



NEWS RELEASE

Endocyte Announces Results of Supplemental Analyses of PRECEDENT Trial

- Analyses Confirm Greatest Benefit in FR(++) Population -

- Conference Call/Webcast at 8:30 a.m. EST Today -

WEST LAFAYETTE, Ind., Dec. 13, 2011 – Endocyte, Inc. (NASDAQ Global Market: ECYT), a biopharmaceutical company developing targeted small molecule drug conjugates (SMDCs) and companion imaging diagnostics for personalized therapy, today announced the results of supplemental analyses of its Phase 2b PRECEDENT trial. PRECEDENT was a randomized trial of EC145 in combination with pegylated liposomal doxorubicin (PLD) in women with platinum-resistant ovarian cancer. Results confirmed the reliability of its companion imaging diagnostic EC20 to select targeted patients. In addition, the blinded independent review committee (IRC) and numerous sensitivity analyses confirmed the robustness of the progression-free survival (PFS) results, particularly in the FR(++) patient population, patients whose tumors are all positive for the targeted folate receptor. The overall survival results were inconclusive as the trial was not sufficiently powered to show an overall survival advantage and there was no trend toward benefit in either arm.

“We believe these findings continue to support the robustness of the PRECEDENT trial results, particularly in the group of FR(++) patients. It was important that EC20 validated for the selection of FR(++) patients so we may use it to specifically select this group of patients for clinical trials,” said Ron Ellis, Endocyte’s president and chief executive officer. “These women, who account for approximately 40 percent of the platinum resistant ovarian cancer patient population, have a particularly poor prognosis with existing therapies, both because of their resistance to platinum therapy and also because of the abundance of folate receptors in their disease, which encourage cancer cell growth. However, these patients are also observed to have the greatest benefit from EC145, due to its ability to target this important receptor.”

A summary of the analyses follows:

- **EC20 validated with high rates of agreement between independent readers.** EC20 is Endocyte’s diagnostic imaging agent used to select patients with folate-receptor positive disease, the targeted patient population for the therapeutic drug, EC145. In order to confirm the reliability of EC20 to select these patients, independent readers evaluated EC20 images from the PRECEDENT trial to measure the agreement rate between readers. The evaluation resulted in an 87 percent agreement rate in selecting patients with at least one tumor positive for the folate-receptor, FR(+), and an 85 percent agreement rate for patients with all folate-receptor positive tumors, FR(++). These rates of agreement compare favorably to internal standards established for this evaluation.
- **Robust PFS results as assessed by sensitivity analyses and IRC.** The primary endpoint of the open-label PRECEDENT trial was PFS based on investigator assessment. Sensitivity analyses demonstrated these results were robust when adjusted for a variety of potential

imbalances (e.g., demographic, prognostic, etc.). The IRC assessments shared a high level of agreement with investigator assessments, confirming investigator-assessed progression for 74 percent of all patients. In addition, the metrics designed to identify an investigator's potential bias to delay assessed progressions for patients in the EC145 study arm or to accelerate assessed progressions in the PLD control arm did not reveal such a bias. The IRC results also correlate with the mechanism of action, reflecting greater reduction in the risk of progression with increasing presence of folate receptor. In FR(++) patients, the IRC reflected a 2.5 months improvement in median PFS from 1.5 months in the PLD control arm to 4.0 months in the EC145 study arm. The hazard ratio of 0.465 suggests a reduction in risk of progression in the EC145 study arm of 53 percent (p=0.0498). In the FR(+) patient population, which includes the FR(++) subgroup, the IRC also reflected a 2.5 months improvement in median PFS from 1.5 month in the PLD control arm to 4.0 months in the EC145 study arm. The hazard ratio of 0.652 was not statistically significant in this broader group.

- **No trend toward overall survival benefit in either trial arm.** The PRECEDENT trial was not statistically powered to show a survival advantage and the results of the trial did not indicate a trend toward benefit in either arm (hazard ratio of 1.099 in the intent-to-treat population). While the median overall survival in the EC145 study arm of 14.1 months represented an improvement in relation to historical trials of PLD alone, the PRECEDENT trial PLD control arm had an unprecedented median overall survival of 16.9 months. These results may have been influenced by prognostic factors favoring the PLD control arm. Specifically, the level of sensitivity to post-trial platinum therapy as measured by platinum-free intervals may have been a factor. Patients in the PLD control arm received post trial platinum-based therapy at nearly twice the rate of those in the EC145 study arm, 33% versus 18% respectively. On an adjusted basis, which accounts for potential differences in demographics and prognostic factors such as platinum free intervals, the overall survival hazard ratio in the FR(++) group was 0.495, although the result was not statistically significant.

