



Osiris Therapeutics Regains Worldwide Rights to Cardiovascular Indications for Prochymal™

COLUMBIA, Maryland – January 7, 2008 – Osiris Therapeutics, Inc. (NASDAQ:OSIR) today announced it has reclaimed sole worldwide rights to cardiovascular indications for Prochymal™ and terminated its development and commercialization agreement with Boston Scientific Corporation in order to provide Osiris with the flexibility to enter more strategically beneficial relationships.

"This step was critical to realizing the full value of our proprietary stem cell technology," stated C. Randal Mills, Ph.D., President and Chief Executive Officer. "Prochymal continues to demonstrate therapeutic utility across multiple disease states, as evident by our recent Defense Department contract for acute radiation syndrome. As a result of this move, we now have the freedom to enter into territory-specific, rather than indication-specific collaborations for Prochymal. This also allows us to accelerate the development of Prochymal for the treatment of acute myocardial infarction, which produced very encouraging results in early clinical trials."

Under the terms of the agreement Osiris will immediately regain worldwide rights to its stem cell technology for all cardiovascular indications. In exchange, Osiris has agreed to relieve Boston Scientific of a \$50 million loan obligation and \$45 million in development payments. Additionally, Osiris will repay a \$5 million debt plus accrued interest in four quarterly installments.

About Osiris Therapeutics

Osiris Therapeutics, Inc. is a leading stem cell therapeutic company focused on developing and marketing products to treat medical conditions in the inflammatory, orthopedic and cardiovascular areas. Osiris currently markets and sells Osteocel® for regenerating bone in orthopedic indications. Prochymal™ is being evaluated in Phase III clinical trials for three indications, including acute and steroid refractory Graft versus Host Disease and also Crohn's disease, and is the only stem cell therapeutic currently designated by FDA as both an Orphan Drug and Fast Track product. Osiris has also partnered with Genzyme Corporation to develop Prochymal™ as a medical countermeasure to nuclear terrorism and other radiological emergencies. Prochymal is also being developed for the repair of heart tissue following a heart attack and for the protection of pancreatic islet cells in patients with type 1 diabetes. The Company's pipeline of internally developed biologic drug candidates under evaluation also includes Chondrogen™ for arthritis in the knee. Osiris is a fully integrated company, having developed capabilities in research, development, manufacturing, marketing and distribution of stem cell products. Osiris has developed an extensive intellectual property portfolio to protect the company's technology in the United States and a number of foreign countries including 47 U.S. and 215 foreign patents owned or licensed. More information can be found on the company's website, www.Osiris.com. (OSIR-G)

Forward-Looking Statements

This press release contains forward-looking statements. Forward-looking statements include statements about our expectations, beliefs, plans, objectives, intentions, assumptions and other statements that are not historical facts. Words or phrases such as "anticipate," "believe," "continue," "ongoing," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project" or similar words or phrases, or the negatives of those words or phrases, may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. Examples of forward-looking statements include, but are not limited to, statements regarding the following: our product development efforts; our clinical trials and anticipated regulatory requirements; the success of our product candidates in development; status of the regulatory process for our biologic drug candidates; implementation of our corporate strategy; our financial performance; our product research and development activities and projected expenditures, including our anticipated timeline and clinical strategy for mesenchymal stem cells and biologic drug candidates; our cash needs; patents and proprietary rights; ability of our potential products to treat disease; our plans for sales and marketing; our plans regarding our facilities; types of regulatory frameworks we expect will be applicable to our potential products; and results of our scientific research. Forward-looking statements are subject to known and unknown risks and uncertainties and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements.



Our actual results could differ materially from those anticipated in forward-looking statements for many reasons, including the factors described in the section entitled "Risk Factors" in our Annual Report on Form 10-K filed with the United States Securities and Exchange Commission. Accordingly, you should not unduly rely on these forward-looking statements. We undertake no obligation to publicly revise any forward-looking statement to reflect circumstances or events after the date of this press release or to reflect the occurrence of unanticipated events.

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