ENDOCYTE INC
Form 10-K
March 18, 2011

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2010

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission file number 001-35050

ENDOCYTE, INC.
(Exact name of Registrant as specified in its charter)

Delaware	**35-1969-140**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification Number)*

3000 Kent Avenue, Suite A1-100
West Lafayette, IN 47906
(Address of Registrant s principal executive offices)

Registrant s telephone number, including area code: (765) 463-7175

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock, $.001 par value	NASDAQ Global Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No þ

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes o No þ

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. þ

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer o	Non-accelerated filer þ (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). o Yes þ No

The registrant completed the initial public offering of its common stock on February 9, 2011. Accordingly, there was no public market for the registrant s common stock as of June 30, 2010, the last business day of the registrant s most recently completed second fiscal quarter. At March 1, 2011, there were 29,679,203 shares of the registrant s common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement to be delivered to stockholders in connection with the 2011 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K.

ENDOCYTE, INC.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2010

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This annual report contains certain statements that are forward-looking statements within the meaning of federal securities laws. When used in this report, the words may, will, should, could, would, anticipate, estimate, believe, predict, potential, project, target, forecast, intend and similar expressions are intended to identify forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. These risks and uncertainties include the important risks and uncertainties that may affect our future operations that we describe in Part I, Item 1A Risk Factors of this report, including, but not limited to, statements regarding the progress and timing of clinical trials, the safety and efficacy of our product candidates, the goals of our development activities, estimates of the potential markets for our product candidates, estimates of the capacity of manufacturing and other facilities to support our product candidates, projected cash needs and our expected future revenues, operations and expenditures.. Readers of this report are cautioned not to place undue reliance on these forward-looking statements. While we believe the assumptions on which the forward-looking statements are based are reasonable, there can be no assurance that these forward-looking statements will prove to be accurate. This cautionary statement is applicable to all forward-looking statements contained in this report.

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PART I

Item 1. *Business*

Overview

We are a biopharmaceutical company developing targeted therapies for the treatment of cancer and inflammatory diseases. We use our proprietary technology to create novel small molecule drug conjugates, or SMDCs, and companion imaging diagnostics. Our 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. We are also developing companion imaging diagnostics for each of our SMDCs that are designed to identify the patients whose disease over-expresses the target of the therapy and who are therefore more likely to benefit from treatment. This combination of an SMDC with its companion imaging diagnostic is designed to personalize the treatment of patients by delivering effective therapy, selectively to diseased cells, in the patients most likely to benefit.

Our lead SMDC, EC145, targets the folate receptor, which is frequently over-expressed on cancer cells. We have chosen platinum-resistant ovarian cancer, or PROC, a highly treatment-resistant disease, as our lead indication for development of EC145 because of the high unmet need in treating this patient population and the high percentage of ovarian cancer patients whose tumors over-express the targeted folate receptor. In the final progression free survival, or PFS, analysis of PRECEDENT, our randomized phase 2 clinical trial in women with PROC, EC145 increased PFS from a median of 11.7 weeks to a median of 21.7 weeks, representing an 85 percent improvement over standard therapy (p=0.031). We studied a subset of patients in which 100 percent of their target lesions over-expressed the folate receptor as determined by an EC20 scan, patients which we refer to as EC20(++). We treated these EC20(++) patients with a combination of EC145 and PLD and observed a median PFS of 24.0 weeks compared to a median of 6.6 weeks for patients receiving PLD alone, an improvement of over 260 percent. The hazard ratio was 0.381 (p=0.018), or a reduction in the risk of progression of 61.9 percent. We anticipate beginning enrollment in PROCEED, our phase 3 registration trial for EC145, in the first half of 2011.

Our imaging studies with our lead companion imaging diagnostic, EC20, and the analysis of tumor biopsies, have shown that the folate receptor is also over-expressed in a broad range of other solid tumors, including non-small cell lung, breast, colorectal, kidney, endometrial and other cancers. In our phase 2 single-arm clinical trial in heavily pre-treated non-small cell lung cancer patients, we observed a disease control rate, or DCR, of 57 percent at the eight week assessment in patients whose target tumors were all identified as over-expressing the folate receptor. This compares to historical DCR for approved therapies of 21 to 30 percent reported in studies of less heavily pre-treated patients. In a subset of patients who had received three or fewer prior therapies and whose target tumors were all positive for the folate receptor, the DCR was 70 percent. We are using companion imaging diagnostics that target the folate receptor and other target receptors, including prostate-specific membrane antigen, or PSMA, to guide future development of our SMDCs in other oncology indications and inflammatory diseases.

We currently have no commercial products and we have not received regulatory approval for, nor have we generated commercial revenue from, any of our product candidates.

Our Strategy

Our strategy is to develop and commercialize SMDCs to treat patients who suffer from a variety of cancers and inflammatory diseases that are not well addressed by currently available therapies. The critical components of our business strategy are to:

Obtain marketing approval of our phase 3-ready SMDC, EC145, for use in women with platinum-resistant ovarian cancer. We plan to initiate a randomized, controlled, double-blinded phase 3 registration trial, PROCEED, in the first half of 2011 for the use of EC145 to treat women with PROC. If successful, we plan to submit the results of the PROCEED trial, supported by the results of our randomized phase 2 clinical trial, PRECEDENT, to the FDA as the basis for our application for marketing approval.

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Expand use of EC145 to other indications. We would consider conducting additional trials to explore the broader utility of EC145 for treating patients with other ovarian cancer indications, such as front-line therapy in combination with platinum-based and taxane-based therapies. We are also developing EC145 for the treatment of NSCLC patients. Folate receptors are over-expressed on a wide variety of tumors, including in breast, colorectal, kidney, endometrial and other cancers. We estimate, based on worldwide cancer incidence rates, our own imaging studies and analysis of tumor biopsies that there are over one million newly diagnosed cancer patients per year in the United States, Europe and Japan whose tumors over-express the folate receptor. We intend to use EC20 to identify additional cancer indications for EC145 and to identify individual patients within each cancer indication who may be most suitable for treatment.

Build a pipeline of SMDCs by leveraging our technology platform. We believe that the modular approach of our technology platform will allow us to quickly and efficiently expand our pipeline of SMDC candidates featuring various combinations of our targeting ligands, linker systems and drug payloads. We currently have four SMDCs and two companion imaging diagnostics in clinical development.

Develop companion imaging diagnostics for each of our therapies. We believe there is a significant opportunity to create targeted therapies where individual patients are selected based upon the use of non-invasive imaging diagnostic tools. Our companion imaging diagnostics may lower the risk of development of our SMDCs by allowing us to select for our clinical trials only those patients whose disease over-expresses the receptor targeted by our SMDCs. This benefit may, upon regulatory approval, extend to clinical practice by giving physicians the information they need to prescribe our SMDCs to patients who are most likely to respond to our therapy.

Build commercial capabilities and partner to maximize the value of our SMDCs. To date, we have retained all worldwide commercial rights to our SMDCs. We intend to commercialize our oncology SMDCs in the United States through our own focused sales force that we would build in connection with such commercialization efforts, or by co-promoting these SMDCs in collaboration with one or more larger pharmaceutical companies that have established capabilities in commercializing cancer therapies. Outside of the United States, we currently intend to partner with established international pharmaceutical companies to maximize the value of our pipeline without the substantial investment required to develop an independent sales force in those geographies. In the large inflammatory disease markets, we currently expect to out-license our SMDCs in order to mitigate their higher costs of development and commercialization.

Our Technology Platform

Our technology platform has enabled us to develop multiple new SMDCs for a range of disease indications. Each SMDC is comprised of three modules: a targeting ligand, a linker and a drug payload. Our companion imaging diagnostics employ the same modular structure as our SMDCs replacing the drug payload with an imaging agent.

Targeting Ligand. Our technology is founded on our high-affinity small molecule ligands that bind to over-expressed receptors on target cells, while largely avoiding healthy cells. We are developing a number of targeting ligands to address a broad range of cancers and inflammatory diseases.

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Linker System. Our linker system attaches the targeting ligand to the drug payload or imaging agent. It is designed to be stable in the bloodstream, and to release the active drug from the targeting ligand when the SMDC is taken up by the diseased cell. The linker system can be customized for each SMDC and each companion imaging diagnostic to improve its pharmacologic properties.

Drug Payload. This module is the biologically active component of our SMDCs. The majority of our drug payloads are highly active molecules that are too toxic to be administered in their untargeted forms at therapeutic dose levels. We are using drug payloads in our SMDCs that were shown in our in vitro preclinical studies to be between 10,000 and 100,000 times more potent than traditional cancer cell-killing drugs such as cisplatin.

With our modular approach, we use a variety of different targeting ligands, linker systems and drug payloads to create a pipeline of novel SMDC candidates for clinical development. For example, our PSMA targeting technology uses a targeting ligand that specifically binds to a receptor over-expressed on the surface of prostate cancer cells. We have developed alternative linker systems that modulate the pharmacologic and biodistribution properties of our SMDCs. In addition, we have developed a linker system that allows us to conjugate multiple drug payloads to a single targeting ligand, thus offering the potential to simultaneously disrupt multiple pathways within cancer cells, forming a novel strategy for addressing drug resistance. We can also attach a wide variety of different drug payloads to our targeting ligands to address different disease indications. For example, we have SMDCs in preclinical development which incorporate proven anti-cancer and anti-inflammatory drug classes, such as microtubule destabilizers, DNA alkylators, proteasome inhibitors and mTOR inhibitors.

We own or have rights to 64 issued patents and 177 patent applications worldwide covering our core technology, SMDCs and companion imaging diagnostics. Our U.S. patent covering our core technology and our lead SMDC, EC145, expires in 2026, and our U.S. patents covering the EC145 companion imaging diagnostic, EC20, expire in 2024.

Companion Imaging Diagnostics

Our technology allows us to create companion imaging diagnostics intended for use with each of our SMDCs. To create our companion imaging diagnostics, we replace the drug payload of the SMDC with an imaging agent that is easily seen with widely available nuclear imaging equipment. Because the targeting ligand found on the companion imaging diagnostic is identical to that found on the therapeutic SMDC, our companion imaging diagnostics allow us to obtain full-body real-time images of tumors that over-express the target for that particular SMDC. This is accomplished without requiring an invasive tissue biopsy or reliance on archived tissue samples.

The information provided by our companion imaging diagnostics is used throughout the development of every new SMDC. In both preclinical and clinical trials, a companion imaging diagnostic is used to validate targeting of our SMDC to specific tissues and cells. These companion imaging diagnostics also allow for the screening of large patient populations to select diseases where a high percentage of the patient population have tumors or diseased cells that over-express the molecular target. These companion imaging diagnostics may also enable us to expand the use of our SMDCs to cancer indications where the percentage of patients who over-express a given receptor target of interest may be relatively low. Upon regulatory approval, we believe companion imaging diagnostics, such as EC20, will help to identify patients who will most likely benefit from treatment with our SMDCs. As a result, use of our companion imaging diagnostics may broaden the commercial use of our SMDCs. In our phase 2 single-arm and phase 2 randomized PRECEDENT clinical trials with EC145, we have seen correlations between favorable therapeutic outcomes and uptake of our companion imaging diagnostic, which we believe supports this approach.

Lead SMDC Candidate (EC145) and Advanced Clinical Trials

Our lead SMDC candidate, EC145, consists of a highly cytotoxic anti-cancer drug, DAVLBH, joined by a linker system to the targeting ligand, folate. DAVLBH is a member of a class of proven anti-cancer drugs that destabilize microtubules within the cell, leading to cell death. As folate is required for cell division, many rapidly dividing cancer cell types have been found to over-express high-affinity folate receptors. In clinical trials using our companion imaging diagnostic, EC20, we found that ovarian, non-small cell lung, breast, colorectal, kidney, endometrial and other cancers over-express folate receptors. EC145 binds to these folate receptors on cancer cells

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with high-affinity and is internalized through a process known as endocytosis. Once EC145 is inside the cell, the linker system is cleaved, releasing the active drug payload within the cancer cell.

We have completed final PFS analysis for PRECEDENT, our randomized phase 2 clinical trial of 149 women with PROC. PRECEDENT is a randomized, controlled clinical trial in which patients received EC145 in combination with pegylated liposomal doxorubicin, or PLD, versus PLD alone. PLD is a current standard of care for PROC and is marketed in the United States under the brand name Doxil. The primary endpoint of the trial is progression free survival, or PFS, which refers to the period of time that begins when a patient enters the clinical trial and ends when either the patient dies, or the patient s cancer has grown by a RECIST-specified percentage or has spread to a new location in the body. RECIST refers to the response evaluation criteria in solid tumors, a set of published rules that define when the patients disease shrinks, remains stable, or progresses. Historically, PROC has proven difficult to treat, and no approved therapy has extended either PFS or overall survival, or OS, in a randomized clinical trial. OS refers to the period of time that begins when a patient enters the clinical trial and ends when the patient dies.

At PRECEDENT s final PFS analysis of 149 patients and 95 PFS events, combination therapy with EC145 and PLD increased median PFS by 85 percent over therapy with PLD alone. PFS increased from a median of 11.7 weeks in the PLD control arm to a median of 21.7 weeks in the EC145 and PLD combination therapy arm (p=0.031). The hazard ratio was 0.626, meaning patients receiving EC145 were 37.4 percent less likely to have died or have their cancer progress compared to patients receiving only PLD.

Kaplan-Meier curve for PFS in PRECEDENT

This observed improvement in PFS was provided in the context of low additional toxicity over that seen in patients receiving PLD alone. There was no statistically significant difference in adverse events in the combination arm of the PRECEDENT trial compared with the control arm (p=0.210). In addition, although PRECEDENT is not powered to demonstrate an improvement in OS, the analysis at the time of final PFS data suggests an early positive trend in OS with 81 percent of patients treated with EC145 and PLD alive at six months versus 72 percent of patients alive at six months when treated with PLD alone. The OS data set has a 66 percent censoring rate, includes only 50 events and is not considered mature. We currently expect that we will receive final OS data from the PRECEDENT trial by the first quarter of 2012.

The predictive power of our EC20 companion imaging diagnostic was also evaluated in the PRECEDENT trial. In an analysis of EC20(++) patients, an increased improvement in PFS was observed. In this subgroup of 38 patients, PFS improved from a median of 6.6 weeks for patients receiving PLD alone to a median of 24.0 weeks for patients receiving the combination of EC145 and PLD, an improvement of over 260 percent. The hazard ratio was 0.381 (p=0.018), or a reduction in the risk of progression of 61.9 percent.

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We are planning to commence enrollment of our PROCEED phase 3 registration trial of EC145 for the treatment of women with PROC in the first half of 2011. PROCEED shares the same fundamental design characteristics of the PRECEDENT trial, except that it is a double-blinded trial, it measures PFS based on radiological progression alone without including clinical progression, and it will be powered for an OS analysis with planned enrollment of 512 patients. The primary endpoint, 2 to 1 randomization, dose and schedule are the same as those used in the PRECEDENT trial. In contrast to PRECEDENT, the PLD control arm in PROCEED will include a placebo in order to blind the study, which will be dosed on the same schedule as EC145. As was the case with the PRECEDENT trial, PROCEED s primary endpoint is PFS.

Patients in the PROCEED trial will be imaged with EC20 prior to treatment. In our clinical trials that incorporated EC20 to date, we saw that approximately 80 percent of ovarian cancer patients over-express the folate receptor. In contrast to our phase 2 PRECEDENT trial, which enrolled both EC20(-), EC20(+) and EC20(++) patients, we expect the phase 3 PROCEED trial to exclude EC20(-) patients, a subset of patients who received no benefit from EC145 in PRECEDENT. PROCEED also includes co-primary PFS endpoints that give the trial two opportunities for a positive result. The first co-primary endpoint is for the full study population defined as patients with at least one EC20 positive lesion, which includes both EC20(+) and EC20(++) patients. The second co-primary endpoint is based on the EC20(++) subgroup alone, patients who have 100 percent positive lesions based on an EC20 scan.

PROCEED is powered to demonstrate a minimum 43 percent improvement in median PFS and a hazard ratio of 0.70 in the EC20(+) and EC20(++) patient population, which compares to a 225 percent improvement in median PFS and a hazard ratio 0.547 observed in PRECEDENT. PROCEED is also powered to demonstrate a minimum 38 percent improvement in the secondary endpoint of median OS.

The table below compares the design characteristics of the PROCEED and PRECEDENT trials.

	PRECEDENT	**PROCEED**
Number of Patients	149	512
Clinical Sites	65	120 to 150
Patient Population	Platinum-resistant ovarian cancer	
Blinding	Open-label	Double-blinded
Treatment Arm	EC145 and PLD	
Control Arm	PLD	PLD and Placebo
Primary Endpoint	PFS (radiologic and clinical)	PFS (radiologic only)
Powered for OS	No	Yes
EC145 Dose	2.5 mg intravenous, 3 times per week in weeks 1 and 3, on a 28 day cycle	
PLD Dose	50 mg/m^2 intravenous on day 1, on a 28 day cycle	
EC20(++) and EC20(+) Hazard Ratio	0.547 (actual)	0.700

EC20(++) Hazard Ratio	0.381 (actual)	0.560
Cross-Over	Not allowed	
EC20 Scan	Enrolled regardless of scan results	EC20(-) excluded

If PROCEED meets either primary endpoint with limited additional toxicity over the PLD control arm, we intend to file a new drug application, or NDA, for EC145 with the U.S. Food and Drug Administration, or FDA, and to also seek approvals outside the United States for use of EC145 in combination with PLD in EC20(+) and EC20(++) patients with PROC or in EC20(++) patients with PROC. The FDA has stated that PROCEED must provide evidence of persuasive and robust statistically significant clinical benefit. If we fail to demonstrate a benefit of this magnitude, we would expect that the FDA would require us to conduct a second phase 3 clinical trial in order to file an NDA and receive marketing approval of EC145 for the treatment of PROC. In addition, the results of PROCEED may not yield safety and efficacy results sufficient to be approved by the FDA for commercial sale.

Our second indication with EC145 is non-small cell lung cancer, or NSCLC. Lung cancer is the leading cause of cancer-related death worldwide and an area of high unmet medical need. Although several therapies are commercially available for the treatment of first and second line NSCLC, ultimately, in most patients the therapy fails and their cancer grows. In our clinical trials that incorporated EC20, approximately 80 percent of NSCLC patients over-express the folate receptor. As a result, we believe NSCLC is also an attractive indication for EC145 development. In a phase 2 single-arm trial in NSCLC patients who had at least one tumor that over-expressed the

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folate receptor, EC145 met the primary endpoint by demonstrating clinical benefit. At the eight week assessment of the patients, the DCR was 57 percent in the patients whose target tumors were all identified as over-expressing the folate receptor. This compares to historical DCRs ranging from 21 to 30 percent reported in other trials of approved therapies in less heavily pre-treated patients. In a subset of patients who had received three or fewer prior therapies and whose target tumors were all positive for the folate receptor, the DCR was 70 percent. DCR is the percentage of patients with complete response, partial response or stable disease, which has been shown to correlate with OS in NSCLC.

We also evaluated OS in EC20(++) patients (n=14) compared to patients in which at least one of the target lesions, but not all, over-expressed the folate receptor, such patients we refer to as EC20(+) (n=14). Median OS improved from 14.9 weeks for EC20(+) patients to 47.2 weeks for EC20(++) patients. The hazard ratio was 0.539, meaning EC20(++) patients were 46.1 percent less likely to die when compared to EC20(+) patients when receiving EC145 (p=0.101). We plan to define the development strategy for NSCLC in 2011 and will execute a trial or trials as funding becomes available.

Inflammatory Diseases

Beyond cancer, we have discovered that activated macrophages, a type of white blood cell found at sites of acute and chronic inflammation, also over-express the folate receptor. Activated macrophages release a variety of mediators of inflammation that contribute to a broad range of diseases, such as rheumatoid arthritis, osteoarthritis, inflammatory bowel disease and psoriasis. We have a number of SMDCs in preclinical development for autoimmune diseases that are designed to inhibit the production of pro-inflammatory cytokines by activated macrophages.

Our Small Molecule Drug Conjugate (SMDC) Technology

Traditional cytotoxic cancer chemotherapies kill rapidly dividing cancer and normal cells in an indiscriminate manner, leading to significant toxicity in patients. The need for patients to recover from this toxicity can limit the ability to deliver effectively-dosed cancer therapy. In addition, cancer therapies for a given tumor type are generally selected based on observations of efficacy and toxicity in that patient population and not, in most cases, based on an understanding of the differences between tumors on a molecular level. In response to these limitations, a number of targeted therapies were developed to be more selective, including monoclonal antibody-based therapies. Due to their selectivity against certain cancers, antibody therapies have achieved tremendous therapeutic and financial success in recent years. According to Roche Group s publicly available information, the three largest cancer drugs in the world, Avastin, Herceptin and Rituxan, are monoclonal antibodies, with collective U.S. sales of $7.3 billion in 2009.

For certain cancers, antibodies alone are not sufficiently effective to achieve meaningful clinical benefit. This limitation has led to the development of a new class of agents called antibody drug conjugates, or ADCs. ADCs are comprised of a monoclonal antibody, which is used to target the specific cancer, attached via a linker system to a cell-killing drug. In clinical trials ADCs have enabled the targeted delivery of highly active anti-cancer drugs, improving response rates in several cancer indications, with generally less toxicity than standard chemotherapy. However, ADCs also have limitations. First, larger molecules, like ADCs, do not penetrate dense solid tumors as efficiently as small molecules, and as a result, ADC efficacy may be compromised due to limited accessibility to the target cells. Second, the slow clearance of antibodies from a patient s bloodstream may lead to increased toxicity. The longer half-life of ADCs has also limited the development of antibody-based imaging diagnostics due to the poor image quality associated with the high background noise caused by ADCs remaining in a patient s bloodstream. Third, ADCs are biologic molecules that are costly and often complex to manufacture.

We believe our SMDC platform represents a novel approach, comparable to ADCs in its ability to deliver highly active drug payloads in a targeted manner, but also with a number of potential advantages:

Small size to better penetrate solid tumors. We believe a key characteristic of our SMDCs is their ability to penetrate deeply into dense solid tumors. The targeting ligands for our SMDCs are approximately 300 times smaller in molecular weight than a typical antibody incorporated in ADCs. This may result in greater uptake and higher concentrations of these molecules within solid tumors.

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Rapid clearance for reduced toxicity. The circulating half-life of ADCs currently in development generally range from several hours to several days. In contrast, our SMDCs are engineered to provide rapid uptake in targeted cells and rapid clearance from the bloodstream with a half-life of approximately 20 minutes. As a result of this shorter half-life, we believe there is reduced risk that our SMDCs will release the unconjugated drug payload into the blood stream. In our phase 1 trial of EC145, only four of 410, or less than one percent, of the blood samples analyzed had quantifiable levels of the unconjugated drug payload, and all four of these positive samples had concentrations near the lowest level of detection, and at a level where no significant toxicity was found.

Companion imaging diagnostics for targeted therapy. A companion imaging diagnostic can be created for each of our SMDCs. Because of the modular nature of our SMDC technology, the drug payload can be replaced with a radioisotope imaging agent, such as technetium-99m, or Tc-99m, that we employ in EC20, to create a companion imaging diagnostic designed to target the same diseased cells as the SMDC. The companion imaging diagnostic is intended to allow for real-time, full-body assessment of the receptor target without requiring an invasive tissue biopsy. Using full-body imaging, the receptor expression can be measured in every tumor and monitored throughout treatment. In our clinical trials that combined EC145 with EC20, we have seen correlations between favorable therapeutic outcomes and increased uptake of EC20.

Cost-effective and simple to manufacture. Given the increasing pressure on drug pricing posed by payors, costs of development and manufacturing are increasingly important. Our SMDCs are relatively simple to manufacture and do not have the complexity and expense of biological molecules, like antibodies and ADCs.

SMDC Pipeline

We have a pipeline of multiple SMDCs and companion imaging diagnostics that are in varying stages of clinical and preclinical development, all of which use our platform SMDC targeting technology. A summary of our most advanced development pipeline SMDCs and companion imaging diagnostics are as follows:

EC145: Folate Receptor Targeted Therapy

EC145 is designed to deliver a highly cytotoxic drug payload directly to folate receptors that are over-expressed on cancer cells, with low toxicity to healthy cells. EC145 consists of a targeting ligand, folate, conjugated via a linker system to an anti-cancer drug payload, DAVLBH. DAVLBH is derived from a proven class of anti-

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cancer drugs and is a potent destabilizer of microtubules. Since microtubules are critical for the separation of chromosomes during cell division, disruption of this microtubule system with DAVLBH promotes cell death.

Folate Receptors in Cancer Cells

Folate is a nutrient required by all living cells, and it is essential for cellular division. As depicted in the image below, folate enters human cells via two distinct transport systems, the reduced folate carrier pathway, or RFC, which has low affinity for folate and the folate receptor pathway, which has high-affinity for folate. The RFC is the predominant route by which normal cells access folate circulating in the body. The RFC is a transport protein that is expressed on virtually all cells in the body. In contrast, rapidly dividing cancer cells over-express the high-affinity folate receptor. The folate receptor captures folate from outside the cell and transports it inside by engulfing it within a vesicle called an endosome. Once internalized, the folate receptor releases the folate and is then recycled back to the cell surface where it resumes its function of capturing circulating folates.

Cellular Uptake of Folate

The folate receptor is not significantly expressed on most normal tissues. Lung, brain, small intestine, kidney and activated macrophages are the normal tissues known to express the folate receptor. In the lung, brain and small intestine, the folate receptor does not face the bloodstream, thus these folate receptors are not accessible to our folate-targeted SMDCs. In the kidney, the folate receptor functions as a salvage receptor that captures folates and transports them back into the blood stream to prevent folate deficiency. Although our SMDCs are also shuttled from the urine back into the blood using this folate receptor-based system, the linker system remains stable during this re-absorptive process to prevent release of the drug payload within the kidney. As a result, we have not observed any SMDC-related kidney toxicities throughout our preclinical or clinical trials. Activated macrophages also express the folate receptor. SMDCs like EC145 target folate receptor-expressing activated macrophages; however, these types of cells are not rapidly dividing, and as a result, anti-cancer drug payloads that disrupt cellular division processes are inactive against this cell type.

Elevated expression of the folate receptor occurs in several cancer types, and may be associated with the more aggressive growth characteristics of cancer cells as compared to normal cells. We believe that cancer cells over-

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express the folate receptor as a mechanism to capture additional folate to support rapid cell growth. The graph below shows the percentage of patients with different cancer types that are known to over-express the folate receptor. We estimate, based on worldwide cancer incidences combined with our own imaging studies that there are over one million newly diagnosed cancer patients per year in the United States, Europe and Japan whose tumors over-express the folate receptor.

Folate Receptor Positive Cancers by Cancer Type

Source: *American Cancer Society and Endocyte estimates based upon imaging studies and tissue biopsies.*

EC145 takes advantage of the natural process of enhanced uptake of folate by cancer cells via the folate receptor by linking an active drug to a folate targeting ligand to create a tumor-targeted SMDC. Following transit through the bloodstream and entry into tumor tissue, EC145 binds to the externally-oriented folate receptor with high-affinity. Endocytosis of EC145 entraps it within a vesicle. As shown in the image on the previous page, drug payload release occurs within that vesicular compartment. The other pathway for folate to be taken up into cells, the RFC, is highly specific to folate but will not readily take up EC145 into the cell due to its molecular structure. As a result, EC145 is highly specific to cancer cells that over-express the folate receptor compared with normal cells which express the RFC.

When tested preclinically as a single agent, EC145 therapy has been observed to eliminate human tumors in mice across multiple folate receptor positive tumor models, using regimens that caused little to no observable toxicity. In the same models, treatment at the maximum tolerated dose, or MTD, with the free drug, DAVLBH, generated only modest or temporary tumor responses, and always in association with substantial toxicity. In addition, EC145 therapy caused no anti-tumor responses in preclinical tumor models that did not express the folate receptor, thus confirming the SMDC s specificity to the target receptor.

EC145 has also been evaluated in preclinical models for activity in combination with several approved chemotherapeutic agents. For example, EC145 has shown significant anti-tumor responses in animals when dosed in combination with approved drugs, such as PLD, cisplatin, topotecan, bevacizumab and docetaxel. The toxicity profile of EC145, particularly its lack of hematologic toxicity, makes this SMDC a good potential candidate for combination therapies.

If we are successful in obtaining regulatory approval for EC145 in second or third line therapies, we intend to explore combinations with other drugs, several of which are frequently used as first line therapies in a variety of tumors that over-express the folate receptor. First line therapy refers to initial cancer treatments, while second or third line therapies refer to subsequent treatments following disease progression.

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Ovarian Cancer

Market Opportunity

Ovarian cancer is a significant cause of patient morbidity, and is the leading cause of gynecologic cancer mortality in the United States. According to the American Cancer Society, approximately 21,500 new cases of ovarian cancer were reported in the United States in 2009. Of those ovarian cancer cases, approximately 50 percent of patients will eventually develop PROC. Mortality rates remain high, with nearly 15,000 deaths from ovarian cancer each year in the United States alone.

While the treatment of ovarian cancer depends on the stage of the disease, the initial therapy almost always involves surgical removal of the cancer from as many sites as possible followed by platinum-based chemotherapy. For women with advanced ovarian cancer who respond to initial platinum-based chemotherapy, most will eventually experience recurrence or progression of their cancer. Patients whose cancer recurs or progresses after initially responding to surgery and primary chemotherapy can be placed into one of two groups based on the time from completion of platinum therapy to disease recurrence or progression, referred to as the platinum-free interval:

> ***Platinum-sensitive.*** Women with platinum-sensitive ovarian cancer have a platinum-free interval of greater than six months. Upon disease recurrence or progression, these patients are believed to benefit from additional exposure to platinum-based chemotherapy.
>
> ***Platinum-resistant.*** Women with platinum-resistant ovarian cancer have a platinum-free interval of six months or less. These patients are much more resistant to standard chemotherapy and will typically receive PLD or topotecan or participate in a clinical trial. Overall response rate measured by RECIST, or ORR, for these subsequent therapies is in the range of 10 to 20 percent with median OS of approximately 11 to 12 months.

