



Osiris Announces Expansion of Board of Directors and Key Additions to its Senior Management Team

August 14, 2006 – Baltimore, MD – With the successful closing of our initial public offering, Osiris Therapeutics Inc. (NasdaqGM:OSIR) is pleased to announce the election of Jay M. Moyes and Gregory H. Barnhill to the Board of Directors. We are also pleased to announce the addition of Earl R. Fender and Lode Debrabandere, Ph.D. to our Senior Management Team.

New Independent Board Members

Mr. Moyes has served as the Chief Financial Officer of Myriad Genetics, Inc. since June 1996 and previously served as their Vice President of Finance from July 1993 until July 2005. From 1991 into 1993, Mr. Moyes served as Vice President of Finance and Chief Financial Officer of Genmark, Inc. Mr. Moyes held various positions with the accounting firm of KPMG LLP from 1979 through 1991. He holds an M.B.A. degree from the University of Utah, a B.A. degree in economics from Weber State University, and is a Certified Public Accountant.

Mr. Barnhill has served as a Partner and Member of the Board of Directors of Brown Advisory Securities, LLC since 2003. Mr. Barnhill is also a member of numerous philanthropic and corporate boards. From 1975 to 2003, Mr. Barnhill held various positions with Deutsche Bank Securities, Inc., most recently as Managing Director and Regional Manager, North American Equity Sales. He holds a B.A. degree in economics from Brown University.

Senior Management Additions

Earl R. Fender has joined the company in the new role of Vice President and General Manager for Orthopedics. Prior to joining Osiris, Mr. Fender served for over ten years with DePuy Spine, a Johnson & Johnson company, holding positions as Vice President, Sales, U.S. President, and finally as Worldwide President. Under his direction DePuy Spine became the second largest spinal implant manufacturer in the world. Mr. Fender's academic credentials include a B.A. in Business Administration from Thiel College and the completion of Harvard Business School's Program for Management Development.

Lode Debrabandere has joined the company in the new role of Vice President and General Manager for Inflammatory Diseases. Prior to joining Osiris, Dr. Debrabandere served for over four years with Bristol-Myers Squibb as Vice President of Strategic Marketing for Neuroscience and Infectious Diseases. He led the Neuroscience Unit and was the Global Brand Leader for Abilify™. Previously, Dr. Debrabandere led the Marketing department of UCB Pharma Inc., focusing in the areas of allergy/respiratory (Zyrtec™) and neurology (Keppra™). Dr. Debrabandere earned an M.B.A., a Ph.D. in pharmaceutical sciences, toxicology, and a Pharm. D. degree, all from the University of Leuven, Belgium.

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 entering Phase III clinical trials and is the only stem cell therapeutic currently designated by FDA as both an Orphan Drug and Fast Track product. The Company's pipeline of internally developed biologic drug candidates under evaluation also includes Chondrogen™ for regenerating cartilage in the knee, and Provacel™, for repairing heart tissue following a heart attack. Osiris is a fully integrated company, having developed stem cell capabilities in research and development, manufacturing, marketing and distribution. 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 45 U.S. and 153 foreign patents owned or licensed.

For additional information, please contact Lisa Rodemann at 410.522.5005, extension 610.