



Osiris Therapeutics Reports Second Quarter 2007 Financial Results

COLUMBIA, Maryland – August 9, 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 its results for the second quarter ended June 30, 2007.

Highlights for the Second Quarter and to Date

- Successfully raised \$20 million in a private placement of common stock
- Completed facility expansion for Osteocel®
- Q2 Osteocel® sales increased 93% as compared to the prior year's second quarter
- Partnered with Genzyme Corp. to develop medical countermeasures for Nuclear and Radiological Threats
- Awarded "Biotechnology Firm of the Year" by the Technology Council of Maryland

"Following our agreement with Genzyme, we are actively pursuing additional market opportunities for Prochymal," said C. Randal Mills, Ph.D., President and Chief Executive Officer. "We believe that these new efforts, coupled with our continued progress with the existing clinical programs for Prochymal, strategically position the company for better growth."

Financial Highlights for Second Quarter

Sales of Osteocel were \$3.3 million in the second quarter of 2007 compared to \$1.7 million in the prior year's second quarter. Other revenues were \$0.3 million for both the second quarter of 2007 and 2006. Osiris reported a net loss of \$10.5 million for the second quarter of 2007 compared to a net loss of \$11.6 million for the second quarter of 2006. Research and development expenses were \$10.6 million for the second quarter of 2007 compared to \$10.9 million for the second quarter of 2006. The 2007 second quarter loss was largely the result of the continued advancement of the company's clinical trials. At the end of the second quarter Osiris had cash and short-term investments of \$33.1 million.

General and administrative (G&A) expenses were \$1.5 million for the second quarter of 2007 compared to \$1.2 million for the second quarter of 2006. The increase in G&A expenses in the second quarter of 2007 was in part driven by costs to support business growth, and costs associated with becoming a public company.

Webcast and Conference Call

The Company has scheduled a webcast and conference call to discuss its financial results tomorrow, August 10th, at 9:00 AM EDT. To access the webcast, visit the Investor Relations section of the company's website at <http://investor.osiris.com/events.cfm>. Alternatively, callers may participate in the conference call by dialing (800) 289-0546 (U.S. participants) or (913) 981-5534 (international participants).

A replay of the conference call will be available approximately two hours after the completion of the call through August 24, 2007. Callers can access the replay by dialing (888) 203-1112 (U.S. participants) or (719) 457-0820 (international participants). The audio replay passcode is 4555023. To access a replay of the webcast, visit the Investor Relations section of the company's website at <http://investor.osiris.com/events.cfm>.



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 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 MSCs 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.

For additional information, please contact Erica Elchin at 443.545.1834.



OSIRIS THERAPEUTICS, INC.
CONDENSED BALANCE SHEETS
(Amounts in thousands except per share amounts)

	June 30, 2007 (unaudited)	December 31, 2006
Assets		
Current assets:		
Cash	\$ 662	\$ 714
Short-term investments	32,400	38,467
Accounts receivable	2,082	1,596
Inventory and other current assets	3,060	2,858
Total current assets	<u>38,204</u>	<u>43,635</u>
Property and equipment, net	5,391	3,942
Restricted cash	286	297
Deferred financing costs, net	447	567
Other assets	399	727
Total assets	<u>\$ 44,727</u>	<u>\$ 49,168</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	\$ 5,809	\$ 8,339
Note payable, current portion	16	49
Capital lease obligations, current portion	1,183	1,129
Deferred revenue, current portion	873	952
Total current liabilities	<u>7,881</u>	<u>10,469</u>
Note payable, net of current portion	25,000	25,000
Capital lease obligations, net of current portion	290	895
Deferred revenue, net of current portion	-	397
Long-term interest payable and other liabilities	1,320	1,120
Total liabilities	<u>34,491</u>	<u>37,881</u>
Stockholders' equity:		
Common stock, \$.001 par value, 90,000 shares authorized 29,230 and 27,321 shares outstanding in 2007 and 2006	29	27
Additional paid-in-capital	219,669	198,763
Accumulated deficit	(209,462)	(187,503)
Total stockholders' equity	<u>10,236</u>	<u>11,287</u>
Total liabilities and stockholders' equity	<u>\$ 44,727</u>	<u>\$ 49,168</u>



OSIRIS THERAPEUTICS, INC.
CONDENSED STATEMENTS OF OPERATIONS
(Unaudited) Amounts in thousands, except per share amounts

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2007	2006	2007	2006
Product sales	\$ 3,252	\$ 1,689	\$ 5,252	\$ 2,794
Cost of goods sold	1,503	762	2,404	1,251
Gross profit	<u>1,749</u>	<u>927</u>	<u>2,848</u>	<u>1,543</u>
Revenue from collaborative research licenses and royalties	<u>295</u>	<u>298</u>	<u>574</u>	<u>593</u>
Operating expenses:				
Research and development	10,583	10,922	21,613	15,290
General and administrative	<u>1,501</u>	<u>1,209</u>	<u>3,007</u>	<u>2,347</u>
Total operating expenses	<u>12,084</u>	<u>12,131</u>	<u>24,620</u>	<u>17,637</u>
Loss from operations	(10,040)	(10,906)	(21,198)	(15,501)
Interest expense, net	<u>(418)</u>	<u>(699)</u>	<u>(761)</u>	<u>(1,225)</u>
Net loss	<u>\$ (10,458)</u>	<u>\$ (11,605)</u>	<u>\$ (21,959)</u>	<u>\$ (16,726)</u>
Basic and diluted net loss per share	<u>\$ (0.37)</u>	<u>\$ (1.27)</u>	<u>\$ (0.79)</u>	<u>\$ (1.83)</u>
Weighted average common shares (basic and diluted)	<u>27,914</u>	<u>9,158</u>	<u>27,649</u>	<u>9,146</u>



OSIRIS THERAPEUTICS, INC.
STATEMENTS OF CASH FLOWS
(Unaudited) Amounts in thousands

	Six Months Ended June 30,	
	2007	2006
Cash flows from operations:		
Net loss	\$ (21,959)	\$ (16,726)
Adjustments to reconcile net loss to net cash used in operations:		
Depreciation and amortization	873	743
Non cash share-based payments	849	412
Non cash interest expense	120	381
Increase (decrease) in cash resulting from changes in assets and liabilities:		
Accounts receivable	(486)	170
Inventory and other current assets	(202)	(1,473)
Other assets	328	2
Accounts payable and accrued expenses	(2,130)	2,610
Deferred revenue	(476)	(476)
Long-term interest payable and other liabilities	200	895
Net cash used in operations:	<u>(22,883)</u>	<u>(13,462)</u>
Cash flows from investing activities:		
Purchases of property and equipment	(2,322)	(697)
Redemption of short-term investments	24,797	15,009
Purchase of short-term investments	(18,730)	--
Net cash provided by investing activities	<u>3,745</u>	<u>14,312</u>
Cash flows from financing activities:		
Principal payments on capital lease obligations and notes payable	(584)	(534)
Restricted cash	11	(119)
Proceeds from the issuance of preferred and common stock, net of offering costs	20,059	20
Payment of debt financing costs	(400)	--
Net cash provided by (used in) financing activities	<u>19,086</u>	<u>(633)</u>
Net (decrease) increase in cash	(52)	217
Cash at beginning of period	714	597
Cash at end of period	<u>\$ 662</u>	<u>\$ 814</u>