecli.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 and progress, objectives and expectations, clinical activity timing, intended product development, the performance and contribution of certain individuals 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 or Transition Report on Form 10-K or 10-K/T, 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.

CONTACT: Media contact

Andrea Coan

Berry & Company

acoan@berrypr.com

(212) 253-8881

Investor contact

Danielle Spangler

The Trout Group

dspangler@troutgroup.com

(646) 378-2924