There are currently only two approved therapies for women with PROC, PLD and topotecan. In clinical trials, neither of these drugs has demonstrated a statistically significant increase in PFS or OS in this indication. The last drug approved in this patient population was PLD, which was granted accelerated approval in 1999 based on an ORR of 13.8 percent (n = 145). The n represents the total patient population utilized in the reported data. ORR refers to the sum of complete and partial tumor responses seen, divided by the total number of evaluated patients. More recently, phase 3 trials of gemcitabine, trabectedin, patupilone and phenoxodiol have shown no statistically significant benefit over PLD in terms of either PFS or OS in women with PROC.

We have chosen PROC as our lead indication for EC145 because of the large unmet need in treating this patient population, the high levels of over-expression of the folate receptor in this tumor type, the enhanced therapeutic effect EC145 had with PLD in preclinical studies, and the acceptable clinical safety profile seen to date with EC145, which may avoid increasing the toxicities seen with PLD. We chose to develop EC145 in conjunction with PLD because it is commonly used as a second line therapy and has a better safety profile than topotecan, the other approved second line therapy.

Phase 1 Clinical Trial

We completed a phase 1 safety and dose-finding trial in 32 patients designed to determine the MTD of EC145 in patients with a variety of different solid tumors. In the trial, we established a dose regimen of three times per week, every other week, at 2.5 mg per day, which was the MTD. This dose regimen showed preliminary signs of efficacy as a monotherapy in heavily pre-treated late-stage cancer patients with a variety of tumor types, including a partial tumor response and long-term disease stabilization in ovarian cancer (n=2) and long-term stabilization in other cancer types.

This dose regimen was well tolerated. Toxicities most commonly seen in the trial were constipation, fatigue, nausea, vomiting, abdominal pain and anemia, many of which are observed in late-stage cancer patients. The primary dose-limiting toxicity for EC145 was a significant but spontaneously reversible constipation/ileus observed at doses above the MTD.

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Phase 2 Single-Arm Clinical Trial

We have completed a phase 2 single-arm clinical trial designed to evaluate the safety and efficacy of EC145 in women with advanced epithelial ovarian, fallopian tube or primary peritoneal cancer. The primary objectives were to collect data on the clinical benefit of EC145 therapy, defined as the number of patients who received six or more cycles of therapy, to explore the safety of EC145 in this drug-resistant patient population, and to assess the degree to which patients who had at least one tumor that over-expressed the targeted folate receptor responded to therapy, thereby enabling us to better identify a target population in which to conduct a randomized clinical trial of EC145 in the future.

Prior to treatment with EC145, patients were scanned with EC20 to determine whether their tumors over-expressed the folate receptor. In addition to standard eligibility criteria, patients were required to have PROC or refractory ovarian cancer, meaning disease that did not respond or progressed during the most recent platinum-based chemotherapy, and at least a single RECIST-measurable tumor. EC145 was administered as a bolus dose three days per week, on weeks one and three of a four-week cycle. Forty-nine women, with a median age of 62 years, were enrolled into the trial. Participants had been heavily pre-treated prior to participation in the trial, having received a median of four prior chemotherapeutic regimens. All of these patients had advanced disease and most had a heavy tumor burden. Although the trial did not achieve the threshold for efficacy, the effectiveness of EC145 was also evaluated based on DCR and ORR. These analyses indicated that a subset of patients exhibited evidence of anti-tumor effect such as tumor shrinkage and disease stabilization, with low toxicity.

In the final analysis of the trial data the DCR for the 45 eligible patients was 42.2 percent with two women achieving a partial response, and the ORR for the eligible patients was 5 percent. An additional analysis established that EC145 was more active in patients previously treated with less than four therapies resulting in a DCR of 60.0 percent and an ORR of 13.3 percent. Safety data indicated that EC145 was very well tolerated, with no Grade 4 drug-related toxicities. The most frequent Grade 3 drug-related toxicities were fatigue in 8.2 percent of the patients and constipation in 8.2 percent of the patients. In addition, the safety data indicated that EC145 did not produce overlapping toxicity with the existing second-line therapeutic agents used, such as topotecan and PLD.

Each patient who was scanned with EC20 was given a score, computed by dividing the number of positive tumors by the total number of target tumors. For example, a patient with a total of four target tumors, two of which over-expressed the folate receptor, would have a patient score of 50 percent. Patients were divided into three groups based on their EC20 scores as follows:

- the EC20(++) group was characterized as having 100 percent of their tumors tested positive for the folate receptor;

- the EC20(+) group score was 1 to 99 percent positive or at least one, but not all of their tumors tested positive for the folate receptor; and

- the EC20(-) group score was 0 percent positive because none of their tumors tested positive for the folate receptor.

Separate analyses were performed to assess the degree to which EC20(++) and EC20(+) patients responded to therapy with EC145. Of the 145 evaluable tumors, only tumors in EC20(++) and EC20(+) patients treated with EC145 showed tumor shrinkage of greater than 20 percent. No tumors of EC20(-) patients showed a decrease of greater than 20 percent. These results were statistically significant, indicating that EC20 uptake by tumors correlates with response to EC145 treatment (p=0.0022).

The ORR and DCR were calculated for each of the three groups. EC20(++) patients had the highest DCR, 57 percent, followed by EC20(+) at 36 percent and EC20(-) patients at 33 percent. In a subgroup analysis of less heavily pre-treated patients, those treated with three or fewer prior regimens, the DCR for the EC20(++) group was 86 percent versus 50 percent and zero percent in the EC20(+) and EC20(-) groups, respectively. Similarly, the ORR in the EC20(++) subgroup was the highest at 14 percent, while the ORR for the EC20(+) subgroup and for the EC20(-) subgroup was 13 percent and zero percent, respectively. Results from this trial indicate a potential correlation between EC20 binding levels and anti-tumor response at the level of the individual patient and the individual tumor.

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Platinum REsistant Ovarian Cancer Evaluation of Doxil and EC145 CombiNation Therapy (PRECEDENT): Randomized Phase 2 Clinical Trial in PROC

PRECEDENT is a multicenter, open-label, randomized phase 2 clinical trial of 149 patients comparing EC145 and PLD in combination, versus PLD alone, in women with PROC. The trial completed enrollment in June 2010 and final PFS analysis of the data has been conducted.

We chose PFS as the primary endpoint of the trial as PFS is a clinically meaningful endpoint in this patient population and allows for a more rapid assessment of results than OS. PFS was measured based upon investigator assessment using both radiological measurements based on RECIST, as well as assessment of clinical progression. Secondary endpoints include OS, ORR and safety and tolerability of EC145 in combination with PLD. To minimize the potential for bias and to ensure the integrity of the OS measurement, cross-over was not allowed. In addition, the trial explored the correlation between therapeutic response and EC20 imaging results.

Eligible patients were randomized in a 2 to 1 ratio to either the EC145 and PLD arm or to the PLD alone arm. PLD was selected as the comparator because it is approved and widely used in PROC and EC145 in combination with PLD was more effective than PLD alone in our preclinical studies. Patients are dosed with EC145 three times per week every other week and PLD is administered once every 28 days in both population arms, consistent with the standard of care. All patients enrolled at clinical centers with nuclear imaging capabilities were scanned with our EC20 companion imaging diagnostic within 28 days prior to the initiation of treatment (113 patients).

PRECEDENT is a multicenter trial involving 65 sites in the United States, Canada and Poland. Patients were stratified based upon their geographic location, primary versus secondary platinum resistance and level of the tumor marker (CA-125). Most of the demographics and disease characteristics were well-balanced between the arms. There were two characteristics slightly imbalanced in the arms of the trial, both of which should have contributed to a poorer prognosis for patients receiving the combination of EC145 and PLD versus patients receiving PLD alone. Specifically, the number of patients with hepatic and pulmonary metastases at enrollment were greater in the combination arm (38.0 percent) compared to the PLD alone arm (22.4 percent). Also, the median cumulative length of tumor at enrollment in the combination arm was 9.3 cm compared to 5.6 cm in the PLD alone arm.

A Data Safety Monitoring Board, or DSMB, monitored the trial and conducted multiple safety reviews and a pre-specified interim analysis. This interim analysis was prepared by an independent biostatistician and reviewed by the DSMB on February 26, 2010. The DSMB recommendation was to continue the trial to full accrual with no protocol modifications.

At PRECEDENT s final PFS analysis of 149 patients and 95 PFS events, we reported an 85 percent increase of median PFS from 11.7 weeks in the PLD arm to 21.7 weeks in the EC145 and PLD treatment arm (p=0.031). The hazard ratio was 0.626, meaning patients receiving EC145 were 37.4 percent less likely to have died or have their cancer progress compared to patients receiving only PLD. The median PFS seen in the control arm was consistent with historical data in this disease setting. This benefit in PFS was provided in the context of low additional toxicity over the current standard of care. We believe that EC145 and PLD is the first combination to show a meaningful improvement in PFS over standard therapy for the treatment of PROC.

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Kaplan-Meier curve for PFS in PRECEDENT

EC145 s companion imaging diagnostic, EC20, was used to correlate folate receptor over-expression with EC145 efficacy in PROC. Patients in the PRECEDENT trial were imaged with EC20 prior to enrollment and target lesions were read to determine whether patients were EC20(++), EC20(+) or EC20(-). In the EC20(++) subgroup of 38 patients, patients whose target lesions all over-expressed the folate receptor, PFS improved from a median of 6.6 weeks for patients receiving PLD alone to a median of 24.0 weeks for patients receiving the combination of EC145 and PLD, an improvement of over 260 percent. The hazard ratio was 0.381 (p=0.018) or a reduction in the risk of progression of 61.9 percent. In addition, the data also showed an early positive trend in OS, with 81 percent of patients receiving the combination of EC145 and PLD alive at 6 months versus 72 percent of patients receiving PLD alone. The OS data set has a 66 percent censoring rate, includes only 50 events and is not considered mature. Final OS data for PRECEDENT is expected by the first quarter of 2012.

Kaplan-Meier curve for OS in PRECEDENT

We also examined other secondary endpoints, including ORR. The ORR at the initial scan was 28.0 percent in the treatment arm as compared to 16.3 percent in the control arm. Consistent with RECIST, the protocol required follow-up scans at least four weeks later to confirm responses. The ORR at the confirmatory scan was 18.0 percent in the treatment arm as compared to 12.2 percent in the control arm.

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At the final PFS analysis, the combination therapy was generally well tolerated. The EC145 and PLD combination arm received a 62 percent greater cumulative dose of PLD because these patients remained in the trial for a longer duration due to improved PFS. Despite this higher cumulative dose of PLD in the combination arm, total drug-related adverse events and serious adverse events were similar between arms. Review of toxicity data indicate that the number of patients reporting at least one treatment-emergent drug-related serious adverse event resulting in discontinuation from the trial was 2.8 percent (n=3) for the EC145 and PLD combination arm vs. 4.0 percent (n=2) for the PLD single-agent arm of the trial. No patient in either arm was known to have died from drug-related adverse events while receiving treatment or within 30 days of receiving treatment. Toxicity levels in the combination arm are similar to historical levels of toxicity experienced in patients receiving PLD as a single agent.

PRECEDENT Trial Grade 3-4 Toxicities(1)
(At final PFS Analysis)

Hematological Toxicities	**EC145 and PLD (n=107)**	**PLD (n=50)**
Neutropenia < 1,000/mm^3	12.1%(13)	4.0%(2)
Febrile neutropenia	0.9%(1)	2.0%(1)
Anemia < 8 g/dL	6.5%(7)	4.0%(2)
Thrombocytopenia < 50,000/mm^3	1.9%(2)	2.0%(1)
Leukopenia < 2,000/mm^3	16.8%(18)	4.0%(2)
Lymphopenia < 500/mm^3	17.8%(19)	18.0%(9)

Non-Hematological Toxicities	**EC145 and PLD (n=107)**	**PLD (n=50)**
Stomatitis	5.6%(6)	4.0%(2)
PPE syndrome	11.2%(12)	2.0%(1)

(1) Hematological toxicities are based on lab values regardless of causality. Non-hematological toxicities were drug-related toxicities occurring in five percent or more of patients in at least one arm of the trial.

Trial for Women With Platinum Resistant Ovarian Cancer Evaluating EC145 in Combination with Doxil (PROCEED): Phase 3 Clinical Trial for Approval of EC145 in PROC

The PROCEED trial is designed to support the approval of EC145 in combination with PLD for the treatment of women with PROC. PROCEED is a double-blinded, multicenter, international, randomized phase 3 clinical trial in 512 patients at more than 100 sites comparing EC145 and PLD to placebo and PLD in women with PROC. We intend to initiate enrollment of the PROCEED trial in the first half of 2011.

We designed our phase 3 registration trial following our end of phase 2 meeting with the FDA held on May 24, 2010. Fundamental design characteristics of the PROCEED trial closely match those of the PRECEDENT trial. The primary endpoint, dose and schedule, 2 to 1 randomization and no option for cross-over, are the same as those used in the PRECEDENT trial. The only significant design changes are that the phase 3 trial will utilize a placebo in order to

double-blind the investigators and patients to which treatment arm they are on, the PFS endpoint will be based only on radiologic assessments with no clinical progression allowed, EC20(-) patients will be excluded, and the trial will be powered for OS as a secondary endpoint. In addition, we expect to add additional countries to those used in the PRECEDENT trial, which included the United States, Canada and Poland.

In the PRECEDENT trial, the EC20(++) subgroup received the most benefit from EC145 therapy, with a hazard ratio of 0.381 (p=0.018). Because this data indicates a strong correlation between EC20(++) scans and EC145 efficacy, the phase 3 PROCEED clinical trial will include co-primary PFS endpoints. The first primary PFS analysis will be based on all patients enrolled in the study, EC20(+) and EC20(++) patients, and if met would support approval for EC145 in PROC for patients who have at least one lesion that over-expresses the folate receptor or based on EC20 scan results. The second primary PFS endpoint, or co-primary endpoint, is based on the subset of patients that are EC20(++) and would support approval of EC145 and EC20 in PROC patients who are EC20(++).

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The co-primary design could allow for approval on either endpoint. We believe this design provides the greatest probability for approval and is consistent with the FDA s critical path initiative to develop personalized therapies. We intend to modify the PROCEED trial protocol to incorporate this co-primary endpoint.

The final primary PFS analysis will be conducted after 334 PFS events in the combined EC20(+) and EC20(++) patient population and 167 PFS events in the EC20(++) patient population, which we expect to occur by mid-2013, although the exact date will depend on a number of factors, including the rate of enrollment. It is estimated that 334 events will provide approximately 85 percent power to detect a 0.70 or lower hazard ratio in the EC20(+) and EC20(++) patient population or approximately a 43 percent improvement in median PFS.

The PROCEED trial is powered for OS analysis as a secondary endpoint. We believe that, in addition to the primary PFS analysis, the interim OS results will be part of the FDA review of our NDA for EC145 in women with PROC. We currently expect to have final OS data in late 2015 or early 2016. At the time of the final PFS analysis, PROCEED planned enrollment is 512 patients, which we estimate will provide 85 percent power to detect a hazard ratio of 0.72 or lower or approximately a 38 percent improvement in median OS.

The PROCEED trial is designed to meet the key elements that we believe, based on our end of phase 2 meeting, will be required by the FDA for approval of new drugs based on PFS in this patient population:

Clinically meaningful improvement in PFS. The trial is designed to show approximately a 43 percent improvement in median PFS, which we believe is clinically meaningful in this patient population, where there is a high unmet medical need and no approved drug has demonstrated a statistically significant improvement in median PFS or OS. Our PRECEDENT randomized phase 2 clinical trial showed a statistically significant PFS benefit that corresponds to approximately an 85 percent improvement in median PFS.

Powered to evaluate OS. The trial is powered to detect a 38 percent improvement in median OS. To ensure the integrity of the OS measurement, we do not allow cross-over between the trial arms.

Blinded radiologic assessment of PFS. The trial will be double-blinded to minimize any occurrence of bias, and the PFS analysis will be based only on radiologic assessment. The trial will include a supportive PFS analysis based on a centralized blinded independent review confirmed by a centralized blinded independent review.

Favorable risk/benefit analysis. The final results of the phase 2 trial indicated a significant and clinically meaningful benefit in PFS in the context of manageable toxicity. No statistically significant safety differences were seen between EC145 and PLD versus PLD alone either in overall adverse events or serious adverse events. We believe that in this area of high unmet medical need, this is a favorable risk/benefit assessment, which we believe can be repeated in PROCEED.

Non-Small Cell Lung Cancer

Market Opportunity

Lung cancer is the number one cause of cancer deaths worldwide. According to the Surveillance Epidemiology and End Results Program of the National Cancer Institute, in 2010, approximately 178,000 patients in the United States were diagnosed with NSCLC and approximately 126,000 died of the disease. Although numerous drugs are available for the treatment of NSCLC patients, according to a study published in Lung Cancer in 2003, the disease of more than 75 percent of patients progresses in less than eight weeks following second line or third line therapy. These findings underscore the need for continued development of new therapeutics, especially for refractory and progressive disease.

In our clinical trials that incorporated EC20 in approximately 60 patients, the tumors in approximately 80 percent of advanced NSCLC patients over-expressed the folate receptor. As a result, we have investigated the use of EC145 for the treatment of NSCLC patients in our phase 2 single-arm trial in this indication.

Clinical Trials in NSCLC: Phase 2 Single-Arm Clinical Trial

We conducted a phase 2 single-arm trial of EC145 in 43 patients with NSCLC. Prior to treatment with EC145, patients were scanned with EC20 to determine whether their tumors over-expressed the folate receptor. Only

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EC20(++) and EC20(+) patients were eligible for the trial. In addition to standard eligibility criteria, patients were required to have a diagnosis of adenocarcinoma of the lung and to have at least a single RECIST-measurable tumor. There were no limits to the maximum number of prior therapies allowed in this patient population. EC145 was administered as a bolus dose of 1 mg per day five days per week, during weeks one through three and five through seven of the eight week induction period, followed by 2.5 mg per day, three days per week every other week thereafter as maintenance. CT scans were performed every eight weeks and adverse events were assessed using standard criteria.

The trial gathered data on efficacy, including DCR and ORR, to characterize the toxicity profile of EC145 in the target population. The trial was also designed to assess whether EC20 tumor scans that were positive for the over-expression of the folate receptor correlated with anti-tumor response. All participants in the trial were EC20(++) and EC20(+). The trial was conducted in a heavily pre-treated patient population, with a median age of 62 and a median of three prior chemotherapeutic regimens with a range of two to nine treatments. Additional analysis confirmed that the group had large-volume disease with a median cumulative tumor length of 7.9 cm. The trial met the primary endpoint of clinical benefit, which was defined as more than 20.0 percent of the patients completing four months of therapy. Safety data for all 43 participants indicated that EC145 was well tolerated, with no Grade 4 drug-related toxicities. The most frequently observed drug-related Grade 3 toxicity was fatigue (4.7 percent).

At the eight week patient assessment, the disease control rate, or DCR, was 57 percent in the patients who had all of their target tumors identified as over-expressing the folate receptor. This compares to DCRs for approved therapies of 21 to 30 percent reported in trials of less heavily pre-treated patients. In a subset of only EC20(++) patients who had received three or fewer prior therapies, the DCR was 70 percent. DCR has been shown to correlate with OS in NSCLC.

	All Patients	**EC20(++)**	**EC20(+)**
EC145 (all patients)	34.5%	57.1%	14.3%
EC145 (three or fewer prior therapies)	42.9%	70.0%	20.0%
Historical benchmark (two or three prior therapies)	21% to 30%		

We also evaluated OS in EC20(++) patients (n=14) compared to EC20(+) patients (n=14). Median OS improved from 14.9 weeks for EC20(+) patients to 47.2 weeks for EC20(++) patients. The hazard ratio was 0.539, meaning EC20(++) patients were 46.1 percent less likely to die when compared to EC20(+) patients when receiving EC145 (p=0.101).

NSCLC Development Plan

Based on these results in the single-arm trial, we intend to define the development strategy for NSCLC in 2011 and will execute a trial or trials as funding becomes available. There are a number of options for developing EC145 within the NSCLC patient population, including single-agent therapy for the treatment of refractory disease or in combination with current therapies in first or second line. We have seen favorable preclinical results with EC145 in combination with other NSCLC therapies, such as docetaxel, a member of the taxane family, and cisplatin. This phase 2 clinical trial will help guide our future development efforts for EC145 in NSCLC.

EC20: Lead Companion Imaging Diagnostic for Folate-Targeted Therapies

We believe the future of medicine includes not only safer and more effective drugs, but also the ability to identify the appropriate therapy for a particular patient. We are committed to this approach, which is commonly referred to as personalized medicine or predictive medicine.

Because of the modular nature of our SMDC technology, the drug payload can be replaced with a radioisotope imaging agent, such as Tc-99m, which we employ in EC20, to create a companion imaging diagnostic designed to target the same diseased cells as the SMDC. The companion imaging diagnostic allows for real-time, full-body assessment of the receptor target without requiring an invasive tissue biopsy. Using full-body imaging, the receptor expression can be measured in every tumor and monitored throughout treatment. As described earlier, our PROC and NSCLC clinical trials combining EC145 with its companion imaging diagnostic have shown correlations between favorable therapeutic outcomes and increased uptake of EC20.

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EC20 is the companion imaging diagnostic for all of our SMDCs that target the folate receptor. EC20 is a conjugate of the targeting ligand folate and the radioisotope imaging agent Tc-99m. Following intravenous administration, EC20 rapidly binds to tumors that over-express the folate receptor, allowing the treating physician to distinguish between patients who are EC20(++), EC20(+) or EC20(-). EC20 enables high quality diagnostic scans one to two hours following its administration as a result of the quick clearance from the blood of EC20 not taken up by cells which over-express the folate receptor.

Potential key advantages of EC20 over tissue-based samples include:

minimally invasive (not requiring biopsy);

real-time assessment of tumor receptor expression (as opposed to analysis based on archived tissue);

greater sensitivity because EC20 binds to all forms of the folate receptor (tissue sample analysis may understate folate receptor expression by not recognizing all forms of the folate receptor);

greater specificity because EC20 distinguishes between those receptors accessible to folate in the blood and those not accessible (tissue sample analysis may overstate folate receptor expression); and

full-body evaluation (as opposed to samples of tumor which may or may not be indicative of all areas of disease).

EC20 Development Plan

EC20 is being developed under the FDA s published guidance regarding usage of imaging agents for therapeutic management of patients. Consistent with this guidance, our development strategy for EC20 will be to show that the presence of EC20 uptake in tumors is predictive of improved therapeutic outcomes resulting from treatment with EC145.

With an estimated incidence of over one million newly diagnosed cancer patients in the United States, Europe and Japan who have tumors that over-express the folate receptor, EC20 could, if approved, represent a substantial commercial opportunity for us as a screening diagnostic. Companion imaging diagnostics are an important part of our development and commercial plan, which may allow us not only to provide a targeted therapy, but also a truly personalized and more effective therapy. This could benefit patients, doctors and payors by allowing doctors to select only patients who are likely to benefit from our therapies.

We plan to file an NDA with the FDA for the separate approval of EC20 for use in women with PROC. We intend to use the data obtained from PROCEED for the basis of the filing of this NDA. However, there can be no assurance the FDA will not require additional clinical trials of EC20 prior to approval. We expect to meet with the FDA s Division of Medical Imaging in early 2011 to discuss in detail our plans for EC20 s approval path.

Other Pipeline Programs

Folate Receptor Targeted Programs

EC0489 is a conjugate that utilizes the same targeting ligand, folate, and the same drug payload, DAVLBH, as EC145, but it includes an alternative linker system. This alternative linker system yields a different biodistribution of the drug compared to EC145, which may allow for higher dosage of drug payload. EC0489 is currently in a phase 1 dose escalation trial evaluating the safety of the drug in patients with solid cancer tumors. To date, 51 patients have been

treated with EC0489. This trial will also allow us to evaluate the utility of our alternative linker system technology and its potential for use in the construction of future SMDCs. Following the conclusion of the phase 1 trial, we will evaluate future development options for EC0489.

EC0225 is a conjugate of folate and two distinct and highly active drugs, DAVLBH and mitomycin-C. DAVLBH is a microtubule destabilizer and mitomycin-C is a DNA alkylator. These two drugs are attached to a single targeting ligand and are brought into the targeted cancer cell via endocytosis, at which point both drugs are concurrently released. The anticipated advantage of using two drugs is that the payload is doubled, which may increase the overall anti-cancer activity of the SMDC. Attaching drugs with different mechanisms of action may allow them to overcome drug resistance. The drug payloads within EC0225 utilize distinct mechanisms of action to

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kill target cancer cells, thus making this SMDC a targeted combination therapy within a single drug. EC0225 is currently being evaluated in an open-label phase 1 dose escalation trial to assess its safety in patients with solid tumors, and to determine the dose for future trials. To date, 66 patients have been treated with EC0225. Enrollment has closed, and we expect final results by early 2011. Following the conclusion of the phase 1 trial, we will evaluate future development options for EC0225.

EC17 is a conjugate of folate and a hapten molecule. This SMDC also utilizes our folate targeting ligand, but instead of DAVLBH, EC17 incorporates hapten as the drug payload, and delivers this drug payload to the tumor surface. When bound to cancer cells, EC17 is designed to elicit an immunologic response from the host immune system in order to facilitate tumor-cell killing. We completed a phase 1 trial with EC17 during which the drug was administered safely with a confirmed anti-hapten antibody response and evidence of anti-tumor activity. We are currently evaluating future development options for EC17.

EC0531 is a conjugate of folate and a drug payload of tubulysin, a microtubule destabilizer that, in our in vitro models, showed approximately 100,000 times more potency than cisplatin. Tubulysin alone is too toxic to be used in patients rendering it impractical for therapeutic use. In contrast, our folate receptor-targeted tubulysin SMDC, EC0531, is curative in multiple xenograft models under conditions that produce no observable toxicities. Following the conclusion of our preclinical studies we will evaluate future development options for EC0531.

Prostate Specific Membrane Antigen Targeting Programs

Leveraging our ligand and linker system expertise that we have obtained from our folate SMDC programs, we recently introduced into clinical trials EC0652, a companion imaging diagnostic for a new class of SMDCs whose targeting ligand binds to PSMA. PSMA is a receptor target that is predominantly over-expressed on prostate cancer cells.

EC0652 is a conjugate of a proprietary PSMA targeting ligand and the imaging agent Tc-99m. EC0652 is used to support SMDCs that target PSMA. In preclinical studies, EC0652 was found to specifically bind to PSMA-expressing tumor cells and it allowed for the non-invasive, real-time assessment of functionally active and drug-accessible PSMA-expressing tumor cells. EC0652 is currently in early clinical trials to validate specificity and biodistribution of the targeting ligand. In addition, we are currently evaluating EC1069, an SMDC for prostate cancer therapy based on the PSMA targeting ligand.

Inflammatory Disease Programs

During the clinical development of EC20, it was discovered that patients with active inflammatory conditions, such as arthritic knees, displayed areas of EC20 uptake in non-cancerous regions of the body. Based on this observation, we began to test preclinical models of rheumatoid arthritis and discovered that activated, but not resting, macrophages present within the inflamed joints over-expressed the folate receptor. Activated macrophages are a type of white blood cell involved in a variety of inflammatory diseases, and they are responsible for the release of pro-inflammatory molecules, such as tumor necrosis factor alpha, or TNF-alpha as well as other cytokines, into the body. Commercially available drugs such as etanercept and adalimumab, both designed to neutralize TNF-alpha biological activity, have proven to be effective for the treatment of a variety of inflammatory diseases. In 2009, these products generated $9.0 billion in annual sales according to Amgen s and Abbott Laboratories publicly available filings. Although effective in some patients, other patients may fail to respond to these costly biological products because the activated macrophages secrete a variety of pro-inflammatory agents, in addition to TNF-alpha, into the systemic circulation, which results in continuing inflammation, causing a decreased therapeutic effect.

Our strategy for treating chronic inflammatory disorders differs from these available drugs that neutralize specific secreted factors such as TNF-alpha because our technology targets the folate receptor over-expressed on activated macrophages, which we believe are the source of pro-inflammatory agents, like TNF-alpha. We are developing a new class of SMDCs designed to neutralize, or de-activate, the activated macrophage itself. Preclinical data suggests that our SMDC candidates may suppress the secretion of all mediators of inflammation. Our oncology class of SMDCs, such as EC145, will target folate receptor-expressing activated macrophages; however, these types of cells are not rapidly dividing, and as a result, anti-cancer drug payloads that would otherwise disrupt cellular division processes are inactive against this cell type.

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Utilizing an identical strategy to that we applied in the development of our oncology programs, SMDCs designed for treating inflammation may be constructed with more potent forms of known, active drugs, and then used along with companion imaging diagnostics to provide personalized therapy. Using our folate receptor-targeted EC20 companion imaging diagnostic in both preclinical and clinical trials, we have identified a number of diseases involving activated macrophages that over-express the folate receptor, including rheumatoid arthritis, osteoarthritis, inflammatory bowel disease and psoriasis.

In our preclinical models of rheumatoid arthritis, SMDCs targeted to activated macrophages result in significant reduction in inflammation and prevention of bone destruction that often accompanies these diseases. For example, EC0746 is an SMDC constructed with the targeting ligand, folate, and an inhibitor of cellular metabolism, called aminopterin. We observed in preclinical models that EC0746 was safe and reduced inflammation more than the most commonly prescribed anti-inflammatory agent, methotrexate, and the anti-TNF-alpha agent, etanercept.