Endocyte's management will host a conference call and webcast today to discuss these results:

Date: December 13, 2011

Time: 8:30 a.m. EST

Dial: (877) 845-0711 (US/Canada) or (760) 298-5081 (International)

Webcast and Presentation: <http://investor.endocyte.com/events.cfm> - a corporate slide presentation will also be available to accompany the conference call. Please access the site at least 15 minutes prior to the scheduled start time in order to download the required software if necessary.

A replay of the call will be available beginning at 11:30 a.m. EST on Dec. 13, until midnight EST, Dec. 20, 2011. To access the replay, please dial (855) 859-2056 (US/Canada) or (404) 537-3406 (International) and reference the conference ID 36382552. Additionally, the webcast will be recorded and available on the Company's website following the call.

About the PRECEDENT Trial

The international, multi-center randomized trial enrolled 149 women who had received two or fewer prior systemic cytotoxic regimens and had disease that was resistant to platinum therapy. Patients were randomized to receive EC145 (2.5 mg 3 times a week intravenously, weeks 1 and 3) plus PLD (50 mg/m² intravenously every 28 days) or PLD alone at the same dose until disease

progression or death. The trial met the primary endpoint of investigator assessed PFS, demonstrating statistically significant improvements in PFS in the intent-to-treat population (hazard ratio 0.626, p=0.031), the FR(+) population (hazard ratio 0.547, p=0.041), and the FR(++) population (hazard ratio 0.381, p=0.013). Results indicate no statistical difference between treatment arms with regard to total adverse events or serious adverse events.

About EC145

EC145 is a conjugate of the vitamin folate and a super-potent vinca alkaloid. Folate is required for cell division and rapidly dividing cancer cells often over-express folate receptors in order to capture enough folate to support cell division. By attaching a chemotherapy drug to folate through proprietary chemistry, EC145 targets cancer cells while avoiding most normal cells. This targeted approach is designed to provide treatment with super-potent drugs while lowering toxicity compared to standard chemotherapy.

About EC20

EC20 is a folate-targeted molecular imaging agent that is being developed as a non-invasive method to identify tumors that over-express folate receptors. These tumors are the molecular target of Endocyte's folate-targeted therapeutic compounds such as EC145. To date, EC20 has been administered to over 500 patients.

About Endocyte

Endocyte is a biopharmaceutical company developing targeted therapies for the treatment of cancer and inflammatory diseases. Endocyte uses its proprietary technology to create novel SMDCs and companion imaging diagnostics for personalized targeted therapies. The company's SMDCs actively target receptors that are over-expressed on diseased cells, relative to healthy cells. This targeted approach is designed to enable the treatment of patients with highly active drugs at greater doses, delivered more frequently, and over longer periods of time than would be possible with the untargeted drug alone. The companion imaging diagnostics are designed to identify patients whose disease over-expresses the target of the therapy and who are therefore more likely to benefit from treatment.

Certain of the statements in this press release and in today's conference call and webcast are and will be forward looking, such as those, among others, relating to the company's expectations for seeking regulatory approval and commercial launch of its products, including any conditional marketing authorization from the EMA, initiation of future clinical trials, and data availability from ongoing and future clinical trials. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. Factors that may cause such a difference include risks that the company may experience delays in the completion of its clinical trial (whether caused by competition, adverse events, patient enrollment rates, regulatory issues or other factors); risks that data from its clinical trials may not be indicative of subsequent clinical trial results; risks related to the safety and efficacy of the company's product candidates, the goals of its development activities, estimates of the potential markets for its product candidates, estimates of the capacity of manufacturing and other facilities required to support its product candidates, projected cash needs, and expected financial results. More information about the risks and uncertainties faced by Endocyte, Inc. is contained in the company's periodic reports filed with the Securities and Exchange Commission. Endocyte, Inc. disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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