Endocyte, Inc. (ECYT)

Initiating Coverage with an OUTPERFORM Rating and $20 Price Target

March 16, 2011

Price
$7.50

Rating
OUTPERFORM

12-Month Price Target
$20

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- **We believe Endocyte's lead drug EC145 is likely to be filed for accelerated approval in Europe in H2:11.** We value the EC145 opportunity in PROC in the EU to be worth approximately $10 per share with accelerated approval and $7 per share without.
- **Lead drug EC145 (folate targeted DAVLBH) is about to start a Phase III clinical study in the ovarian cancer setting (PFS data likely by H1:13).** Data from a randomized controlled study of EC145 + PLD showed a statistically significant improvement in PFS (hazard ratio 0.62) p=0.031 with median PFS increase to 21.7 weeks from 11.7 weeks in all patients. Based upon the promising efficacy and relatively benign safety profile of the drug, we believe the EMA will be receptive to a request for a filing for accelerated approval in EU (expected late 2011/early 2012). We expect Endocyte to initiate a Phase III study of EC145 in platinum resistant ovarian cancer in H1:11.
- **We project EC145 could achieve peak sales of $1.5 billion in the ovarian cancer setting in the EU and US markets, if approved.** Early data in the larger NSCLC setting are also promising. Approval in this setting could lead to sales of $1.5-$2.0 billion.
- **The next catalysts for the stock include initiation of a Phase III trial for EC145 in women with platinum-resistant ovarian cancer (H1:11) and an update on the company's anticipated route and timeline to regulatory approval in Europe (June 2011).**
- **Initiating coverage with an OUTPERFORM rating and $20 price target.** We arrive at our $20 price target by taking the sum of the per share values of US sales and EU royalties in 2015. We value the US opportunity for EC145 in the platinum-resistant ovarian cancer setting at $10 which is derived by taking 6x our 2015 sales estimate of $137 million and discounting back at 25% over 4.75 years. We value the EU opportunity for EC145 in the platinum-resistant ovarian cancer setting at $10 a share, based upon a 6x multiple of EU royalties, 20% of $285 million, discounted back 25% over 4.75 years. Our valuation off of EU royalties assumes accelerated approval and launch in 2013; should accelerated approval not occur, we value the EU opportunity at approximately $7 per share.

FYE Dec	2010A	2011E			2012E		
REV	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	$0.0A	$0.0E		--	$0.0E		--
Q2 Jun	0.0A	0.0E		--	0.0E		--
Q3 Sep	0.0A	0.0E		--	0.0E		--
Q4 Dec	0.0A	0.0E		--	0.0E		--
Year*	**$0.0A**	**$0.0E**		**--**	**$0.0E**		**--**
Change	--	--			--		
	2010A	2011E			2012E		
EPS	ACTUAL	CURR.	PREV.	CONS.	CURR.	PREV.	CONS.
Q1 Mar	$0.00A	($0.55)E		--	($0.38)E		--
Q2 Jun	0.00A	(0.35)E		--	(0.43)E		--
Q3 Sep	(1.10)A	(0.36)E		--	(0.37)E		--
Q4 Dec	(0.22)A	(0.36)E		--	(0.37)E		--
Year*	**($1.32)A**	**($1.44)E**		**--**	**($1.55)E**		**--**
P/E	--	--			--		
Change	93%	-9%			-8%		

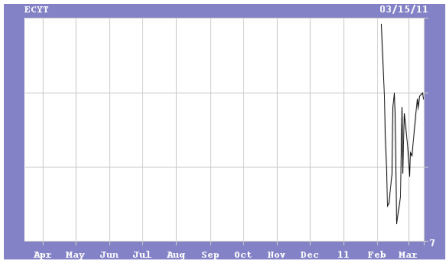
Consensus estimates are from Thomson First Call.
** Numbers may not add up due to rounding.*

Company Information

Shares Outst (M)	$29.6
Market Cap	$191.8
52-Wk Range	$6.15 - $8.34
Book Value/sh	$2.29
Cash/sh	$3.75
Enterprise Value (M)	$211.3
LT Debt/Cap %	0
Cash Burn (M)	$43.3

Company Description

Endocyte is developing novel small molecule drug conjugates and companion imaging prognostics. Their lead candidate, EC145, is in PIII trials in the PROC setting, targets cancers expressing the folate receptor that is also expressed on many solid tumors.



