

For Immediate Release

**Arterioocyte and the US Army Institute of Surgical Research (USAISR) sign a CRADA to speed development of Cellular Therapies for Orthopaedic Trauma**

**Cleveland, OH, June 7, 2011**

Arterioocyte®, a leading clinical stage biotechnology company with offices in Cleveland, Ohio and Hopkinton, Massachusetts that develops proprietary stem cell and tissue engineering based therapies announced today that they have entered into a Cooperative Research and Development Agreement (CRADA) with the United States Army Institute of Surgical Research (USAISR) at Fort Sam Houston, Texas. The 3-year CRADA, entitled “The Use of Concentrated Bone Marrow Aspirate from a Point-of-Care Device in Orthopaedic Trauma,” enables collaborative investigation of new stem cell based therapies for orthopaedic trauma and related battlefield injuries using Arterioocyte’s Magellan MAR01™ system for rapid bed-side production of cellular therapies and Arterioocyte’s NANEX™ rapid stem cell expansion technology.

Arterioocyte is currently working with USAISR to evaluate Magellan® point-of-care therapies for compartment syndrome (amputation prevention), burn debridement, and post-surgical wound infection prevention under existing research agreements. The newly established CRADA will enable Arterioocyte to work directly with USAISR staff to explore broader use of its technologies to treat orthopaedic trauma including limb injuries (bone, cartilage, muscle and vessel structure) that affect a majority of battlefield wounded soldiers.

Joseph Wenke, PhD, Manager, Extremity Trauma and Regenerative Medicine Task Area, and Manager, Orthopaedic Extremity Trauma Research Program will serve as Principal Investigator for USAISR. “We’re excited to expand our collaboration with Arterioocyte,” said Dr. Wenke. “Rapid development and deployment of improved treatments for Orthopaedic Trauma is central USAISR’s mission. These technologies have significant potential to improve outcomes for our injured personnel, and assist in their healthy recovery to active duty.”

The Magellan® system is an FDA 510(k) cleared medical device for the rapid production of platelet rich plasma from blood and bone marrow that is applied to a surgical site as surgeons deem necessary for their clinical use requirements. Magellan MAR01™ technology enables the rapid “closed system” concentration of aspirated bone marrow, yielding an injectable tissue rich in platelets, hematopoietic stem cells and mesenchymal stem cells, commonly viewed as key components in tissue repair. The self contained Magellan unit provides critical ease-of-use and operator-independent consistency necessary for deployment in military medical operations. In addition to therapies for battlefield wounds, Arterioocyte is currently enrolling patients into an FDA approved Phase I IDE clinical trial to evaluate the role of MAR01™ in peripheral vascular disease (critical limb ischemia) with additional cardiac and orthopedic trials planned.

The NANEX™ platform consists of a biofunctional nanofiber-based 3D scaffold designed to mimic the bone marrow environment, permitting rapid *ex vivo* proliferation of hematopoietic stem cells with minimal differentiation. Arterioocyte has multiple active development programs for its NANEX technology including treatment of ischemic disease, identification and treatment of cancers of the blood system and rapid high volume *ex vivo* red blood cell production.

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*CELLULAR THERAPIES  
MEDICAL SYSTEMS*

Arteriocyte CEO Don Brown said, “we consider it a privilege to be requested by the US Military to help in the care delivery for our men and women in uniform. We strongly believe it is our responsibility to make Arteriocyte’s technologies available to those who volunteer to serve our country, and we are humbled by the opportunity to work with our partners at Fort Sam Houston to help ensure that our wounded soldiers get access to the best care possible so they can get home or back to active duty as quickly as possible.”

## **About Arteriocyte**

Arteriocyte, a leading clinical stage biotechnology company, is dedicated in developing novel stem cell products and medical devices for unmet clinical needs. Arteriocyte leverages its expertise in stem cell and tissue engineering in order to develop a broad portfolio of cell based therapeutics to improve patient outcomes. In October of 2007, Arteriocyte partnered with DW Healthcare Partners and Comerica to create Arteriocyte Medical Systems Inc., in order to commercialize and distribute novel medical devices and point of care surgical solutions to address serious unmet medical needs in cardiac, orthopedic and vascular surgeries. Arteriocyte Medical Systems manufactures and distributes the Magellan<sup>®</sup> Autologous Platelet Separator System.

## **Contact Information**

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