



Osiris Therapeutics Added to NASDAQ Biotechnology Index

BALTIMORE, Maryland - May 14, 2007 - Osiris Therapeutics, Inc. (NASDAQ: OSIR), a leading stem cell therapeutic company focused on developing and marketing products to treat medical conditions in the inflammatory, orthopedic, and cardiovascular areas, announced today that it has been selected for addition to the NASDAQ Biotechnology Index[®], effective Monday, May 21, 2007.

Launched in 1993, the NASDAQ Biotechnology Index includes securities of NASDAQ-listed pharmaceutical and biotechnology companies as classified according to the Industry Classification Benchmark. All securities in the NASDAQ Biotechnology Index are listed on the NASDAQ Global Market or Global Select Market and must meet specific criteria, including market value, average daily share volume and seasoning as a public company. The NASDAQ Biotechnology Index is ranked on a semi-annual basis in May and November and is calculated under a modified capitalization-weighted methodology. For more information about the NASDAQ Biotechnology Index, including eligibility criteria, visit www.nasdaq.com.

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 in 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 47 U.S. and 167 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 may contain forward-looking statements. These forward- looking statements may generally be identified by the use of the words "may," "will," "expects," "anticipates," "believes," "estimates," and similar expressions, and involve a number of risks and uncertainties. For a variety of reasons, actual results may differ materially from those described in or contemplated by any such forward-looking statement. Consequently, the reader is cautioned to consider all forward-looking statements in light of the risks to which they are subject.

For additional information, please contact Erica Elchin at 443.545.1834.