OXiGENE Reports Positive Data From Phase 1 Study of OXi4503 at the 2010 ASCO Annual Meeting

SOUTH SAN FRANCISCO, Calif., June 7, 2010 (GLOBE NEWSWIRE) -- OXiGENE, Inc. (Nasdaq:OXGN), a clinical-stage, biopharmaceutical company developing novel therapeutics to treat cancer and eye diseases, announced today that in collaboration with OXiGENE, Professor Gordon Rustin and colleagues from the Mount Vernon Cancer Research Centre, UK and other institutions in the United Kingdom, reported positive final data from an investigator-sponsored Phase 1 study of OXi4503 in patients with solid tumors. Data from a dose escalation study of 45 patients with advanced solid tumors who had declined or were refractory to standard treatment were presented at the 2010 Annual Meeting of the American Society of Clinical Oncology (ASCO). Partial responses were observed in two patients with epithelial ovarian cancer and stable disease was observed in 9 patients. OXi4503 was also shown to be well-tolerated.

The data were presented in a poster titled, "Phase 1 Pharmacokinetic and Pharmacodynamic Evaluation of the Vascular Disrupting Agent OXi4503 in Patients with Advanced Solid Tumors," by Dr. Martin Zweifel of the Mount Vernon Cancer Centre, UK.

"The data from this study provide excellent insight into the tolerability and potential optimal dosing schedule for OXi4503, with intriguing and encouraging signs of activity," commented Peter Langecker, M.D., Ph.D., OXiGENE CEO. "Of particular clinical interest are the two patients with epithelial ovarian cancer who achieved partial responses and the 9 patients with stable disease. We believe that OXi4503 is a highly promising, second-generation, dual action vascular disrupting agent with potential both as a single agent and in combination with other treatment modalities. The encouraging results from this Phase 1 study suggest that a Phase 2 study of OXi4503 in patients with solid tumors would be an exciting next step."

In this study, OXi4503 was given intravenously in escalating doses ranging from 0.06 to 15.4 mg/m2. Dose levels of 8.5, 11.0, 12.5, and 14 mg/m2 were repeated following the introduction of amlodopine as prophylaxis to prevent hypertension.

Key data points from the Phase 1 study of OXi4503 are as follows.

- OXi4503 was observed to be well-tolerated; common adverse events included tumor pain, nausea, hypertension, fatigue and myelosuppression.
- Drug-related dose-limiting toxicities of grade 3 hypertension and visual disturbances were seen in two patients at 15.4 mg/m2 before the introduction of amlodopine as prophylaxis.
- One dose-limiting toxicity (grade 3 troponin level elevation) at 11 mg/m2 was seen thereafter.
- 67% of evaluable patients showed DCE-MRI changes consistent with VDA activity.
- Best observed responses include 2 RECIST partial responses at 11 mg/m2 and 14 mg/m2 in patients with epithelial ovarian cancer.
- The investigators recommend a phase 2 dose between 11 and 14 mg/m2.

The company also announced that two posters describing trials investigating OXiGENE drug candidates were presented as part of the new "Trials in Progress" session of the ASCO annual meeting.

- #TPS164: A multicenter, open-label phase Ib/II study to assess the safety and clinical activity of intravenous combretastatin A1 diphosphate (OXi4503) as monotherapy in subjects with primary or secondary hepatic tumor burden. Poster presentation by Paul N. Mainwaring, M.D.

- #TPS147: A pilot study of fosbretabulin with bevacizumab in recurrent high-grade gliomas. Poster presentation by Ramin Altaha, M.D.

A copy of the 2010 ASCO presentations will be available on OXiGENE's website at www.oxigene.com.

About OXi4503

OXi4503 (combretastatin A1 di-phosphate / CA1P) is a dual-mechanism vascular disrupting agent (VDA) that is being developed in clinical trials for the treatment of solid tumors. Like its structural analog, ZYBRESTAT™ (fosbretabulin / CA4P), OXi4503 has been observed to block and destroy tumor vasculature, resulting in extensive tumor cell death and necrosis. In addition, preclinical data indicate 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 (1) single-agent activity against a range of xenograft tumor models; and (2) 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 1 dose-escalation trial in patients with advanced solid tumors and in patients with hepatic tumor burden.

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 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, anticipated conclusions of ongoing studies and the initiation of new 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 ongoing clinical studies, emerging oncology treatments and the availability of sufficient financing to continue development of Oxi4503 and 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.

CONTACT: OXiGENE, Inc.
Investor and Media Contact:
Michelle Edwards, Investor Relations
650-635-7006
medwards@oxigene.com