Competition

The biotechnology and pharmaceutical industries are highly competitive. There are many pharmaceutical companies, biotechnology companies, public and private universities and research organizations actively engaged in the research and development of products that may be similar to our SMDCs. A number of multinational pharmaceutical companies and large biotechnology companies are pursuing the development of or are currently marketing pharmaceuticals that target ovarian cancer and NSCLC, or other oncology pathways on which we are focusing. It is possible that the number of companies seeking to develop products and therapies for the treatment of unmet needs in oncology will increase.

Many of our competitors, either alone or with their strategic partners, have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of drugs, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Accordingly, our competitors may be more successful than we may be in obtaining approval for drugs and achieving widespread market acceptance. Our competitors drugs may be more effective, or more effectively marketed and sold, than any drug we may commercialize and may render our product candidates obsolete or non-competitive before we can recover the expenses of developing and commercializing any of our product candidates. We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available.

Recent successes with targeted therapies in solid tumors, such as those found in colon, breast and lung cancers, have led to a marked increase in research and development in targeted treatments for cancer, including cancer of the ovary. We are aware of a number of companies that have ongoing programs to develop both small molecules and biologics to treat patients with ovarian cancer. Roche Holdings is currently testing bevacizumab in women with ovarian cancer, including a phase 3 clinical trial in women with PROC. Eisai Company is conducting advanced stage clinical trials of farletuzumab, a folate receptor targeted antibody, in women with PROC and platinum-sensitive disease. Nektar Therapeutics, using its conjugate technology, is developing NKTR-102 for use in patients with solid tumor malignancies, including PROC, colorectal, breast and cervical cancers. Sunesis Pharmaceuticals is conducting a phase 2 single-arm trial of voreloxin, an anti-cancer quinolone derivative, in a number of patient populations, including PROC. Sanofi-Aventis is conducting a phase 2 single-arm trial of their drug BSI-201, a PARP inhibitor currently in a number of patient populations, including ovarian cancer. Eli Lilly is conducting a phase 2 single-arm trial of their drug LY573636.

We believe that our ability to successfully compete will depend on, among other things:

- our ability to design and successfully execute appropriate clinical trials;

our ability to recruit and enroll patients for our clinical trials;

the results of our clinical trials and the efficacy and safety of our SMDCs and companion imaging diagnostics;

the cost of treatment in relation to alternative therapies;

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- the speed at which we develop our SMDCs and companion imaging diagnostics;
- achieving and maintaining compliance with regulatory requirements applicable to our business;
- the timing and scope of regulatory approvals, including labeling;
- adequate levels of reimbursement under private and governmental health insurance plans, including Medicare;
- our ability to protect intellectual property rights related to our SMDCs and companion imaging diagnostics;
- our ability to commercialize and market any of our products that may receive regulatory approval;
- our ability to have our partners manufacture and sell commercial quantities of any approved SMDCs and companion imaging diagnostics to the market; and
- acceptance of SMDCs and companion imaging diagnostics by physicians, other healthcare providers and patients.

In addition, the biopharmaceutical industry is characterized by rapid technological change. Our future will depend in large part on our ability to maintain a competitive position with respect to these technologies. Our competitors may render our technologies obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies. Also, because our research approach integrates many technologies, it may be difficult for us to stay abreast of the rapid changes in each technology. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our SMDCs or companion imaging diagnostics obsolete or less competitive.

Manufacturing

To date, our SMDCs and companion imaging diagnostics have been manufactured in small quantities for preclinical studies and clinical trials by third-party manufacturers and we intend to continue to do so in the future. We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our SMDC candidates. We currently have no plans to build our own clinical or commercial scale manufacturing capabilities. To meet our projected needs for commercial manufacturing, third parties with whom we currently work will need to increase their scale of production or we will need to secure alternate suppliers. While individual contract manufacturers have demonstrated the capability to produce quantities of our SMDCs sufficient to support our ongoing clinical trials for EC145 and other SMDCs, we continue to engage alternative suppliers to provide supply in the event of a failure to meet demand on the part of a single contract manufacturer. In addition, the linker system for EC145 is obtained from a single source supplier, AmbioPharm, and we are currently assessing alternate suppliers to prevent a possible disruption of manufacturing of EC145. We believe that we currently have, or have the ability to access, sufficient supplies of all of the key components of EC145 to manufacture EC145 to conduct and complete our planned phase 3 clinical trial for EC145. There are several manufacturers we are aware of that have the capacity to manufacture EC145 in the quantities that our development and future commercialization efforts, if any, may require. We have utilized two such suppliers to date. We expect to continue to depend on third-party contract manufacturers for the foreseeable future.

Our SMDCs and companion imaging diagnostics require precise, high quality manufacturing. Failure by our contract manufacturers to achieve and maintain high manufacturing standards could result in patient injury or death, product

recalls or withdrawals, delays or failures in testing or delivery, cost overruns, or other problems that could seriously harm our business.

As a result of the potency of our compounds, we do not expect the quantities required at full commercial scale to present a challenge to our third-party manufacturing partners. Although we rely on contract manufacturers, we have personnel with extensive manufacturing experience to oversee the relationships with our contract manufacturers.

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Sales and Marketing

Our operations to date have been limited to organizing and staffing our company, acquiring, developing and securing our technology, undertaking preclinical testing and clinical studies of our SMDCs and companion imaging diagnostics and engaging in research and development under collaboration agreements. We have not yet demonstrated an ability to obtain regulatory approval, formulate and manufacture commercial-scale products, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, it is difficult to predict our future success and the viability of any commercial programs that we may choose to take forward.

Subject to successful completion of our PROCEED clinical trial for EC145 and FDA approval of EC145 for women with PROC, it is our objective to establish EC145 in combination with PLD as the therapy of choice for PROC patients. If EC145 is approved by the FDA, we intend to build the commercial infrastructure sufficient to market and sell EC145 and EC20 in the United States. This infrastructure is expected to include a specialty sales force of approximately 50 to 75 representatives, sales management, sales and distribution support staff and internal marketing staff. Following approval, but in advance of distribution, we expect to make a significant investment in marketing efforts to support the successful launch of EC145.

Outside of the United States, we may choose to utilize strategic partners or contract sales organizations to support the sales, marketing and distribution of EC145 and other approved SMDCs.

Employees

As of December 31, 2010, we had a total of 55 full-time employees, of whom 47 were engaged in research and development activities. None of our employees is represented by a labor union or subject to a collective bargaining agreement. We have not experienced a work stoppage and consider our relations with our employees to be good.

Government Regulation

Government authorities in the United States (including federal, state and local authorities) and in other countries, extensively regulate, among other things, the manufacturing, research and clinical development, marketing, labeling and packaging, distribution, post-approval monitoring and reporting, advertising and promotion, and export and import of pharmaceutical products, such as those we are developing. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

United States Government Regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and related regulations. Drugs are also subject to other federal, state and local statutes and regulations. Failure to comply with the applicable U.S. regulatory requirements at any time during the product development process, approval process or after approval may subject an applicant to administrative or judicial sanctions. These sanctions could include the imposition by the FDA or an Institutional Review Board, or IRB, of a clinical hold on trials, the FDA s refusal to approve pending applications or supplements, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us.

The Investigational New Drug Process

An Investigational New Drug application, or an IND, is a request for authorization from the FDA to administer an investigational drug to humans. Such authorization must be secured before commencing clinical trials of any new drug candidate in humans.

The central focus of the initial IND submission is on the general investigational plan and the protocol(s) for human studies. The IND also includes results of animal studies or other human studies, as appropriate, as well as manufacturing information, analytical data and any available clinical data or literature to support the use of the investigational new drug. An IND must become effective before human clinical trials may begin. An IND will

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automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical trials as outlined in the IND. In such a case, the IND may be placed on clinical hold until any outstanding concerns or questions are resolved.

Clinical trials involve the administration of the investigational drug to patients under the supervision of qualified investigators in accordance with Good Clinical Practices, or GCPs. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the parameters to be used in monitoring safety and the efficacy criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical site s IRB before the trials may be initiated. All participants in clinical trials must provide their informed consent in writing prior to their enrollment in the trial.

The clinical investigation of an investigational drug is generally divided into three phases. Although the phases are usually conducted sequentially, they may overlap or be combined. The three phases of an investigation are as follows:

Phase 1. Phase 1 involves the initial introduction of an investigational new drug into humans. Phase 1 clinical trials are typically closely monitored and may be conducted in patients with the target disease or condition or healthy volunteers. These studies are designed to evaluate the safety, dosage tolerance, metabolism and pharmacologic actions of the investigational drug in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness. During phase 1 clinical trials, sufficient information about the investigational drug s pharmacokinetics and pharmacologic effects may be obtained to permit the design of well-controlled and scientifically valid phase 2 clinical trials. The total number of participants included in phase 1 clinical trials varies, but generally ranges from 20 to 80.

Phase 2. Phase 2 includes the controlled clinical trials conducted to preliminarily or further evaluate the effectiveness of the investigational drug for a particular indication in patients with the disease or condition under study, to determine dosage tolerance and optimal dosage, and to identify possible adverse side effects and safety risks associated with the drug. Phase 2 clinical trials are typically well controlled, closely monitored and conducted in a limited patient population, usually involving no more than several hundred participants.

Phase 3. Phase 3 clinical trials are generally controlled clinical trials conducted in an expanded patient population generally at geographically dispersed clinical trial sites. They are performed after preliminary evidence suggesting effectiveness of the drug has been obtained, and are intended to further evaluate dosage, effectiveness and safety, to establish the overall benefit-risk relationship of the investigational drug, and to provide an adequate basis for product approval by the FDA. Phase 3 clinical trials usually involve several hundred to several thousand participants.

The decision to terminate development of an investigational drug may be made by either a health authority body such as the FDA, or by us for various reasons. Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data safety monitoring board or committee. This group provides a recommendation of whether or not a trial may move forward at pre-specified check points based on access that only the group maintains to available data from the trial. Suspension or termination of development during any phase of clinical trials can occur if it is determined that the participants or patients are being exposed to an unacceptable health risk. We may decide to suspend or terminate development based on evolving business objectives and/or competitive climate.

In addition, there are requirements and industry guidelines to require the posting of ongoing clinical trials on public registries and the disclosure of designated clinical trial results and related payments to healthcare professionals.

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational drug information is submitted to the FDA in the form of a New Drug Application, or NDA, except under limited circumstances, requesting approval to market the product for one or more indications.

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The NDA Approval Process

In order to obtain approval to market a drug in the United States, a marketing application must be submitted to the FDA that provides data establishing the safety and effectiveness of the investigational drug for the proposed indication to the FDA s satisfaction. The application includes all relevant data available from pertinent preclinical and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product s chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators.

The FDA will initially review the NDA for completeness before it accepts the NDA for filing. The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency s threshold determination that it is sufficiently complete to permit substantive review. After the NDA submission is accepted for filing, the FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product s identity, strength, quality and purity. The FDA may refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Based on phase 3 clinical trial results submitted in an NDA, upon the request of an applicant a priority review designation may be granted to a product by the FDA, which sets the target date for FDA action on the application at six months. Priority review is given where preliminary estimates indicate that a product, if approved, has the potential to provide a safe and effective therapy where no satisfactory alternative therapy exists, or a significant improvement compared to marketed products is possible. If criteria are not met for priority review, the standard FDA review period is ten months. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. If the FDA determines the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process for a drug requires substantial time, effort and financial resources and this process may take several years to complete. Data obtained from clinical activities are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all. We may encounter difficulties or unanticipated costs in our efforts to develop our SMDCs or companion imaging diagnostics and secure necessary governmental approvals, which could delay or preclude us from marketing our products. Even if the FDA approves an SMDC or companion imaging diagnostic, it may limit the approved indications for use or place other conditions on approval that could restrict commercial application, such as a requirement that we implement special risk management measures through a Risk Evaluation and Mitigation Strategy. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

Post-Approval Regulation

After regulatory approval of a drug product is obtained, we are required to comply with a number of post-approval requirements. For example, as a condition of approval of an NDA, the FDA may require post-marketing testing, including phase 4 clinical trials, and surveillance to further assess and monitor the product s safety and

effectiveness after commercialization. Regulatory approval of oncology products often requires that patients in clinical trials be followed for long periods to determine the OS benefit of the drug. The FDA has indicated to us that if we receive approval of EC145 for treatment of PROC based on PFS data from the PROCEED trial, we will be required to continue to follow patients in that trial to determine the OS benefit of the drug. In addition, as a holder of an approved NDA, we would be required to report, among other things, certain adverse reactions and production problems to the FDA, to provide updated safety and efficacy information, and to comply with requirements concerning advertising and promotional labeling for any of our products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval to assure and preserve the long-term stability of the drug product. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP, which imposes extensive procedural, substantive and record-keeping requirements. In addition, changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our SMDCs. Future FDA and state inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Newly discovered or developed safety or effectiveness data may require changes to a product s approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA s policies may change, which could delay or prevent regulatory approval of our products under development.

Europe/Rest of World Government Regulation

In addition to regulations in the United States, we will be subject, either directly or through our distribution partners, to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In Europe, for example, a clinical trial application, or CTA, must be submitted to each country s national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country s requirements, clinical trial development may proceed.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials are conducted in accordance with GCP and other applicable regulatory requirements.

To obtain regulatory approval of an investigational drug under European Union regulatory systems, we must submit a marketing authorization application. This application is similar to the NDA in the United States, with the exception of, among other things, country-specific document requirements. Medicines can be authorized in the European Union by

using either the centralized authorization procedure or national authorization procedures, and our SMDCs and companion imaging diagnostics would fall under the centralized authorization procedure.

The European Medicines Agency, or EMA, implemented the centralized procedure for the approval of human medicines to facilitate marketing authorizations that are valid throughout the European Union. This procedure results in a single marketing authorization issued by the EMA that is valid across the European Union, as well as Iceland, Liechtenstein and Norway. The centralized procedure is compulsory for human medicines that are: derived

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from biotechnology processes, such as genetic engineering; contain a new active substance indicated for the treatment of certain diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative disorders or autoimmune diseases and other immune dysfunctions; and officially designated orphan medicines.

Under the Centralized Procedure in the European Union, the maximum timeframe for the evaluation of a marketing authorization application is 210 days (excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the Committee for Medicinal Products for Human Use, or CHMP). Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, defined by three cumulative criteria: the seriousness of the disease to be treated; the absence or insufficiency of an appropriate alternative therapeutic approach; and anticipation of high therapeutic benefit. In this circumstance, EMA ensures that the opinion of the CHMP is given within 150 days.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCP and the other applicable regulatory requirements.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Compliance

During all phases of development (pre- and post-marketing), failure to comply with the applicable regulatory requirements may result in administrative or judicial sanctions. These sanctions could include the following actions by the FDA or other regulatory authorities: imposition of a clinical hold on trials; refusal to approve pending applications; withdrawal of an approval; warning letters; product recalls; product seizures; total or partial suspension of production or distribution; product detention or refusal to permit the import or export of products; injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us.

Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any drug products for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third-party payors. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the drug product. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drugs for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA approvals. Our SMDCs may not be considered medically necessary or cost-effective. A payor s decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

In 2003, the United States government enacted legislation providing a partial prescription drug benefit for Medicare recipients, which became effective at the beginning of 2006. Government payment for some of the costs of prescription drugs may increase demand for any products for which we receive marketing approval. However, to obtain payments under this program, we would be required to sell products to Medicare recipients through prescription drug plans operating pursuant to this legislation. These plans will likely negotiate discounted prices for our products. Federal, state and local governments in the United States continue to consider legislation to limit the

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growth of healthcare costs, including the cost of prescription drugs. Future legislation could limit payments for pharmaceuticals such as the drug candidates that we are developing.

Different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular SMDC to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, an increasing emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Other Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration), other divisions of the U.S. Department of Health and Human Services (e.g., the Office of Inspector General), the U.S. Department of Justice and individual U.S. Attorney offices within the Department of Justice, and state and local governments. For example, sales, marketing and scientific/educational grant programs must comply with the anti-fraud and abuse provisions of the Social Security Act, the False Claims Act, the privacy provisions of the Health Insurance Portability and Accountability Act, or HIPAA, and similar state laws, each as amended. Pricing and rebate programs must comply with the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veterans Health Care Act of 1992, each as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Under the Veterans Health Care Act, or VHCA, drug companies are required to offer certain drugs at a reduced price to a number of federal agencies including U.S. Department of Veterans Affairs and U.S. Department of Defense, the Public Health Service and certain private Public Health Service designated entities in order to participate in other federal funding programs including Medicare and Medicaid. Recent legislative changes purport to require that discounted prices be offered for certain U.S. Department of Defense purchases for its TRICARE program via a rebate system. Participation under the VHCA requires submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulations.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file

periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities or register their sales representatives, as well as prohibiting pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and prohibiting certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

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Patents and Proprietary Rights

Because of the length of time and expense associated with bringing new products to market, biopharmaceutical companies have traditionally placed considerable importance on obtaining and maintaining patent protection for significant new technologies, products and processes.

Our success depends in part on our ability to protect the proprietary nature of our SMDC candidates, technology, and know-how, to operate without infringing on the proprietary rights of others, and to prevent others from infringing our proprietary rights. As a matter of policy, we seek to protect our proprietary position by, among other methods, filing United States and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business. We also rely on trade secrets, know-how, continuing technological innovation, and in-licensing opportunities to develop and maintain our proprietary position.

We have applied, and are applying, for patents directed to our three main areas of focus: anti-tumor therapeutics and diagnostics, anti-inflammation therapeutics and diagnostics and immunotherapy therapeutics and diagnostics, both in the United States and, when appropriate, in other countries. We own or have rights to 64 issued patents and 177 applications worldwide covering our core technology, SMDCs and companion imaging diagnostics.

Currently, we own three issued U.S. patents, patent number 7,601,332, or the 332 patent, entitled Vitamin Receptor Binding Drug Delivery Conjugates , patent number 7,128,893, or the 893 patent, entitled Vitamin-Targeted Imaging Agents and patent number 7,862,798, or the 798 patent, also entitled Vitamin-Targeted Imaging Agents . The 332 patent issued on October 13, 2009 in the United States and is scheduled to expire in 2026. The 332 patent includes claims covering EC145, among other compounds. Additionally, we have filed continuation patent applications to the 332 patent and prosecution is ongoing. With respect to EC145 coverage, we have patents issued in the United States, China, India, New Zealand with continuations filed in the United States and China, and pending patent applications in Canada, Europe, Japan, Australia, Israel, Taiwan, Argentina, Venezuela and South Africa, and the patents also claim related chemical structures, pharmaceutical compositions, and methods for linking vitamins to drugs through our linker system. We also have filed several patent applications related to EC145 specifically, such as using EC20 to predict patients response to EC145 and the combination of EC145 with PLD.

The 893 patent and 798 patent issued on October 31, 2006 and on January 4, 2011, respectively, in the United States and are both scheduled to expire in 2024. The 893 patent and 798 patent include claims covering EC20, among other compounds. Additionally, we have filed continuation patent applications to the 893 patent and prosecution is ongoing. The 798 patent was one such continuation application issued as a patent. Notably, the 893 patent has foreign patent counterparts and to date, the 893 patent equivalent has been issued in several countries worldwide. In Europe, drug product claims covering some EC20 formulations have been issued. We are currently developing a strategy to increase the breadth of EC20 coverage in Europe.

We have filed additional patent applications worldwide to protect our innovations such as multidrug ligand conjugates including EC0225, spacer conjugates including EC0489, tubulysin conjugates including EC0531 and conjugates directed to the PSMA, including EC0651. EC0651 is owned by the Purdue Research Foundation, a non-profit organization, which manages the intellectual property of Purdue University, and exclusively licensed to us.

We entered into two exclusive, worldwide licenses for a number of patents and patent applications, owned by the Purdue Research Foundation, for select folate-targeted technology and for select technology related to PSMA. The folate-technology license was originally entered into on July 17, 1998 with an effective date as of December 21, 1995, and was restated on October 21, 1998. The PSMA license was entered into on March 1, 2010.

Under the two Purdue Research Foundation licenses, there are 33 issued and 79 pending patent applications worldwide which have yet to issue or grant. Most of our licensed intellectual property is under the folate-targeted license. In the United States, we license six issued patents under the folate-targeted license and none under the PSMA license. Each of the folate-targeted license and PSMA license expire on the expiration date of the last to expire of the patents licensed thereunder, respectively, including those that are issued on patents currently pending and on matters not yet filed. As a result, the final termination date of the Purdue Research Foundation licenses is

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indeterminable until the last such patents issue and results of potential patent extensions are known. We may terminate the Purdue Research Foundation licenses without cause with 60 days notice. Purdue Research Foundation may terminate the licenses for material default by us which is not cured within 90 days notice by Purdue Research Foundation or upon 60 days notice in the event we fail to meet public demand for approved products covered by the licensed patents after a six month cure period following commercial introduction. The Purdue Research Foundation licenses also contain standard provisions allowing Purdue Research Foundation to terminate upon our bankruptcy. We have royalty obligations to Purdue Research Foundation based on sales of products that are designed, developed or tested using the licensed technology as well as annual minimum royalty obligations. Pursuant to our exclusive license agreement with Purdue Research Foundation relating to folate, we are obligated to pay an annual minimum royalty of $12,500 until commercial sales commence, following which time the payment of single digit royalty rates will commence. Pursuant to our exclusive license agreement with Purdue Research Foundation relating to PSMA, we are obligated to make annual minimum payments of $15,000 until commercial sales commence, following which time the payment of single digit royalty rates will commence, along with an annual milestone payment of $100,000. In addition, certain clinical and regulatory milestone payments of $500,000 along with sales-based milestones related to third-party sales are also payable. We are also subject to penalties totaling $300,000 if certain diligence milestones are not met. Future milestone payments in excess of $500,000 may be waived by Purdue Research Foundation. We do not anticipate incurring liabilities for EC145 royalty payments based on the estimated timing of when we may have commercial sales and the expiration of the applicable patents.

Most of our portfolio consists of intellectual property we exclusively license from Purdue Research Foundation or which we own ourselves. Generally, the intellectual property licensed from Purdue Research Foundation is early stage and relates to methods that were invented in the laboratory of Professor Philip Low. Internally, we typically develop these methods further and refine them to determine the commercial applicability. Additionally, these early-stage patents often provide us protection from competitors while we evaluate commercial possibilities of a specific program. For example, some of the very early patents we licensed from Purdue Research Foundation covered methods of delivering folate attached to targeting ligand across a cell membrane. We were able to use the patent protection afforded by such early patents to develop folate conjugates, including the invention and clinical development, and in the future, the commercialization of our linker system incorporated in EC145.

Due to the use of federal funds in the development of some of the folate-related technology at Purdue Research Foundation, the U.S. government has the irrevocable, royalty-free, paid-up right to practice and have practiced certain patents throughout the world, should it choose to exercise such rights, namely to three early-stage United States patents issued to Purdue Research Foundation and to two pending jointly owned Purdue Research Foundation patent applications.

Our development strategy also employs lifecycle management positions. For example, the interim results of our PRECEDENT trial indicated a benefit of PLD and EC145 over PLD alone. As noted above, we filed a patent application directed to this combination. In evaluating our current plans for development, it is likely that we will apply for regulatory approval for this combination. If we are able to obtain patent approval for this indication, then it will provide several years of additional coverage above and beyond the expiration of certain patents relating to EC145 alone. As a result, our general guiding strategy is to obtain patent coverage for innovations that show a clinical benefit to patients and an economic opportunity for us.

Pursuant to a license agreement with Bristol-Myers Squibb, or BMS, we co-own several patent applications directed to epothilone with BMS. BMS notified us of their intent to terminate our license agreement in June 2010 and in July 2010 also notified us of their intent to abandon certain of the patent applications subject to the license related to folate conjugates with epothilone.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing a non-provisional patent application. In the United States, a patent s term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in granting a patent, or may be shortened if a patent is terminally disclaimed over another patent.

The patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review

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process. The Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other non-U.S. jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our pharmaceutical products receive FDA approval, we expect to apply for patent term extensions on patents covering those products.

While we pursue patent protection and enforcement of our SMDC candidates and aspects of our technologies when appropriate, we also rely on trade secrets, know-how and continuing technological advancement to develop and maintain our competitive position. To protect this competitive position, we regularly enter into confidentiality and proprietary information agreements with third parties, including employees, independent contractors, suppliers and collaborators. Our employment policy requires each new employee to enter into an agreement containing provisions generally prohibiting the disclosure of confidential information to anyone outside of us and providing that any invention conceived by an employee within the scope of his or her employment duties is our exclusive property. We have a similar policy with respect to independent contractors, generally requiring independent contractors to enter into an agreement containing provisions generally prohibiting the disclosure of confidential information to anyone outside of us and providing that any invention conceived by an independent contractor within the scope of his or her services is our exclusive property with the exception of contracts with universities and colleges that may be unable to make such assignments. Furthermore, our know-how that is accessed by third parties through collaborations and research and development contracts and through our relationships with scientific consultants is generally protected through confidentiality agreements with the appropriate parties. We cannot, however, assure you that these protective arrangements will be honored by third parties, including employees, independent contractors, suppliers and collaborators, or that these arrangements will effectively protect our rights relating to unpatented proprietary information, trade secrets and know-how. In addition, we cannot assure you that other parties will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our proprietary information and technologies.

Additionally, there can be no assurance that our patents will provide significant protection, competitive advantage or commercial benefit. The validity and enforceability of patents issued to biopharmaceutical companies has proven highly uncertain. For example, legal considerations surrounding the validity of patents in the fields of biopharmaceuticals are in transition, and we cannot assure you that the historical legal standards surrounding questions of validity will continue to be applied or that current defenses relating to issued patents in these fields will be sufficient in the future. In addition, we cannot assure you as to the degree and range of protections any of our patents, if issued, may afford us or whether patents will be issued. For example, patents which may issue to us may be subjected to further governmental review that may ultimately result in the reduction of their scope of protection, and pending patent applications may have their requested breadth of protection significantly limited before being issued, if issued at all. Further, since publication of discoveries in scientific or patent literature often lags behind actual discoveries, we cannot assure you that we were the first creator of inventions covered by our pending patent applications, or that we were the first to file patent applications for these inventions.

Many biopharmaceutical companies and university and research institutions have filed patent applications or have received patents in our areas of product development. Many of these entities applications, patents and other intellectual property rights could prevent us from obtaining patents or could call into question the validity of any of our patents, if issued, or could otherwise adversely affect the ability to develop, manufacture or commercialize SMDC candidates. In addition, certain parts of our technology originated from third-party sources. These third-party sources include academic, government and other research laboratories, as well as the public domain. If use of technology incorporated into or used to produce our SMDCs is challenged, or if a conflicting patent issued to others is upheld in the courts or if a conflicting patent application filed by others is issued as a patent and is upheld, we may be unable to

market one or more of our SMDCs, or we may be required to obtain a license to market those SMDCs. To contend with these possibilities, we may have to enter into license agreements in the future with third parties for technologies that may be useful or necessary for the manufacture or commercialization of some of our SMDCs. In addition, we are routinely in discussions with academic and commercial entities that hold patents on technology or

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processes that we may find necessary in order to engage in some of our activities. However, we cannot assure you that these licenses, or any others that we may be required to obtain to market our SMDCs, will be available on commercially reasonable terms, if at all, or that we will be able to develop alternative technologies if we cannot obtain required licenses.

To protect our rights to any of our issued patents and proprietary information, we may need to litigate against infringing third parties, or avail ourselves of the courts or participate in hearings to determine the scope and validity of those patents or other proprietary rights. These types of proceedings are often costly and could be very time-consuming to us, and we cannot assure you that the deciding authorities will rule in our favor. An unfavorable decision could allow third parties to use our technology without being required to pay us licensing fees or may compel us to license needed technologies to avoid infringing third-party patent and proprietary rights; or even could result in the invalidation or a limitation in the scope of our patents or forfeiture of the rights associated with our patents or pending patent applications. Although we believe that we would have valid defenses to allegations that our current SMDCs, production methods and other activities infringe the valid and enforceable intellectual property rights of any third parties, we cannot be certain that a third party will not challenge our position in the future. Even if some of these activities were found to infringe a third party s patent rights, we may be found to be exempt from infringement under 35 U.S.C. § 271(e) to the extent that these are found to be pre-commercialization activities related to our seeking regulatory approval for a SMDC. However, the scope of protection under 35 U.S.C. § 271(e) is uncertain and we cannot assure you that any defense under 35 U.S.C. § 271(e) would be successful. Further, the defense under 35 U.S.C. § 271(e) is only available for pre-commercialization activities, and could not be used as a defense for sale and marketing of any of our SMDCs. There has been, and we believe that there will continue to be, significant litigation in the biopharmaceutical and pharmaceutical industries regarding patent and other intellectual property rights.

Corporate Information

We were incorporated in the State of Indiana in 1995 and we were reincorporated in the State of Delaware in 2001. Our principal executive offices are located at 3000 Kent Avenue, Suite A1-100, West Lafayette, Indiana 47906, and our telephone number is (765) 463-7175.

Available Information

Our website address is www.endocyte.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available or may be accessed free of charge through www.sec.gov and the Investor Relations section of our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission, or SEC. Our website and the information contained therein or connected thereto are not intended to be incorporated by reference into this Annual Report on Form 10-K or any other report we file with the SEC.

The name Endocyte and our logo are our trademarks. All other trademarks and trade names appearing in this annual report are the property of their respective owners.

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Executive Officers of the Registrant

The following table sets forth certain information concerning our executive officers as of March 1, 2011:

Name	Age	Position
P. Ron Ellis	49	President and Chief Executive Officer
Michael A. Sherman	44	Chief Financial Officer
Philip S. Low, Ph.D.	63	Chief Science Officer
Christopher P. Leamon, Ph.D.	44	Vice President of Research
Chandra D. Lovejoy	39	Vice President of Regulatory Affairs
Richard A. Messmann, M.D.	54	Vice President of Medical Affairs
Allen R. Ritter, Ph.D.	49	Vice President of Manufacturing and Chemistry Manufacturing Control

P. Ron Ellis is one of our founders and has served as our President and Chief Executive Officer since January 1996 and as a member of our Board of Directors since December 1995. From May 1987 to December 1995, Mr. Ellis served in various positions at Hill-Rom Company, but most recently as Vice President of Strategy and Corporate Development of the specialty care division. Mr. Ellis holds a B.S. in computer science and an M.B.A. from Brigham Young University and a certification in regulatory affairs from Purdue University.

