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OXiGENE Reports Fourth Quarter and Year-End 2007 Results
Company Provides Updates; Milestones; Financial Guidance for 2008

WALTHAM, MA -- February 28, 2008 -- OXiGENE, Inc. (NASDAQ: OXGN, XSSE: OXGN), a clinical-stage, biopharmaceutical company developing novel therapeutics to treat cancer and eye diseases, reported financial results for the quarter and year ending December 31, 2007; summarized recent clinical and corporate progress; and provided financial and milestone guidance for 2008.

Financial Results

The Company reported that the net loss for the fourth quarter of 2007 was $5.8 million, or $0.21 per share, compared with a net loss of $3.4 million, or $0.12 per share, for the same period in 2006.

For the year ending December 31, 2007, the net loss was $20.4 million, or $0.73 per share, compared with a net loss of $15.5 million, or $0.56 per share, for the comparable period in 2006.

The increase in loss is attributable to an increase in operating expenses which was driven primarily by a higher level of clinical development activities, including the initiation of the ZYBRESTAT™ (*fosbretabulin)* pivotal registration trial in anaplastic thyroid cancer (ATC) as well as the management of other ongoing clinical trials and drug development activities.

At December 31, 2007, OXiGENE had cash, cash equivalents and marketable securities of approximately $28.4 million compared with approximately $45.8 million on December 31, 2006.

“In 2007, we advanced key drug development programs, in particular, our pivotal Phase II/III registration study for ZYBRESTAT in ATC and our topical ophthalmology program,” commented Richard Chin, OXiGENE President and CEO. “We remain highly confident in our vascular disrupting agent (VDA) drug development programs, and we are committed to translating our product candidates into innovative drug products that deliver meaningful benefits to patients with cancer and ophthalmological diseases. We expect that the financial resources available to us, including cash and the recently-established committed equity line, will allow us to continue to build value in these programs.”

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Fourth Quarter 2007 Highlights

Oncology

- Subsequent to Dr. Patricia Walicke joining the OXiGENE team in August 2007 as Chief Medical Officer, OXiGENE accelerated clinical site initiation and patient recruitment activities in the ongoing Phase II/III pivotal registration study for ZYBRESTAT in anaplastic thyroid cancer. As of year-end, OXiGENE had initiated four sites in the U.S. and India, and continues to initiate sites and enroll patients in 2008.

- In December, OXiGENE announced that ZYBRESTAT achieved the pre-specified primary efficacy endpoint for Stage 1 of an ongoing Simon two-stage design Phase II study of ZYBRESTAT in combination with chemotherapy in patients with platinum-resistant ovarian cancer. Enrollment of an additional 25 patients is proceeding in the second stage of the trial.

- In October, OXiGENE announced that the Phase Ib study of ZYBRESTAT in combination with bevacizumab in patients with advanced solid tumors resulted in significantly enhanced and sustained tumor blood-flow inhibition, demonstrated early evidence of clinical activity in the absence of concurrent cytotoxic chemotherapy, and appeared to be well-tolerated.

- In October, OXiGENE reported interim data from a Phase I dose-escalation study of OXi4503, its second-generation, dual-mechanism VDA product candidate. The study showed, among other things, that OXi4503 appeared to be well-tolerated, had no dose-limiting toxicity, achieved tumor blood flow shutdown and metabolic inactivation, and demonstrated early signs of clinical activity. The Company also announced publication of an article describing the mechanism-of-action by which OXi4503 may exert direct cytotoxic effects on tumor cells—in addition to its demonstrated vascular-disrupting activity.

- In November, OXiGENE announced publication of preclinical study results online and ahead of print in the journal *Blood* by Dr. Shahin Rafii, Howard Hughes Investigator at Cornell University, indicating that ZYBRESTAT has anti-leukemic effects and prolonged survival in an animal model of acute leukemia.

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Ophthalmology

- In December, OXiGENE reported positive preclinical ocular penetration data with a topical formulation of ZYBRESTAT for ophthalmology. These studies, performed in industry-standard rabbit models, indicate that two formulations of ZYBRESTAT, when applied topically to the surface of the eye, are absorbed and result in concentrations of drug in target tissues in the back of the eye (i.e., the retina and choroid) that the Company believes will be sufficient for therapeutic activity in eye diseases in which abnormal neovascularization plays a role, such as age-related macular degeneration, diabetic retinopathy, and neovascular glaucoma. The Company reported in May 2007 positive results from a Phase II study of intravenously-administered ZYBRESTAT in patients with myopic macular degeneration.