Source: Thomson Reuters

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Investment Thesis

Endocyte is developing novel drug candidates based on its small molecule drug conjugate technology and companion imaging prognostic tests. Small molecule drug conjugate technology (SMDC) provides the backbone for all of Endocyte's drug candidates and companion imaging prognostics. SMDCs allow for the direct targeting of potent anti-cancer agents to specific tumor cells in the body. SMDCs are part of a new class of targeted drug therapies, incorporating an antibody or ligand targeting component, and drug payload. This drug class includes approved and late stage candidates, such as TDM-1, SGN-35, CLDX-110, and IMGN853 a folate targeting antibody-drug conjugate. The companion imaging prognostic, EC20, utilizing the same SMDC technology applied in drug candidates, allows for individualized patient testing to determine patient suitability for treatment with a folate targeted SMDCs and may be proven to function as a unique validation tool in the development process. Endocyte's lead candidates—EC145 and EC20—highlight the utility of the combination of technologies, where patients with a high expression of the targeted marker (folate receptor) showed an improvement following treatment compared to those with limited receptor expression. Endocyte's initial focus is in the ovarian cancer setting, in which few effective drugs exist, and we believe it facilitates a potentially more straightforward route to registration for EC145 and its eventual application in many other indications. Additionally, the target folate receptor offers opportunities in many other indications since it is over-expressed in many cancer types. While other targeted drug (antibody drug conjugates etc.) technologies are being developed, Endocyte's SMDC technology is somewhat unique, given that while other targeted drug technologies (antibody drug conjugates etc.) are being developed, ECYT's dual functionality as an imaging prognostic aids development and offering a potential marker of treatment success.

Valuation

We arrive at our $20 price target by taking the sum of the per-share values of US sales and EU royalties in 2015. We value the US opportunity for EC145 in the platinum-resistant ovarian cancer setting at $10 which is derived by taking 6x our 2015 sales estimate of $137 million and discounting back at 25% over 4.75 years. We value the EU opportunity for EC145 in the platinum-resistant ovarian cancer setting at $10 a share based upon a 6x multiple of EU royalties, 20% of $285 million, discounted back 25% over 4.75 years. Our valuation off of EU royalties assumes accelerated approval and launch in 2013, should accelerated approval not occur, we value the EU opportunity at approximately $7 per share.

Risks

Risks to our price target include 1) failure of EC145 for PROC in the clinic; and 2) failure to receive marketing approval in the US or the EU for EC145 for PROC.

KEY POINTS

- **Endocyte is developing small molecule drug conjugate (SMDC) therapies that exploit the over-expression of a specific folate nutrient receptor in cancer and inflammation.** The folate receptor is highly expressed in ovarian, NSCLC, kidney, colorectal and breast cancers and importantly the size of the SMDC is small enough such that it can penetrate solid tumors

- **Endocyte's lead drug EC145 (folate targeted DAVLBH) is about to start Phase III in the ovarian cancer setting in the US (data likely by H1:13).** Data from a randomized controlled study of EC145 + PLD showed a statistically significant improvement in PFS (hazard ratio 0.62) p=0.031 with median PFS increase to 21.7 weeks from 11.7 weeks in all patients. Based upon the promising efficacy and relatively benign safety profile of the drug, we believe the EMA will be receptive to a request for a filing for accelerated approval in EU (expected late 2011/early 2012). We expect Endocyte to initiate a Phase III study of EC145 in platinum resistant ovarian cancer H1:11.

- **We expect ECYT to have concluded its discussions with EMA and be guiding to a YE:11/Early 2012 filing with potential approval in H2:12.**

- **If approved, we project EC145 could achieve peak sales of $1.5 billion in the ovarian cancer setting in the EU and US markets, by our estimates.** Early data in the larger NSCLC setting are also promising. Approval in this setting could lead to sales of $1.5-$2.0 billion.

- **In conjunction with the development of EC145, Endocyte is pursuing a companion prognostic imaging test (EC20) which may identify those patients with a poor prognostic outcome and who might benefit the most from treatment with EC145.** Endocyte's Phase II ovarian study will enroll both high folate receptor expressers as well as normal expressing ovarian cancer patients and is designed to determine if the EC20 imaging procedure is useful in identifying appropriate patients for EC145 treatment.