Michael A. Sherman has served as our Chief Financial Officer since October 2006. From December 1994 to October 2006, Mr. Sherman served in various executive roles, but most recently as Vice President of Finance and Strategic Planning from May 2004 to October 2006, of Guidant Corporation, or Guidant, a cardiovascular device manufacturer acquired by Boston Scientific Corporation, a medical device company, in April 2006. Mr. Sherman holds a B.A. in economics from DePauw University and an M.B.A. from the Amos Tuck School, Dartmouth College.

Philip S. Low, Ph.D. is one of our founders and has served as our Chief Science Officer since April 1998 and as a member of our Board of Directors since December 1995. Dr. Low has served on the faculty at Purdue University since August 1976, where he is currently the Ralph C. Corley Distinguished Professor of Chemistry. Dr. Low holds a B.S. in chemistry from Brigham Young University and a Ph.D. in biochemistry from the University of California, San Diego.

Christopher P. Leamon, Ph.D. has served as our Vice President of Research since April 2000. From February 1999 to April 2000, Dr. Leamon served as our Director of Biology and Biochemistry. Prior to joining us, Dr. Leamon was employed in the pharmaceutical industry where he conducted discovery research in the field of peptide, oligonucleotide, liposome and DNA drug delivery for GlaxoWellcome, a healthcare company, in December 2000, and Isis Pharmaceuticals, a biomedical pharmaceutical company. Dr. Leamon holds a B.S. in chemistry from Baldwin Wallace College and a Ph.D. in biochemistry from Purdue University.

Chandra D. Lovejoy has served as our Vice President of Regulatory Affairs since May 2010. From December 2007 to May 2010, Ms. Lovejoy served as our Director of Regulatory Affairs. Ms. Lovejoy served in various positions at Genentech, a biotechnology company and an indirectly wholly owned subsidiary of Roche Holdings, a healthcare company, including Manager of Regulatory Affairs from October 2006 to November 2007 and as a Senior Associate of Regulatory Affairs from April 2005 to October 2006. Ms. Lovejoy holds a B.S. in organizational behavior from the University of San Francisco and a certification in regulatory affairs from San Diego State University.

Richard A. Messmann, M.D. has served as our Vice President of Medical Affairs since July 2005. From July 2003 to July 2005, Dr. Messmann served as Director of Cancer Research for the Great Lakes Cancer Institute, a joint venture between Michigan State University and McLaren Health Care. Dr. Messmann holds a B.S. in electrical and computer engineering from Oakland University, an M.H.S. in clinical research from Duke University, and an M.S. in biochemistry and an M.D. from Wayne State University.

Allen R. Ritter, Ph.D. has served as our Vice President of Manufacturing and Chemistry Manufacturing Control, or CMC, since December 2005. From May 2004 to December 2005, Dr. Ritter served as our Director of

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Development, CMC and Manufacturing. Dr. Ritter holds a B.S. in chemistry from St. Olaf College, an M.S. in organic chemistry from the University of Pittsburgh, and a Ph.D. in synthetic organic chemistry from the University of Notre Dame.

Item 1A. *Risk Factors*

Risk factors which could cause actual results to differ from our expectations and which could negatively impact our financial condition and results of operations are discussed below and elsewhere in this report. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that are currently not believed to be significant to our business may also affect our actual results and could harm our business, financial condition and results of operations. If any of the risks or uncertainties described below or any additional risks and uncertainties actually occur, our business, results of operations and financial condition could be materially and adversely affected.

Risks Related to Our Business and Industry

We have incurred significant losses since our inception and anticipate that we will continue to incur losses for the foreseeable future. We may never achieve or sustain profitability.

We are a clinical-stage biopharmaceutical company with a limited operating history. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We are not profitable and have incurred losses in each year since our inception in December 1995. We have not generated any revenue from product sales to date. We continue to incur significant research and development and other expenses related to our ongoing operations. Our net loss for the year ended December 31, 2008, 2009, and 2010 was $18.5 million, $17.0 million and $20.1 million, respectively. As of December 31, 2010, we had a retained deficit of $98.1 million. We expect to continue to incur losses for the foreseeable future, and we expect these losses to increase as we continue our development of, and seek regulatory approvals for, our small molecule drug conjugates, or SMDCs, and companion imaging diagnostics, and begin to commercialize any approved products. As such, we are subject to all the risks incident to the creation of new SMDCs and companion imaging diagnostics, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. If any of our product candidates fail in clinical trials or do not gain regulatory approval, or if any of our approved products fail to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

We are a clinical-stage company with no approved products, which makes it difficult to assess our future viability.

We were incorporated in December 1995, are a clinical-stage company and, as of December 31, 2010, have not derived any revenue from the sales of our products. Our operations to date have been limited to organizing and staffing our company, acquiring, developing and securing our technology, undertaking preclinical studies and clinical trials of our product candidates and engaging in research and development under collaboration agreements. We have not yet demonstrated an ability to obtain regulatory approval, formulate and manufacture commercial-scale products, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, it is difficult to predict our future success and the viability of any commercial programs that we may choose to take forward. From our inception through December 31, 2010, we have derived non-grant related revenues of $11.9 million from payments under collaborative agreements with BMS, and Sanofi-Aventis. We do not expect any further payments under these agreements, neither of which are still in force.

We are highly dependent on the success of our lead SMDC, EC145, and we cannot give any assurance that we will successfully complete its clinical development, or that it will receive regulatory approval or be successfully

commercialized.

Our lead SMDC, EC145, has been evaluated in a randomized phase 2 clinical trial for the treatment of women with platinum-resistant ovarian cancer, or PROC, and we recently completed a phase 2 single-arm clinical trial for advanced non-small cell lung cancer, or NSCLC. Our future trials may not be successful, and EC145 may never

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receive regulatory approval or be successfully commercialized. We may fail to obtain necessary marketing approvals for EC145 from the U.S. Food and Drug Administration, or FDA, or similar non-U.S. regulatory authorities if our clinical development program for EC145 fails to demonstrate that it is safe and effective to the satisfaction of such authorities, or if we have inadequate financial or other resources to advance EC145 through clinical trials. Even if EC145 receives regulatory approval, we may not be successful in marketing it for a number of reasons, including the introduction by our competitors of more clinically-effective or cost-effective alternatives or failure in our sales and marketing efforts. Any failure to obtain approval of EC145 and successfully commercialize it would have a material and adverse impact on our business.

The results of previous clinical trials may not be predictive of future results, and our current and planned clinical trials may not satisfy the requirements of the FDA or other non-U.S. regulatory authorities.

The clinical trials of our product candidates are, and the manufacturing and marketing of any approved products will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test and market our product candidates. Before obtaining regulatory approvals for the commercial sale of any product candidate, we must demonstrate through preclinical testing and clinical trials that the product candidate is safe and effective for use in each indication for which we intend to market such product candidate. This process can take many years and requires the expenditure of substantial financial and human resources and may include post-marketing trials and surveillance. To date, we have not completed any randomized phase 3 clinical trials. We have completed two phase 2 single-arm and one phase 2 randomized clinical trials with EC145 for the treatment of patients with advanced ovarian cancer and NSCLC. We have three other product candidates in phase 1 clinical trials. In addition, we have other product candidates in the discovery and preclinical testing stages.

Positive results from preclinical studies and early clinical trials should not be relied upon as evidence that later-stage or large-scale clinical trials will succeed. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, even after promising results in earlier trials. We will be required to demonstrate with substantial evidence through adequate and well-controlled clinical trials, including our planned phase 3 trial of EC145 for the treatment of women with PROC, that our product candidates are safe and effective for use in the target population before we can seek regulatory approvals for their commercial sale.

Further, our product candidates may not be approved even if they achieve the primary endpoints in phase 3 clinical trials or registration trials. The FDA or other non-U.S. regulatory authorities may disagree with our trial design or our interpretation of data from preclinical studies and clinical trials. For example, while we have discussed with the FDA the design of our initial phase 3 randomized clinical trial for the approval of EC145 to treat women with PROC, we have not sought a Special Protocol Assessment, or SPA, from the FDA for this clinical trial, and therefore do not have the FDA s agreement that the trial design is adequate to support a new drug application, or an NDA, for EC145. Accordingly, it is possible that the FDA will not view this phase 3 trial as adequate support of an NDA, based on the endpoints chosen or other elements of the trial design.

In our end of phase 2 meeting with the FDA related to EC145, the FDA stated that, because of the difficulty in reliably determining cancer progression based on imaging studies in ovarian cancer, its office policy is to require that the primary endpoint for an ovarian cancer registration trial be overall survival, or OS. However, the FDA stated that we may choose, at our own risk, to conduct a phase 3 trial in which progression free survival, or PFS, is the primary endpoint; provided that for such a trial to be the basis for approval, the PFS results must be very robust statistically and clinically meaningful, and the trial must be powered to demonstrate a statistically significant OS benefit. In addition to evaluating PFS in the patient population whose lesions over-expressed the folate receptor, EC20(+) and EC20(++) patients, we also plan to conduct a PFS analysis of the EC20(++) patient subset as part of the PROCEED

clinical trial protocol. Even if our phase 3 trial meets either of its PFS primary endpoints, a positive trend in OS at the time of filing our NDA may be required for approval or the FDA may delay consideration of approval until final OS data becomes available, which would result in significant additional costs and delay our ability to market EC145 for this indication. The FDA also noted that the final OS analysis from our phase 3 trial would be required as a post-marketing commitment should approval be granted based upon PFS. In addition, if the FDA approves EC145 based upon meeting either of our PFS primary endpoints, in certain circumstances the

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approval could be withdrawn if any required post-marketing trials or analyses do not meet FDA requirements. Furthermore, as is typical for cancer drug approvals, the FDA stated that for the initial approval of EC145 to be based on a single phase 3 clinical trial, the trial must provide evidence of persuasive and robust statistically significant clinical benefit such that it would be considered unethical to conduct another trial. If we fail to demonstrate a benefit of this magnitude in our planned phase 3 trial, we would expect that the FDA would require us to conduct a second phase 3 trial in order to receive marketing approval of EC145 for the treatment of PROC. Such a requirement would result in significant additional cost and would delay our ability to market EC145 for this indication.

Patients in our initial phase 3 trial will be imaged with our companion imaging diagnostic, EC20, prior to treatment with EC145. Although EC20 is part of our phase 3 trial design, there can be no assurance that this trial will provide a sufficient basis for approval of an NDA for EC20. Similarly, we can provide no assurance to you that EC145 will be approved without EC20 approval. In addition, although we expect to exclude EC20(-) patients from our PROCEED trial, there can be no assurance that the FDA will not require us to include these patients in the trial.

The FDA, and other regulatory authorities, may change requirements for the approval of our product candidates even after reviewing and providing non-binding comment on a protocol for a pivotal phase 3 clinical trial that has the potential to result in FDA approval. In addition, regulatory authorities may also approve any of our product candidates for fewer or more limited indications than we request, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

There is a high risk that our development and clinical activities will not result in commercial products, and we will have invested in our current development and clinical programs, to the exclusion of others, for several more years before it is known whether one or more of our product candidates will receive regulatory approval or be commercially introduced.

Our product candidates are in various stages of development and are prone to the risks of failure inherent in biopharmaceutical development. We will need to complete significant additional clinical trials before we can demonstrate that our product candidates are safe and effective to the satisfaction of the FDA and other non-U.S. regulatory authorities. Clinical trials are expensive and uncertain processes that take years to complete. Failure can occur at any stage of the process. Further, even if our product candidates receive required regulatory approvals, we cannot assure you that they will be successful commercially. In addition, we have a large number of product candidates in our development pipeline, and while we invest in the technology and indications that we believe are most promising, financial and resource constraints may require us to forego or delay opportunities that may ultimately have greater commercial potential than those programs we are currently actively developing.

The coverage and reimbursement status of newly approved biopharmaceuticals is uncertain, and failure to obtain adequate coverage and adequate reimbursement of EC145 or other product candidates could limit our ability to generate revenue.

There is significant uncertainty related to the third-party coverage and reimbursement of newly approved drugs. The commercial success of our product candidates, including EC145, in both domestic and international markets will depend in part on the availability of coverage and adequate reimbursement from third-party payors, including government payors, such as the Medicare and Medicaid programs, and managed care organizations. Government and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for new drugs and, as a result, they may not cover or provide adequate payment for our product candidates. These payors may conclude that our product candidates are less safe, less effective or less cost-effective than existing or later introduced products, and third-party payors may not approve our product candidates for coverage

and reimbursement or may cease providing coverage and reimbursement for these product candidates. Because each country has one or more payment systems, obtaining reimbursement in the United States and internationally may take significant time and cause us to spend significant resources. The failure to obtain coverage and adequate reimbursement for our product candidates or healthcare cost containment initiatives that limit or deny reimbursement for our product candidates may significantly reduce any future product revenue.

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In the United States and in other countries, there have been and we expect there will continue to be a number of legislative and regulatory proposals to change the healthcare system in ways that could significantly affect our business. International, federal and state lawmakers regularly propose and, at times, enact legislation that would result in significant changes to the healthcare system, some of which are intended to contain or reduce the costs of medical products and services. The U.S. government and other governments have shown significant interest in pursuing healthcare reform, as evidenced by the recent passing of the Patient Protection and Affordable Care Act and its amendment, the Health Care and Education Reconciliation Act. Such government-adopted reform measures may adversely impact the pricing of healthcare products and services in the United States or internationally and the amount of reimbursement available from governmental agencies or other third-party payors. In addition, in some foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. The continuing efforts of U.S. and other governments, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce healthcare costs may adversely affect our ability to set prices for our products, which we believe are fair, and our ability to generate revenues and achieve and maintain profitability.

In some countries, particularly in the European Union, prescription drug pricing is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product candidate. To obtain reimbursement or pricing approval in some countries, we may be required to conduct additional clinical trials that compare the cost-effectiveness of our product candidates to other available therapies. If reimbursement of our product candidates is unavailable or limited in scope or amount in a particular country, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability of our products in such country.

Our development activities could be delayed or stopped for a number of reasons, many of which are outside our control, including failure to recruit and enroll patients for clinical trials.

Each of our clinical trials requires the investment of substantial expense and time and the timing of the commencement, continuation and completion of these clinical trials may be subject to significant delays relating to various causes. We do not know whether our current clinical trials will be completed on schedule, or at all, and we cannot guarantee that our future planned clinical trials will begin on time, or at all. Clinical trials must be conducted in accordance with FDA or other applicable foreign government guidelines and are subject to oversight by the FDA, other foreign governmental agencies and independent institutional review boards, or IRBs, at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with supplies of our product candidates produced under current Good Manufacturing Practice, or cGMP, and other requirements in foreign countries, and may require large numbers of test patients. Our current and planned clinical trials could be substantially delayed or prevented by several factors, including:

- limited number of, and competition for, suitable sites to conduct our clinical trials;
- government or regulatory delays and changes in regulatory requirements, policy and guidelines;
- delay or failure to obtain sufficient supplies of the product candidate for our clinical trials as a result of non-compliance of current cGMP, of our suppliers or for other reasons;
- delay or failure to reach agreement on acceptable clinical trial agreement terms with prospective sites or investigators; and
- delay or failure to obtain IRB, approval to conduct a clinical trial at a prospective site.

The completion of our clinical trials could also be substantially delayed or prevented by several factors, including:

- slower than expected rates of patient recruitment and enrollment;
- unforeseen safety issues;
- lack of efficacy evidenced during clinical trials, which risk may be heightened given the advanced state of disease and lack of response to prior therapies of patients in our clinical trial for EC145 in PROC;

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termination of our clinical trials by an IRB at one or more clinical trial sites;

inability or unwillingness of patients or medical investigators to follow our clinical trial protocols; and

inability to monitor patients adequately during or after treatment or high patient dropout rates.

For example, we have in the past experienced slower than expected rates of patient recruitment and enrollment with our PRECEDENT trial due to a number of reasons, including slower than expected clinical trial site activations due to prolonged contract negotiations and delays in scheduling or approval by IRBs, lack of qualified patients at a particular site, competition with other clinical trials for patients, and clinical investigator scheduling and availability due to vacations or absences.

Our clinical trials may be suspended or terminated at any time by the FDA, other regulatory authorities or us. For example, a Data Safety Monitoring Board, or DSMB, will monitor PROCEED and could recommend closing the trial based on the results of a pre-specified interim futility analysis or any observed unexpected safety concern that may occur during the trial. Failure or significant delay in completing clinical trials for our product candidates could materially harm our financial results and the commercial prospects for our product candidates.

Even if we are able to obtain regulatory approval of EC145 based on our initial phase 3 clinical trial, marketing will be limited to our intended indication of PROC and not ovarian cancer generally, or any other type of cancer.

Even if we are able to obtain regulatory approval of EC145 based on our initial phase 3 clinical trial, PROCEED, and formulate and manufacture a commercial-scale product, our marketing of EC145 will be limited to our initial intended indication of PROC and not ovarian cancer generally, or any other type of cancer. According to the American Cancer Society, approximately 21,500 new cases of ovarian cancer were reported in the United States in 2009. Of those ovarian cancer cases, approximately 50 percent of patients will eventually develop PROC. Marketing of EC145, if approved for our intended indication, will be limited to those women with ovarian cancer who demonstrate a resistance to platinum-based therapies and who are EC20(+) or EC20(++). The intended indication for use may be further limited to only patients who are EC20(++). Marketing efforts for EC145 outside of our approved indication of PROC will require additional regulatory approvals, which we may never pursue or receive.

Our product candidates may cause undesirable side effects that could delay or prevent their regulatory approval or commercialization.

Common side effects of EC145 include abdominal pain, vomiting, constipation, nausea, fatigue, loss of appetite and peripheral sensory neuropathy. Because our products have been tested in relatively small patient populations and for limited durations to date, additional side effects may be observed as their development progresses.

Undesirable side effects caused by any of our product candidates could cause us or regulatory authorities to interrupt, delay or discontinue clinical trials and could result in the denial of regulatory approval by the FDA or other non-U.S. regulatory authorities for any or all targeted indications. This, in turn, could prevent us from commercializing our product candidates and generating revenues from their sale. In addition, if one of our products receives marketing approval and we or others later identify undesirable side effects caused by this product:

regulatory authorities may withdraw their approval of this product;

we may be required to recall this product, change the way this product is administered, conduct additional clinical trials or change the labeling of this product;

this product may be rendered less competitive and sales may decrease; or

our reputation may suffer generally both among clinicians and patients.

Any one or a combination of these events could prevent us from achieving or maintaining market acceptance of the affected product or could substantially increase the costs and expenses of commercializing the product, which in turn could delay or prevent us from generating significant revenues from the sale of the product.

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We may not obtain government regulatory approval to market our product candidates or negotiate satisfactory pricing for our product candidates which could adversely impact our future profitability.

We intend to seek approval to market certain of our product candidates in both the United States and in non-U.S. jurisdictions. Prior to commercialization, each product candidate will be subject to an extensive and lengthy governmental regulatory approval process in the United States and in other countries. In order to market our products in the European Union and many other non-U.S. jurisdictions, we must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. To date, we have not filed for marketing approval for any of our product candidates in the U.S. or in any other jurisdictions and may not receive the approvals necessary to commercialize our product candidates in any market. We may not be able to obtain regulatory approval for any product candidates, or even if approval is obtained, the labeling for such products may place restrictions on their use that could materially impact the marketability and profitability of the product subject to such restrictions. Satisfaction of these regulatory requirements, which includes satisfying the FDA and foreign regulatory authorities that the product is both safe and effective for its intended uses, typically takes several years or more depending upon the type, complexity, novelty and safety profile of the product and requires the expenditure of substantial resources. Uncertainty with respect to meeting the regulatory requirements governing our product candidates may result in excessive costs or extensive delays in the regulatory approval process, adding to the already lengthy review process.

Also, the approval procedure varies among countries and can involve additional testing and data review. The time and safety and efficacy data required to obtain foreign regulatory approval may differ from that required to obtain FDA approval. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory agencies in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory agencies in other countries or by the FDA. However, a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in other jurisdictions, including approval by the FDA. The failure to obtain regulatory approval in any jurisdiction could materially harm our business.

We may require substantial additional funding which may not be available to us on acceptable terms, or at all.

We are advancing multiple product candidates through clinical development. We believe that our current cash position, including cash equivalents and short term investments is expected to be sufficient to fund the operations, including PROCEED, the phase 3 clinical trial of EC145 and EC20, through the availability of final primary PFS data from that study, which is anticipated to be in the second quarter of 2013. We may require additional funding through either collaboration arrangements, borrowings or sales of additional securities to commercialize any of our SMDCs or companion imaging diagnostics. In addition, if the FDA requires us to undertake a second phase 3 clinical trial or obtain final OS data from PROCEED we will also require additional funding.

Our future funding requirements will depend on many factors, including but not limited to:

- our need to expand our research and development activities;
- the rate of progress and cost of our clinical trials and the need to conduct clinical trials beyond those planned;
- the costs associated with establishing a sales force and commercialization capabilities;
- the costs of acquiring, licensing or investing in businesses, product candidates and technologies;
- the costs and timing of seeking and obtaining approval from the FDA and non-U.S. regulatory authorities;

our ability to maintain, defend and expand the scope of our intellectual property portfolio;

our need and ability to hire additional management and scientific and medical personnel;

the effect of competing technological and market developments;

our need to implement additional internal systems and infrastructure, including financial and reporting systems appropriate for a public company; and

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the economic and other terms and timing of collaboration, licensing or other arrangements into which we may enter.

Until we can generate a sufficient amount of revenue to finance our cash requirements, which we may never do, we expect to finance future cash needs primarily through public or private equity financings, debt financings or strategic collaborations. We do not know whether additional funding will be available on acceptable terms, or at all. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of or eliminate one or more of our clinical trials or research and development programs, or enter into collaboration or other arrangements with other companies to provide such funding for one or more of such clinical trials or programs in exchange for our affording such partner commercialization or other rights to the product candidates that are the subject of such clinical trials or programs.

In addition, our operating plan may change as a result of many factors currently unknown to us, and we may need additional funds sooner than planned. Also, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Raising additional capital may cause dilution to existing stockholders, restrict our operations or require us to relinquish rights.

We may seek the additional capital necessary to fund our operations through public or private equity financings, debt financings, and collaborative and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted and the terms may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures, or declaring dividends, or which impose financial covenants on us that limit our operating flexibility to achieve our business objectives. If we raise additional funds through collaboration and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us. In addition, we cannot assure you that additional funds will be available to us on favorable terms or at all.

If our competitors develop and market products that are more effective, safer or less expensive than our product candidates, our commercial opportunities will be negatively impacted.

The life sciences industry is highly competitive, and we face significant competition from many pharmaceutical, biopharmaceutical and biotechnology companies that are researching and marketing products designed to address various types of cancer and other indications we treat or may treat in the future. We are currently developing cancer therapeutics that will compete with other drugs and therapies that currently exist or are being developed. Also, our lead SMDC, EC145, is being clinically developed not as a primary therapy but as a therapy for patients whose tumors have developed resistance to chemotherapy, which limits its potential addressable market. Products we may develop in the future are also likely to face competition from other drugs and therapies. Many of our competitors have significantly greater financial, manufacturing, marketing and drug development resources than we do. Large biopharmaceutical companies, in particular, have extensive experience in clinical testing and in obtaining regulatory approvals for drugs. Additional mergers and acquisitions in the biopharmaceutical industry may result in even more resources being concentrated by our competition. Competition may increase further as a result of advances in the commercial applicability of technologies currently being developed and a greater availability of capital investment in those fields. These companies also have significantly greater research and marketing capabilities than we do. Some of the companies developing products which may compete with EC145 include Roche Holdings, Eisai Company, Nektar Therapeutics, Sunesis Pharmaceuticals, Eli Lilly and Sanofi-Aventis. In addition, many universities and U.S. private

and public research institutes are active in cancer research, the results of which may result in direct competition with EC145 or other of our product candidates.

In certain instances, the drugs which will compete with our product candidates are widely available or established, existing standards of care. To compete effectively with these drugs, our product candidates will need to demonstrate advantages that lead to improved clinical safety or efficacy compared to these competitive products. We cannot assure you that we will be able to achieve competitive advantages versus alternative drugs or therapies. If

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our competitors market products that are more effective, safer or less expensive than our product candidates, if any, or that reach the market sooner than our product candidates, if any, we may not achieve commercial success.

We believe that our ability to successfully compete will depend on, among other things:

- our ability to design and successfully execute appropriate clinical trials;
- our ability to recruit and enroll patients for our clinical trials;
- the results of our clinical trials and the efficacy and safety of our product candidates;
- the speed at which we develop our product candidates;
- achieving and maintaining compliance with regulatory requirements applicable to our business;
- the timing and scope of regulatory approvals, including labeling;
- adequate levels of reimbursement under private and governmental health insurance plans, including Medicare;
- our ability to protect intellectual property rights related to our product candidates;
- our ability to commercialize and market any of our product candidates that may receive regulatory approval;
- our ability to have our partners manufacture and sell commercial quantities of any approved product candidates to the market;
- acceptance of our product candidates by physicians, other healthcare providers and patients; and
- the cost of treatment in relation to alternative therapies.

In addition, the biopharmaceutical industry is characterized by rapid technological change. Our future will depend in large part on our ability to maintain a competitive position with respect to these technologies. Our competitors may render our technologies obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies. Also, because our research approach integrates many technologies, it may be difficult for us to stay abreast of the rapid changes in each technology. If we fail to stay at the forefront of technological change, we may be unable to compete effectively.

If we fail to attract and retain key management and scientific personnel, we may be unable to successfully develop or commercialize our product candidates.

Our success as a specialized scientific business depends on our continued ability to attract, retain and motivate highly qualified management and scientific and clinical personnel. The loss of the services of any of our senior management could delay or prevent the commercialization of our product candidates.

We may not be able to attract or retain qualified management and scientific personnel in the future due to the intense competition for a limited number of qualified personnel among biopharmaceutical, biotechnology, pharmaceutical and other businesses, particularly in Indiana. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that will impede the achievement of our research and

development objectives, our ability to raise additional capital and our ability to implement our business strategy

As we evolve from a company primarily involved in clinical development to a company also involved in commercialization, we may encounter difficulties in managing our growth and expanding our operations successfully.

As we advance our product candidates through clinical trials, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with such third parties, as well as additional collaborators and suppliers. Maintaining these relationships and

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managing our future growth will impose significant added responsibilities on members of our management and other personnel. We must be able to: manage our development efforts effectively; manage our clinical trials effectively; hire, train and integrate additional management, development, administrative and sales and marketing personnel; improve our managerial, development, operational and finance systems; and expand our facilities, all of which may impose a strain on our administrative and operational infrastructure.

If we are unable to establish sales, marketing and distribution capabilities or to enter into agreements with third parties to do so, we may be unable to successfully market and sell any products, even if we are able to obtain regulatory approval.

We currently have no marketing, sales or distribution capabilities. If our product candidates receive regulatory approval, we intend to establish our sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize our product candidates, which will be expensive and time consuming. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. With respect to our product candidates, we may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. To the extent that we enter into co-promotion or other licensing arrangements, our product revenue is likely to be lower than if we directly marketed or sold our products. In addition, any revenue we receive will depend in whole or in part upon the efforts of such third parties, which may not be successful and are generally not within our control. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval. If we are not successful in commercializing our product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

If we do not establish development or commercialization collaborations, we may have to alter our development and marketing plans.

Our development programs and potential commercialization of our product candidates will require substantial additional cash to fund expenses. Our strategy includes potentially selectively collaborating with leading biopharmaceutical, pharmaceutical and biotechnology companies to assist us in furthering development and potential commercialization of some of our product candidates in the United States or internationally. Although we are not currently party to any collaboration agreements, we may enter into collaborations in the future, especially for target indications in which the potential collaborator has particular therapeutic expertise or for markets outside of the United States. We face significant competition in seeking appropriate collaborators and these collaborations are complex and time-consuming to negotiate and document. We may not be able to negotiate collaborations on acceptable terms, or at all. If that were to occur, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization, reduce the scope of our sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms, or at all. If we do not have sufficient funds, we will not be able to bring our product candidates to market and generate product revenue. In addition, even if we do enter into one or more development or commercialization arrangements, we cannot assure you that the objectives of such arrangements will be realized or that the arrangement will not be terminated or expire. For example, we previously entered into an exclusive license agreement with BMS in a collaboration to develop and commercialize folate conjugates, which was terminated in June 2010, we believe as a result of a change in its strategic focus.

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We rely on third parties to conduct clinical trials for our product candidates and plan to rely on third parties to conduct future clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, it may cause delays in commencing and completing clinical trials of our product candidates or we may be unable to obtain regulatory approval for or commercialize our product candidates.

Clinical trials must meet applicable FDA and foreign regulatory requirements. We do not have the ability to independently conduct phase 2 or phase 3 clinical trials for any of our product candidates. We rely on third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories, to conduct all of our clinical trials of our product candidates; however, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with its investigational plan and protocol. Moreover, the FDA and other non-U.S. regulatory authorities require us to comply with regulations and standards, commonly referred to as Good Clinical Practices for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials. Our reliance on third parties does not relieve us of these responsibilities and requirements.

We or the third parties we rely on may encounter problems in clinical trials that may cause us or the FDA or foreign regulatory agencies to delay, suspend or terminate our clinical trials at any phase. These problems could include the possibility that we may not be able to manufacture sufficient quantities of materials for use in our clinical trials, conduct clinical trials at our preferred sites, enroll a sufficient number of patients for our clinical trials at one or more sites, or begin or successfully complete clinical trials in a timely fashion, if at all. Furthermore, we, the FDA or foreign regulatory agencies may suspend clinical trials of our product candidates at any time if we or they believe the subjects participating in the trials are being exposed to unacceptable health risks, whether as a result of adverse events occurring in our trials or otherwise, or if we or they find deficiencies in the clinical trial process or conduct of the investigation.

