Aastrom Biosciences Achieves U.S. Bone Fracture Clinical Milestone

AASTROM BIOSCIENCES ACHIEVES U.S. BONE FRACTURE CLINICAL MILESTONE

Ann Arbor, Michigan, June 29, 2006 – Aastrom Biosciences, Inc. (Nasdaq: ASTM) announced today that it has completed the last patient accrual and treatment in its U.S. Phase I/II multi-center long bone fracture trial. Completion of the cell therapy phase for all 36 patients enrolled in this trial represents a key milestone that supports Aastrom's business model to use its cell-based Tissue Repair Cells (TRCs) for tissue regeneration.

"We are pleased that all patients have completed the surgical phase of this clinical trial," said Janet M. Hock, B.D.S., Ph.D., Vice President Global Research and Chief Scientific Officer of Aastrom. "This is an important company and clinical milestone that sets us well on our way in the evaluation of how well TRCs safely regenerate bone. If these data support our early feasibility study data, our TRC therapy should provide a new solution to a currently unmet need in the world of orthopedic medicine."

This announcement follows positive interim data presented earlier this year by Principal Investigator, Matthew L. Jimenez, M.D., of the Illinois Bone & Joint Institute. Dr. Jimenez presented results from his early clinical experience with the first seven patients treated for recalcitrant long bone non-union fractures with Aastrom's TRCs. All patients appear to have demonstrated bone healing, and returned to weight bearing mobility by 6 months.

The U.S. Phase I/II clinical trial is evaluating the use of TRCs – a mixture of stem, stromal and progenitor cells derived from the patient's bone marrow – in the treatment of severe fractures that have failed prior treatment interventions. All patients treated in this trial will be followed for a total of twelve months post-surgery, with interim data collected at the six month endpoint. It is expected that additional interim data will be disclosed by the end of September 2006.

The interim results reported to date from this U.S. trial complement observations previously disclosed in Aastrom's Spanish feasibility study, showing positive bone regeneration with no TRC-related adverse events in all patient treatments. Based on data provided to the Spanish Drug Agency, Aastrom was granted permission to commence another severe non-union bone fracture trial in Spain, and is actively enrolling up to 10 patients at this clinical site.

About Aastrom Biosciences, Inc.

Aastrom Biosciences, Inc. (Nasdaq: ASTM) is developing products for the repair or regeneration of multiple human tissues, based on its proprietary Tissue Repair Cell (TRC) adult stem cell technology. Aastrom's TRC products contain large numbers of stromal, stem and progenitor cells that are produced from a small amount of bone marrow cells originating from the patient. The AastromReplicell® System, an industry-unique automated cell product manufacturing platform, was developed for the production of standardized, patient-specific TRC products. TRC products have been used safely in humans as a substitute for bone marrow stem cells, and are currently in clinical trials for bone grafting (long bone fractures and spine fusion) and blood vessel regeneration (diabetic limb ischemia) applications. The Company has recently reported positive interim clinical trial results for its TRCs demonstrating both the clinical safety and ability of TRCs to induce healthy new tissue growth (long bone fractures and jaw bone reconstruction). Most recently, the Company's proprietary TRCs received an Orphan Drug Designation from the U.S. Food and Drug Administration (FDA) for use in the treatment of osteonecrosis at the hip.

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

This document contains forward-looking statements, including without limitation, statements concerning planned clinical trials, product development objectives, potential advantages of TRCs, and potential product applications, which involve certain risks and uncertainties. The forward-looking statements are also identified through use of the words "expected," "should," 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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