Potential Upcoming Milestones

H1:11	Initiate Phase III trial for EC145 in women with platinum-resistant ovarian cancer
H1:11	Initiate Phase III trial for EC20 folate imaging agent (companion prognostic for EC145)
H1:11	End of Phase II meeting with EU EMEA
June 4-8th	Final Phase II PRECEDENT trial data for EC145 at ASCO (Chicago, IL)
June 2011	Update the Street on the anticipated route and timeline to EU approval
H2:11	Potential filing for accelerated approval in the EU with existing platinum-resistant ovarian cancer PFS data
YE:11	PSMA targeting SMDC trial expected to be complete
YE:11	Complete Phase I Trial for EC0489 DAVLBH payload SMDC in solid tumors
YE:11	Complete Phase I Trial for EC0225 DAVLBH/mitomycin-C payload SMDC in solid tumors
Q1:12	Overall survival data from Phase IIb PRECEDENT trial of EC145 in platinum-resistant ovarian cancer
2012	Potential EU launch if accelerated approval granted by the EMA
2013	Final analysis of Phase III PROCEED trial of EC145
2014	Potential US launch of EC145 in PROC setting

Clinical Pipeline

EC145 — Lead SMDC Candidate

EC145 uses folate to target the chemotherapeutic payload desacetylvinblastine monohydrazide (DAVLBH), a potent microtubule destabilizing agent. Alone, DAVLBH has no therapeutic window because it is highly toxic, but when conjugated to folate, it has been found to be safe up to 2.5 mg day. The folate-targeted SMDC binds to the folate receptor, is then internalized by endocytosis, after which the DAVLBH payload is cleaved from the SMDC inside the endosome where it escapes to exert activity inside the cell. Results from the Phase IIb PRECEDENT trial of EC145, in combination with pegylated liposomal doxorubicin (PLD) conducted in platinum resistant ovarian cancer (PROC) patients who had failed first or second line platinum therapy, were encouraging, in our opinion, as it delayed progression—median PFS increased from 11.7 weeks to 21.7 weeks in all patients and to 24 weeks in folate receptor positive patients. Additional results from the study are expected at ASCO, June 4-8th (Chicago, IL), and OS data from the study is expected in Q1:12. AEs from the study show that the combination EC145 and PLD are well tolerated, suggesting neutropenia, leukopenia and lymphopenia are likely to be the most closely watched but consistent with PLD therapies. AEs associated with pre-mature linker dissociation in the blood stream were moderate, suggesting that the Endocyte SMDC linker technology is relatively stable. Initiation of a Phase III study "PROCEED" with the same design as the Phase IIb trial is expected to begin in H1:11, with initial PFS data potentially expected in 2013.

PROCEED Phase III Trial in PROC

In H1:11, Endocyte is expected to initiate a double-blinded, 2:1 randomized trial of EC145 + PLD versus PLD only, in ~500 folate receptor positive PROC patients that failed first or second line platinum therapy. The study will use the same dose and schedule as the Phase II study. A 2.5 mg dosage of EC145 will be administered via IV bolus on days 1, 3, 5 and 15, 17, 19 of a 4-week cycle with pegylated liposomal doxorubicin (PLD) in combination with 50 mg/m^2 intravenous infusion on day 1 of a 4-week cycle. The PLD dose will be based on ideal body weight for subjects whose measured body weight is greater than their ideal body weight), with dose reductions permitted for toxicity. The PLD-only dosing arm will have the same dose and schedule as the combination arm. The study is powered to show a 43% improvement in PFS and to show OS. The primary endpoint is progression-free survival based on investigator assessment using RECIST v1.1, assessed at 6 week intervals through week 24 and at 8 week intervals thereafter. Secondary endpoints include OS comparison between treatment arms, occurring at 375 deaths and incidence of SAEs as assessed at each study visit including deaths.

Table 1: Phase II Results and Phase III Trial Design

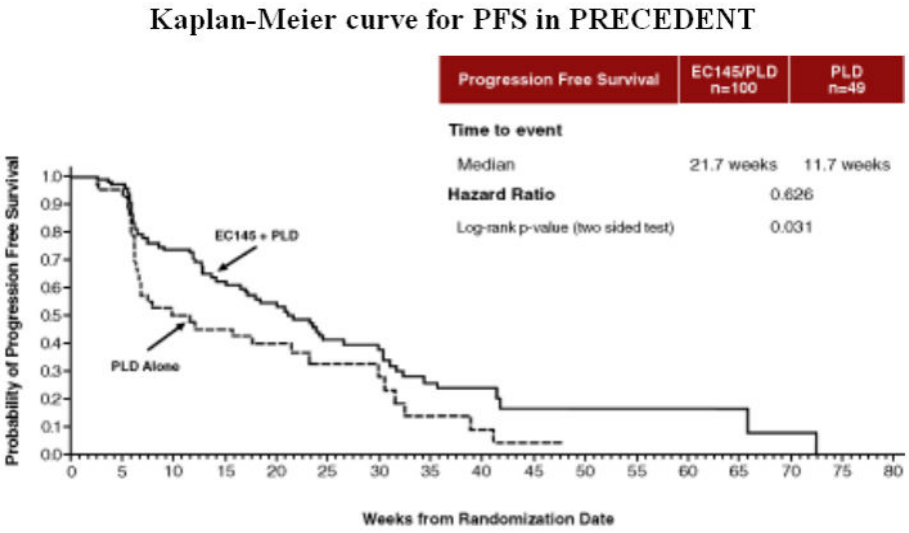
Study Metric	Folate++ group	Everyone (Folate +)
Achieved PII PFS HR	0.38 (p=0.018)	0.55 (p=0.031)
PIII PFS HR Powering Assumption	0.56	0.70
Alpha Spend	0.01	0.04
PIII PFS for control group	~6 *	11-12 weeks*
PIII OS Secondary Endpoint Powering Assumption	0.41*	0.72*