The FDA and foreign regulatory agencies could also require additional clinical trials before or after granting of marketing approval for any products, which would result in increased costs and significant delays in the development and commercialization of such products and could result in the withdrawal of such products from the market after obtaining marketing approval. Our failure to adequately demonstrate the safety and efficacy of a product candidate in clinical development could delay or prevent obtaining marketing approval of the product candidate and, after obtaining marketing approval, data from post-approval studies could result in the product being withdrawn from the market, either of which would likely have a material adverse effect on our business.

We rely on third parties to manufacture and supply our product candidates.

We do not currently own or operate manufacturing facilities for clinical or commercial production of our product candidates. We lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. We rely on four third-party suppliers to make the key components of EC145. The linker system for EC145 is currently obtained from a single source supplier and we are currently assessing alternate suppliers to prevent a possible disruption of manufacturing EC145. We believe that we currently have, or have the ability to access, sufficient supplies of all of the other key components of EC145 in sufficient quantities to conduct and complete our PROCEED clinical trial; however, there is only one manufacturer we are aware of that has the capacity to manufacture EC145 in the quantities that our development and future commercialization efforts, if any, may require. If this manufacturer was unable to produce EC145 in the amounts that we require, we may not be able to obtain a sufficient alternative supply from another supplier on a timely basis and in the quantities we require and as a result, PROCEED, our other clinical trials or our commercialization plans may be significantly impaired. We do not have any long-term supply arrangements with any of these third parties and obtain our raw materials on a purchase order-basis. We expect to continue to depend on third-party contract manufacturers for the foreseeable future.

If for some reason our contract manufacturers cannot perform as agreed, we may be unable to replace them in a timely manner and the production of our product candidates would be interrupted, resulting in delays in clinical trials and additional costs. For example, we are currently obtaining clinical trial quantities of EC145 and our other

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product candidates from our contract manufacturers. We have no experience with managing the manufacturing of commercial quantities of any of our product candidates and scaling-up production to commercial quantities could take us significant time and result in significant costs, both of which could delay commercialization of EC145 for PROC or any other indication or of any of our other SMDCs. Switching manufacturers may be difficult because the number of potential manufacturers is limited and the FDA must approve any replacement manufacturer prior to manufacturing our product candidates. Such approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our product candidates after receipt of FDA approval to manufacture any of our product candidates. It may be difficult or impossible for us to find a replacement manufacturer on acceptable terms quickly, or at all.

To date, our product candidates have been manufactured in small quantities for preclinical studies and clinical trials by third-party manufacturers. If the FDA or other regulatory agencies approve any of our product candidates for commercial sale, we expect that we would continue to rely, at least initially, on third-party manufacturers to produce commercial quantities of our approved product candidates, as is the case with EC145. These manufacturers may not be able to successfully increase the manufacturing capacity for any of our approved product candidates in a timely or economic manner, or at all. Significant scale-up of manufacturing may require additional validation studies, which the FDA must review and approve. Additionally, any third-party manufacturer we retain to manufacture our product candidates on a commercial scale must pass an FDA pre-approval inspection for conformance to the cGMPs before we can obtain approval of our product candidates. If we are unable to successfully increase the manufacturing capacity for a product candidate in conformance with cGMPs, the regulatory approval or commercial launch of such products may be delayed or there may be a shortage in supply.

Our product candidates require precise, high quality manufacturing. Failure by our contract manufacturers to achieve and maintain high manufacturing standards could result in patient injury or death, product recalls or withdrawals, delays or failures in testing or delivery, cost overruns, or other problems that could seriously harm our business. Contract manufacturers may encounter difficulties involving production yields, quality control and quality assurance. These manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state and non-U.S. authorities to ensure strict compliance with cGMP and other applicable government regulations and corresponding foreign standards; however, we do not have control over third-party manufacturers compliance with these regulations and standards.

We are subject to risks associated with the availability of key raw materials such as technetium-99m.

Our EC20 companion imaging diagnostic requires the use of the radioisotope technetium-99m, or Tc-99m, and there is currently a limited supply of Tc-99m worldwide. Tc-99m for nuclear medicine purposes is usually extracted from Tc-99m generators, which contain molybdenum-99, or Mo-99, as the usual parent nuclide for Tc-99m. The majority of Mo-99 produced for Tc-99m medical use comes from fission of highly enriched uranium from only five reactors around the world located in Canada, Belgium, South Africa, the Netherlands and France. Although Tc-99m is used in various nuclear medicine diagnostics utilized by healthcare providers, Tc-99m has a very short half-life (6 hours). As a result, healthcare providers extract Tc-99m from generators which use Mo-99. Mo-99 itself has a short half-life (2.75 days) and is sent to the nuclear medicine pharmacy directly from one of the five reactors. Accordingly, Tc-99m diagnostics are made on-site at the clinic, and neither Tc-99m nor Mo-99 can be inventoried. Sources of Tc-99m may be insufficient for our clinical trial site needs due to its limited supply globally. For example, global shortages of Tc-99m emerged in the past few years because aging nuclear reactors in the Netherlands and Canada that provided about two-thirds of the world s supply of Mo-99 were shut down repeatedly for extended maintenance periods and two replacement Canadian reactors constructed in the 1990s were closed before beginning operation for safety reasons.

We use, and plan to continue to use, EC20 or other companion imaging diagnostics that employ Tc-99m in our clinical trials. For example, EC20 is a component of PROCEED and, in the future, if our clinical trial sites are not able

to obtain sufficient quantities of Tc-99m for use in EC20, we may not be able to gather sufficient data on EC20 during PROCEED and as a result, the approval of EC20 may be delayed. In addition, to the extent the approval of our product candidates depends on the screening and monitoring of the patient population with a companion imaging diagnostic such as EC20 in our clinical trials, we would experience a corresponding delay in approval and commercialization of these SMDCs if we are not able to obtain sufficient Tc-99m.

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If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, we could be forced to pay substantial damage awards.

The use of any of our product candidates in clinical trials, and the sale of any approved products, may expose us to product liability claims. We currently maintain product liability insurance coverage in an amount which we believe is adequate for our clinical trials currently in progress and those recently completed. We monitor the amount of coverage we maintain as the size and design of our clinical trials evolve and intend to adjust the amount of coverage we maintain accordingly. However, we cannot assure you that such insurance coverage will fully protect us against some or all of the claims to which we might become subject. We might not be able to maintain adequate insurance coverage at a reasonable cost or in sufficient amounts or scope to protect us against potential losses. In the event a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct financial and managerial resources to such defense and adverse publicity could result, all of which could harm our business.

Each of our product candidates will remain subject to ongoing regulatory review even if it receives marketing approval. If we or our contractors fail to comply with continuing regulations, we or they may be subject to enforcement action that could adversely affect us.

We and our contractors will continue to be subject to pervasive regulation by the FDA and other regulatory authorities even after our product candidates become approved products. We and our contractors will continue to be subject to FDA requirements governing among other things the manufacture, packaging, sale, promotion adverse event reporting, storage and recordkeeping of our approved products. Although we have not received any notice that we are the subject of any FDA enforcement action, it is possible that we may be in the future and that could have a material adverse effect on our business. We may be slow to adapt, or may never adapt, to changes in existing regulatory requirements or adoption of new regulatory requirements. If we or any of our contractors fail to comply with the requirements of the FDA and other applicable U.S. or foreign governmental or regulatory authorities or previously unknown problems with our products, manufacturers or manufacturing processes are discovered, we or the collaborator could be subject to administrative or judicially imposed sanctions, including: restrictions on the products, the manufacturers or manufacturing processes we use, warning letters, civil or criminal penalties, fines, injunctions, product seizures or detentions, import bans, voluntary or mandatory product recalls and publicity requirements, suspension or withdrawal of regulatory approvals, total or partial suspension of production, and refusal to approve pending applications for marketing approval of new products to approved applications.

We deal with hazardous materials and must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our activities involve the controlled storage, use, and disposal of hazardous materials, including corrosive, explosive and flammable chemicals, biologic waste and various radioactive compounds. We are subject to federal, state, and local laws and regulations governing the use, manufacture, storage, handling, and disposal of these hazardous materials. Although we believe that our safety procedures for the handling and disposing of these materials comply with the standards prescribed by these laws and regulations, we cannot eliminate the risk of accidental contamination or injury from these materials.

In the event of an accident, state or federal authorities may curtail our use of these materials, and we could be liable for any civil damages, which may exceed our financial resources and may seriously harm our business. We currently maintain insurance covering hazardous waste clean up costs in an amount we believe to be sufficient for typical risks regarding our handling of these materials, however, this amount of coverage may not be sufficient to cover extraordinary or unanticipated events. Additionally, an accident could damage, or force us to temporarily shut down,

our operations.

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Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2010, we had federal net operating loss carryforwards, or NOLs, of $95.2 million to offset future taxable income, which expire in various years beginning in 2022, if not utilized. A lack of future taxable income would adversely affect our ability to utilize these NOLs. In addition, under Section 382 of the U.S. Internal Revenue Code, or Code, a corporation that experiences a more-than 50 percent ownership change over a three-year testing period is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. In connection with our recently completed initial public offering, we are evaluating whether an ownership change has occurred which could limit our ability to utilize NOLs in accordance with Section 382 of the Code. Future changes in our stock ownership, many of the causes of which are outside of our control, could result in an ownership change under Section 382 of the Code. Our NOLs may also be impaired under state law. As a result of these limitations, we may not be able to utilize a material portion of the NOLs.

Risks Related to Intellectual Property

Our proprietary rights may not adequately protect our technologies and product candidates.

Our commercial success will depend in part on our ability to obtain additional patents and protect our existing patent position as well as our ability to maintain adequate protection of other intellectual property for our technologies, product candidates, and any future products in the United States and other countries. If we do not adequately protect our intellectual property, competitors may be able to use our technologies and erode or negate any competitive advantage we may have, which could harm our business and ability to achieve profitability. The laws of some foreign countries do not protect our proprietary rights to the same extent or in the same manner as U.S. laws, and we may encounter significant problems in protecting and defending our proprietary rights in these countries. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies, product candidates and any future products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

We apply for patents covering both our technologies and product candidates, as we deem appropriate. However, we may fail to apply for patents on important technologies or product candidates in a timely fashion, or at all. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products and technologies. We cannot be certain that our patent applications will be approved or that any patents issued will adequately protect our intellectual property. For example, our issued patents do not claim composition of matter protection for the drug payloads connected to the linker system and targeting ligand modules of our SMDCs. In addition, we generally do not control the patent prosecution of subject matter that we license from others, including those licensed from Purdue Research Foundation, a non-profit organization which manages the intellectual property of Purdue University. Accordingly, we are unable to exercise the same degree of control over this intellectual property as we would over our own and would need to involve Purdue Research Foundation in legal proceedings to enforce these intellectual property rights. Moreover, the patent positions of biopharmaceutical companies are highly uncertain and involve complex legal and factual questions for which important legal principles are often evolving and remain unresolved. As a result, the validity and enforceability of patents cannot be predicted with certainty. In addition, we do not know whether:

- we or our licensors were the first to make the inventions covered by each of our issued patents and pending patent applications;
- we or our licensors were the first to file patent applications for these inventions;
- any of our product candidates will be Orange Book eligible;

others will independently develop similar or alternative technologies or duplicate any of our technologies;

any of our or our licensors pending patent applications will result in issued patents;

any of our or our licensors patents will be valid or enforceable;

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any patents issued to us or our licensors and collaboration partners will provide us with any competitive advantages, or will be challenged by third parties;

we will develop additional proprietary technologies that are patentable;

the U.S. government will exercise any of its statutory rights to our intellectual property that was developed with government funding; or

our business may infringe the patents or other proprietary rights of others.

The actual protection afforded by a patent varies based on products or processes, from country to country and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory related extensions, the availability of legal remedies in a particular country, the validity and enforceability of the patents and our financial ability to enforce our patents and other intellectual property. Our ability to maintain and solidify our proprietary position for our products will depend on our success in obtaining effective claims and enforcing those claims once granted. Our issued patents and those that may issue in the future, or those licensed to us, may be challenged, narrowed, invalidated or circumvented, and the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar products. Due to the extensive amount of time required for the development, testing and regulatory review of a potential product, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent.

We also rely on trade secrets to protect some of our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to maintain. While we use reasonable efforts to protect our trade secrets, our or any of our collaboration partners employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our proprietary information to competitors and we may not have adequate remedies in respect of that disclosure. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, non-U.S. courts are sometimes less willing than U.S. courts to protect trade secrets. If our competitors independently develop equivalent knowledge, methods and know-how, we would not be able to assert our trade secrets against them and our business could be harmed.

The intellectual property protection for our product candidates is dependent on third parties.

With respect to patent applications relating to our product candidates that incorporate patents licensed from Purdue Research Foundation, the right and obligation to prosecute and maintain the patents and patent applications covered by these license agreements are retained by Purdue Research Foundation. Generally, we do not have the right to prosecute and maintain such patents in our territories, unless Purdue Research Foundation elects not to file, prosecute or maintain any or all of such patents. We would need to determine, with our other potential partners, who would be responsible for the prosecution of patents relating to any joint inventions. If any of our licensing partners fail to appropriately prosecute and maintain patent protection for any of our product candidates, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products.

If we breach any of the agreements under which we license commercialization rights to our product candidates or technology from third parties, we could lose license rights that are important to our business.

We license the use, development and commercialization rights for some of our product candidates, and we expect to enter into similar licenses in the future. For example, we licensed exclusive worldwide rights from Purdue Research Foundation, pursuant to a license agreement, which enables us to use and administer EC145 in the treatment of cancer. Under this license we are subject to commercialization and development, diligence obligations, sublicense revenue sharing requirements, royalty payments and other obligations. If we fail to comply with any of these obligations or otherwise breach this license agreement or any other current or future licenses, our licensing partners may have the right to terminate the license in whole or in part or to terminate the exclusive nature of the license. Generally, the loss of any of current or future licenses or the exclusivity rights provided therein could materially harm our financial condition and operating results.

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The patent protection for our product candidates may expire before we are able to maximize their commercial value, which may subject us to increased competition and reduce or eliminate our opportunity to generate product revenue.

The patents for our product candidates have varying expiration dates and, if these patents expire, we may be subject to increased competition and we may not be able to recover our development costs or market any of our approved products profitably. For example, one of our U.S. patents claims compounds encompassing EC145 and is due to expire in 2026, and our other U.S. patents claim compounds encompassing EC20 and are due to expire in 2024. In some of the larger potential market territories, such as the United States and Europe, patent term extension or restoration may be available to compensate for time taken during aspects of the product s development and regulatory review. However, we cannot be certain that such an extension will be granted, or if granted, what the applicable time period or the scope of patent protection afforded during any extension period will be. In addition, even though some regulatory authorities may provide some other exclusivity for a product under their own laws and regulations, we may not be able to qualify the product or obtain the exclusive time period. If we are unable to obtain patent term extension/restoration or some other exclusivity, we could be subject to increased competition and our opportunity to establish or maintain product revenue could be substantially reduced or eliminated. Furthermore, we may not have sufficient time to recover our development costs prior to the expiration of our U.S. and non-U.S. patents.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on all of our product candidates throughout the world would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

If we are sued for infringing intellectual property rights of third parties, litigation will be costly and time-consuming and could prevent us from developing or commercializing our product candidates.

Our commercial success depends, in part, on our not infringing the patents and proprietary rights of other parties and not breaching any collaboration or other agreements we have entered into with regard to our technologies and product candidates. Numerous third-party U.S. and non-U.S. issued patents and pending applications exist in the areas of targeted therapy and targeted diagnostics, including cytotoxic agents and other active compounds and formulations comprising such compounds.

Because patent applications can take several years to issue, if they are issued at all, there may currently be pending applications, unknown to us, that may result in issued patents that cover our technologies or product candidates. It is uncertain whether the issuance of any third-party patent would require us to alter our products or processes, obtain licenses or cease activities related to the development or commercialization of our product candidates. If we wish to use the technology or compound claimed in issued and unexpired patents owned by others, we may need to obtain a license from the owner, enter into litigation to challenge the validity of the patents or incur the risk of litigation in the

event that the owner asserts that any of our product candidates infringe its patents. The failure to obtain a license to technology or the failure to challenge an issued patent that we may require to discover, develop or commercialize our products may have a material adverse impact on us.

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There is a substantial amount of litigation involving intellectual property in the biopharmaceutical industry generally. If a third party asserts that our products or technologies infringe its patents or other proprietary rights, we could face a number of risks that could seriously harm our results of operations, financial condition and competitive position, including:

- infringement and other intellectual property claims, which would be costly and time-consuming to defend, whether or not the claims have merit, and which could delay the regulatory approval process and divert management s attention from our business;
- substantial damages for past infringement, which we may have to pay if a court determines that our product candidates or technologies infringe a competitor s patent or other proprietary rights;
- a court prohibiting us from selling or licensing our technologies or our product candidates unless the third-party licenses its patents or other proprietary rights to us on commercially reasonable terms, which it is not required to do;
- if a license is available from a third party, we may have to pay substantial royalties or lump sum payments or grant cross-licenses to our patents or other proprietary rights to obtain that license; and
- redesigning our products so they do not infringe, which may not be possible or may require substantial monetary expenditure and time.

Although we are not currently a party to any legal proceedings relating to our intellectual property, in the future, third parties may file claims asserting that our technologies or products infringe on their intellectual property. We cannot predict whether third parties will assert these claims against us or against the current or future licensors of technology licensed to us, or whether those claims will harm our business. If we are forced to defend against these claims, whether they are with or without any merit, whether they are resolved in favor of or against us or our licensors, we may face costly litigation and diversion of management s attention and resources. As a result of these disputes, we may have to develop costly non-infringing technology, or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to us, if at all, which could seriously harm our business or financial condition.

One or more third-party patents or patent applications may conflict with patent applications to which we have rights. Any such conflict may substantially reduce the coverage of any rights that may issue from the patent applications to which we have rights. If third parties file patent applications in technologies that also claim technology to which we have rights, we may have to participate in interference proceedings with the U.S. Patent and Trademark Office, or USPTO, or non-U.S. patent regulatory authorities, as applicable, to determine priority of invention.

We may become involved in lawsuits to protect enforce our patents or other intellectual property rights, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents or other intellectual property rights. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. To the extent such claims relate to patents held by the Purdue Research Foundation, it would have to file such an infringement lawsuit since we do not have the independent right to enforce the Purdue Research Foundation s intellectual property. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents and patent applications or those of our current or future collaborators. An unfavorable outcome could require us to cease using the technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if a prevailing party does not offer us a license on terms that are acceptable to us. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and

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distraction of our management and other employees. We may not be able to prevent, alone or with our collaborators, misappropriation of our proprietary rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential and proprietary information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Risks Related to Ownership of Our Common Stock

The price of our common stock may be volatile and our shares may suffer a decline in value.

As a biopharmaceutical company with no products currently on the market, we expect to experience volatility in the trading price of our common stock. Factors that could cause volatility in the market price of our common stock include, but are not limited to:

- results from, and any delays in, our current or planned clinical trials, including PROCEED;
- announcements of FDA non-approval of our product candidates, including EC145, or delays in FDA or other non-U.S. regulatory authority review processes;
- FDA or other U.S. or non-U.S. regulatory actions affecting us or our industry;
- litigation or public concern about the safety of our product candidates;
- failure or discontinuation of any of our research or clinical trial programs;
- delays in the commercialization of our product candidates;
- our ability to effectively partner with collaborators to develop or sell our products;
- market conditions in the pharmaceutical, biopharmaceutical and biotechnology sectors and issuance of new or changed securities analysts reports or recommendations;
- actual and anticipated fluctuations in our quarterly operating results;
- developments or disputes concerning our intellectual property or other proprietary rights;
- introduction of technological innovations or new products by us or our competitors;
- issues in manufacturing our product candidates;
- market acceptance of our product candidates;
- deviations in our operating results from the estimates of securities analysts;
- coverage and reimbursement policies of governments and other third-party payors;

sales of our common stock by our officers, directors or significant stockholders;

price and volume fluctuations in the overall stock market from time to time;

general economic conditions and trends;

major catastrophic events;

our ability to expand our operations, domestically and internationally, and the amount and timing of expenditures related to this expansion; and

additions or departures of key personnel.

In addition, the stock markets in general, and the markets for biopharmaceutical, pharmaceutical and biotechnology stocks in particular, have experienced extreme volatility that has been often unrelated to the

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operating performance of the issuer. These broad market fluctuations may adversely affect the trading price or liquidity of our common stock. In the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the issuer. If any of our stockholders were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our management would be diverted from the operation of our business, which could result in the delays of our clinical trials or commercialization efforts.

Sales of substantial amounts of our shares could adversely affect the market price of our common stock.

As of March 1, 2011, we have 29,679,203 shares of common stock outstanding, Approximately one-half of these shares are currently subject to trading restrictions and will become eligible for sale in August 2011, subject to the provisions of Rule 144 or Rule 701. Consequently, a substantial amount of our common stock which is presently subject to trading restrictions may be sold in or after August 2011.

Sales of substantial amounts of our common stock in the public market following our initial public offering, or the perception that these sales could occur, could cause the market price of our common stock to decline. These sales could also make it more difficult for us to raise capital by selling equity or equity-related securities in the future at a time and price that we deem appropriate.

In addition, in the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other securityholders, certain holders of our common stock and other registrable securities are entitled to notice of such registration and are entitled to include their common stock in such registration, subject to certain marketing and other limitations. The holders of at least 50 percent of these registrable securities have the right to require us, on not more than two occasions, to file a registration statement on Form S-1 under the Securities Act in order to register the resale of shares of their common stock, subject to our right, in certain circumstances, to defer such registrations. Further, these holders may require us to register the resale of all or a portion of their shares on a registration statement on Form S-3, subject to certain conditions and limitations. Finally, these holders have certain piggyback registration rights. If we propose to register any of our equity securities under the Securities Act other than pursuant to the registration rights noted above or specified excluded registrations, which include the registration of the shares issued and issuable under our equity incentive plans and shares sold in this offering, holders may require us to include all or a portion of their registrable securities in the registration and in any related underwritten offering.

As restrictions on resale end or if these securityholders exercise their registration rights, the market price of our common stock could decline if the holders of the restricted shares sell them or are perceived by the market as intending to sell them.

Our existing stockholders have substantial control of our management and affairs, which could limit your ability to influence the outcome of key transactions, including a change of control.

As of March 1, 2011, our directors, executive officers and each of our stockholders who own greater than five percent of our outstanding common stock and their affiliates, in the aggregate, beneficially owned approximately 42.9 percent of the outstanding shares of our common stock As a result, these stockholders, if acting together, would be able to influence or control matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control of our company, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might affect the market price of our common stock.

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Provisions in our certificate of incorporation and bylaws and under Delaware law might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Our certificate of incorporation and bylaws contain provisions that could depress the trading price of our common stock by acting to discourage, delay or prevent a change of control of our company or changes in our management that our stockholders may deem advantageous. These provisions include:

establishing a classified board so that not all members of our Board of Directors are elected at one time;

authorizing blank check preferred stock that our Board of Directors could issue to increase the number of outstanding shares to discourage a takeover attempt;

eliminating the ability of stockholders to call a special stockholder meeting;

eliminating the ability of stockholders to act by written consent;

being subject to provisions of Section 203 of the Delaware General Corporate Law regulating corporate takeovers;

providing that our Board of Directors is expressly authorized to make, alter or repeal our bylaws; and

establishing advance notice requirements for nominations for elections to our Board of Directors or for proposing other matters that can be acted upon by stockholders at stockholder meetings.

If we fail to establish and maintain proper internal controls, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.

Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, requires that beginning with our annual report for the year ending December 31, 2011, management assess and report annually on the effectiveness of our internal control over financial reporting and identify any material weaknesses in our internal control over financial reporting. Compliance with Section 404 of the Sarbanes Oxley Act also requires our independent registered public accounting firm to issue an annual report that addresses the effectiveness of our internal control over financial reporting. Prior to becoming a public company, we were not required to comply with Section 404 of the Sarbanes-Oxley Act, and as a result we have not yet evaluated our compliance with these provisions. We anticipate that compliance with Section 404 of the Sarbanes-Oxley Act will increase our legal, accounting and financial compliance costs, may make related activities more difficult, time-consuming and costly and may also place undue strain on our personnel, systems and resources.

If we conclude that our internal control over financial reporting is not effective, we cannot be certain as to the timing of completion of our evaluation, testing and remediation actions or their effect on our operations because there is presently no precedent available by which to measure compliance adequacy. As a consequence, we may not be able to remediate in time to meet our deadline for compliance with Section 404 of the Sarbanes-Oxley Act. Also, there can be no assurance that we will not identify one or more material weaknesses in our internal controls in connection with evaluating our compliance with Section 404 of the Sarbanes-Oxley Act. The presence of material weaknesses could result in financial statement errors which, in turn, could require us to restate our operating results.

If either we are unable to conclude that we have effective internal control over financial reporting or our independent auditors are unwilling or unable to provide us with an unqualified report on the effectiveness of our internal control

over financial reporting as required by Section 404 of the Sarbanes-Oxley Act, investors may lose confidence in our operating results, our stock price could decline and we may be subject to litigation or regulatory enforcement actions. In addition, if we are unable to meet the requirements of Section 404 of the Sarbanes-Oxley Act, we may not be able to remain listed on The Nasdaq Global Market.

Item 1B. ***Unresolved Staff Comments***

None.

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Item 2. ***Properties***

Our offices are located in two primary leased facilities, a 14,000 square foot facility in West Lafayette, Indiana in the Purdue University Research Park and a 4,400 square foot corporate office space in Indianapolis, Indiana. The West Lafayette facility includes both administrative and research laboratory space. The lease for this facility expires March 31, 2011, and we do not foresee risk in obtaining an extension to this lease agreement for similar terms or having a disruption to our operations. The Indianapolis offices are used exclusively for corporate and administrative functions. The lease for this facility expires in November 2015. We believe the existing facilities are sufficient to meet our current and near-term needs.

Item 3. ***Legal Proceedings***

We are not currently a party to any material legal proceedings.

Item 4. ***(Removed and Reserved)***

PART II

Item 5. ***Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Market Information and Stockholders

Shares of our common stock are traded on the The Nasdaq Global Market (symbol ECYT). Our shares have only been publicly traded since February 9, 2011; as a result, we have not set forth quarterly information with respect to the high and low prices for our common stock and the dividends declared on our common stock for the two most recent fiscal years.

As of March 1, 2011, there were 88 stockholders of record of our common stock. The number of record holders is based upon the actual number of holders registered on the books of the company at such date and does not include holders of shares in street name or persons, partnerships, associations, corporations or other entities identified in security position listings maintained by depositories.

Unregistered Sales of Securities

On December 14, 2010, we issued $8.1 million of Subordinated Convertible Promissory Notes, or Subordinated Notes, and in January 2011 we issued an additional $3.7 million of Subordinated Notes. A $7.0 million investment in the Subordinated Notes was made by the Pension Fund of the Christian Church (Disciples of Christ), Inc., a $4.7 million investment in the Subordinated Notes was made by three other current holders of our preferred stock and a $100,000 investment in the Subordinated Notes was made by Michael Sherman, our Chief Financial Officer.

In December 2010, we issued 14,372 warrants to Mid-Cap Funding III, LLC and 7,186 warrants to Silicon Valley Bank to purchase 21,558 aggregate shares of our Series C-3 convertible preferred stock at a $8.12 per share exercise price.

The foregoing transactions were exempt from registration under the Securities Act pursuant to Section 4(2) and Rule 506 of Regulation D promulgated under the Securities Act.

Issuer Purchases of Equity Securities

We did not purchase any of our equity securities during the period covered by this report.

Use of Proceeds

On February 9, 2011, we completed our initial public offering of common stock pursuant to a Registration Statement on Form S-1, as amended (Reg. No. 333-168904) that was declared effective on February 4, 2011. Under the registration statement, we registered the offering and sale of an aggregate of 14,375,000 shares of our common

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stock. All of the 14,375,000 shares of common stock registered under the registration statement, which included 1,875,000 shares of our common stock covered by an over-allotment option granted to the underwriters, were sold at a price to the public of $6.00 per share. RBC Capital Markets, LLC and Leerink Swann LLC acted as joint book running managers of the offering and as representatives of the underwriters. As a result of the initial public offering, we raised a total of approximately $86.3 million in gross proceeds, and approximately $78.8 million in net proceeds after deducting underwriting discounts and commissions of $5.5 million and estimated offering expenses of $2.0 million. We intend to use the net proceeds from the offering to fund our phase 3 clinical trial related to the use of EC145 and EC20 in platinum-resistant ovarian cancer, for working capital and other general corporate purposes. Pending use of the proceeds, we have invested the proceeds in a variety of capital preservation investments, including short-term, investment-grade and interest-bearing instruments.

We have never declared or paid any dividends on our capital stock. We currently intend to retain all future earnings for the operation and expansion of our business and, therefore, we do not anticipate declaring or paying cash dividends for the foreseeable future. The payment of dividends will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends present in our current and future debt agreements, and other factors that our Board of Directors may deem relevant. In addition, provisions contained in our current credit facility restrict our ability to pay dividends.

Item 6. ***Selected Financial Data***

We have derived the selected statement of operations data for the year ended December 31, 2008, 2009 and 2010 and selected balance sheet data as of December 31, 2009 and 2010 from our audited financial statements and related notes included in this annual report. We have derived the statement of operations data for the year ended December 31, 2006 and 2007 and the balance sheet data as of December 31, 2006, 2007 and 2008 from our audited financial statements not included in this annual report. Our historical results are not necessarily indicative of the results to be expected for any future period. The following selected financial data should be read in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and related notes included elsewhere in this annual report.

