OXiGENE Announces Positive New Preclinical Safety and Efficacy Data for CA4P at AACR

WALTHAM, Mass.--(BUSINESS WIRE)--April 19, 2005--OXiGENE, Inc. (NASDAQ: OXGN) (XSSE: OXGN):

-CA4P in Combination Treatment Causes Complete Remissions in Anaplastic Thyroid Preclinical Model-

-Safety Profile for Chronic Administration Enhanced by Lack of Chromosomal Damage in an in vitro model-

OXiGENE, Inc. (NASDAQ: OXGN, XSSE: OXGN) today announced the presentation of positive new preclinical data supporting the development of its lead clinical candidate, CA4P. The data were presented at the 96th Annual Meeting of the American Association of Cancer Research.

In a presentation entitled The interaction of Combretastatin A-4 phosphate with pacliataxel and manumycin A in a mouse xenograft model of anaplastic thyroid cancer, Dr. Sai-Ching Jim Yeung presented positive efficacy data from a study by researchers at the University of Texas M.D. Anderson Cancer Center, who combined CA4P with pacliataxel and a farnesyltransferase inhibitor (FTI) in a murine model of anaplastic thyroid cancer (ATC). He reported that the triple combination had a significant effect in slowing the growth of the xenografts, or transplanted tumors, and that complete remissions and stable disease had been observed in several of the subject animals. The researchers concluded that "the triple-drug combination of a taxane, an FTI and CA4P are good candidate regimens for clinical trials in patients with ATC."

"These data shown by Dr. Yeung, et. al., provide evidence of the potential therapeutic effectiveness of CA4P in a very aggressive cancer, ATC, particularly when used in a treatment regime containing pacliataxel," commented David Chaplin, Ph.D., Chief Scientific Officer of OXiGENE.

In a presentation entitled Lack of clastogenicity of Combretastatin A-4 (CA4P) - microtubule destabilizing agent, in human peripheral blood lymphocytes in vitro, Dr. Devaki Sadhu from the Genetic Toxicology Department of Toxikon Corporation presented data from a study intended to determine if CA4, the active form of CA4P, or its metabolites could induce chromosome damage in an in vitro model. The results of the study showed that neither CA4, nor its metabolites, caused any increase in the number of structural chromosome aberrations (damage or rearrangement to DNA). In addition, it was determined that CA4 and its metabolites do not cause breaks in the DNA and there was no evidence that CA4 causes cells to have an abnormal number of chromosomes.

"These additional safety data are especially important as we continue to expand the clinical evaluation of CA4P beyond cancer into non-life-threatening conditions, including our ongoing Phase I/II and Phase II trials in ophthalmology," said Scott Young, Chief Operating Officer of OXiGENE.

About Combretastatin A4P (CA4P)

CA4P leads a novel class of drug candidates which have been referred to by OXiGENE as vascular targeting agents (VTAs). CA4P attacks the vascular structure of solid tumors and other diseases characterized by the formation of aberrant blood vessels. The compound triggers a change in the shape of the endothelial cells lining these blood vessels, in turn blocking the flow of blood to a tumor and depriving it of oxygen and nutrients essential to its survival. Similarly, in eye diseases that are characterized by abnormal blood vessel growth, CA4P has been shown in preclinical studies to suppress development and induce regression of these unnecessary blood vessels.

CA4P is currently being studied in seven clinical trials in oncology, including anaplastic thyroid, lung, head and neck, prostate, colorectal, ovarian, cervical cancers and other imageable tumor types. These clinical trials involve the use of CA4P in both single-agent and combination therapies. It is also currently being studied in a Phase I/II trial in wet age-related macular degeneration and a Phase II trial in myopic macular degeneration.

About OXiGENE

OXiGENE is an emerging pharmaceutical 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.

This news release about AACR presentations 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, including statements regarding potential therapeutic effectiveness of CA4P in a very aggressive cancer, ATC; and continued expansion of the clinical evaluation of CA4P beyond cancer into non-life-threatening conditions. 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 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, 2004 for a description of these risks.

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