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NEWS RELEASE

ENDOCYTE BEGINS PHASE II CLINICAL TRIAL OF EC145 FOR TREATMENT OF WOMEN WITH OVARIAN CANCER

Study will evaluate the safety and efficacy of EC145 in combination with standard chemotherapy

WEST LAFAYETTE, IN. – February 19, 2009 – Endocyte Inc. has announced the initiation of a randomized Phase II clinical study of the company's investigational drug EC145 in women with platinum-resistant ovarian cancer. The phase II trial, also called the "PRECEDENT study," will evaluate the efficacy and safety of EC145 when administered in combination with pegylated liposomal doxorubicin (PLD). PLD is widely used as a standard therapy for women with platinum-resistant ovarian cancer. The efficacy and safety of the combination of EC145/PLD will be compared to treatment with PLD without EC145.

Ovarian cancer is the fifth most common cancer among women in the United States and the leading cause of death due to cancer of the female reproductive system. The PRECEDENT study will enroll 122 subjects and involve more than 50 clinical centers in the U.S., Canada, and Europe. Trial details can be found at www.endocyte.com and <http://www.clinicaltrials.gov>.

EC145 links a very potent anticancer drug to the vitamin folate, which is required for cell division. Rapidly dividing cancer cells over-express folate receptors to capture enough folate to support cell division. By combining a chemotherapy drug with folate, EC145 targets cancer cells while avoiding normal cells. This targeted approach is designed to provide treatment with more potent drugs with lower toxicity.

In addition to EC145, patients in the PRECEDENT trial will also be treated with a new molecular imaging agent called EC20 developed by Endocyte. By targeting folate receptors, EC20 imaging agent allows clinicians to identify tumors that over-express the folate receptor. Using EC20, doctors may be able to identify, in advance, those patients who will benefit from EC145 therapy.

According to Dr. Wendel Naumann of the Blumenthal Cancer Center, Carolinas Medical Center and principal investigator for the PRECEDENT study, "Patients with advanced, platinum resistant, ovarian cancer are in need of therapy that does not result in significant toxicity. The earlier clinical studies of EC145 were encouraging because they indicated that clinicians could use EC20 to identify women whose tumors expressed the molecular target of EC145. Therapy with EC145 might benefit these patients without causing significant additional toxicity."

"The start of the PRECEDENT study is another important validation of Endocyte's promising DGS technology platform," said Dr. Richard Messmann, Endocyte's vice president for medical affairs. "This also represents an important milestone in Endocyte's efforts to develop a range of new drugs and predictive medicine tools to treat cancer and other serious diseases in the years ahead. "

About Endocyte

Endocyte is a privately-held biotechnology company with headquarters in the Purdue Research Park of West Lafayette, IN. Based on the applications of Endocyte's advanced proprietary Drug Guidance System (DGS), the Company is working to develop new drugs and diagnostic agents to treat many types of cancer and other serious diseases. The DGS platform makes it possible to use highly-potent drugs on extended and frequent dosing schedules and in combination with other drugs to maximize efficacy. The technology improves drug targeting and reduces the risk of side effects by combining drugs with ligands

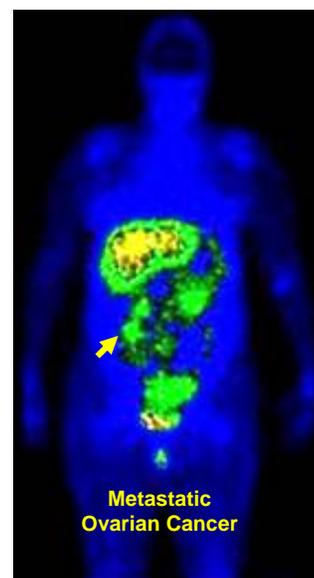


Image of ovarian cancer patient with Endocyte's EC20 molecular imaging agent.

that are able to identify and attach to receptors found on tumor and other disease cells. Endocyte is currently conducting three separate Phase 2 clinical trials for its lead compound, EC145, together with EC20, a companion molecular imaging agent, for the treatment of ovarian cancer and non-small cell lung cancer. Other clinical-stage products in the Endocyte pipeline include: EC0225, a combination of two potent anticancer drugs; BMS493, a potent drug being developed in partnership with Bristol-Myers Squibb; EC17, a targeted immunotherapy agent; and EC0489, a targeted cancer drug. The Company also has multiple product candidates in pre-clinical stage development.

This press release contains "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations and involve significant risks and uncertainties that may cause results to differ materially from those set forth in the statements. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise

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