Financial Guidance for 2008

OXiGENE expects cash utilization from operations for fiscal 2008 to range from $22 million to $28 million, which reflects an increase in activity in all programs. OXiGENE estimates that it has approximately one year of operating cash and marketable securities on hand as of December 31, 2007. Also, as previously announced, OXiGENE entered into a Committed Equity Financing Facility with Kingsbridge Capital in February 2008. This facility allows Kingsbridge to purchase, at OXiGENE's discretion, up to $40 million in OXiGENE common stock for a period of up to three years.

Company Milestones for 2008

Oncology

- In the first quarter of 2008, the Company expects to initiate a randomized, controlled, double-blind Phase II study that will evaluate the combination of ZYBRESTAT, bevacizumab and chemotherapy versus bevacizumab and chemotherapy as a potential first-line therapy in patients with Stage IIIb/IV non-small cell lung cancer (NSCLC).

- In the first half of 2008, the Company anticipates initiating most of the clinical sites for the ongoing 180-patient, pivotal registration study of ZYBRESTAT in ATC. Consistent with the Company's objective of reaching the study's planned interim analysis by mid-2009, the Company plans to have enrolled approximately half of the patients in the study by year-end 2008.

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Oncology (cont.)

- In the first half of 2008, the Company expects to report results from the Phase Ib combination study of ZYBRESTAT and bevacizumab in patients with advanced solid tumors.

- In the first half of 2008, the Company expects to report results from the Phase I dose-escalation study of OXi4503 and announce preclinical study data that will inform clinical development of the product candidate.

- In the second half of 2008, the Company expects to report results from an ongoing Phase Ib study evaluating the combination of ZYBRESTAT, cetuximab and radiation therapy as a treatment for patients with head-and-neck cancer.

- In 2008, the Company expects to complete enrollment in the ongoing Phase 2 study of ZYBRESTAT in platinum-resistant ovarian cancer.

Ophthalmology (ZYBRESTAT Topical)

- In the first quarter of 2008, the Company expects to report results from ongoing primate tolerance and topical penetration studies that, if positive, will provide key support for further investment in the program and a subsequent IND filing. The Company anticipates presenting preclinical ocular penetration and tolerance data at an appropriate scientific meeting later in 2008.

- By mid-year, the Company expects to file an IND for a topical formulation of ZYBRESTAT and proceed into clinical evaluation of the product candidate in patients with age-related macular degeneration and/or another ophthalmological condition characterized by abnormal ocular neovascularization.

Members of OXiGENE's management team will review fourth quarter results via a webcast and conference call today at 10:00 a.m. ET (7:00 a.m. PST). To listen to a live or an archived version of the audio webcast, please log on to the Company's website, www.oxigene.com. Under the "Investor Center" tab, select the link to "Presentations & Conference Calls."

OXiGENE's earnings conference call can also be heard live by dialing (800) 909-7113 in the United States and Canada, and (785) 830-1914 for international callers, five minutes prior to the beginning of the call. A replay will be available starting at 1:00 p.m. ET, (10:00 a.m. PST) on February 28, 2008 and ending at 1:00 p.m. ET (10:00 a.m. PST) on Thursday, March 6, 2008. To access the replay, please dial (888) 203-1112 if calling from the United States or Canada, or (719) 457-0820 from international locations. Please refer to replay pass code 9542510.

About ZYBRESTAT (fosbretabulin)

ZYBRESTAT is currently being evaluated in a pivotal registration study in anaplastic thyroid cancer (ATC) under a Special Protocol Assessment agreement with the U.S. Food and Drug Administration (FDA). OXiGENE believes that ZYBRESTAT is poised to become the first therapeutic product in a novel class of small-molecule drug candidates called vascular disrupting agents (VDAs). Through interaction with vascular endothelial cell cytoskeletal proteins, ZYBRESTAT selectively targets and collapses tumor vasculature, thereby depriving the tumor of oxygen and causing death of tumor cells. In clinical studies in solid tumors, ZYBRESTAT has demonstrated potent and selective activity against tumor vasculature, as well as clinical activity against ATC, ovarian cancer, and various other solid tumors. In clinical studies in patients with forms of macular degeneration, intravenously-administered ZYBRESTAT has demonstrated clinical activity, and the Company is working to develop a convenient and patient-friendly topical formulation of ZYBRESTAT for ophthalmological indications.

