



Aastrom Biosciences Issues Statement on Unique Features of Its Bone Marrow Tissue Repair Cell Product and Technology

-- The Following is a Statement from R. Douglas Armstrong, Ph.D., Chief Executive Officer and Chairman of Aastrom Biosciences, Inc. Regarding Recent Article in New Scientist Magazine --

Ann Arbor, Michigan, April 26, 2005 -- R. Douglas Armstrong, Ph.D., Chief Executive Officer and Chairman of Aastrom Biosciences, Inc. (NasdaqSC: ASTM) today issued the following statement in response to an article concerning certain aging, research laboratory cultured mesenchymal stem cells and their potential ability to produce tumors in animals, published in the April 21, 2005 edition of New Scientist magazine.

The report noted that mesenchymal stem cells can be managed safely using standard cell culture expansion for 6-8 weeks. However, following multi-passage long-term culture (4 to 5 months), these cells could undergo a spontaneous transformation to cells that may form tumors. This long term culture effect has been known for animal cells, and is now shown for human cells as well.

Aastrom is developing patient-specific bone marrow-based products - called "Tissue Repair Cells" or TRCs - for the repair or regeneration of human tissues, utilizing the Company's proprietary technology.

The Aastrom TRC production process utilizes a small amount of the patient's own bone marrow, the natural habitat for stem cells in the human body. The sample is placed in a sterile cassette inside the AastromReplicell® System, a proprietary, automated cell production system designed to mimic the natural tissue growth environment of the human body. In a short 12-day production cycle the bone marrow grows, filling the cassette and resulting in a much higher number of early-stage stem and progenitor cells, which are then harvested and administered back to the patient for therapeutic treatment.

There are a number of important differences that distinguish Aastrom's TRCs from the cells that were discussed in the New Scientist article, which synthesized the results of studies cited in an original article in Cancer Research, Vol. 65, Pgs. 3035-3039, published April 15, 2005.

The experiments discussed in the original article used cells obtained from adipose tissue, or fat, not from bone marrow. Once the adipose tissue was collected, the investigators selectively isolated a specific type of cell, removing it from its native tissue environment and thereby eliminating the growth controls that the tissue environment provides. The long-term culture approach used by the investigators was a multiple-passage process that can be preferential for selective outgrowth of transformed cells that can form tumors. Finally, the resultant human cells were administered to mice, a pre-clinical laboratory model which does not always allow for a normal human tissue growth opportunity.

In contrast, Aastrom's TRCs are produced in a natural mixed-cell environment, in which the bone marrow stem cells remain associated with a portion of the native tissue environment. TRCs are produced over a very short, defined period of 12 days utilizing Aastrom's proprietary single-pass perfusion technology, which maintains conditions that are conducive to a natural bone marrow growth process. The 12-day process is much less than the 6 to 8 week process that was shown to be safe in the Cancer Research study.

TRCs are not an isolated, pure stem cell product, but a mixture of cells found naturally occurring in bone marrow, and include stem and other cells, which is the natural mixture for augmenting tissue growth. Also, because TRCs are derived from the patient being treated, there are no rejection issues.

Aastrom's TRCs have been administered safely to over 180 patients to date with no evidence of tumorigenic activity or other serious issues. Aastrom is currently conducting an FDA-approved multi-center human clinical trial of its lead product, intended for the repair of severe long bone fractures, in the United States, and is engaged in similar trials of this lead product in the EU.

About Aastrom Biosciences, Inc.

Aastrom Biosciences, Inc. (NasdaqSC: ASTM) is developing patient-specific products for the repair or regeneration of human tissues, utilizing the Company's proprietary adult stem cell technology. Aastrom's strategic position in the tissue regeneration sector is enabled by its proprietary Tissue Repair Cells (TRCs), a mix of bone marrow-derived adult stem and progenitor cells, and the AastromReplicell® System, an industry-unique automated cell production platform used to produce cells for clinical use. TRCs are the core component of the products Aastrom is developing for severe bone fractures, ischemic vascular

disease, jaw reconstruction and spine fusion, with Phase I/II level clinical trials active in the U.S. and EU for some of these indications.

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

This document contains forward-looking statements, including without limitation, statements concerning product development objectives, potential product applications, and potential advantages of the AastromReplicell® System, which involve certain risks and uncertainties. The forward-looking statements are also identified through use of the word "plan," 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 clinical trial results, potential product development difficulties, 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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