Aastrom Biosciences Receives NIH Grant for Dendritic Cell Vaccine Research

-- Study Expands Aastrom's Tumor Antigen Primed Vaccine Approach to Ovarian Cancer --

Ann Arbor, Michigan, September 15, 2003 -- Aastrom Biosciences, Inc. (NasdaqSC: ASTM) today announced it has received a Small Business Innovation Research Phase I grant from the National Institutes of Health (NIH) to demonstrate the feasibility of utilizing the AastromReplicell™ System ("System") for the production of completed dendritic cell-based vaccines for the immunotherapy of ovarian cancer, the leading cause of gynecological cancer-related deaths in women. This constitutes the fourth NIH grant awarded to the Company in the past two quarters.

Recent studies have shown that dendritic cells produced and exposed to cancer molecules (antigens) in culture ex vivo have induced clinically significant immune responses against malignant diseases. Current methods of cell production utilize traditional laboratory cell culture approaches that present difficulties in producing large-scale quantities of complex dendritic cell vaccines. This study will evaluate and demonstrate the feasibility of using Aastrom's System, a GMP-compliant, integrated, fully-automated system, to produce sufficient clinical quantities of antigen-loaded dendritic cells to perform a complete immunotherapy treatment in patients with ovarian cancer.

Dr. Douglas M. Smith, Immunotherapy Program Leader at Aastrom, is the principal investigator for the six-month study, funded at $101,262 by the NIH's National Cancer Institute, which will be conducted at the Company's laboratories in Ann Arbor, MI. In related activities to this preclinical study for an ovarian cancer dendritic cell vaccine, Aastrom is preparing to begin dendritic cell clinical studies in collaboration with Stanford University for multiple myeloma cancer and with Duke University for colorectal cancer.

"We are very interested in determining the role Aastrom's technology can have in bringing new cell-based cancer vaccines forward," said R. Douglas Armstrong, Ph.D., President and Chief Executive Officer of Aastrom. "This new NIH grant supports that mission by validating our belief in the potential of dendritic cell vaccines, and the necessity for effective large-scale cell production solutions."

The successful completion of this Phase I study should lead to a Phase II program designed to optimize and fully automate the antigen-loading process, and clinically evaluate the completed patient-specific dendritic cell vaccine in human clinical trials.

About Aastrom's Immunotherapy Program

Aastrom's Immunotherapy Program is focused on the development, evaluation and commercial implementation of single-pass medium perfusion and closed system automation for widespread and reproducible production of clinical quantities of an array of different dendritic cell-based vaccines for patient therapy. Dendritic cell antigen loading strategies may include simple peptides, complex protein antigens, nucleic acids, apoptotic tumor cells, tumor lysates and viral vectors. Recently, the Company received CE marking in Europe of its third dendritic cell product, designated DCV-II, for the automated GMP-compliant production and peptide-epitope priming of dendritic cells in the AastromReplicell™ System. Peptide antigens are under broad evaluation and clinical application as well-defined molecular targets for the immune system against infectious diseases and cancer. Additional strategies for antigen-independent or antigen-driven ex vivo expansion of T-lymphocytes as potent mediators of cellular immunity against cancer and infectious diseases are under preclinical testing and development using Aastrom's proprietary technologies.

About Aastrom Biosciences, Inc.

Aastrom Biosciences, Inc. (NasdaqSC: ASTM) is a late-stage development company focused on human cell-based therapies. The AastromReplicell™ System - a patented, integrated system of instrumentation and single-use consumable kits for the production of patient-specific cells - is the Company's core technology for its Prescription Cell Products (PCP) business and its Cell Production Products (CPP) business. The principal focus of the PCP business is the repair or regeneration of tissue intended for large markets such as bone grafting, vascular systems and severe osteoporosis. The CPP business markets the AastromReplicell™ System to researchers and companies for their production of cells for clinical trials. These two businesses are intended to enable Aastrom to generate multiple paths to revenue. The initial commercial phase of the CPP business for dendritic cell production products is underway in Europe and the United States. 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 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 words "intended," "may," "should," "can," "potential" 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, government funding policies and practices, 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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