**Our estimates*
Source: Endocyte and Wedbush Pac Grow Life Sciences

EC145 Phase II PRECEDENT Data in PROC

In September 2008, Endocyte initiated an open-label, randomized, multi-center Phase II study of EC145, in combination with PLD versus PLD alone in 149 women with PROC who had failed 1 or 2 prior platinum based therapies. One 2.5 mg dose of EC145 was administered via IV bolus on days 1, 3, 5 and 15, 17, 19 of a 4-week cycle with pegylated liposomal doxorubicin (PLD) in combination with 50 mg/m^2 intravenous infusion on day 1 of a 4 week cycle. The PLD dose was based on ideal body weight for subjects whose measured body weight is greater than their ideal body weight, with dose reductions permitted for toxicity. The PLD-only dosing arm uses the same dose and schedule as the combination arm. Final analysis of the primary endpoint, according to RECIST criteria of 149 patients and 95 PFS events, showed combination therapies increased median PFS to 21.7 weeks over 11.7 weeks for PLD alone, and delayed progression by 85% in all patients (p=0.031) with a hazard ratio of 0.626 (Figure 1). Additional analysis of EC20++ patients (n=38 total, n=23 EC145 + PLD, n=15 PLD), those with folate receptors detected on primary and secondary tumors, showed an increased improvement in PFS, to 24.0 weeks versus 6.6 weeks for PLD alone, with a hazard ratio of 0.381 (p=0.018). Although not powered to demonstrate an improvement in secondary endpoint, OS, interim data analysis shows 81% of EC145 + PLD treated patients alive at 6 months versus 72% with PLD alone; mature OS data from the study is expected Q1:12. EC145 + PLD was found to be well tolerated, with no statistically significant difference in AEs noted (p=0.210). Predominate grade 3/4 AEs under combination EC145 and PLD dosing included lymphopenia 17.8% (n=19), leukopenia 16.8% (n=18), and neutropenia, 12.1% (n=13) and PPE syndrome 11.2% (n=12) and were consistent with both Phase I safety data (Table 2) and higher PLD dosing (Table 3). Based upon the overlapping PFS curves for all and ++ EC145 treated groups, we're confident that the improvement versus the untreated group was not driven by just the efficacy in the ++ group. The data suggests to us that over-expression of a folate transporter is a negative prognostic factor.

Figure 1: PFS Data for PRECEDENT Phase IIb Trial in PROC



Source: Endocyte's S-1

Table 2: EC145 Phase I Safety Data

Drug Related AE (n=100)	Grade 3	Grade 4
Anemia	2% (2)	0% (0)
Abdominal pain	3% (3)	0% (0)
Constipation	4% (4)	0% (0)
Diarrhea	1% (1)	0% (0)
Nausea	1% (1)	0% (0)
Vomiting	1% (1)	0% (0)
Fatigue	6% (6)	0% (0)
Anorexia	1% (1)	0% (0)
Neuropathy	1% (1)	0% (0)
Peripheral sensory neuropathy	1% (1)	0% (0)

Source: Endocyte's S-1

Table 3: EC145 Phase II Safety Data in Combination Treatment with PLD

Drug Related AE (n=100)	EC145 + PLD (n=107)	PLD Alone (n=50)
Cumulative PLD dose (median)	275.0 mg	170.0 mg
Hematological Toxicities		
Neutropenia < 1000/mm^3	12.1% (13)	4.0% (2)
Febrile neutropenia	0.9% (1)	2.0% (1)
Anemia < 8g/dL	6.5% (7)	4.0% (2)
Thrombocytopenia < 50000/mm^3	1.9% (2)	2.0% (1)
Leukopenia	16.8% (18)	4.0% (2)
Lymphopenia	17.8% (19)	18.0% (9)
Non-Hematological Toxicities in 5% or more		
Stomatitis	5.6% (60)	4.0% (2)
PPE syndrome	11.2% (12)	2.0% (1)

Source: Endocyte's S-1

Ovarian Cancer and Platinum-resistance

The current standard of care for ovarian cancer is, depending upon the stage of the disease, surgical removal of the cancer followed by platinum-based chemotherapy, until recurrence or progression. Approximately 50% of patients become resistant to platinum therapies; these patients are also, in general, more resistant to other chemotherapies and typically receive PLD, topotecan or move on to clinical trials upon progression. Overall response rate measured by RECIST for these subsequent therapies is in the range of 10 to 20 percent, with median OS of approximately 11 to 12 months.

