



Osiris Therapeutics Reports Record Fourth Quarter and Full Year 2007 Financial Results

COLUMBIA, Maryland — February 28, 2008 - 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 fourth quarter and year ended December 31, 2007.

"In 2007, Osiris performed exceptionally well as evidenced by our objective record of success," said C. Randal Mills, Ph.D., the Company's President and Chief Executive Officer. "It is becoming clear that cellular therapies offer unique advantages that may allow us to solve many of the most challenging problems facing medicine today. Moving forward, we intend to further our leadership position in cell therapy by leveraging our infrastructure, intellectual property, and experience to usher in a new era of smart medicine."

Fourth Quarter Highlights

- Doubled fourth quarter Osteocel[®] sales over the same period last year
- Awarded Department of Defense Contract for Prochymal fully valued at \$224.7 million
- Regained worldwide rights to cardiovascular indications for Prochymal[™]
- Reported positive one year data for Chondrogen[™] in patients with osteoarthritis
- Received milestone payment from JCR for Prochymal in Japan

Full Year and Current Highlights

- Achieved \$15 million in full year Osteocel[®] sales, an increase of 83% from 2006
- Partnered with Genzyme Corp. to develop medical countermeasures for nuclear and radiological threats
- Secured \$62 million in new financing and financing commitments - \$30 million line of credit and a \$32 million private placement of common stock
- Eliminated \$19 million of debt through conversion into common stock at a premium
- Received \$4 million funding commitment from Juvenile Diabetes Research Foundation and obtained FDA clearance to conduct Phase II trial evaluating Prochymal[™] for the treatment of type 1 diabetes
- Reported positive Phase II data for Prochymal[™] in the frontline treatment of acute GvHD and initiated a pivotal Phase III trial with FDA Fast Track Status
- Initiated Phase III trial evaluating Prochymal[™] in patients with treatment refractory Crohn's disease and received FDA Fast Track Status
- Reported positive results for Prochymal[™] as a rescue agent in pediatric patients with end stage GvHD
- Reported positive one year data for Prochymal[™] in patients suffering acute myocardial infarction

Fourth Quarter Financial Highlights

Total revenues for the fourth quarter were \$7.2 million, up 125% from revenues of \$3.2 million for the same period of the prior year. Sales of Osteocel were \$6.0 million in the fourth quarter, up 100% from \$3.0 million for the same period of the prior year. Other revenues were \$1.2 million in the fourth quarter of 2007, including a \$0.5 million milestone payment from JCR Pharmaceuticals, compared to \$0.3 million for the same period of the prior year.

The Company reported a net loss of \$21.6 million for the fourth quarter of 2007 compared to a net loss of \$12.7 million for the same period of the prior year. The fourth quarter of 2007 included \$5.1 million of non-recurring, non-cash charges associated with the conversion of \$18.8 million of convertible promissory notes into common stock. The increase in the 2007 fourth quarter loss was largely the result of the continued advancement of clinical trials and costs associated with the production of increased amounts of Prochymal for use in clinical trials. During the quarter, net cash used in operations was \$15.0 million.



Research and development expenses were \$18.4 million for the fourth quarter of 2007 compared to \$13.1 million for the same period of the prior year. General and administrative (G&A) expenses were \$2.0 million for the fourth quarter of 2007 compared to \$0.8 million for the same period of the prior year. The increase in G&A expenses in the fourth quarter of 2007 as compared to the same period of the prior year was largely driven by costs associated with Osiris's status as a public company and increases in professional staff as the Company prepares for further product commercialization.

Non Cash Debt Conversion Charges

In the fourth quarter of 2007, \$18.8 million of the 10% Convertible Promissory Notes, together with accrued interest, were converted at \$13.00 per share into shares of Osiris common stock. As a result of the conversion, the Company eliminated \$3.0 million in cash interest expense that would have accrued had the Notes remained outstanding to maturity in April 2009. In connection with this debt conversion, the Company recorded a non-cash debt conversion charge of \$4.8 million and accelerated the recognition of deferred financing fees of \$0.3 million, as components of interest expense.

Full Year 2007 Financial Highlights

Total revenues for the full year 2007 were \$17.3 million, an increase of 82% over total revenues of \$9.5 million for the prior year. Sales of Osteocel were \$15.2 million, an increase of 83% over sales of \$8.3 million for the prior year. Other revenues were \$2.0 million compared to \$1.2 million for the prior year.

The Company reported a net loss of \$53.9 million in 2007 and a net loss of \$45.0 million in 2006. The 2007 net loss includes \$5.1 million of non-cash charges associated with the debt conversion that was recognized in the fourth quarter. Exclusive of these non-cash charges, net loss in 2007 was \$48.8 million. Research and development costs in 2007 totaled \$50.9 million, representing 88% of the Company's total operating expenses, as compared to research and development costs of \$37.6 million for the prior year, which represented 82% of total operating expenses.

As of December 31, 2007, the Company had \$48.2 million in available cash including \$18.2 million of cash and short-term investments, and \$30.0 million available under its credit line.

Webcast and Conference Call

The Company has scheduled a webcast and conference call to discuss its financial results today, February 28th at 9:00 AM EST. 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 (877) 604-9665 (U.S. participants) or (719) 325-4898 (international participants).