About OXi4503

OXi4503 (combretastatin A1 di-phosphate / CA1P) is a dual-mechanism vascular disrupting agent (VDA) that is being developed in clinical studies for the treatment of solid tumors. Like its structural analog, ZYBRESTAT(TM) (fosbretabulin / CA4P), OXi4503 has been observed to block and destroy tumor vasculature, resulting in extensive tumor cell death and necrosis. In addition, preclinical data indicates that OXi4503 is metabolized by oxidative enzymes (e.g., tyrosinase and peroxidases), which are elevated in many solid tumors and tumor white blood cell infiltrates, to an orthoquinone chemical species that has direct cytotoxic effects on tumor cells. Preclinical studies have shown that OXi4503 has (i) single-agent activity against a range of xenograft tumor models; and (ii) synergistic or additive effects when incorporated in various combination regimens with chemotherapy, molecularly-targeted therapies (including tumor-angiogenesis inhibitors), and radiation therapy.
OXi4503 is currently being evaluated as a monotherapy in a Phase I dose-escalation study in patients with advanced solid tumors.

About OXiGENE

OXiGENE is a clinical-stage biopharmaceutical company developing novel therapeutics to treat cancer and eye diseases. The company's major focus is developing vascular disrupting agents (VDAs) that selectively disrupt abnormal blood vessels associated with solid tumor progression and visual impairment. OXiGENE is dedicated to leveraging its intellectual property and therapeutic development expertise to bring life-extending and -enhancing medicines to patients.

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Safe Harbor Statement

This news release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Any or all of the forward-looking statements in this press release may turn out to be wrong. Forward-looking statements can be affected by inaccurate assumptions OXiGENE might make or by known or unknown risks and uncertainties, including, but not limited to, enrollment rate for patients in the ZYBRESTAT pivotal trial for anaplastic thyroid cancer, interim analysis of the same, timing of the IND filing and Phase I trial initiation for topical ZYBRESTAT, timing of a phase II study of ZYBRESTAT and Avastin in NSCLC, timing or execution of a strategic collaboration on any product or indication, and cash utilization rate for 2008. Additional information concerning factors that could cause actual results to materially differ from those in the forward-looking statements is contained in OXiGENE's reports to the Securities and Exchange Commission, including OXiGENE's reports on Form 10-K, 10-Q and 8-K. However, OXiGENE undertakes no obligation to publicly update forward-looking statements, whether because of new information, future events or otherwise. Please refer to our Annual Report on Form 10-K for the fiscal year ended December 31, 2006.

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OXiGENE, Inc.
Condensed Balance Sheets
(All amounts in 000's)
(Unaudited)

	December 31, 2007	December 31, 2006
Assets		
Cash, cash equivalents and marketable securities	$ 28,438	$ 45,839
License agreement	679	777
Other assets	947	1,026
Total assets	$ 30,064	$ 47,642
Liabilities and stockholders' equity		
Accounts payable and accrued liabilities	$ 5,207	$ 4,222
Total stockholders' equity	24,857	43,420
Total liabilities and stockholders' equity	$ 30,064	$ 47,642

OXiGENE, Inc.
Condensed Statements of Operations
(All amounts in 000's except per share amounts)
(Unaudited)

	Three months ended December 31,		Twelve months ended December 31,	
	2007	2006	2007	2006
License revenue	$ 5	$ -	$ 12	$ -
Costs and expenses:				
Research and development	4,494	2,482	14,130	10,816
General and administrative	1,667	1,515	8,155	7,100
Total costs and expenses	6,161	3,997	22,285	17,916
Operating loss	(6,156)	(3,997)	(22,273)	(17,916)
Investment income	394	609	1,955	2,502
Other expense, net	(35)	(7)	(71)	(43)
Net loss	$ (5,797)	$ (3,395)	$ (20,389)	$ (15,457)
Basic and diluted net loss per common share	$ (0.21)	$ (0.12)	$ (0.73)	$ (0.56)
Weighted average number of common shares outstanding	28,035	27,846	27,931	27,626