



Osiris Announces Third Quarter Results with Osteocel[®] Sales Growth of 50%

Company Makes Significant Progress in the International Development of Prochymal[™] for GVHD and Crohn's Disease

BALTIMORE, Maryland – November 2, 2006 – Osiris Therapeutics, Inc. (NASDAQ:OSIR), announced its financial results for the third quarter and nine months ended September 30, 2006.

Highlights

- Osteocel sales increase by 50% or more for the 5th consecutive quarter
- Osiris makes significant progress expanding its Phase 3 trial evaluating Prochymal for Graft versus Host Disease (GvHD), achieving regulatory milestones in Canada and Europe
- The Company announced positive Phase 2 results of Prochymal for the treatment of patients with drug resistant Crohn's Disease
- The Company refinances debt with significantly favorable terms, resulting in expected savings of \$3.2 million over the term of the debt
- Major shareholders elect to extend lock-up for an additional 12 months to January 30, 2008

For the third quarter ended September 30, 2006, sales of Osteocel grew 50% from the second quarter to \$2.5 million. Osiris reported a net loss of \$15.6 million for the third quarter of 2006 compared to a net loss of \$4.7 million for the third quarter of 2005. The third quarter's loss was largely driven by the recognition of non-recurring, non-cash charges associated with the completion of the Company's initial public offering and clinical trial activity. Total non-cash charges relating to the IPO recognized during the quarter were \$7.0 million. Excluding non-recurring, non-cash IPO related charges, the net loss for the third quarter of 2006 was \$8.6 million. For the nine month period ended September 30, 2006, the Company reported a net loss of \$32.3 million compared to a net loss of \$11.9 million for the corresponding nine month period in 2005. During the first nine months of 2006 the Company completed enrollment in five clinical trials and initiated a pivotal Phase 3 trial for its lead drug candidate Prochymal[™]. During the quarter, Osiris completed an initial public offering with net proceeds of \$34.2 million. At the end of the third quarter Osiris had cash and short-term investments of \$53.6 million.

"Clearly this has been a great quarter for Osiris," said C. Randal Mills, Ph.D., President and CEO of Osiris. "Osteocel continues to demonstrate our ability to develop stem cell therapies that translate into commercial success. The capacity to not only develop, but launch and market stem cell products becomes more important with the advancement of our late stage drug candidates."

Debt Refinancing and Lockup agreement

On October 30, 2006, Osiris issued \$20 million in convertible promissory notes in a private placement to several Swiss investors. The Notes bear interest at a rate of 10%, with semi-annual payments of accrued interest becoming due and payable on April 30 and October 30 of each calendar year, until maturity on April 30, 2009. The Notes are convertible at the option of the respective holders at any time after February 9, 2007 into shares of Osiris Common Stock at a conversion price of \$18 per share. The Notes automatically convert into common stock at the same conversion price, if at any time after February 9, 2007, the closing price of Osiris common stock for ten consecutive trading days equals \$25 per share or greater. The Notes provide for redemption at any time at the option of Osiris with 30-days prior notice.



The net proceeds from the Notes have been applied to the repayment in full of a \$20.6 million convertible promissory note previously issued to a foreign investor. The prior note had a maturity date of November 29, 2008, and accrued interest at a base rate of 6%, together with premium payments of 9% initially and increasing to 27% if the note was held to maturity. Repayment of the prior note at this time allows Osiris to avoid an increase in the premium obligation of up to 18%, or \$3.7 million, which would have been payable had the prior note been held to maturity. After accounting for costs to refinance and interest rate differences, total net savings to the Company over the prior note's full term are expected to be approximately \$3.2 Million "The refinancing of this debt allows the company to maintain its strong cash position under more favorable financing terms," said Cary J. Claiborne, Osiris' Chief Financial Officer.

Also on October 30, 2006, Osiris entered into a Lock-up Agreement with Peter Friedli, Chairman of the Board of Directors of Osiris, and certain entities with which he is affiliated. Pursuant to the Lock-up Agreement, the parties have agreed not to transfer Company securities held by them without approval of the Company until January 30, 2008. The extended lock-up agreement covers 12.4 million shares of Osiris common stock, and warrants for an additional 1,000,000 shares of common stock.

