OXiGENE Reports Encouraging Safety and Efficacy Data from Ongoing Phase 2 Trial of ZYBRESTAT in Non-Small Cell Lung Cancer at the 2010 ASCO Annual Meeting

SOUTH SAN FRANCISCO, Calif., June 6, 2010 (GLOBE NEWSWIRE) -- OXiGENE, Inc. (Nasdaq:OXGN), a clinical-stage, biopharmaceutical company developing novel therapeutics to treat cancer and eye diseases, announced today that it presented updated safety and clinical activity data from the FALCON trial, a randomized, controlled Phase 2 study of ZYBRESTAT™ (CA4P) in patients with non-small cell lung cancer (NSCLC), at the 2010 Annual Meeting of the American Society of Clinical Oncology (ASCO). The updated analysis showed that meaningful improvements were observed in response rate, progression-free survival and overall survival rates in the study arm (ZYBRESTAT combined with bevacizumab and carboplatin/paclitaxel chemotherapy) as compared with the control arm (bevacizumab and chemotherapy) of the trial. The combination regimen including ZYBRESTAT was observed to be well-tolerated with no significant cumulative toxicities when compared with the control arm of the study.

The data were presented in a poster titled, "Randomized phase II trial of a tumor vascular disrupting agent fosbretabulin tromethamine (CA4P) with carboplatin, paclitaxel and bevacizumab in stage IIIb/IV nonsquamous non-small cell lung cancer (NSCLC): The FALCON trial," by Edward Garon, M.D., Assistant Professor of Medicine at the University of California, Los Angeles and primary investigator in the study.

"The data gathered to date from the FALCON study are highly encouraging as they demonstrate improvement over the standard of care for this challenging and aggressive disease," commented Dr. Garon. "This initial trend is exciting, and if maintained as the data matures, these results strongly suggest that ZYBRESTAT should be evaluated further in a Phase 3 study in non-small cell lung cancer."

"We believe that these promising data continue to build upon the growing body of evidence demonstrating that ZYBRESTAT can yield clinical benefit without increased toxicity when added to existing mainstay cancer therapies," commented Peter Langecker, M.D., Chief Executive Officer at OXiGENE. "This study is the first trial to investigate the combined use of a vascular disrupting agent with an anti-angiogenic therapy at full strength. Anti-angiogenic agents represented an important breakthrough when combined with conventional chemotherapy in multiple tumor types, and have since become the standard by which other therapies are measured. We believe that the addition of the VDA ZYBRESTAT represents the next key step in treating patients with cancer."

FALCON is a controlled, randomized study investigating the addition of ZYBRESTAT (fosbretabulin tromethamine, or CA4P) to standard therapy (carboplatin, paclitaxel, and bevacizumab) in patients with Stage IIIb or IV predominantly non-squamous NSCLC. A total of 53 patients were treated with 27 in the standard therapy arm and 26 in the CA4P + standard therapy arm (safety population). The treatment arms were well balanced except for a greater number of males in the CA4P arm. Disease was predominately Stage IV in both arms. Patients received CA4P plus standard therapy or standard therapy alone every 21 days for up to 6 cycles (treatment phase). Patients without disease progression after 6 cycles could continue to receive

bevacizumab with or without CA4P (depending on treatment arm) until disease progression (maintenance phase).

Key data points from the ongoing FALCON trial are as follows.

Progression-free survival (PFS)

- PFS determined by RECIST criteria
- Median PFS was 6.9 months in the CA4P arm versus 6.2 months in the standard therapy arm (hazard ratio (95%CI) = 0.70 (0.27, 1.82))
- Represents a 30% reduction in the odds of progression for patients receiving CA4P vs. standard therapy

Tumor response

- Partial Response (PR) was 60% in the CA4P arm and 40% in the standard therapy arm

Survival

- With 22 deaths overall (12 in the Control Arm and 10 in the CA4P Arm), median survival has not been reached in either arm
- In the efficacy population, the observed hazard ratio and 95%CI is 0.68 (0.26, 1.79) in favor of the CA4P arm

A copy of the ASCO presentation is available on OXiGENE's website at www.oxigene.com.

About ZYBRESTAT (fosbretabulin)

ZYBRESTAT is being evaluated in a Phase 2 study of patients with non-small cell lung cancer and other clinical trials. OXiGENE believes that ZYBRESTAT is poised to become an important product in a novel class of small-molecule drug candidates called vascular disrupting agents. 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 trials in solid tumors, ZYBRESTAT has demonstrated potent and selective activity against tumor vasculature, as well as clinical activity against anaplastic thyroid cancer, ovarian cancer and various other 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 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 life-enhancing medicines to patients.

The OXiGENE, Inc. logo is available at
http://www.globenewswire.com/newsroom/prs/?pkgid=4969

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, which include projected study outcomes, emerging oncology treatments and the expected conclusion of ongoing or initiation of new clinical studies 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, the outcome of clinical studies and the availability of additional financing to continue development of ZYBRESTAT.

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, 2009.

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