	Year Ended December 31,				
	2006	2007	2008	2009	2010
	(In thousands, Except Per Share Amounts)				
Statement of operations data:					
Total revenue	$ 1,511	$ 1,082	$ 500	$ 3,000	$
Operating expenses:					
Research and development	6,479	11,305	13,323	14,804	14,561
General and administrative	3,277	4,401	4,786	3,934	6,039
Total operating expenses	9,756	15,706	18,109	18,738	20,600
Loss from operations	(8,245)	(14,624)	(17,609)	(15,738)	(20,600)
Other income (expense):					
Interest income	1,113	1,297	682	49	8
Interest expense	(33)	(25)	(1,579)	(1,436)	(1,065)
Other income (expense)	93	(306)	13	119	1,564

Total other income (expense)	1,173	966	(884)	(1,268)	507
Loss before income taxes	(7,072)	(13,658)	(18,493)	(17,006)	(20,093)
Income tax (benefit) expense					
Net loss	$ (7,072)	$ (13,658)	$ (18,493)	$ (17,006)	$ (20,093)
Basic and diluted loss per share(1)	$ (8.28)	$ (15.76)	$ (20.54)	$ (18.67)	$ (21.77)
Shares used in computation of basic and diluted loss per share(1)(2)	853,870	866,517	900,127	911,066	923,007

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(1) On January 10, 2011, the Company effected a 1.00 for 1.91 reverse stock split. All historical common stock and per share information has been changed to reflect the stock split.

(2) Diluted weighted average common shares outstanding are identical to basic weighted average common shares outstanding and diluted earnings per share is identical to basic earnings per share because common share equivalents are excluded from the calculations of diluted weighted average common shares outstanding for those quarters, as their effect is anti-dilutive.

	As of December 31,				
	2006	2007	2008	2009	2010
			(In thousands)		
Balance sheet data:					
Cash, cash equivalents and short-term investments	$ 20,207	$ 31,735	$ 18,383	$ 23,909	$ 16,873
Working capital	19,817	29,737	11,486	15,476	12,377
Total assets	21,327	34,354	20,188	25,268	21,214
Total debt	370	9,952	14,384	8,977	14,804
Subordinated notes					9,529
Total stockholders deficit	(28,159)	(41,318)	(59,412)	(76,058)	(96,911)

Item 7. ***Management s Discussion and Analysis of Financial Condition and Results of Operations***

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes included in this annual report. Please note that the Company effected a 1.00 for 1.91 stock split on January 10, 2011, and all historical common stock and per share information has been changed to reflect the stock split.

Overview

We are a biopharmaceutical company developing targeted therapies for the treatment of cancer and inflammatory diseases. We use our proprietary technology to create novel small molecule drug conjugates, or SMDCs, and companion imaging diagnostics. Our 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. We are also developing companion imaging diagnostics for each of our SMDCs that are designed to identify the patients whose disease over-expresses the target of the therapy and who are therefore more likely to benefit from treatment. This combination of an SMDC with its companion imaging diagnostic is designed to personalize the treatment of patients by delivering effective therapy, selectively to diseased cells, in the patients most likely to benefit.

Our lead SMDC candidate, EC145, targets the folate receptor, which is frequently over-expressed on cancer cells. We have chosen platinum-resistant ovarian cancer, or PROC, a highly treatment-resistant disease, as our lead indication for development of EC145 because of the high unmet need in treating this patient population and the high percentage of ovarian cancer patients whose tumors over-express the targeted folate receptor. We recently conducted a multicenter, open-label randomized phase 2 clinical trial of EC145 in 149 women with PROC, referred to as the PRECEDENT trial. We received final PFS data in the fourth quarter of 2010 and based upon our findings from the

PRECEDENT trial, we intend to begin enrollment of our PROCEED trial, a phase 3 registration trial in women with PROC, in the first half of 2011. We have spent a significant amount of time and resources in 2009 and 2010 on the PRECEDENT trial and as we shift focus to the PROCEED trial, we will be increasing the amount of time and resources, both financial and personnel, devoted to our EC145 program in PROC.

In addition to PROC, we are pursuing clinical trials of EC145 in other indications, such as non-small cell lung cancer, and we also plan to advance other SMDCs and companion imaging diagnostics through development as preclinical and clinical trial results merit and funding permits.

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Recent Developments

On February 9, 2011, we completed our initial public offering of 14,375,000 shares of common stock, including 1,875,000 shares of common stock pursuant to the exercise of the over-allotment option by the underwriters. Proceeds, net of underwriting discounts, commissions and other transaction costs, were $78.8 million. Upon the completion of the offering, our outstanding subordinated notes, plus accrued and unpaid interest thereon were automatically converted into 2,335,823 shares of common stock using a conversion price of $5.10 per share (85% of the original issue price of the shares sold in the initial public offering), all of our outstanding convertible preferred shares were converted in an aggregate 11,747,563 shares of common stock, and all of the outstanding warrants to purchase our preferred stock were converted into warrants to purchase our common stock.

Financial Operations Overview

We have devoted substantially all of our resources to our drug discovery efforts, including research and development, conducting clinical trials, protecting intellectual property, and general and administrative support for these operations. To date, we have generated no revenue from sales of our SMDCs or companion imaging diagnostics. Through December 31, 2010, we have principally funded our operations through:

$11.9 million in license fees and milestone payments received from our strategic partners;

$7.9 million of state and federal research grants;

$90.3 million of capital from the sale of convertible preferred stock to certain accredited investors; and

$8.1 million of subordinated notes issued to certain accredited investors.

As of December 31, 2010, our subordinated notes were treated as share-settled debt under ASC 480-10-25-14 and were recorded at fair value. The subordinated notes accrued interest in kind at an annual rate of 10.0 percent. Subsequent to December 31, 2010, we issued an addition $3.7 million of subordinated notes. All of the subordinated notes plus accrued and unpaid interest thereon were automatically converted into 2,335,823 shares of common stock upon the completion of our initial public offering.

We have never been profitable and have incurred significant net losses since our inception. As of December 31, 2010, we had a retained deficit of $98.1 million. We expect to continue to incur significant and increasing operating losses for the next several years as we pursue the advancement of our SMDCs and companion imaging diagnostics through the research, development, regulatory and commercialization processes. We received net proceeds of $78.8 million from our February 2011 initial public offering. Our current cash position, including cash equivalents and short term investments is expected to be sufficient to fund our operations, including PROCEED, the phase 3clinical trial of EC145 and EC20, through the availability of final primary PFS data from that study, which is anticipated to be in the second quarter of 2013. The current operating plan does not include the initiation of other significant clinical studies beyond the PROCEED study. If we pursue other significant clinical studies or if the FDA requires us to undertake a second phase 3 clinical trial or obtain final OS data from PROCEED, we will require additional financing to support our operations. As a result, we will seek to fund our operations through public or private equity or debt financings or other sources, such as strategic partnerships. Such funding may not be available on favorable terms, or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategies.

Revenue

To date, we have generated no revenue from sales of our SMDCs or companion imaging diagnostics. All of our revenue has been derived from license fees, milestone payments and government grants.

In the future, we may generate revenue from a combination of direct sales of our SMDCs and companion imaging diagnostics, license fees, milestone payments and royalties in connection with strategic collaborations. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, achievement of performance-based milestones and other payments received under such collaborations, and the amount and timing of payments that we receive upon the sale of our SMDCs and companion imaging diagnostics, to the extent any are successfully commercialized. Based upon our SMDCs and companion imaging

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diagnostics currently in development and the stage of development, we do not expect to generate revenue from product sales until 2013 at the earliest. If we or our strategic partners fail to complete the development of our SMDCs and companion imaging diagnostics in a timely manner or obtain regulatory approval for them, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected.

Research and Development Expenses

Research and development expenses consist of expenses incurred in connection with the discovery and development of our SMDCs and companion imaging diagnostics, including:

- employee-related expenses, which include salaries and stock-based compensation expense;
- expenses incurred under agreements with contract research organizations, investigative sites and consultants that conduct our clinical trials and a portion of our preclinical studies;
- the cost of acquiring and manufacturing clinical trial materials;
- license fees for and milestone payments related to in-licensed products and technology;
- costs associated with non-clinical activities and regulatory approvals; and
- research supplies.

We expense research and development costs as incurred. License fees and milestone payments related to in-licensed products and technology and research supplies are expensed if it is determined that they have no alternative future use.

Conducting a significant amount of research and development is central to our business model. Our SMDCs and companion imaging diagnostics in later stages of clinical development generally have higher development costs than those in earlier stages of development, primarily due to the increased size and duration of late stage clinical trials. We plan to increase our research and development expenses for the foreseeable future as we begin to enroll patients in the PROCEED trial for our most advanced SMDC, EC145, and to further advance our earlier-stage research and development projects.

Our internal resources, employees and infrastructure are not directly tied to any individual research project and are typically deployed across multiple projects. Through our clinical development programs, we are advancing our SMDCs and companion imaging diagnostics in parallel for multiple therapeutic indications and through our preclinical development programs we are seeking to develop potential SMDCs and companion imaging diagnostics for additional disease indications. The following table sets forth costs incurred on a program-specific basis for identified lead candidate SMDCs and companion imaging diagnostics, excluding personnel-related costs. Discovery Research includes such costs for projects where no lead candidate has yet been identified. All employee-related expenses for those employees working in research and development functions are included in Research and Development Payroll.

	Year Ended December 31,		
	2008	**2009**	**2010**
EC145	$ 5,075	$ 6,495	$ 6,844
EC20	106	298	322

EC0489	754	753	883
EC0225	1,224	643	418
EC17	268	19	
Discovery Research	1,650	1,285	1,318
Research and Development Payroll	4,246	5,311	4,776
Total Research and Development Expenses	$ 13,323	$ 14,804	$ 14,561

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The following table identifies the current status of our major research and development projects and our currently expected near-term milestone timing:

Project	Status	Expected Near-Term Milestones
EC145	Phase 2	In the first half of 2011 initiate phase 3 trial
EC20	Phase 2	In the first half of 2011 initiate phase 3 trial
EC0489	Phase 1	In 2011 complete phase 1 trial
EC0225	Phase 1	Evaluating future development options
EC17	Phase 2	Evaluating future development options

General and Administrative Expenses

General and administrative expenses consist principally of salaries and stock-based compensation for personnel in executive, finance, business development, legal and human resources functions. Other general and administrative expenses include employee benefits, facility, patent filing and prosecution costs, and professional service fees.

We anticipate that our general and administrative expenses will increase in the future primarily for the following reasons:

- increased payroll and expanded infrastructure as a result of more advanced development activity and potential preparation for commercial operations;
- increased expenses related to becoming a public company, including increased legal, accounting and investor relations fees, higher director compensation and increased insurance premiums; and
- expenses related to the sales and marketing of our SMDCs and companion imaging diagnostics in anticipation of commercial launch before we receive regulatory approval.

Other Income

Other income consists primarily of gains or losses on sales of equipment, amounts related to the change in the fair value of our preferred stock warrant liability and income for a tax credit award.

Interest Income and Interest Expense

Interest income consists of interest earned on our cash, cash equivalents and short-term investments. The primary objective of our investment policy is capital preservation. Interest expense consists primarily of interest, amortization of debt discount and amortization of deferred financing costs associated with our previous credit facility with General Electric Capital Corporation, or GECC, and Oxford Finance Corporation, or Oxford and our current facility with Mid Cap Financial, or Mid-Cap and Silicon Valley Bank, or SVB.

Critical Accounting Policies and Significant Judgments and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial

statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued expenses and stock-based compensation. We base our estimates on historical experience, known trends and events and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Our significant accounting policies are described in more detail in Note 2 of the notes to our financial statements appearing elsewhere in this annual report. We believe the following accounting policies to be most

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critical to the judgments and estimates used in preparation of our financial statements and have been reviewed and discussed with our audit committee.

Revenue Recognition

To date, our revenues have been generated primarily through collaborative research, development and commercialization agreements. The terms of these collaborative agreements typically include payments to us of one or more of the following: nonrefundable, upfront license fees, milestone payments and royalties on future product sales.

When evaluating multiple element arrangements, we consider whether the components of the arrangement represent separate units of accounting. This evaluation requires subjective determinations and requires management to make judgments about the fair value of the individual elements and whether such elements are separable from the other aspects of the contractual relationship.

We typically have received upfront, nonrefundable payments when licensing our intellectual property in conjunction with a research and development agreement. Upfront payments, if they are nonrefundable and not contingent on further performance by us, are recognized when due pursuant to the terms of the underlying contract.

Our licensing agreements may also contain milestone payments. Revenues from milestones are recognized upon the achievement of the milestone event if the event is substantive, objectively determinable and represents an important point in the development life cycle of the SMDC. If not considered substantive, milestones are initially deferred and recognized over the remaining performance obligation.

We have not received any royalty revenues related to SMDC or companion imaging diagnostic sales to date.

Grant revenue is recognized when earned, which is in the period in which qualifying expenditures are incurred.

Accrued Clinical Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses. This process involves reviewing open contracts, identifying services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We estimate our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Expense accruals related to clinical trial activity typically comprise the majority of these accruals. Examples of estimated expenses related to clinical trial activity include:

- fees paid to contract research organizations in connection with clinical trials;
- fees paid to investigative sites in connection with clinical trials; and
- fees paid to vendors in connection with preclinical development activities.

We base our expenses related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and contract research organizations that conduct and manage clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under certain contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time

period over which services are performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of the effort varies from our estimate, we adjust the accrual accordingly. Although our estimates in the past have not been materially different from amounts actually incurred, and we do not expect our estimates to be materially different from amounts actually incurred in the future, if our estimate of the status and timing of services performed differs from the actual status and timing of services performed we may report amounts that are too high or too low in any particular period. Based on our level of clinical

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trial expenses for the twelve months ended December 31, 2010, a five percent change in our estimate could result in an adjustment to our accrued clinical trial expense in future periods of approximately $40,000.

Stock-Based Compensation

Effective January 1, 2006, we adopted the recognition provisions of Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, *Compensation Stock Compensation*, which we refer to as ASC 718, using the prospective transition method. This method required us, as a nonpublic company that had previously measured compensation expense using the minimum value method to continue to account for equity awards outstanding at the date of adoption in the same manner as they had been accounted for prior to adoption. For all awards granted, modified, or settled after the date of adoption, we recognized compensation expense based on the grant-date fair value of our common stock estimated in accordance with the provisions of ASC 718. Compensation expense was recognized over the vesting period of the award. Determining the amount of stock-based compensation to be recorded required us to develop estimates of the value of stock options as of the grant date. The calculated value of stock-based awards required that we make highly subjective assumptions. We used the Black-Scholes option pricing model to value our stock option awards. Prior to filing a registration statement in August 2010, our peer companies were determined to be early-stage venture capital backed companies that were not publicly traded. However, we concluded that it was not practical to estimate the volatility due to a lack of historical volatility and therefore we utilized an industry index as permitted under applicable accounting guidelines. We elected to use the calculated value provisions for purposes of determining our compensation expense. Our expected stock price volatility utilized the NASDAQ Biotechnology Index as a proxy for the volatility of our stock price. The NASDAQ Biotechnology Index was selected as it better approximated the volatility of our common stock over the life of the options being valued because we utilized multiple methodologies to value the options and multiple sets of peer companies in the various scenarios, including publicly-traded companies. The weighted-average expected life of the option is based on the contractual term of the option and historical terminations. We utilized a dividend yield of zero based on our historical experience and estimate of future dividend yields at the time. The risk-free interest rate used for each grant is based on the U.S. Treasury yield curve in effect at the time of grant for instruments with a similar expected life. Subsequent to filing the registration statement, all of our prospective grants will be valued under the fair value provision of ASC 718.

The value of our stock options was estimated at the grant date using the following assumptions:

	Year Ended December 31,		
	2008	**2009**	**2010**
Volatility	34.87%	35.59%	36.26%
Expected Term (in years)	10.0	10.0	9.8
Risk-Free Interest Rates	4.04%	3.67%	3.52%
Dividend Yield	0.00%	0.00%	0.00%

In accordance with ASC 718, we recognized stock-based compensation expense of approximately $257,000, $382,000 and $524,000 for the year ended December 31, 2008, 2009 and 2010, respectively. As of December 31, 2010, we had $1.2 million in total unrecognized compensation expense, net of related forfeiture estimates, which we expect to recognize over a weighted-average period of approximately 1.5 years.

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Results of Operations

Comparison of Year Ended December 31, 2009 and 2010

	Year Ended December 31,		Increase/	
	2009	2010	(Decrease)	%
	(In thousands)			
Statement of operations data:				
Revenue	$ 3,000	$	$ (3,000)	(100)%
Operating expenses:				
Research and development	14,804	14,561	(243)	(2)%
General and administrative	3,934	6,039	2,105	54%
Total operating expenses	18,738	20,600	1,862	9%
Loss from operations	(15,738)	(20,600)	4,862	30%
Interest income	49	8	(41)	(84)%
Interest expense	(1,436)	(1,065)	(371)	(26)%
Other income, net	119	1,564	1,445	(1,214)%
Net loss	$ (17,006)	$ (20,093)	$ 3,087	18%

For the year ended December 31, 2009, we earned revenue from a licensing agreement with Bristol-Myers Squibb, or BMS, which was entered into on December 22, 2005. Under such license agreement, we granted BMS an exclusive worldwide license to develop and commercialize SMDCs using folate as the targeting ligand and epothilone as the drug payload. In 2009, BMS advanced this folate-epothilone SMDC, which BMS called BMS-753453, into a phase 2 clinical trial, which triggered a $3.0 million milestone payment under the license. On June 3, 2010, BMS notified us of their intent to terminate the license. We believe BMS elected to terminate the license as a result of a change in its strategic focus. We received an aggregate of $8.1 million from BMS from the fourth quarter 2005 to the third quarter of 2009 pursuant to this license.

Research and Development

The decrease in research and development expense in 2010 compared to 2009 was primarily the result of a decrease in payroll expense due to a shift of management focus from research and development activities to general and administrative functions during 2010. These decreases were partially offset by increased manufacturing costs incurred as preparation for the EC 145 Phase 3 clinical trial.

Included in research and development expense were stock-based compensation charges of $332,000 and $402,000 for the years ended December 31, 2009 and 2010, respectively.

Research and development expenses include expenses of $352,000 and $391,000 for the years ended 2009 and 2010, respectively, for company-funded research at Purdue University, the primary employer of our Chief Science Officer.

General and Administrative

The increase in general and administrative expenses in 2010 compared to 2009 was primarily attributable to increases in patent prosecution expenses associated with the growing portfolio and professional fees associated with various partnering and financing activities, including the preparation for our initial public offering.

Included in general administrative expenses were stock-based compensation charges of $50,000 and $122,000 for the years ended 2009 and 2010, respectively.

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Other Income, Net

Other income increased in 2010 compared to 2009 primarily due to receiving an award of $1.5 million under section 48D of the Code for Qualifying Therapeutic Discovery Projects. Other income, net in 2010 also includes a loss on extinguishment of debt of $144,000, which was offset by an increase in income of $219,000 related to the change in the fair value of our preferred stock warrant liability.

Interest Income

The decrease in interest income in 2010 compared to 2009 resulted from a decrease in balances available for investment due to the use of these funds for operations.

Interest Expense

The decrease in interest expense in 2010 compared to 2009 was due to the decrease in the outstanding and unpaid principal under our previous credit facility with GECC and Oxford, which was repaid in August 2010, partially offset by the outstanding and unpaid principal and interest incurred under our new credit facility.

Comparison of Year Ended December 31, 2008 and 2009

	Year Ended December 31,		Increase/	
	2008	2009	(Decrease)	%
	(In thousands)			
Statement of operations data:				
Revenue	$ 500	$ 3,000	$ 2,500	500%
Operating expenses:				
Research and development	13,323	14,804	1,481	11%
General and administrative	4,786	3,934	(852)	(18)%
Total operating expenses	18,109	18,738	629	3%
Loss from operations	(17,609)	(15,738)	(1,871)	(11)%
Interest income	682	49	(633)	(93)%
Interest expense	(1,579)	(1,436)	(143)	(9)%
Other income, net	13	119	106	815%
Net loss	$ (18,493)	$ (17,006)	$ (1,487)	(8)%

Revenue

For both years, revenue was from a license agreement with BMS. Revenue in 2008 of $500,000 represented an annual maintenance payment associated with this licensing agreement. In 2009, BMS advanced a folate-epothilone SMDC, into a phase 2 clinical trial, which triggered a $3.0 million milestone payment under the licensing agreement.

Research and Development

The increase in research and development expenses in 2009 compared to 2008 was primarily attributable to a $1.5 million increase in clinical trial and product manufacturing expenses principally due to the PRECEDENT trial, which commenced enrollment in September 2008 and continued enrollment throughout 2009.

Included in research and development expense were stock-based compensation charges of $197,000 and $332,000 for the year ended December 31, 2008 and 2009, respectively.

Research and development expenses include expenses of $394,000 and $352,000 for the year ended December 31, 2008 and December 31, 2009, respectively, for company-funded research at Purdue University, the primary employer of our current Chief Science Officer.

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General and Administrative

The decrease in general and administrative expenses in 2009 compared to 2008 was caused primarily by a $470,000 shift of payroll expense from general and administrative expenses to research and development expenses resulting from a shift of management time from administrative functions to development activities. The remaining decrease was due to reduced recruiting and consulting fees compared to the prior year.

Included in general and administrative expenses were stock-based compensation charges of $60,000 and $50,000 for the year ended December 31, 2008 and 2009, respectively.

Other Income, Net

Other income in each period is primarily comprised of the change in the fair value of our preferred stock warrant liability. The increase was due primarily to the larger change in the fair value of our preferred stock warrant liability compared to the prior period.

Interest Income

The decrease in interest income in 2009 compared to 2008 was a result of a lower cash balance, a shift into more conservative investment vehicles and a decrease in interest rates from an average of 1.38 percent in 2008 to an average rate of 0.14 percent in 2009.

Interest Expense

The decrease in interest expense in 2009 compared to 2008 was due to the decrease in the outstanding and unpaid principal under our prior credit facility with GECC and Oxford.

Liquidity and Capital Resources

We have funded our operations principally through the private placement of equity securities, revenue from strategic collaborations, revenue from grants and debt financings and, most recently, our initial public offering of common stock that closed on February 9, 2011 As of December 31, 2010, we had cash and cash equivalents of approximately $16.9 million, and as of March 1, 2011, we had cash, cash equivalents and short-term investments of approximately $97.9 million.

In August, 2010 we obtained a $15.0 million loan commitment from Mid-Cap and SVB to pay-off the existing loan commitment from GECC and Oxford that was set to mature in March and July 2011. Upon execution of the agreement, we drew $10.0 million in principal. In December 2010, we amended the term loan arrangement with Mid-Cap and SVB in order to access the remaining tranche of $5.0 million.

On October 29, 2010, we were notified we had been awarded a total of $1.5 million under section 48D of the Code for Qualifying Therapeutic Discovery Projects. In November 2010, we received $1.4 million of this award, and the remaining $0.1 million was received in early 2011. This was accounted for as other income.

In December 2010, we issued $8.1 million of Subordinated Notes, and as of December 31, 2010, the Subordinated Notes were treated as share-settled debt under ASC 480-10-25-14 and were recorded at fair value. The Subordinated Notes accrued interest in kind at an annual rate of 10.0 percent. In January 2011, we issued an additional $3.7 million of Subordinated Notes to certain accredited investors.

On February 9, 2011, we completed our initial public offering of 14,375,000 shares of common stock, including 1,875,000 shares of common stock pursuant to the exercise of the over-allotment option by the underwriters. Proceeds, net of underwriting discounts, commissions and other transaction costs, were $78.8 million. Upon the completion of the offering, our outstanding subordinated notes, plus accrued and unpaid interest thereon were automatically converted into 2,335,823 shares of common stock using a conversion price of $5.10 per share (85% of the original issue price of the shares sold in the initial public offering), all of our outstanding convertible preferred shares were converted in an aggregate 11,747,563 shares of common stock, and all of the outstanding warrants to purchase our preferred stock were converted into warrants to purchase our common stock.

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We are using the funds received from the term loan with Mid-Cap and SVB, our Subordinated Notes and the initial public offering to help fund our current operations and development plans.

The following table sets forth the primary sources and uses of cash for each of the periods set forth below:

	Year Ended December 31,		
	2008	2009	2010
Net cash provided by (used in) operating activities	$ (17,287)	$ (15,396)	$ (20,745)
Net cash provided by (used in) investing activities	(4,428)	(1,866)	15,010
Net cash provided by (used in) financing activities	4,272	21,083	13,908
Net increase (decrease) in cash and cash equivalents	$ (17,443)	$ 3,821	$ 8,173

Operating Activities

The use of cash in all periods primarily resulted from our net losses adjusted for non-cash items and changes in operating assets and liabilities. The decrease in cash used for the year ended 2009 compared to 2008 resulted from an increase in collaboration revenue received from BMS offset by a decrease in interest income. The increase in cash used in 2010 compared to 2009 was due to an increase in clinical trial expenses and general and administrative expenses for patent prosecution and professional fees.

Investing Activities

The cash provided by (used in) investing activities for each of the three years was due primarily to the net result of maturities and sales of short-term investments, which was partially offset by capital expenditures for equipment of $460,000 in 2008, $155,000 in 2009 and $201,000 in 2010.

Financing Activities

The cash provided by financing activities in 2008 was from the borrowing of $5.0 million under our previous credit facility with GECC and Oxford, which was partially offset by principal payments of $705,000 on this and other credit facilities. The cash provided by financing activities in 2009 was from the sale and issuance of 3,282,456 shares of Series C-3 convertible preferred stock for total net proceeds of $26.6 million, which was partially offset by principal payments of $5.5 million on our prior credit facility with GECC and Oxford. For 2010, our financing activities consisted of repaying our credit facility with GECC and Oxford of $9.0 million, receiving proceeds from our new credit facility with Mid-Cap and SVB of $15.0 million and receiving gross proceeds of $8.1 million for the issuance of subordinated notes.

Credit Facilities

In December 2007, we entered into a $15.0 million credit facility with GECC and Oxford to fund research and development and general corporate purposes. We drew down $10.0 million in principal amount upon signing the agreement and drew down the remaining $5.0 million in June 2008. This credit facility was repaid in August 2010.

In August 2010, we entered into a $15.0 million credit facility with Mid-Cap and SVB to pay-off the then existing credit facility with GECC and Oxford, to fund research and development and for general corporate purposes. We drew

down $10.0 million in principal amount upon signing the agreement at a fixed 9.75 percent interest rate and drew down the remaining $5.0 million in December 2010. Repayment of the principal will begin in April 2011 following a seven-month interest-only period, followed by a 30-month repayment of principal and interest. The loan is collateralized by a security interest in all of our assets, excluding intellectual property. The loan agreement includes customary covenants and may be accelerated upon the occurrence of any event of default in the loan agreement, including defects in collateral securing the loan, judgment defaults or any event or development that has a material adverse effect, as defined in the agreement. The failure of any preclinical study or clinical trial will not, in and of itself, constitute a material adverse effect.

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Operating Capital Requirements

Assuming we successfully complete clinical trials and obtain requisite regulatory approvals, we anticipate commercializing our first product in 2013 at the earliest. Therefore, we anticipate we will continue to generate significant losses for the next several years as we incur expenses to complete our clinical trial programs for EC145, build commercial capabilities, develop our pipeline and expand our corporate infrastructure. We will require additional funding through either collaboration arrangements, borrowings or sales of additional securities to commercialize any of our SMDCs or companion imaging diagnostics.

If our available cash, cash equivalents and short-term investments are insufficient to satisfy our liquidity requirements, or if we develop additional opportunities to do so, we may seek to sell additional equity or debt securities, obtain additional credit facilities or refinance our current credit facility with Mid-Cap and SVB. The sale of additional equity and debt securities may result in additional dilution to our stockholders. If we raise additional funds through the issuance of debt securities or convertible preferred stock, these securities may have rights senior to those of our common stock and could contain covenants that would restrict our operations. We may require additional capital beyond our currently forecasted amounts. Any such required additional capital may not be available on reasonable terms, if at all. If we were unable to obtain additional financing, we may be required to reduce the scope of, delay or eliminate some or all of our planned research, development and commercialization activities, which could harm our business.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amounts of our working capital requirements. Our future funding requirements will depend on many factors, including but not limited to:

- the number and characteristics of the SMDCs and companion imaging diagnostics we pursue;
- the scope, progress, results and costs of researching and developing our SMDCs and companion imaging diagnostics and conducting preclinical and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals for our SMDCs and companion imaging diagnostics;
- the cost of commercialization activities if any of our SMDCs and companion imaging diagnostics are approved for sale, including marketing sales and distribution costs;
- the cost of manufacturing any of our SMDCs and companion imaging diagnostics we successfully commercialize;
- our ability to establish and maintain strategic partnerships, licensing or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation; and
- the timing, receipt and amount of sales of, or royalties on, our SMDCs and companion imaging diagnostics, if any.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations at December 31, 2010:

	Total	Less than 1 Year	1 to 3 Years	4 to 5 Years
		(In thousands)		
Short-term and long-term debt (including interest)	$ 17,254	$ 5,733	$ 11,521	$
Subordinated notes(1)	9,529	9,529		
Operating lease obligations	485	157	163	165
Other long term obligations	638		638	
Total contractual cash obligations	$ 27,906	$ 1 5,419	$ 12,322	$ 165

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(1) All of the subordinated notes were automatically converted into 2,335,823 shares of common stock upon the completion of our initial public offering in February 2011, and therefore, will not be repaid.