A replay of the conference call will be available approximately two hours after the completion of the call through March 13, 2008. Callers can access the replay by dialing (888) 203-1112 (U.S. participants) or (719) 457-0820 (international participants). The audio replay passcode is 9504908. 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 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 253 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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OSIRIS THERAPEUTICS, INC.
CONDENSED BALANCE SHEETS
Amounts in thousands

	<u>December 31,</u> <u>2007</u>	<u>December 31,</u> <u>2006</u>
	<u>(unaudited)</u>	
Assets		
Current assets:		
Cash	\$ 704	\$ 714
Short-term investments	17,460	38,467
Accounts receivable	4,873	1,596
Inventory and other current assets	5,704	2,858
Total current assets	<u>28,741</u>	<u>43,635</u>
Property and equipment, net	6,616	3,942
Restricted cash	280	297
Deferred financing costs, net	19	567
Other assets	1,385	727
Total assets	<u>\$ 37,041</u>	<u>\$ 49,168</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	\$ 14,087	\$ 8,339
Note payable, current portion	6,521	49
Capital lease obligations, current portion	886	1,129
Deferred revenue, current portion	—	952
Total current liabilities	<u>21,494</u>	<u>10,469</u>
Note payable, net of current portion	1,200	25,000
Capital lease obligations, net of current portion	11	895
Deferred revenue, net of current portion	—	397
Long-term interest payable and other liabilities	—	1,120
Total liabilities	<u>22,705</u>	<u>37,881</u>
Stockholders' equity:		
Common stock, \$.001 par value, 90,000 shares authorized 31,648 and 27,321 shares outstanding in 2007 and 2006	32	27
Additional paid-in-capital	255,728	198,763
Accumulated deficit	(241,424)	(187,503)
Total stockholders' equity	<u>14,336</u>	<u>11,287</u>
Total liabilities and stockholders' equity	<u>\$ 37,041</u>	<u>\$ 49,168</u>



OSIRIS THERAPEUTICS, INC.
CONDENSED STATEMENTS OF OPERATIONS

Amounts in thousands, except per share amounts

	Three Months Ended December 31,		Year Ended December 31,	
	2007	2006	2007	2006
	(unaudited)	(unaudited)	(unaudited)	
Product sales	\$ 5,985	\$ 2,958	\$ 15,240	\$ 8,291
Cost of goods sold	2,725	1,333	6,955	3,697
Gross profit	<u>3,260</u>	<u>1,625</u>	<u>8,285</u>	<u>4,594</u>
Revenue from collaborative research licenses and royalties	<u>1,180</u>	<u>286</u>	<u>2,048</u>	<u>1,181</u>
Operating expenses:				
Research and development	18,396	13,058	50,851	37,590
General and administrative	2,012	812	6,708	8,459
Total operating expenses	<u>20,408</u>	<u>13,870</u>	<u>57,559</u>	<u>46,049</u>
Loss from operations	(15,968)	(11,959)	(47,226)	(40,274)
Interest expense, net	<u>(5,604)</u>	<u>(709)</u>	<u>(6,695)</u>	<u>(4,685)</u>
Net loss	<u>\$ (21,572)</u>	<u>\$ (12,668)</u>	<u>\$ (53,921)</u>	<u>\$ (44,959)</u>
Basic and diluted net loss per share	<u>\$ (0.73)</u>	<u>\$ (0.46)</u>	<u>\$ (1.89)</u>	<u>\$ (2.70)</u>
Weighted average common shares (basic and diluted)	<u>29,556</u>	<u>27,316</u>	<u>28,511</u>	<u>16,663</u>



OSIRIS THERAPEUTICS, INC.
CONDENSED STATEMENTS OF CASH FLOWS
Amounts in thousands

	<u>Year Ended December 31,</u>	
	2007	2006
	(unaudited)	
Cash flows from operations:		
Net loss	\$ (53,921)	\$ (44,959)
Adjustments to reconcile net loss to net cash used in operations:		
Depreciation and amortization	2,033	1,546
Non cash share-based payments	1,340	5,494
Non cash interest expense	6,881	5,653
Increase (decrease) in cash resulting from changes in assets and liabilities:		
Accounts receivable	(3,277)	(622)
Inventory and other current assets	(2,846)	(2,491)
Other assets	(663)	(457)
Accounts payable and accrued expenses	6,404	3,374
Deferred revenue	(1,349)	(952)
Long-term interest payable and other liabilities	(1,120)	(1,896)
Net cash used in operations	<u>(46,518)</u>	<u>(35,310)</u>
Cash flows from investing activities:		
Purchases of property and equipment	(4,702)	(1,696)
Redemption of short-term investments	50,900	40,112
Purchase of short-term investments	(29,893)	(35,805)
Net cash provided by investing activities	<u>16,305</u>	<u>2,611</u>
Cash flows from financing activities:		
Principal payments on capital lease obligations and notes payable	(1,115)	(21,692)
Restricted cash	17	(107)
Proceeds from convertible notes payable	—	20,000
Proceeds from the issuance of common stock, net of offering costs	31,701	34,824
Payment of debt financing costs	(400)	(209)
Net cash provided by financing activities	<u>30,203</u>	<u>32,816</u>
Net (decrease) increase in cash	(10)	117
Cash at beginning of period	714	597
Cash at end of period:	<u>\$ 704</u>	<u>\$ 714</u>