INSPIRING SCIENCE, INNOVATING CARE

OXiGENE Reports Fourth Quarter and Fiscal Year 2006 Results and Sets Fiscal 2007 Priorities

- *Company Achieves Regulatory and Clinical Milestones, Focuses on Targeted Strategic Plan and Execution in 2007*
- *OXiGENE prepares to initiate registrational study of CA4P for anaplastic thyroid cancer*
- *OXiGENE commits to build strong collaborations with the addition of a Chief Business Officer*

WALTHAM, MA – March 6, 2007 – OXiGENE, Inc. (NASDAQ: OXGN, XSSE: OXGN), a clinical-stage biotechnology company developing novel therapeutics to treat cancer and eye diseases, today reported operational and financial results for its fourth quarter and Fiscal Year 2006.

Dr. Richard Chin, President and Chief Executive Officer of OXiGENE, commented that, "OXiGENE has developed a clear and focused strategy, demonstrated sound execution on key scientific and development projects and committed to establishing strong partnerships with the addition of a Chief Business Officer." Dr. Chin continued, "We are pursuing anaplastic thyroid cancer as our lead targeted indication, and we believe we have a development strategy that will make CA4P the first vascular disrupting agent on the market."

Priorities for 2007

The Company indicated that its operational priorities for its fiscal 2007 will be the following:

- Continue to build on its successful pre-IND meetings with the FDA for both its oncology program in anaplastic thyroid cancer and its ophthalmology program;
- Develop non-invasive administration formulations for the ophthalmologic therapeutic area for CA4P;
- Complete studies to determine the most science-driven and comprehensive set of biomarkers of treatment response for its lead compounds; and
- Aggressively pursue strategically driven collaboration and partnership initiatives.

Commenting on the year ahead, Dr. Peter Harris, Chief Medical Officer stated, "For our oncology program, our focus will be to enroll our first patient in the advanced thyroid cancer Phase III trial by the end of the first half of 2007. With regards to our ophthalmology program, barring no unforeseen circumstances with our formulation development, we hope to be in the clinic for age-related macular degeneration with a non-invasive formulation by late 2007 or early 2008," Dr. Harris continued, "One of our goals in 2007 is to further elucidate the therapeutic potential of OXi4503 and help identify the appropriate Phase II program for this drug."

Financial Results and 2007 Guidance

In the fourth quarter of 2006, OXiGENE's net loss was approximately $3.4 million, or $0.12 per share, compared to a net loss of approximately $3.4 million, or $0.16 per share, in the fourth quarter of 2005. For the twelve-month period ended December 31, 2006, the Company reported a net loss of approximately $15.5 million, or $0.56 per share compared to a net loss of approximately $11.9 million, or $0.61 per share in 2005.

At December 31, 2006, OXiGENE had cash, cash equivalents and marketable securities of approximately $45.8 million compared with approximately $58.9 million at December 31, 2005.

Cash utilization for 2007 is anticipated to be between approximately $16 and $22 million in support of the Company's ongoing research and development efforts.

2006: The Year in Review

Clinical Update: Oncology

In March 2006, OXiGENE announced the completion of patient enrollment in a Phase II clinical trial evaluating CA4P with chemotherapy in imageable solid tumors. Dr. Wallace Akerley of the Huntsman Cancer Center in Salt Lake City, Utah was the lead investigator on this study and will be presenting the study findings at an upcoming scientific meeting this year.

In May 2006, OXiGENE announced the US FDA granted orphan drug designation to CA4P for the treatment of ovarian cancer, which marked the second indication for which CA4P has received orphan drug status, the first being anaplastic thyroid cancer.

In June 2006, OXiGENE announced the release of positive data from two Phase II clinical trials involving patients with anaplastic thyroid cancer. This was the basis for the Company's decision to have this as a lead indication in its oncology strategy.

In November 2006 the Company announced the enrollment of the first patient in its study of CA4P in combination with Avastin for the treatment of advanced cancers.

Clinical Update: Ophthalmology

In September 2006, OXiGENE announced that it would be closing enrollment of the Phase II CA4P clinical trial in myopic macular degeneration (MMD). All patients in the study met the primary endpoint of maintenance of vision, and the full results from the MMD clinical trial will be presented at the Annual Meeting of the Association for Research in Vision and Ophthalmology in Fort Lauderdale, FL in May 2007 by David M. Brown MD FACS and Tien P. Wong MD of The Methodist Hospital, Houston, TX. After carefully reviewing the results of the MMD study, consulting with experts in the field of ophthalmology and meeting with the FDA, the Company has decided to pursue the development of CA4P for the treatment of age-related macular degeneration. The primary goal will be to develop an eye drop formulation or other non-invasive administration approaches.

Preclinical Update

In September 2006, OXiGENE announced the publication in the journal Science of the results of a preclinical study that demonstrated the ability of OXiGENE's vascular disrupting agents to enhance the suppression of tumor growth when used in combination with an antiangiogenic drug.

About OXiGENE, Inc.

OXiGENE is a clinical-stage biotechnology company developing novel small-molecule therapeutics to treat cancer and eye diseases. The Company's major focus is the clinical advancement of drug candidates that selectively disrupt abnormal blood vessels associated with solid tumor progression and visual impairment. OXiGENE is dedicated to leveraging its intellectual property position and therapeutic development expertise to bring life saving and enhancing medicines to patients.

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 including the initiation of a Phase III study in anaplastic thyroid cancer, CA4P becoming the first vascular disrupting agent on the market, development of a non-invasive form of administration of CA4P, establishing collaborations and partnerships, the initiation of a study of age-related macular degeneration, and the utilization of cash in 2007, 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. 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 Form 10-Q, 8-K and 10-K reports. 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, 2005 for a description of these risks.

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SOURCE: OXiGENE, Inc.

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

Assets	December 31, 2005	December 31, 2006
Cash, cash equivalents and marketable securities	$ 58,855	$ 45,839
Licensing agreement	873	777
Other assets	540	1,026
Total assets	$ 60,268	$ 47,642
Liabilities and stockholders' equity		
Accounts payable and accrued liabilities	$ 3,734	$ 4,222
Total stockholders' equity	56,534	43,420
Total liabilities and stockholders' equity	$ 60,268	$ 47,642

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

	Three months ended December 31,		Twelve months ended December 31,	
	2005	2006	2005	2006
License revenue	$ 1	$ -	$ 1	$ -
Costs and expenses:				
Research and development	2,039	2,482	7,098	10,816
General and administrative	1,665	1,515	5,951	7,100
Total costs and expenses:	3,704	3,997	13,049	17,916
Operating loss	(3,703)	(3,997)	(13,048)	(17,916)
Investment income	324	609	1,135	2,502
Other (expense) income, net	-	(7)	4	(43)
Net loss	$ (3,379)	$ (3,395)	$ (11,909)	$ (15,457)
Basic and diluted net loss per common share	$ (0.16)	$ (0.12)	$ (0.61)	$ (0.56)
Weighted average number of common shares outstanding	20,956	27,846	19,664	27,626