In addition, we have certain obligations under licensing agreements with third parties. In October 2007, we entered into an exclusive worldwide license with R&D Biopharmaceuticals to research, develop, and commercialize products containing conjugates of folate receptor targeting compounds and tubulysin compounds. In February 2011, this licensing agreement was assigned by R&D Biopharmaceuticals to Trientlgasse. Under this license agreement, we may be required to make $6.3 million in additional contingent payments upon the achievement of specific scientific, clinical and regulatory milestones, in addition to royalties upon commercial sales. Pursuant to our exclusive license agreement with Purdue Research Foundation relating to folate, we are obligated to pay an annual minimum royalty of $12,500 until commercial sales commence, following which time the payment of royalties with market rates will commence. Pursuant to our exclusive license agreement with Purdue Research Foundation relating to PSMA, we are obligated to pay annual minimum payments of $15,000 until commercial sales commence, following which time the payment of royalties with market rates will commence, along with an annual milestone payment of $100,000. In addition, certain clinical and regulatory milestone payments of $500,000 along with sales-based milestones related to third-party sales are also payable. We are also subject to penalties totaling $300,000 if certain diligence milestones are not met. Future milestone payments in excess of $500,000 may be waived by Purdue Research Foundation. There were no material obligations greater than five years. We do not anticipate incurring liabilities for EC145 royalty payments based on the estimated timing of when we may have commercial sales and the expiration of the applicable patents.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under rules promulgated by the Securities and Exchange Commission.

Tax Loss Carryforwards

As of December 31, 2010, we have net operating loss carryforwards of approximately $95.2 million and $93.7 million to offset future federal and state income taxes, respectively. These federal and state loss carryforwards expire at various times beginning in 2022. We also have research and development tax credit carryforwards of approximately $3.7 million to offset future federal income taxes and approximately $1.4 million to offset future state income taxes. The federal and state tax credits expire at various times through 2029. The occurrence of certain events, including significant changes in ownership interests under Section 382 of the Code, may limit the amount of the net operating loss carryforwards and tax credit carryforwards available in future years. We are evaluating whether the consummation of our recent initial public offering has resulted in an ownership change. At December 31, 2010, we recorded a 100 percent valuation allowance against our net operating loss carryforwards of approximately $43.2 million, as our management believes it is more likely than not they will not be fully realized. If we determine in the future that we will be able to realize all or a portion of our net operating loss carryforwards, an adjustment to our net operating loss carryforwards would increase net income in the period in which we make such a determination.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risks***

We are exposed to market risk related to changes in interest rates. As of December 31, 2009 we had cash, cash equivalents and short-term investments of $23.9 million, and as of December 31, 2010 we had cash and cash equivalents of $16.9 million. The short-term investments consisted of money market funds, U.S. Treasuries, Certificates of Deposit and cash equivalents. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term

marketable securities. Our short-term investments are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10 percent change in interest rates would not have a material effect on the fair market value of our portfolio. We have the ability to hold our short-investments until maturity, and therefore we would not expect our operations results or cash flows to be affected by any significant degree by the effect of a change in

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market interest rates on our investments. We carry our investments based on publicly available information. We do not currently have any investment securities for which a market is not readily available or active.

We are not subject to significant credit risk as this risk does not have the potential to materially impact the value of assets and liabilities.

We contract with contract research organizations and investigational sites globally. We may be subject to fluctuations in foreign currency rates in connection with these agreements. A ten percent fluctuation in foreign currency rates would not have a material impact on our financial statements. We do not hedge our foreign currency exchange rate risk.

Our credit facility with Mid-Cap and SVB, provides that we will make interest payments at fixed rates. As a result, we have limited exposure to changes in interest rates.

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Item 8. ***Financial Statements and Supplementary Data***

ENDOCYTE, INC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Endocyte, Inc.

We have audited the accompanying balance sheets of Endocyte, Inc. as of December 31, 2009 and 2010, and the related statements of operations, convertible preferred stock, stockholders equity (deficit) and comprehensive loss, and cash flows for each of the three years in the period ended December 31, 2010. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company s internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Endocyte, Inc. at December 31, 2009 and 2010, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2010, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Indianapolis, Indiana
March 18, 2011

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ENDOCYTE, INC.

BALANCE SHEETS

	December 31, 2009	December 31, 2010
Assets		
Current assets:		
Cash and cash equivalents	$ 8,699,372	$ 16,872,783
Short-term investments	15,210,378	
Prepaid expenses	373,475	2,637,783
Other assets		539,659
Total current assets	24,283,225	20,050,225
Property and equipment, net	923,051	863,008
Deferred financing costs	61,419	300,985
Total assets	$ 25,267,695	$ 21,214,218
Liabilities, Convertible Preferred Stock, and Stockholders Equity (Deficit)		
Current liabilities:		
Accounts payable	$ 1,789,534	$ 2,836,395
Accrued wages and benefits	459,288	155,102
Accrued interest payable	78,856	140,427
Current portion of long-term debt	6,258,324	4,318,078
Preferred stock warrants	221,031	223,032
Total current liabilities	8,807,033	7,673,034
Long-term debt, net of current portion	2,718,742	10,485,811
Subordinated notes		9,529,413
Other liabilities		637,500
Total liabilities	11,525,775	28,325,758
Convertible preferred stock, $0.001 par value 14,310,992 shares authorized; 11,747,563 shares issued and outstanding at December 31, 2009 and 2010	89,799,483	89,799,483
Stockholders equity (deficit):		
Common stock and additional paid-in capital: $0.001 par value, 100,000,000 shares authorized; 1,133,579, and 1,203,228 shares issued and outstanding at December 31, 2009 and 2010	1,916,445	1,157,884
Accumulated other comprehensive income	2,177	
Retained deficit	(77,976,185)	(98,068,907)
Total stockholders equity (deficit)	(76,057,563)	(96,911,023)
Total liabilities, convertible preferred stock, and stockholders deficit	$ 25,267,695	$ 21,214,218

See accompanying notes.

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ENDOCYTE, INC.

STATEMENTS OF OPERATIONS

	2008	2009	2010
Revenue:			
Grant revenue	$	$	$
Collaboration revenue	500,000	3,000,000	
Total revenue	500,000	3,000,000	
Operating expenses:			
Research and development	13,323,318	14,803,741	14,560,821
General and administrative	4,785,466	3,934,259	6,039,145
Total operating expenses	18,108,784	18,738,000	20,599,966
Loss from operations	(17,608,784)	(15,738,000)	(20,599,966)
Other income (expense):			
Interest income	682,433	49,315	7,683
Interest expense	(1,579,297)	(1,435,988)	(1,064,556)
Other income	12,772	118,988	1,564,117
Net loss	(18,492,876)	(17,005,685)	(20,092,722)
Net loss per share basic and diluted	$ (20.54)	$ (18.67)	$ (21.77)
Weighted-average number of common shares used in net loss per share calculation basic and diluted	900,127	911,066	923,007

See accompanying notes.

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ENDOCYTE, INC.

STATEMENTS OF CONVERTIBLE PREFERRED STOCK, STOCKHOLDERS EQUITY (DEFICIT) AND COMPREHENSIVE LOSS

	Convertible Preferred Stock		Common Stock and Additional Paid-In Capital		Accumulated Other Comprehensive Income	Retained		Con
	Shares	Amount	Shares	Amount	(Loss)	Deficit	Total	
cember 31,	8,465,107	$ 63,197,046	1,090,127	$ 1,231,455	$ (71,639)	$ (42,477,624)	$ (41,317,808)	$ (
tock options			43,452	45,950			45,950	
compensation				257,163			257,163	
						(18,492,876)	(18,492,876)	(
ain on					95,202		95,202	
cember 31,	8,465,107	63,197,046	1,133,579	1,534,568	23,563	(60,970,500)	(59,412,369)	(
eries C-3 referred stock,	3,282,456	26,602,437						
compensation				381,877			381,877	
						(17,005,685)	(17,005,685)	(
ss on					(21,386)		(21,386)	
cember 31,	11,747,563	89,799,483	1,133,579	1,916,445	2,177	(77,976,185)	(76,057,563)	(
justment of ted notes				(1,429,412)			(1,429,412)	
tock options			69,649	147,289			147,289	
compensation				523,562			523,562	
						(20,092,722)	(20,092,722)	(
ss on					(2,177)		(2,177)	
cember 31,	11,747,563	$ 89,799,483	1,203,228	$ 1,157,884	$	$ (98,068,907)	$ (96,911,023)	$ (

See accompanying notes.

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ENDOCYTE, INC.

STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2008	**2009**	**2010**
Operating activities			
Net loss	$ (18,492,876)	$ (17,005,685)	$ (20,092,722)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	346,361	231,890	260,571
Stock-based expense	257,163	381,877	523,562
Gain on disposal of property and equipment		3,588	
Loss on extinguishment of debt			144,284
Accretion of bond discount	(26,877)	(17,250)	(3,075)
Non cash interest expense	250,004	210,809	160,844
Decrease in fair value on preferred stock warrants	(11,912)	(74,118)	(237,457)
Extinguishment of liability			18,389
Change in operating assets and liabilities:			
Accounts and accrued interest receivable	1,074,662		
Prepaid expenses and other assets	(192,358)	269,326	(2,323,788)
Accounts payable	(366,944)	493,263	(118,140)
Accrued interest, wages, benefits and other liabilities	(123,977)	109,959	922,386
Net cash used in operating activities	(17,286,754)	(15,396,341)	(20,745,146)
Investing activities			
Purchases of property and equipment	(459,770)	(155,441)	(200,527)
Purchases of investments	(19,457,362)	(35,496,785)	(12,295,754)
Proceeds from sale of investments	15,489,229	33,785,889	27,507,030
Net cash provided by (used in) investing activities	(4,427,903)	(1,866,337)	15,010,749
Financing activities			
Proceeds from issuance of convertible preferred stock, net of issuance costs		26,602,437	
Proceeds from borrowings, net of issuance costs	4,930,697		14,857,292
Proceeds from issuance of subordinated convertible notes, net of issuance costs			8,040,837
Principal payments on borrowings	(705,327)	(5,518,941)	(9,035,548)
Loss on Extinguishment of debt			(102,062)
Proceeds from the exercise of stock options	45,950		147,289
Net cash provided by financing activities	4,271,320	21,083,496	13,907,808
Net increase (decrease) in cash and cash equivalents	(17,443,337)	3,820,818	8,173,411
Cash and cash equivalents at beginning of period	22,321,891	4,878,554	8,699,372

Cash and cash equivalents at end of period	$ 4,878,554	$ 8,699,372	$ 16,872,783

See accompanying notes.

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS

1. Nature of Business and Organization

Endocyte, Inc. (the Company) was incorporated on December 6, 1995. The Company is a biopharmaceutical company developing targeted therapies for the treatment of cancer and inflammatory diseases. The Company uses its proprietary technology to create novel small molecule drug conjugates, or SMDCs, and companion imaging diagnostics. The 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 a highly active drug at greater doses, delivered more frequently, and over longer periods of time than would be possible with the untargeted drug alone. The Company is also developing companion imaging diagnostics for each of its SMDCs that are designed to identify the patients whose disease over-expresses the target of the therapy and who are therefore more likely to benefit from treatment.

Initial Public Offering

On February 9, 2011, the Company completed its initial public offering of 14,375,000 shares of common stock, including 1,875,000 shares of common stock pursuant to the exercise of the over-allotment option by the underwriters. Proceeds, net of underwriting discounts, commissions and other transaction costs were $78,772,500. Upon the closing of the offering, the Subordinated Notes (see footnote 8) automatically converted into 2,335,823 shares of common stock using a conversion price of $5.10 per share (85% of the original issue price of the shares sold in the initial public offering), all of the outstanding convertible preferred shares were converted to common stock, and the outstanding warrants to purchase Series C-3 preferred stock were converted to warrants to purchase common stock. Additionally, the warrants were reclassified from a liability to equity. The following table sets forth share amounts of common stock outstanding after the closing of the offering:

	In Shares
Common Stock outstanding prior to offering	1,203,228
Initial public offering shares	14,375,000
Conversion of convertible preferred stock	11,747,563
Conversion of subordinated notes	2,335,823
Total Common Stock outstanding after initial public offering	29,661,614

2. Significant Accounting Policies

Stock Split

On January 10, 2011, the Company effected a 1.00 for 1.91 reverse stock split. All historical common stock and per share information has been changed to reflect the stock split.

Basis of Presentation

The financial statements are prepared in conformity with U.S. generally accepted accounting principles (GAAP). The Company has made estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. Subsequent events have been evaluated through the date of issuance, which is the same as the date the Form 10-K is filed with the Securities Exchange Commission.

Cash and Cash Equivalents

The Company considers cash and all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents, except for those funds managed by the Company s investment manager, which are classified as short-term investments. Cash equivalents consist primarily of money market instruments.

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

Short-Term Investments

Short-term investments consist primarily of investments with original maturities greater than three months and less than one year when purchased. Management determines the appropriate classification of marketable securities at the time of purchase and reevaluates such designation as of each balance sheet date. All securities held at December 31, 2008 and 2009, were classified as available-for-sale as defined by the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 320, *Investments Debt and Equity Securities* (ASC 320). Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported in other comprehensive income. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in other income. The Company considers and accounts for other-than-temporary impairments according to ASC 320. The cost of securities sold is based on the specific-identification method. Discounts and premiums on debt securities are amortized to interest income and expense over the term of the security.

Prepaid Expenses

Prepaid expenses as of December 31, 2010 include $1.9 million of deferred costs for legal, accounting and other direct costs related to the Company s initial public offering. These costs will be reclassified to additional paid-in capital in 2011 as a reduction of the initial public offering proceeds.

Property and Equipment

Property and equipment are stated at cost and are being depreciated using the straight-line method over estimated useful lives, which range from three to seven years.

Licenses and Patents

Licenses and patent costs are expensed as incurred as the Company does not believe there is an alternate future use for the costs. Licenses are classified as research and development and patents are classified as general and administrative expenses in the statements of operations.

Long-Lived Assets

The Company reviews long-lived assets, including property and equipment, for impairment when events or changes in business conditions indicate that their full carrying value may not be fully recoverable.

Preferred Stock Warrants

The Company accounts for its preferred stock warrants under ASC Topic 480, *Distinguishing Liabilities from Equity*. The preferred stock warrants are recorded at fair value and any changes to fair value are recorded as other income (expense).

Revenue Recognition

The Company recognizes revenues from license agreements when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the fee is fixed or determinable, and there is reasonable assurance that the related amounts are collectible in accordance with ASC Topic 605, *Revenue Recognition* (ASC 605).

The Company has generated revenues as a result of an out-license agreement. The Company immediately recognizes the full amount of milestone payments due upon the achievement of the milestone event if the event is substantive, objectively determinable, and represents an important point in the development life cycle of the product. Milestone payments earned are recorded in collaboration revenue.

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

Research and Development Expenses

Research and development expenses represent costs associated with the ongoing development of SMDCs and companion imaging diagnostics and include salaries, supplies, and expenses for clinical trials. The Company records accruals for clinical trial expenses based on the estimated amount of work completed. The Company monitors patient enrollment levels and related activities to the extent possible through internal reviews, correspondence, and discussions with research organizations.

Upfront payments made in connection with business collaborations and research and development arrangements are evaluated under ASC Subtopic 730-20, *Research and Development Arrangements*. Upfront payments made in connection with business development collaborations are expensed as research and development costs, as the assets acquired do not have alternative future use. Amounts related to future research and development are capitalized as prepaid research and development and are expensed over the service period based upon the level of services provided. To date, no significant amounts have been capitalized.

Stock-Based Compensation

The Company has accounted for all options granted subsequent to January 1, 2006, pursuant to ASC Topic 718, *Compensation Stock Compensation* (ASC 718), which requires the recognition of the fair value or calculated value for nonpublic entities, of stock-based compensation in net income. Stock-based compensation consists of stock options, which are granted to employees at exercise prices at or above the fair market value of the Company s common stock on the dates of grant. The Company used the calculated value to measure its stock-based compensation.

Prior to January 1, 2006, in accordance with ASC 718, the Company used the intrinsic value method to account for stock options. The Company issued its stock options at exercise prices at or above the estimated fair market value of the Company s common stock on the dates of grant. Accordingly, no compensation expense was recognized for options granted to employees in the prior periods.

The Company elected the prospective transition method for the adoption of ASC 718, which requires that nonpublic companies that had previously measured compensation cost using the minimum value method continue to account for equity awards outstanding at the date of adoption in the same manner as they had been accounted for prior to adoption. For all awards granted, modified, or settled after the date of adoption, the Company recognizes compensation cost based on the grant-date value estimated in accordance with the provisions of ASC 718.

Net Loss Per Share

The Company calculates basic net loss per share based on the weighted-average number of outstanding common shares. The Company calculates diluted net loss per share based on the weighted-average number of outstanding common shares plus the effect of dilutive securities.

Income Taxes

The Company accounts for income taxes under the liability method in accordance with the provision of ASC Topic 740, *Income Taxes* (ASC 740). ASC 740 requires recognition of deferred taxes to provide for temporary differences between financial reporting and tax basis of assets and liabilities. Deferred taxes are measured using enacted tax rates

expected to be in effect in a year in which the basis difference is expected to reverse. The Company continues to record a valuation allowance for the full amount of deferred tax assets, which would otherwise be recorded for tax benefits relating to operating loss and tax credit carryforwards, as realization of such deferred tax assets cannot be determined to be more likely than not.

In June 2006, the FASB issued authoritative guidance on accounting for uncertainty in income taxes, amended by Accounting Standards Update No. (ASU) 2009-06 in September 2009 on accounting for uncertain tax

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

positions, which clarifies the accounting for uncertainty in income taxes recognized in an enterprise s financial statements. This guidance prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return and provides guidance on derecognition of tax benefits, classification on the balance sheet, interest and penalties, accounting in interim periods, disclosure, and transition.

The Company adopted the provisions set forth in ASC 740, including ASU No. 2009-06 on accounting for uncertain tax positions effective January 1, 2009. At the date of adoption and during the year ended December 31, 2009, the Company had no unrecognized tax benefits and expects no significant changes in unrecognized tax benefits in the next 12 months. If incurred, the Company will classify any interest and penalties as a component of tax expense. To date, there have been no interest or penalties charged to the Company in relation to the underpayment of income taxes. The Company files its tax returns as prescribed.

Segment Information

Operating segments are defined as components of an enterprise engaging in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one operating segment and the Company operates in only one geographic segment.

3. New Accounting Pronouncements

Recently Adopted Accounting Standards

Effective January 1, 2009, the Company adopted ASC 808, *Collaborative Arrangements*. This guidance defines collaborative arrangements and establishes reporting requirements for transactions between participants in a collaborative arrangement and between participants in the arrangement and third parties. This guidance has been applied retrospectively to all prior periods presented for significant collaborative arrangements existing as of the effective date. The adoption did not impact the financial statements.

Effective January 1, 2009, the Company adopted clarifying guidance issued by the FASB on other-than-temporary impairments on debt securities, codified within ASC 320-10, *Investments Debt and Equity Securities*, on January 1, 2009. This guidance amends the other-than-temporary recognition guidance for debt securities and requires additional annual disclosures of other-than-temporary impairments on debt and equity securities. Pursuant to the new guidance, an other-than-temporary impairment has occurred if a company does not expect to recover the entire amortized cost basis of the security. In this situation, if the company does not intend to sell the impaired security, and it is not more likely than not it will be required to sell the security before the recovery of its amortized cost basis, the amount of the other-than-temporary impairment recognized in earnings is limited to the portion attributed to the credit loss. The remaining portion of the other-than-temporary impairment is then recorded in other comprehensive income (loss). This guidance has been applied to existing and new securities as of January 1, 2009. The applicable disclosures are included in Note 4. The implementation of this guidance was not material to the Company s financial position or results of operations, and there was no cumulative effect adjustment.

Effective January 1, 2009, the Company adopted FASB authoritative guidance relating to accounting for uncertainty in income taxes, under ASC 740, amended by ASU 2009-06. This guidance requires that realization of an uncertain

income tax position be more likely than not (i.e., greater than 50 percent likelihood of receiving a benefit) before it can be recognized in the financial statements. Furthermore, this guidance prescribes the benefit to be recorded in the financial statements as the amount most likely to be realized assuming a review by tax authorities having all relevant information and applying current conventions. This interpretation also clarifies the financial statement classification of tax-related penalties and interest and sets forth new disclosures regarding unrecognized tax benefits. The implementation of this interpretation had no impact on the financial statements.

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

In May 2009, the FASB issued ASC 855, *Subsequent Events*. ASC 855 provides authoritative accounting literature and disclosure requirements for material events occurring subsequent to the balance sheet date and prior to the issuance of the financial statements. The Company adopted this guidance as of December 31, 2009. The implementation of this statement had no effect on the Company s financial position or results of operations.

Recently Issued Accounting Standards

In October 2009, the FASB ratified ASU No. 2009-13 guidance related to revenue recognition that amends the previous guidance on arrangements with multiple deliverables, within ASC 605-25, *Revenue Recognition Multiple Element Arrangements*. This guidance provides principles and application guidance on whether multiple deliverables exist, how the arrangements should be separated, and how the consideration should be allocated. It also clarifies the method to allocate revenue in an arrangement using the estimated selling price. This guidance is effective for the Company as of January 1, 2011, and is not expected to be material to the Company s financial position or results of operations.

In April 2010, the FASB ratified ASU No. 2010-17 guidance related to the milestone method of revenue recognition. The ASU provides guidance on defining a milestone under ASC 605. This guidance states that an entity can make an accounting policy election to recognize a payment that is contingent upon the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. This guidance is effective for the Company as of January 1, 2011, and is not expected to be material to the Company s financial position or results of operations.

4. Short-Term Investments

Effective January 1, 2008, the Company adopted ASC Topic 820, *Fair Value Measurements and Disclosures* (ASC 820). ASC 820, which defines fair value, establishes a framework for measuring fair value in GAAP, and expands disclosures about fair value measurements.

ASC 820 establishes a three-level valuation hierarchy for fair value measurements. These valuation techniques are based upon the transparency of inputs (observable and unobservable) to the valuation of an asset or liability as of the measurement date. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company s market assumptions. These two types of inputs create the following fair value hierarchy:

Level 1 Valuation is based on quoted prices for identical assets or liabilities in active markets.

Level 2 Valuation is based on quoted prices for similar assets or liabilities in active markets, or other inputs that are observable for the asset or liability, either directly or indirectly, for the full term of the financial instrument.

Level 3 Valuation is based upon other unobservable inputs that are significant to the fair value measurement.

The fair value of the Company s fixed income securities is based on a market approach using quoted market values.

The following tables summarize the fair value of short-term investments as of December 31, 2009:

Fair Value

Description	Cost	Level 1	(Carrying Value)
Certificate of deposit	$ 500,000	$ 500,000	$ 500,000
U.S. government agency obligations	14,708,200	14,710,378	14,710,378
	$ 15,208,200	$ 15,210,378	$ 15,210,378

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

Total unrealized gross gains were $2,177 and $0 for the year ended December 31, 2009 and 2010, respectively. There were no unrealized gross losses for the year ended December 31, 2009 and 2010. The Company does not have any securities in an unrealized loss position and, therefore, there are no other-than-temporary impairments. The Company had no investment securities as of December 31, 2010.

5. Property and Equipment

Property and equipment consisted of the following:

	Estimated Useful Lives	December 31, 2009	December 31, 2010
Laboratory equipment	7	$ 2,349,175	$ 2,453,788
Office equipment and software	3-5	513,394	582,072
Leasehold improvements	7	115,009	140,101
		2,977,578	3,175,961
Less accumulated depreciation		(2,054,527)	(2,312,953)
		$ 923,051	$ 863,008

The total amount of depreciation expense for the year ended December 31, 2008, 2009 and 2010 were $346,361, $231,890 and $260,571 respectively.

6. Notes Payable

Long-term debt consisted of the following:

	December 31, 2009	December 31, 2010
Note payable to bank, with interest rate of 0.5% below prime (2.75% at December 31, 2009), monthly payments through October 2010	$ 58,965	$
Notes payable to GECC and Oxford, with fixed interest rate of 7.24% above three-year Treasury rate (10.56% at December 31, 2009), monthly payments through March 2011	5,659,771	
Notes payable to GECC and Oxford, with fixed interest rate of 7.24% above three-year Treasury rate (10.51% at December 31, 2009), monthly payments through July 1 2011	3,316,812	
Notes payable to Mid-Cap and SVB, with fixed interest rate of 9.75%, monthly payments through September 1, 2013		15,000,000

	9,035,548	15,000,000
Less unamortized discount	(58,482)	(196,111)
	8,977,066	14,803,889
Less current portion, including unamortized discount	(6,258,324)	(4,318,078)
	$ 2,718,742	$ 10,485,811

In 2007, the Company obtained a $15.0 million loan commitment from General Electric Capital Corporation (GECC) and Oxford Finance Corporation (Oxford). The loan is collateralized by a security interest in all of the Company s assets, excluding intellectual property. The loan includes customary covenants, including those that require prior written consent of the lenders before the Company can incur or prepay indebtedness, create additional

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

liens, sell, or transfer any material portion of its assets. The loan agreement also contains customary events of default, and also includes a material adverse effect clause. In connection with this loan, the Company issued warrants to the lenders to purchase an aggregate of 69,294 shares of Series C-3 convertible preferred stock. The fair value of the preferred stock warrants issued was based on observable inputs using quoted market values and the income approach as derived by the Black-Scholes model. The terms of these preferred stock warrants and the fair value assumptions and inputs are consistent with Note 7.

In August, 2010 the Company obtained a $15.0 million loan commitment from Mid-Cap and SVB to pay-off the existing loan commitment from GECC and Oxford that was set to mature in March and July 2011, and to fund research and development and corporate purposes. Upon execution of the agreement in August 2010, the Company drew $10.0 million in principal. In December 2010, the Company amended their term loan arrangement with Mid-Cap and SVB in order to access the remaining tranche of $5.0 million. The Company is required to make interest only payments each month through March 2011, and principal and interest payments of $566,612 monthly starting April 1, 2011. The loan is collateralized by a security interest in all of the Company s assets, excluding intellectual property. The loan includes customary covenants, including those that require prior written consent of the lenders before the Company can incur or prepay indebtedness, create additional liens, sell, or transfer any material portion of its assets. The loan agreement also contains customary events of defaults, and also includes a material adverse effect clause. In connection with the loan, the Company issued warrants to lenders to purchase an aggregate of 64,674 shares of Series C-3 convertible preferred stock. The fair value of the preferred stock warrants issued was $219,322 on the dates of issuance and was based on observable inputs using quoted market values and the income approach as derived by the Black-Scholes model. The terms of these preferred stock warrants and the fair value assumptions and inputs are detailed in Note 7.

The notes payable to bank are collateralized by certain property and equipment of the Company. Interest paid was $1,202,674, $1,272,942 and $842,141 for the year ended December 31, 2008, 2009, 2010, respectively.

Aggregate maturities of debt due after December 31, 2010, are as follows:

2011	$ 4,433,233
2012	6,021,052
2013	4,545,715
	15,000,000
Less unamortized discount	(196,111)
	$ 14,803,889

7. Preferred Stock Warrants

In 2007, the Company issued warrants as consideration in connection with its loan commitment from GECC and Oxford to purchase 69,294 of Series C-3 convertible preferred stock, maturing in 2017. These preferred stock warrants were exercisable upon issuance, and no contingent conversion feature exists. Any Series C-3 convertible preferred stock issued upon exercise would maintain the rights and conversion features set forth in Note 10.

In August 2010 and December 2010, the Company issued warrants as consideration in connection with its loan commitment from Mid-Cap and SVB to purchase either Series C-3 preferred stock or preferred stock offered in a subsequent offering. The number of preferred stock warrants issued was based on the Series C-3 convertible preferred stock and a $8.12 per share exercise price. The preferred stock warrants will mature in 2020, are exercisable upon issuance and do not contain contingent conversion features. Upon exercise of the warrants, the underlying shares would maintain the rights and conversion features set forth in Note 9 for the Series C-3 convertible preferred stock.

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

The liability is measured at fair value, and any changes to fair value are recorded in the statement of operations as other income (expense). The fair value of the GECC and Oxford preferred stock warrants was determined using the Black-Scholes valuation model as of December 31, 2009 and 2010 based upon the following assumptions:

	December 31, 2009	December 31, 2010
Exercise price	$ 8.12	$ 8.12
Convertible preferred stock price	$ 8.12	$ 6.00
Risk-free interest rate	3.12%	2.9-3.7%
Expected life	8 years	7-10 years
Dividend yield	0.00%	0.00%
Expected volatility	27.69%	22.69-29.55%

The fair value of the preferred stock warrants is based upon observable inputs using quoted market values and the income approach as derived by the Black-Scholes model. Volatility is derived from the historical volatility of the NASDAQ Biotechnology Index over the remaining expected life of the warrant. The warrants contain anti-dilution and change in control provisions that can impact conversion.

The carrying and fair values of the preferred stock warrants are $221,031 and $223,032 as of December 31, 2009 and 2010, respectively. The preferred stock warrants are classified as Level 2 within the ASC 820 fair value hierarchy. The Company recorded other income in 2008, 2009 and 2010 of $11,912, $74,118, and $219,068, respectively, due to the change in fair value on the warrants.

8. Subordinated Notes

In December 2010, the Company issued $8.1 million of Subordinated Convertible Promissory Notes (the Subordinated Notes) and in January 2011 the Company issued an additional $3.7 million of Subordinated Notes. The Subordinated Notes converted into shares of our common stock upon the closing of our initial public stock offering on February 9, 2011. The Subordinated Notes, plus accrued and unpaid interest thereon, were converted into 2,335,823 shares of common stock using a conversion price of $5.10 per share (85% of offering price). As of December 31, 2010, the Subordinated Notes were treated as share-settled debt under ASC 480-10-25-14 and were recorded at fair value. The Subordinated Notes accrued interest in kind at an annual rate of 10.0 percent and were not due until maturity.

9. Leases

Future minimum lease payments for noncancellable operating leases as of December 31, 2010, are:

2011	$ 157,021
2012	80,543
2013	82,627
2014	84,826

2015	79,696
Total minimum lease payments	$ 484,713

Rent expense for operating leases was $336,311, $355,601 and $367,144 for the year ended December 31, 2008, 2009 and 2010, respectively. In 2010, the Company entered into a noncancelable operating lease, with minimum lease payments that total $406,009 and are payable through 2015.