Financial Highlights for Third Quarter 2006

Osteocel sales for the quarter ended September 30, 2006, were \$2.5 million compared to \$0.3 million in the third quarter of 2005. Other revenues for the quarter ended September 30, 2006 were \$0.3 million compared to \$1.0 million for the third quarter of 2005.

Research and development expenses were \$9.2 million for the third quarter of 2006 compared to \$3.5 million for the third quarter of 2005. The increase in expenses from 2005 was primarily due to the advancement of our clinical programs.

Selling, general and administrative (SG&A) expenses were \$5.3 million for the third quarter of 2006 compared to \$0.6 million for the third quarter of 2005. The increase in SG&A expenses in the 2006 quarter was in part driven by the recognition of non-cash charges associated with the IPO as detailed below, costs to support business growth and costs associated with being a newly public company. Excluding non-recurring items related to the IPO, SG&A was \$0.9 million for the third quarter of 2006 compared to \$0.6 million in the third quarter of 2005.

Net interest expense was \$2.8 million for the third quarter of 2006 compared to \$1.7 million in the third quarter of 2005. The increase in interest expense was driven by the recognition of previously deferred financing costs and premiums associated with debt that was converted into common stock at the completion of the initial public offering. Excluding non-recurring items related to the IPO, net interest expense was \$0.1 million for the third quarter of 2006.

Non-Recurring, Non-Cash IPO Related Charges

In the third quarter of 2006, the company recognized a total of \$7.0 million in non-recurring, non-cash charges relating to the completion of its IPO in August. Included in SG&A was a non-cash charge of \$0.8 million for stock-based compensation expense related to accelerated vesting upon completion of the IPO of certain employee stock options. The company also recognized, in SG&A, \$3.5 million in non-cash charges related to warrants that were priced upon completion of the IPO. Interest expense for the quarter included \$2.7 million in previously deferred financing costs and premiums that were recognized as a result of debt that was converted into common stock at the completion of the initial public offering.



Web Cast, Conference Call and Healthcare Conference

The Company has scheduled a web cast and conference call to discuss its financial results tomorrow, November 3, 2006 at 8:30 AM EST. To access the web cast, 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 800-810-0924 (U.S. participants) or 913-981-4900 (international participants).

A replay of the conference call will be available approximately two hours after the completion of the call through Friday, November 17, 2006. Callers can access the replay by dialing 888-203-1112 (U.S. participants) or 719-457-0820 (international participants). The audio replay passcode is 6027748. To access a replay of the webcast, visit the Investor Relations section of the company's website at <http://investor.osiris.com/events.cfm>.

C. Randal Mills, Ph.D., President and CEO, will be presenting at the Rodman & Renshaw 8th Annual Healthcare Conference on November 8, 2006 in New York City at the New York Palace Hotel. The presentation is scheduled for 9:55 AM, EST. To access the web cast, 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 3 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 46 U.S. and 164 foreign patents owned or licensed. (OSIR-G)

Forward-Looking Statements

This press release contains forward-looking statements. Forward-looking statements provide our current expectations or forecasts of future events. 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 Registration Statement on Form S-1, File No: 333-134037, as filed with the United States Securities and



Exchange Commission and declared effective on August 3, 2006. 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 Lisa Rodemann at 410.522.5005, extension 610.



OSIRIS THERAPEUTICS, INC.
BALANCE SHEETS

(Amounts in thousands except per share amounts)

	September 30, <u>2006</u>	December 31, <u>2005</u>
	(Unaudited)	
ASSETS		
Current assets:		
Cash	\$1,565	\$597
Short-term investments	51,993	42,774
Accounts receivable, inventory and other current assets	2,954	1,341
Total current assets	<u>56,512</u>	<u>44,712</u>
Property and equipment, net	3,587	3,792
Restricted cash	303	190
Deferred financing costs, net and other assets	1,038	2,320
Total assets	<u>\$61,440</u>	<u>\$51,014</u>
 LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable and accrued expenses	\$7,521	\$4,565
Notes payable, current portion	20,665	65
Other current liabilities	2,055	1,979
Total current liabilities	<u>30,241</u>	<u>6,609</u>
Notes payable, net of current portion	5,000	47,411
Long-term interest payable and other liabilities	2,844	6,389
Mandatorily redeemable convertible preferred stock Series D, 3,750 shares designated, 3,213 shares issued and outstanding in 2005	-	64,267
Total liabilities	<u>38,085</u>	<u>124,676</u>
Stockholders' deficit:		
Convertible preferred stock, \$0.001 par value, 16,250 shares authorized, 12,250 shares Designated, 10,651 shares outstanding in 2005	-	32,746
Common stock, \$0.001 par value, 90,000 shares authorized, 27,283 shares outstanding in 2006, 9,153 shares outstanding in 2005	27	9
Additional paid-in capital	198,164	36,127
Accumulated deficit	(174,836)	(142,544)
Total stockholders' equity/(deficit)	<u>23,355</u>	<u>(73,662)</u>
Total liabilities and stockholders' equity/(deficit)	<u>\$61,440</u>	<u>\$51,014</u>



