Aastrom

First Patient Treated in Aastrom Adult Stem Cell Trial for Critical Limb Ischemia

Five Sites Initiated for Phase IIb Trial in U.S.

ANN ARBOR, Mich., Jun 27, 2007 (PrimeNewswire via COMTEX News Network) -- Aastrom Biosciences, Inc. (Nasdaq:ASTM), a regenerative medicine company, today announced that the first critical limb ischemia (CLI) patient was treated at the Malcom Randall Veterans Affairs (VA) Medical Center in Gainesville, FL. The Company is evaluating its Vascular Repair Cell (VRC) product in a U.S. Phase IIb clinical trial to treat patients suffering from CLI, the most severe form of peripheral arterial disease (PAD).

Approximately 900,000 people suffer from CLI, which leads to 100,000 major amputations per year in the U.S. CLI patients endure chronic ischemia-induced pain (even at rest), ulcers, tissue loss or gangrene in the limbs, and represent the end stage for PAD patients.

"Current surgical or endovascular techniques for limb revascularizations are often limited by anatomic constraints in patients with CLI. These patients suffer from rest pain and frequently have no other options for revascularization. Typically we see these patients over the course of several years. They come to us with severe pain, and on evaluation typically have long segments of their arteries blocked so that it is impossible for us to reestablish blood flow by any conventional means. Unfortunately, these patients often go on to develop gangrene of the toes, requiring successive amputation surgery. Due to inadequate perfusion, the wounds from these surgeries often do not heal, leading to a vicious cycle of repeat amputations with wound healing complications," commented Scott A. Berceli, M.D., Ph.D., Principal Investigator at the VA Medical Center. "The ability to improve blood flow to the limbs in patients such as this through vascular tissue regeneration provides the next generation of therapeutic options, and VRCs stand at the forefront of these approaches."

Aastrom's VRCs are based on the Company's Tissue Repair Cell Technology, which enables patient-specific stem cell products for multiple regenerative medicine applications. Aastrom manufactures VRCs for vascular tissue regeneration in an automated, GMP (Good Manufacturing Practices) process. Unique in the stem cell industry is the Company's manufacturing technology that enables the production of a consistent and reliable cell product containing large numbers of early stage stem and progenitor cells essential for tissue regeneration.

"Our VRCs are composed of stem and progenitor cells that we believe are required for tissue regeneration in the human body. A normal dose of VRCs contains significantly more of these key cells than can normally be harvested from a patient," stated Elmar R. Burchardt, M.D., Ph.D., Vice President, Medical Affairs of Aastrom. "These large numbers of stem and progenitor cells may be extremely important when treating critical limb ischemia patients with severely impaired blood flood that can affect the majority of their lower leg."

In addition to the VA Medical Center in Gainesville, FL, four other sites have been initiated and trained, including: Southern Illinois University School of Medicine, Springfield, IL; St. Joseph Mercy Hospital, Ann Arbor, MI; Michigan Vascular Research Center, Flint, MI; and, Vanderbilt University Medical Center, Nashville, TN. Aastrom will update its website as other clinical sites are initiated and trained.

Aastrom's prospective, controlled, randomized, double-blinded, multi-center trial is expected to enroll 120 patients at up to 20 sites, randomized into two patient groups, to evaluate the safety and efficacy of the TRC-based product in the treatment of CLI. Patients from both groups will be followed for a period of 12 months, post-treatment. The primary objective of the clinical trial is to assess the safety of the TRC-based product in CLI patients. Secondary objectives include assessing amputation rates, wound closure and blood flow in the affected limbs, patient quality of life, and the reduction of pain and analgesic use. Once the first 30 patients have completed the 12-month follow-up, Aastrom will analyze the interim results from these patients. Data gathered from this clinical trial will provide the scientific and statistical basis for an anticipated pivotal trial in the vascular regeneration area.

About Aastrom Biosciences, Inc.

Aastrom is a regenerative medicine company developing autologous cell products for the repair or regeneration of multiple human tissues, based on its proprietary Tissue Repair Cell (TRC) Technology. Aastrom's TRC-based products are a unique cell mixture of stem and progenitor cells, produced from a small amount of bone marrow taken from the patient. TRC-based products have been used in over 250 patients, and are currently in clinical trials for bone regeneration (osteonecrosis of the femoral head and long bone fractures) and vascular regeneration (critical limb ischemia applications). The Company is also developing programs to address cardiac and neural regeneration indications. TRC-based products have received Orphan Drug Designation from the FDA for use in the treatment of osteonecrosis of the femoral head and the treatment of dilated

cardiomyopathy, a severe chronic disease of the heart.

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

For more information, visit Aastrom's website at www.aastrom.com. (astmc)

This document contains forward-looking statements, including without limitation, statements concerning planned clinical trials, product development objectives, and potential product applications, which involve certain risks and uncertainties. The forward-looking statements are also identified through use of the words "expected," "can," "anticipated," "may," "could," "believe," and other words of similar meaning. Actual results may differ significantly from the expectations contained in the forward-looking statements. Among the factors that may result in differences are potential patient accrual difficulties, clinical trial results, potential product development difficulties, the effects of competitive therapies, regulatory approval requirements, the availability of financial and other 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 and other filings with the Securities and Exchange Commission.

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