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

10. Convertible Preferred Stock

On July 29, 2009, the Company increased the number of Series C-3 convertible preferred stock authorized for issuance to 5,235,602 shares. On October 8, 2009, the Company increased the number of Series C-3 convertible preferred stock authorized for issuance to 5,549,738 shares. Between August 3, 2009 and October 13, 2009, the Company sold 3,282,456 shares of Series C-3 convertible preferred stock for $8.12 per share for proceeds totaling $26,645,524, net of offering costs of $43,097. In December 2010, the Company increased the number of Series C-3 convertible preferred stock authorized for issuance to 7,643,979 shares to allow for the conversion of the Subordinated Notes and the issuance of Series C-3 warrants associated with the Company s credit facility.

The Company s total outstanding convertible preferred stock, with a par value of $0.001 per share, consisted of the following as of December 31, 2010:

Convertible Preferred Stock	Shares Authorized	Shares Issued	Price per Share	Total Proceeds (Net of Offering Costs)
Series A-1	750,261	750,167	$ 1.91	$ 1,470,370
Series A-2	241,884	241,634	5.73	1,430,749
Series B	936,649	936,241	8.12	7,530,180
Series C-1	1,937,172	1,895,765	8.12	15,320,640
Series C-2	2,801,047	2,787,791	8.12	22,447,353
Series C-3	7,643,979	5,135,965	8.12	41,600,191
				$ 89,799,483

The Company s total proceeds, net of offering costs, for its outstanding convertible preferred stock, with a par value of $0.001 per share, consisted of the following:

Convertible Preferred Stock	December 31, 2009	2010
Series A-1	$ 1,470,370	$ 1,470,370
Series A-2	1,430,749	1,430,749
Series B	7,530,180	7,530,180
Series C-1	15,320,640	15,320,640
Series C-2	22,447,353	22,447,353
Series C-3	41,600,191	41,600,191
	$ 89,799,483	$ 89,799,483

Following is a description of the conversion, dividends, liquidation, and voting characteristics of the Company s convertible preferred stock.

Conversion. Each share of the Company s convertible preferred stock may be converted at any time into shares of common stock at its conversion price at the option of the stockholder. The conversion price, which is $1.91 for the Series A-1, $5.73 for the Series A-2 and $8.12 per share for the Series B, C-1, C-2 and C-3 convertible preferred stock at December 31, 2009, adjusts proportionally for stock splits, stock dividends, and recapitalizations. If the Company issues or is deemed to have issued additional shares of common stock at a purchase price less than the applicable conversion price, exclusive of common stock options and certain other excluded issuances, the conversion price will be adjusted based on a weighted-average formula. The weighted-average formula is based upon the initial conversion price and common stock outstanding prior to issuance of additional shares of common stock. The conversion price is adjusted by multiplying it by a fraction, the numerator of which is the common stock outstanding prior to the issuance of additional shares of common stock plus the number of additional shares that

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

would be purchased based upon the consideration received through the issuance and the conversion price, if any, and the denominator of which is the number of shares of common stock outstanding prior to the issuance of additional shares of common stock plus the number of additional shares of common stock issued or deemed issued.

The convertible preferred stock converts to common stock automatically at the applicable conversion price upon approval of holders of at least 50 percent of the outstanding shares of the respective series of convertible preferred stock. All shares of convertible preferred stock converted into common stock on a one-for-one basis upon the closing of the Company s initial public stock offering on February 9, 2011. At December 31, 2010 and December 31, 2009, 11,747,563 shares of common stock were reserved for issuance upon conversion of convertible preferred stock.

Dividends. The holders of the convertible preferred stock are entitled to receive dividends when and if declared by the Board from legally available earnings at the rate of $0.15 per share for the Series A-1, $0.46 per share for the Series A-2 and $0.65 per share for the Series B, C-1, C-2 and C-3 convertible preferred stock. The full declared but unpaid dividend on convertible preferred stock must be paid prior to any dividend on the common stock. No dividends had been declared through December 31, 2010.

Liquidation. The holders of the Series A-1 and A-2 convertible preferred stock are entitled to receive $1.91 and $5.73 per share, respectively, plus any declared but unpaid dividends in the event of liquidation of the Company. The holders of the Series B, C-1, C-2, and C-3 convertible preferred stock are entitled to receive $8.12 per share plus any declared but unpaid dividends in the event of liquidation of the Company. The holders of Series B, C-1, C-2, and C-3 convertible preferred stock receive preference over the holders of Series A-1 and A-2 convertible preferred stock. A liquidation is defined as (i) a sale of all or substantially all of the assets of the Company or a merger or consolidation which will result in the Company s stockholders immediately prior to such transaction holding less than 51 percent of the voting power of the surviving, continuing or purchasing entity; and (ii) the sale, assignment, transfer or termination in any manner of (A) the amended and restated license agreement between the Company and Purdue Research Foundation dated October 1998, as amended from time to time, or (B) the patents, pending patents or patent rights described in such license agreement, except in the event that a transaction so effecting such license agreement or intellectual property shall not be deemed a liquidation if it has been unanimously approved by the Board.

Voting. Both holders of convertible preferred stock and common stock have voting rights. Each share of convertible preferred stock and common stock is entitled to one vote. Convertible preferred stock and common stock maintain the same voting rights, except for the election of the Board of Directors under which separate classes, based upon common stock and series of preferred stock, vote to elect a pre-determined number of directors.

11. Stockholders Equity (Deficit)

Common Stock

In conjunction with the issuance of Series B convertible preferred stock, the Company issued common stock to several Series B investors. Under the terms of the agreement, the Company has the right, but not the obligation, to repurchase the common stock, if certain conditions are not met by the holders. At December 31, 2009 and 2010, 222,510 shares remained subject to certain repurchase conditions. Based on the post-money valuation upon the Company s closing of the initial public offering on February 9, 2011, 196,335 of the shares of common stock subject to certain repurchase conditions were released to several Series B investors. The remaining 26,175 shares of common stock remain restricted and, subject to certain conditions, may be repurchased by the Company.

Stock Options

The Company has an employee stock option plan for which 1,963,350 shares of common stock are authorized and reserved at December 31, 2009 and 2,486,663 at December 31, 2010. The plan is available to all employees, directors and certain contractors as determined by the Board. Employees are granted incentive stock options, while

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

directors and contractors are issued non-qualified options. The plan allows the holder of the option to purchase common stock at the exercise price, which was at or above the fair value of the Company s common stock on the date of grant.

Generally, options fully vest four years from the grant date and have a term of ten years. Options granted in connection with an employee s commencement of employment generally vest over a four-year period with half of the shares subject to the grant vesting after two years of employment and remaining options vesting monthly over the remainder of the four-year period. Options granted for performance or promotions vest monthly over a four-year period. Unexercised stock options terminate on the tenth anniversary date after the date of grant. The Company recognizes the stock-based compensation expense over the requisite service period of the individual grantees, which generally equals the vesting period. In connection with the adoption of ASC 718, the Company reassessed the valuation methodology for stock options and the related input assumptions. As a result, beginning with the 2006 stock option grant, the Company utilizes a Black-Scholes option-pricing model to estimate the value of stock options. The Black-Scholes model allows the use of a range of assumptions related to volatility, risk-free interest rate, and employee exercise behavior. Expected volatility is derived from the historical volatility of the NASDAQ Biotechnology Index, which the Company has determined is a proxy for its volatility. The risk-free interest rate is derived from the weighted-average yield of a Treasury security with the same term as the expected life of the options. The expected life of the options was based on the weighted-average life of the Company s historical option grants, and the dividend yield is based on historical experience and the Company s estimate of future dividend yields. Since the Company has elected to use an index to determine the value of its stock options, it is applying the calculated value approach for a private company instead of using fair value. Subsequent to filing the registration statement, all of our prospective grants will be valued under the fair value provisions of ASC 718.

The weighted-average value of the individual options granted during 2008, 2009 and 2010 were determined using the following assumptions:

	Year Ended December 31,		
	2008	**2009**	**2010**
Weighted-average volatility	34.87%	35.59%	36.26%
Risk-free interest rate	4.04%	3.67%	3.52%
Weighted-average expected life (in years)	10.0	10.0	9.8
Dividend yield	0.00%	0.00%	0.00%

The resulting value of options granted was $343,119, and $1,226,783 for the year ended December 31, 2009 and 2010, respectively, which will be amortized into income over the remaining requisite service period. The Company recognized stock-based compensation cost, net of forfeitures, in the amount of $257,163, $381,877 and

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

$523,562 for the year ended December 31, 2008, 2009 and 2010, respectively. The Company s stock option activity and related information are summarized as follows:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (In Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2008	1,057,806	$ 2.54		
Granted during year	357,240	3.05		
Exercised during year	(43,452)	1.05		
Expired during year	(1,570)	5.87		
Forfeited during year	(15,703)	2.45		
Outstanding at December 31, 2008	1,354,321	$ 2.72	7.00	$ (987,712)
Exercisable at December 31, 2008	799,986	2.81	5.89	(660,088)
Outstanding at January 1, 2009	1,354,321	2.72		
Granted during year	374,227	2.54		
Exercised during year				
Expired during year	(119,607)	6.58		
Forfeited during year	(20,732)	2.34		
Outstanding at December 31, 2009	1,588,209	$ 2.39	7.23	$ 1,113,770
Exercisable at December 31, 2009	980,812	2.23	6.44	442,029
Outstanding at January 1, 2010	1,588,209	2.39		
Granted during year	555,987	4.22		
Exercised during year	(69,649)	2.11		
Expired during year	(8,224)	7.64		
Forfeited during year	(46,990)	5.08		
Outstanding at December 31, 2010	2,019,333	$ 2.82	7.01	$ 8,887,814
Exercisable at December 31, 2010	1,271,226	$ 2.41	6.10	$ 6,108,168

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

The following is a rollforward of the Company s nonvested stock options from December 31, 2007 to December 31, 2010.

	Options	Weighted-Average Grant Date Value
Nonvested stock options at January 1, 2008	481,709	$ 0.63
Granted during year	357,240	1.51
Vested during year	(267,341)	1.05
Expired during year	(1,570)	0.44
Forfeited during year	(15,703)	1.20
Nonvested at December 31, 2008	554,335	$ 1.05
Nonvested stock options at January 1, 2009	554,335	$ 1.05
Granted during year	374,227	0.92
Vested during year	(180,826)	1.15
Expired during year	(119,607)	6.59
Forfeited during year	(20,732)	1.24
Nonvested at December 31, 2009	607,397	$ 1.01
Nonvested stock options at January 1, 2010	607,397	$ 1.01
Granted during year	555,987	2.21
Vested during year	(360,063)	1.31
Expired during year	(8.224)	4.41
Forfeited during year	(46,990)	1.43
Nonvested at December 31, 2010	748,107	$ 1.97

The total grant date value of options vested during 2008, 2009 and 2010 was $271,116, $351,664 and $521,196, respectively. As of December 31, 2009 and December 31, 2010, the total remaining unrecognized compensation cost related to nonvested stock options granted subsequent to the adoption of ASC 718 on January 1, 2006, was $614,959 and $1,204,746, respectively, which will be amortized over the remaining requisite service period. The intrinsic value of options exercised was $0 and $302,160 for the year ended December 31, 2009 and December 31, 2010, respectively.

12. Income Taxes

A reconciliation of the expected income tax benefit (expense) computed using the federal statutory income tax rate to the Company s effective income tax rate is as follows for year ended December 31, 2008, 2009, and 2010:

	December 31,		
	2008	2009	2010
Income tax computed at federal statutory tax rate	34.0%	34.0%	34.0%
State taxes, net of federal benefits	8.5%	8.5%	8.4%
Research and development credits	5.1%	5.7%	4.8%
Permanent differences	(3.4)%	(3.6)%	(0.7)%
Other	0.3%	0.2%	(0.1)%
Change in valuation allowance	(44.5)%	(44.8)%	(46.4)%
Total	0.0%	0.0%	0.0%

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

At December 31, 2010, the Company has net operating loss carryforwards totaling approximately $95,200,000 and $93,700,000 for federal and state income taxes, respectively, that may be used to offset future taxable income. If not used, the carryforwards will begin expiring in the year 2022. As of December 31, 2009 and December 31, 2010, the Company has not experienced a change in ownership, as defined under Section 382 of the U.S. Internal Revenue Code (the Code). The Company is evaluating whether the initial public offering that occurred in February, 2011 resulted in an ownership change. The Company recognizes future tax benefits, such as net operating losses, to the extent those benefits are expected to be realized in future periods. Due to uncertainty surrounding the realization of its deferred tax assets, the Company has recorded an equal and offsetting valuation allowance against its net deferred tax assets.

Net deferred tax assets and liabilities are comprised of the following:

	December 31,	
	2009	2010
Net operating loss carryforwards	$ 29,571,000	$ 37,987,000
Research and development credit carryforwards	4,285,000	5,169,000
Accrued vacation	40,000	49,000
Other	(16,000)	(1,000)
	33,880,000	43,204,000
Less valuation allowance	(33,880,000)	(43,204,000)
	$	$

13. Collaborative Arrangements

In December 2005, the Company entered into a collaborative agreement with Bristol-Myers Squibb (BMS) granting BMS an exclusive worldwide license to its proprietary patent rights and know-how related to methods and compositions useful in making folate conjugates to develop and commercialize folate conjugates of epothilone compounds. To date, the Company received upfront payments, milestone payments, and maintenance payments totaling $8.1 million from BMS. As all payments are not contingent on specific performance or ongoing responsibilities of the Company, the Company recognized the upfront revenue upon contract signing, milestone revenue when milestones were achieved, and annual maintenance fees when they were due. BMS terminated this agreement during 2010. As a result, the Company does not expect to receive additional milestones or royalties associated with this program. No material payments were expected to be received during 2011 and 2012 and, therefore, this termination does not have a material financial impact on the Company.

In October 2007, the Company entered into an exclusive worldwide license with R&D Biopharmaceuticals to research, develop, and commercialize products containing conjugates of folate receptor targeting compounds and tubulysin compounds. The Company paid an upfront fee of $300,000 as research and development and has since paid $50,000 in annual maintenance fees. In February 2011, this licensing agreement was assigned by R&D Biopharmaceuticals to Trientlgasse. The Company could pay $6,300,000 in additional contingent payments upon the achievement of specific scientific, clinical, and regulatory milestones, in addition to royalties upon commercial sales.

All payments have been expensed as research and development as incurred, as there is no alternate future use for this technology.

In December 1995, as amended in October 1998, the Company entered into an exclusive license agreement with Purdue Research Foundation, which licenses the right under certain patents to the Company. The Company is obligated to pay an annual minimum royalty of $12,500 until commercial sales commence, following which time the payment of single digit royalty rates will commence. All payments have been expensed as incurred, as the Company does not believe there is an alternate future use for this technology.

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

In December 2009, the Company entered into a financial term sheet to be incorporated into a written license agreement with Purdue Research Foundation for a patent related to prostate cancer. The agreement was signed and became effective on March 1, 2010. Pursuant to the exclusive license agreement, the Company is subject to annual payments of $15,000, payable until first commercial sale, following which time the payment of single digit royalty rates will commence. In addition, certain clinical and regulatory milestone payments of $500,000 along with sales-based milestones related to third-party sales are also payable. The Company is also subject to penalties totaling $300,000 if certain diligence milestones are not met. Subsequent to the first commercial sales, the annual milestone is $100,000. Future milestone payments in excess of $500,000 may be waived by Purdue Research Foundation.

14. Related-Party Transactions

The Company funds research at the employer of one of its founders and current Chief Science Officer. Amounts included in research and development expenses were $394,474, $352,165, and $391,325, for the year ended December 31, 2008, 2009 and 2010, respectively. During the past three years, the Company has completed various financing transactions which included the issuance of our Preferred Stock and Subordinated Notes. In each case, certain of our existing stockholders participated by purchasing the securities.

15. Retirement Plans

The Company maintains a 401(k) retirement savings plan to provide retirement benefits for substantially all of its employees. Participants in the plan may elect to contribute a portion of their annual compensation to the plan, limited to the maximum allowed by the Code. The Company does not currently match 401(k) contributions.

16. Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common share equivalents outstanding for the period determined using the treasury-stock method and the if-converted method. For purposes of this calculation, convertible preferred stock, stock options and warrants are considered to be common stock equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive.

The following tables and discussion provide a reconciliation of the numerator and denominator of the basic and diluted net loss per share computations. The calculation below provides net loss, weighted-average common shares outstanding, and the resultant net loss per share on both a basic and diluted basis for the year ended December 31, 2008, 2009 and 2010.

Historical net loss per share

	Year Ended December 31,		
	2008	**2009**	**2010**
Numerator:			

Net loss	$ (18,492,876)	$ (17,005,685)	$ (20,092,722)
Denominator:			
Weighted-average common shares outstanding	900,127	911,066	923,007
Basic and diluted net loss per share	$ (20.54)	$ (18.67)	$ (21.77)

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

As of December 31, 2008, 2009 and 2010 the following number of potential common stock equivalents were outstanding:

Common stock equivalents

	Year Ended December 31,		
	2008	**2009**	**2010**
Outstanding common stock options	1,354,321	1,588,209	2,019,333
Outstanding restricted stock	222,510	222,510	222,510
Shares issuable upon conversion of preferred shares	8,465,107	11,747,563	11,747,563
Shares issuable upon conversion of subordinated notes			1,596,066
Total	10,041,938	13,558,282	15,585,472

These common stock equivalents were excluded from the determination of diluted net loss per share due to their anti-dilutive effect on earnings.

17. Selected Quarterly Financial Data (unaudited)

The following table summarizes the unaudited statements of operations for each quarter of 2010 and 2009 (in thousands except per share amounts):

	Quarters Ended			
	March 31,	**June 30,**	**September 30,**	**December 31,**
2010				
Revenue	$	$	$	$
Cost and Expenses:				
Research and development	3,899	3,701	3,671	3,290
General and administrative	1,476	1,546	1,700	1,317
Loss from operations	(5,375)	(5,247)	(5,371)	(4,607)
Interest, net	(246)	(201)	(218)	(392)
Other	12	26	(123)	1,649
Net loss	$ (5,609)	$ (5,422)	$ (5,712)	$ (3,350)
Basic and diluted net loss per share(1)	$ (6.16)	$ (5.93)	$ (6.16)	$ (3.57)
Weighted average common shares outstanding basic and diluted(2)	911,066	914,580	927,703	937,088
2009				

Revenue	$	$	$ 3,000	$
Cost and Expenses:				
Research and development	3,193	3,682	3,805	4,124
General and administrative	879	885	913	1,257
Loss from operations	(4,072)	(4,567)	(1,718)	(5,381)
Interest, net	(395)	(374)	(330)	(288)
Other	26	24	15	54
Net loss	(4,441)	(4,917)	(2,033)	(5,615)
Basic and diluted net loss per share(1)	$ (4.87)	$ (5.40)	$ (2.23)	$ (6.16)
Weighted average common shares outstanding basic and diluted(2)	911,066	911,066	911,066	911,066

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ENDOCYTE, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(1) Per common share amounts for the quarters and full years have been calculated separately. Accordingly, the sum of quarterly amounts may not equal the annual amount because of differences in the weighted average common shares outstanding during each period, principally due to the effect of share issuances by the Company during the year.

(2) Diluted weighted average common shares outstanding are identical to basic weighted average common shares outstanding and Diluted EPS is identical to Basic EPS for all quarters of 2010 and 2009 because common share equivalents are excluded from the calculations of diluted weighted average common shares outstanding for those quarters, as their effect is anti-dilutive.

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Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures***

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

As of December 31, 2010, management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission s rules and forms, and that such information is accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2010, the design and operation of our disclosure controls and procedures were effective.

Management s Report on Internal Control Over Financial Reporting

This annual report does not include a report of management s assessment regarding internal control over financial reporting or an attestation report of the company s registered public accounting firm due to a transition period established by the rules of the Securities and Exchange Commission for newly public companies.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended December 31, 2010, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information***

None.

Part III

Item 10. ***Directors, Executive Officers and Corporate Governance***

Directors

The information required by this item set forth under the caption Proposal No. 1 Election of Directors in our definitive Proxy Statement to be used in connection with the 2011 Annual Meeting of Stockholders (the 2011 Proxy Statement) and incorporated herein by reference.

Executive Officers

Information regarding our executive officers is set forth in Item 1 of Part I of this annual report under the caption Executive Officers of the Registrant.

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics that applies to all of our directors and officers and other employees, including our principal executive officer, principal financial officer and principal accounting officer. This code is publicly available through the Investor Relations section of our website at www.endocyte.com. To the extent permissible under applicable law, the rules of the SEC or NASDAQ listing standards, we intend to post on our

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website any amendment to the code of business conduct and ethics, or any grant of a waiver from a provision of the code of business conduct and ethics, that requires disclosure under applicable law, the rules of the SEC or NASDAQ listing standards.

Audit Committee

The information required by this item relating to our audit committee is set forth under the caption Corporate Governance and Meetings and Committees of the Board in the 2011 Proxy Statement and incorporated herein by reference.

Section 16(a) Beneficial Ownership Reporting Compliance

Not applicable for 2010 since our common stock was not registered under the Exchange Act until February 9, 2011.

Corporate Governance

The information required by this item relating to the procedures by which stockholders may recommend nominees to the board of directors is set forth under the caption Corporate Governance Matters in the 2011 Proxy Statement and incorporated herein by reference.

Item 11. ***Executive Compensation***

The information required by this item is set forth under the captions Executive Compensation and Meetings and Committees of the Board in the 2011 Proxy Statement and incorporated herein by reference.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information required by this item with respect to security ownership of certain beneficial owners and management is set forth under the caption Beneficial Ownership of Common Stock by Certain Stockholders and Management in the 2011 Proxy Statement and incorporated herein by reference.

Equity Compensation Plan Information

The following table provides information regarding our equity compensation plan in effect as of December 31, 2010:

	Equity Compensation Plan Information(1)		
	Number of Securities to be Issued Upon Exercise of Outstanding	**Weighted Average Exercise Price of Outstanding**	**Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plan (Excluding Securities Referenced in**

Plan Category	Options, Warrants and Rights (a)		Options, Warrants and Rights (b)	Column (a)) (c)
Equity compensation plans approved by security holders:(2)	2,019,333	$	2.82	190,029(3)
Equity compensation plans not approved by security holders:				
Total	2,019,333	$	2.82	190,029

(1) On January 10, 2011, the Company effected a 1.00 for 1.91 reverse stock split. All historical common stock and per share information has been changed to reflect the stock split and is referred to in this chart as adjusted. .

(2) Consists of 1997 Stock Plan and 2007 Stock Plan.

(3) The 1997 Stock Plan provides for the grant of incentive stock options, nonqualified stock options and stock purchase rights. The original number of shares available for awards under the 1997 Stock Plan was 2,000,000, or 1,047,120, As Adjusted. On December 31, 2010 there were no shares available for grants of awards under the 1997 Stock Plan. The 2007 Stock Plan provides for the grant of incentive stock options, nonqualified stock options and stock purchase rights. The original number of shares available for awards under the 2007 Stock Plan was 3,305,036, or 1,730,237, As Adjusted. On December 31, 2010 there were 190,029 shares that remain available for grants of awards under the 2007 Stock Plan, As Adjusted.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

The information required by this item is set forth under the captions Corporate Governance and Transactions with Related Persons in the 2011 Proxy Statement and incorporated herein by reference.

Item 14. ***Principal Accounting Fees and Services***

The information required by this item is set forth under Proposal 4 Ratification of Independent Registered Public Accounting Firm in the 2011 Proxy Statement and incorporated herein by reference.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules.***

(a) 1. *Financial Statements*

The following financial statements of Endocyte, Inc. and its subsidiaries are set forth in Part II, Item 8.

2. *Financial Statement Schedules*

Financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or the notes thereto.

3. *Exhibits*

A list of exhibits required to be filed as part of this report is set forth in the Index to Exhibits, which immediately precedes such exhibits and is incorporated herein by reference.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ENDOCYTE, INC.

By:
/s/ P. Ron Ellis

P. Ron Ellis
President and Chief Executive Officer

Date: March 18, 2011

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ P. Ron Ellis	Director, President and Chief Executive Officer	March 18, 2011
P. Ron Ellis	(Principal Executive Officer)	
/s/ Michael A. Sherman	Chief Financial Officer (Principal	March 18, 2011
Michael A. Sherman	Financial and Accounting Officer)	
/s/ John C. Aplin	Director	March 18, 2011
John C. Aplin		
/s/ Philip S. Low	Director and Chief Science Officer	March 18, 2011
Philip S. Low		
/s/ Douglas G. Bailey	Director	March 18, 2011
Douglas G. Bailey		
/s/ Keith E. Brauer	Director	March 18, 2011
Keith E. Brauer		
/s/ John G. Clawson	Chairman of the Board of Directors	March 18, 2011
John G. Clawson		
/s/ Ann F. Hanham	Director	March 18, 2011
Ann F. Hanham		
/s/ Fred A. Middleton	Director	March 18, 2011
Fred A. Middleton		

Director

James S. Shannon

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EXHIBIT INDEX

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of Endocyte, Inc.
3.2	Amended and Restated Bylaws of Endocyte, Inc.
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 of Amendment No. 3 to Form S-1 (Registration No. 333-168904) filed January 12, 2011).
4.2	Third Amended and Restated Investor Rights Agreement dated March 9, 2007, among Endocyte, Inc. and the parties set forth therein, as amended (incorporated by reference to Exhibit 4.2 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
4.3	Warrant to Purchase Shares of Series C-3 Preferred Stock issued by Endocyte, Inc. to General Electric Capital Corporation on December 31, 2007 (incorporated by reference to Exhibit 4.3 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
4.4	Warrant to Purchase Shares of Series C-3 Preferred Stock issued by Endocyte, Inc. to Oxford Finance Corporation on December 31, 2007 (incorporated by reference to Exhibit 4.4 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
4.5	Warrant to Purchase Stock issued by Endocyte, Inc. to Silicon Valley Bank on August 27, 2010 (incorporated by reference to Exhibit 4.5 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
4.6	Warrant to Purchase Stock issued by Endocyte, Inc. to Midcap Funding III, LLC on August 27, 2010 (incorporated by reference to Exhibit 4.6 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
4.7	Form of Subordinated Convertible Promissory Note between Endocyte, Inc. and the parties set forth in the Note Purchase Agreement dated December 14, 2010 (incorporated by reference to Exhibit 4.7 of Amendment No. 2 to Form S-1 (Registration No. 333-168904) filed December 15, 2010).
10.1*	Form of Director and Executive Officer Indemnification Agreement (incorporated by reference to Exhibit 10.1 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
10.2*	1997 Stock Plan and forms of option agreements thereunder (incorporated by reference to Exhibit 10.2 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
10.3*	2007 Stock Plan and forms of option agreements thereunder (incorporated by reference to Exhibit 10.3 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
10.4*	2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
10.5*	Form of Option Agreement under the 2010 Equity Incentive Plan.
10.6*	2010 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.5 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
10.7	Lease dated May 1, 2008 between Endocyte, Inc. and 2639 Executive Building LLC (incorporated by reference to Exhibit 10.6 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
10.8	Lease dated May 30, 2008 between Endocyte, Inc. and Zeller Management Corporation, amended (incorporated by reference to Exhibit 10.7 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).
10.9	Lease dated November 1, 2008 between Endocyte, Inc. and 2639 Executive Building LLC (incorporated by reference to Exhibit 10.8 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed

September 28, 2010).

10.10 Lease dated March 1, 2010 between Endocyte, Inc. and Purdue Research Foundation (incorporated by reference to Exhibit 10.9 to Form S-1 (Registration No. 333-168904) filed August 17, 2010).

10.11 Amended and Restated Exclusive License Agreement dated October 21, 1998 between Endocyte, Inc. and Purdue Research Foundation, as amended (incorporated by reference to Exhibit 10.11 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).

10.12 Exclusive License Agreement effective March 1, 2010 between Endocyte, Inc. and Purdue Research Foundation (incorporated by reference to Exhibit 10.12 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).

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Exhibit Number	Description
10.13*	Form of Change in Control Agreements each dated August 25, 2010 between Endocyte, Inc. and certain of its named executive officers (incorporated by reference to Exhibit 10.13 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
10.14*	Change in Control Agreement dated August 25, 2010 between Endocyte, Inc. and P. Ron Ellis (incorporated by reference to Exhibit 10.14 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
10.15*	Change in Control Agreement dated August 25, 2010 between Endocyte, Inc. and Michael A. Sherman (incorporated by reference to Exhibit 10.15 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
10.16	Patent Assignment Agreement dated November 1, 2007 among Endocyte, Inc. and the parties set forth therein (incorporated by reference to Exhibit 10.16 of Amendment No. 1 to Form S-1 (Registration No. 333-168904) filed September 28, 2010).
10.17	Loan and Security Agreement dated August 27, 2010 among Endocyte, Inc., Midcap Funding III, LLC and Silicon Valley Bank, as amended on December 14, 2010 (incorporated by reference to Exhibit 10.17 of Amendment No. 2 to Form S-1 (Registration No. 333-168904) filed December 15, 2010).
10.18	Note Purchase Agreement, dated December 14, 2010 among Endocyte, Inc. and the parties set forth therein (incorporated by reference to Exhibit 10.18 of Amendment No. 2 to Form S-1 (Registration No. 333-168904) filed December 15, 2010).
10.19	Form of Subordination Agreement between Endocyte, Inc. and the parties set forth in the Note Purchase Agreement dated December 14, 2010 (incorporated by reference to Exhibit 10.19 of Amendment No. 2 to Form S-1 (Registration No. 333-168904) filed December 15, 2010).
23.1	Consent of Ernst & Young, LLP, Independent Registered Public Accounting Firm.
31.1	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the Chief Executive Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the Chief Financial Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Indicates management contracts or compensatory plans or arrangements.