



OSIRIS THERAPEUTICS, INC.

Osiris Launches the Osteocel[®] Product Line

Bone repair product provides a much needed option for orthopedic surgery

BALTIMORE, Maryland – September 22, 2005 - Osiris Therapeutics, Inc. announced today that it has begun distribution of Osteocel[®] a product indicated for the repair, replacement and/or reconstruction of bone defects. Osteocel is an allogeneic bone matrix containing viable stem cells. In developing the product, Osiris leveraged its extensive experience in stem cell technology to offer an alternative to autograft in orthopedic procedures.

In many orthopedic procedures, standard practice has been to surgically remove a portion of the patient's own healthy bone from one site (an autograft) and transfer it to replace diseased or missing bone at another site. However, the autograft harvest often results in greater long term pain and discomfort than the primary surgery. "For years, drug, device and tissue companies have struggled to come up with a reasonable alternative to autograft with limited success," said C. Randal Mills Ph.D., Osiris' President and CEO. "By eliminating the autograft procedure, the use of Osteocel prevents the pain and suffering commonly associated with this surgery."

Osiris has entered into an agreement with Blackstone Medical, Inc. for distribution of Osteocel under the Trinity[™] brand. Based in Springfield Massachusetts, Blackstone Medical is a leading innovator of products for spinal surgery. Blackstone will be introducing Trinity at the 20th Annual Meeting of the North American Spine Society in Philadelphia, PA. "We are very excited about the opportunity to add this novel technology to our product offerings," said Blackstone Chairman Bill Lyons. "Osiris' deep knowledge of the science behind bone healing and our surgeon-focused approach to the market holds promise for a successful partnership."

Osiris will also directly market and distribute the product under the Osteocel brand. Osiris has established a network of 45 independent distributors with significant experience in biologic product representation.

Osteocel falls under the United States Food and Drug Administration's Human Cellular and Tissue Based Products regulatory paradigm, which allows rapid access to the product by surgeons and their patients. "This product launch is significant for the benefit it provides to patients in need, while generating a revenue stream that will help to sustain the company as we achieve our mission of being the first to commercialize a stem cell based drug therapy," stated Cary J. Claiborne, CFO of Osiris. The company is currently conducting clinical trials for its three stem cell drugs.

Osiris Therapeutics, Inc. is the leader in adult stem cell therapy. The stem cells produced by Osiris are obtained from adult volunteer donors, avoiding the technical problems and controversy surrounding other stem cell technologies. Using proprietary methods, these cells are grown in culture to very high numbers, allowing a single donor's cells to treat thousands of patients. These cells can be used in patients unrelated to the donor, without rejection, eliminating the need for donor matching and recipient immune suppression. Once transplanted, the cells promote healing of damaged or diseased tissues. The Company's current focus includes the use of adult stem cells to improve outcomes in bone marrow recipients being treated for leukemia, to repair damage following a heart attack or congestive heart failure, and to prevent and treat arthritis.

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