



Compassionate Use Patients in Spain Treated With Adult Stem Cell Therapy Demonstrate Jaw Bone Regeneration Enabling Dental Implants

Results From Three Patient Treatments Involving Investigational Stem Cell Therapy Developed by Aastrom Biosciences Presented During the 2nd Annual Congress of Regenerative Medicine & Stem Cell in Dalian, China

ANN ARBOR, Mich., Aug. 10, 2009 (GLOBE NEWSWIRE) -- Aastrom Biosciences, Inc. (Nasdaq:ASTM), a leading regenerative medicine company, today announced that results from compassionate use treatments using Aastrom's Bone Repair Cells (BRCs) in patients suffering from severe craniofacial defects were presented at the 2nd Annual Congress of Regenerative Medicine & Stem Cell in Dalian, China. BRCs are derived from a small sample of the patient's bone marrow that is processed using Aastrom's proprietary Tissue Repair Cell (TRC) technology to generate larger numbers of stem and early progenitor cells with enhanced therapeutic potential.

In an oral presentation, Dr. Jose Mendonca, Director of the Head and Neck Surgery Unit of Hospital POLUSA in Lugo, Spain and previously a Clinical and Research Fellow in Oral and Maxillofacial Surgery at the UCLA School of Dentistry, reviewed the results of treatment with BRCs in three patients with craniofacial defects, as follows:

- * The first patient was treated for severe mandibular osteoradionecrosis, or osteonecrosis of the jaw caused by radiation, and presented with pathological fracture and complete numbness of the lower lip. At 12 months post-BRC treatment, the patient displayed restored vascular function, new bone formation, fracture consolidation and total recovery of lip numbness.
- * The second patient was treated for post-traumatic mandibular osteomyelitis and presented with massive bone loss, chronic infection, chronic pain and total impairment of function of both mandibular nerves. At 12 months post-BRC treatment, the patient experienced complete functional nerve recovery and the formation of new bone.
- * The third patient was treated for iatrogenic massive bone loss in the posterior maxilla and presented with severe oral function impairment. At 12 months post-BRC treatment, the patient had new bone formation in atrophic areas.
- * All patients underwent a minor surgery to insert a dental implant into the newly regenerated jaw bone. Eight weeks later, the dental prosthesis (teeth) was attached to the implant completing the treatment objectives with the restoration of oral function.

"The outcome of these treatments with BRCs has been very satisfactory. We observed early bone formation in the afflicted areas that eventually resulted in complete healing," said Dr. Mendonca. "Unexpected therapeutic results from treatment with BRCs include peripheral nerve regeneration or repair, new skin formation and proliferation in blood vessels in ischemic areas. The results open a promising pathway for the treatment of some patients where conventional therapies fail or do not exist."

Compassionate use of TRC-based products was authorized by the Spanish Ministry of Health. In May 2008, Aastrom announced the reprioritization of its clinical development programs to focus primarily on cardiovascular applications, thus discontinuing further patient enrollment into the U.S. Phase III ON-CORE bone regeneration clinical trial. The Company does not anticipate new clinical bone activity or reactivating the Phase III ON-CORE trial at the present time but has continued to treat patients on a compassionate use basis in Spain.

"Our bone program remains open for partnering. Encouraging compassionate use treatments such as those noted by Dr. Mendonca strengthen our bone program portfolio, especially in the EU," said Sheldon A. Schaffer, PhD, Aastrom's Vice President, Corporate Development & Intellectual Property.

At a parallel meeting, Francisco Vidal, Managing Director of Aastrom Biosciences S.L., presented a summary overview of

Aastrom's technology at the 2009 4th Medical Biotech Forum in Dalian, China.

About Aastrom Biosciences, Inc.

Aastrom is a leader in the development of autologous cell products for the repair or regeneration of human tissue. The Company's proprietary Tissue Repair Cell (TRC) technology involves the use of a patient's own cells to manufacture products to treat a range of chronic diseases and serious injuries. Aastrom's TRC-based products contain increased numbers of stem and early progenitor cells, produced from a small amount of bone marrow collected from the patient. The TRC technology platform has positioned Aastrom to advance multiple products into clinical development. TRC-based products have been used in over 325 patients with over 10 years of positive safety data. The Company's ongoing development activities focus on applying TRC technology to cardiac and vascular tissue regeneration. The Company is currently focused on cardiovascular regeneration through a Phase II clinical trial with dilated cardiomyopathy (DCM) patients (the IMPACT-DCM trial) and a Phase IIb clinical trial with critical limb ischemia (CLI) patients (the RESTORE-CLI trial).

For more information, 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 planned clinical trials and activities and anticipated timing of clinical events, 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," "anticipated," "planned," 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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