OSIRIS THERAPEUTICS, INC.
CONDENSED STATEMENTS OF OPERATIONS

(Amounts in thousands, except per share amounts)

	<u>Three Months Ended September 30,</u>		<u>Nine months Ended September 30,</u>	
	<u>2006</u>	<u>2005</u>	<u>2006</u>	<u>2005</u>
	(Unaudited)		(Unaudited)	
Product sales	\$2,539	\$284	\$5,333	\$284
Cost of goods sold	<u>1,113</u>	<u>220</u>	<u>2,364</u>	<u>220</u>
Gross profit	<u>1,426</u>	<u>64</u>	<u>2,969</u>	<u>64</u>
Revenue from collaborative research licenses and grants	<u>302</u>	<u>1,001</u>	<u>895</u>	<u>2,725</u>
Operating expenses:				
Research and development.....	9,242	3,464	24,532	9,713
General and administrative.....	<u>5,300</u>	<u>554</u>	<u>7,647</u>	<u>1,793</u>
Total operating expenses.....	<u>14,542</u>	<u>4,018</u>	<u>32,179</u>	<u>11,506</u>
Loss from operations	(12,814)	(2,953)	(28,315)	(8,717)
Interest expense, net	<u>(2,751)</u>	<u>(1,725)</u>	<u>(3,976)</u>	<u>(3,223)</u>
Net loss	<u>\$(15,565)</u>	<u>\$(4,678)</u>	<u>\$(32,291)</u>	<u>\$(11,940)</u>
Basic and diluted net loss per share.....	<u>\$(0.75)</u>	<u>\$(0.52)</u>	<u>\$(2.47)</u>	<u>\$(1.33)</u>
Weighted average common stock outstanding, in thousands (basic and diluted)	<u>20,769</u>	<u>8,957</u>	<u>13,063</u>	<u>8,953</u>



OSIRIS THERAPEUTICS, INC.
STATEMENTS OF CASH FLOWS

(Amounts in thousands)

	Nine Months Ended September 30,	
	2006	2005
Cash flows from operations:		
Net loss	\$ (32,291)	\$ (11,928)
Adjustments to reconcile net cash to net cash used in operations:		
Depreciation and amortization	1,139	1,178
Non cash stock based compensation expense	5,887	193
Non cash interest expense	3,961	2,464
Increase (decrease) in cash resulting from changes in assets and liabilities:		
Accounts receivable	(39)	(692)
Inventory and other current assets	(1,579)	(595)
Other assets	(78)	4
Accounts payable	2,956	681
Deferred revenue	(714)	(714)
Accrued expenses and other	(1,996)	(95)
Net cash used in operations:	(22,754)	(9,504)
Cash flows from investing activities:		
Purchases of property and equipment	(933)	(132)
Sale of short-term investments	26,586	-
Purchase of short-term investments	(35,805)	(15,838)
Net cash provided by (used in) investing activities	(10,152)	(15,970)
Cash flows from financing activities:		
Principal payments on capital lease obligations and notes payable	(808)	(664)
Restricted cash	(113)	17
Proceeds from notes payable and bank borrowings	-	16,903
Proceeds from the issuance of preferred and common stock, net of offering costs	34,795	11,662
Payment of debt financing costs	-	(1,559)
Net cash (used in) provided by financing activities	33,874	26,359
Net increase in cash	968	885
Cash at beginning of year	597	488
Cash at end of period	\$ 1,565	\$ 1,373