Platinum-resistant Ovarian Cancer Market Opportunity

Ovarian cancer accounts for approximately 3 percent of cancers in women, and it is estimated that about 22,000 women are diagnosed each year, with 50% eventually developing PROC (American Cancer Society). Some 69% of women are diagnosed at 55+ where complications from co-morbidities make currently administered aggressive chemotherapy treatment less desirable (Ovarian Cancer Alliance). Currently, PLD and topotecan are the only two currently approved therapies for woman with PROC and, we note that these therapies have not been shown to definitively confer clinical benefit. Considering the limited treatment options, the PROC setting represents an area of unmet medical need and potential opportunity for EC145 to become part of the treatment paradigm.

Competitive Landscape EC145 in Ovarian Cancer

Several candidates are in late stage development in the ovarian cancer setting (Table 4). Eisai Company is in advanced stage clinical trials of farletuzumab, a folate receptor targeted antibody, in women with PROC and platinum-sensitive disease. Nektar Therapeutics, using its conjugation technology, is developing NKTR-102 for use in patients with solid tumor malignancies, including PROC, and other cancer indications. Sunesis Pharmaceuticals is conducting a Phase II single-arm trial of voreloxin, an anti-cancer quinolone derivative, in a number of patient populations, including PROC. Sanofi-Aventis is conducting a Phase II single-arm trial of its drug BSI-201, a PARP inhibitor currently in a number of patient populations, including ovarian cancer. Eli Lilly is conducting a Phase II single-arm trial of its drug LY573636. Additionally, other already approved candidates, such as Avastin, are in trials for ovarian cancer. Considering the currently limited treatment opportunities for PROC patients and strong results of EC145 in folate expressers, it would be difficult to imagine EC145 is at risk of being left out.

Table 4: Ovarian Cancer Competitive Landscape

Company	Candidate	Stage and Setting	Mechanism
Genentech/Roche	bevacizumab	Phase III in Ovarian Cancer	VEGF-A targeted monoclonal antibody
Eisai Company	farletuzumab	Phase II in PROC	A folate receptor targeted antibody
Nektar Therapeutics	NKTR-102	Phase II in solid tumors including PROC	Inhibitor-polymer conjugate
Sunesis Pharmaceuticals	voreloxin	Phase II	First in class topoisomerase II inhibitors
Sanofi-Aventis	BSI-201	Phase II multiple settings including Ovarian Cancer	PARP1 inhibitor
Eli Lilly	LY573636	Phase II	Novel anti mitotic

Sources: ClinicalTrials.gov and Wedbush Pac Grow Life Sciences

Milestones for EC145

H1:11	Initiate Phase III trial for EC145 in women with platinum-resistant ovarian cancer
H1:11	End of Phase II meeting with EU Regulators
June 4-8th	Phase II PRECEDENT EC145 trial data at ASCO (Chicago, IL)
June 2011	Potential accelerated approval in the EU with existing PFS data
Q1:12	OS from Phase IIb PRECEDENT trial of EC145 in platinum-resistant ovarian cancer
2012	Potential EU launch if accelerated approval granted in the EU
2013	Final analysis of Phase III PROCEED trial of EC145

EC145 in Advanced NSCLC — Phase II Trial

In August 2007, Endocyte initiated a single-arm Phase II clinical benefit study in 43 patients with NSCLC who had at least one tumor that over-expressed the folate receptor and had received at least two prior cytotoxic therapies (range 2 to 9 prior treatments). EC145 was administered as a bolus dose of 1 mg, per day five days per week for the first 3 weeks of the four week, 2 cycle induction period, followed by 2.5 mg per day, three days per week every other week thereafter as maintenance therapy. CT scans were performed every eight weeks along with adverse events. The study met its primary endpoint of clinical benefit defined as PR or CR or SD at 8 weeks, with 57% demonstrating clinical benefit (DCR) versus historical comparisons of 21% to 31%. 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. OS was also evaluated in EC20(++) patients (n=14) compared to EC20(+) (n=14), with median OS improved from 14.9 weeks for EC20(+) patients to 47.2 weeks for EC20(++) patients (0.539 hazard ratio and p=0.101). 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%).

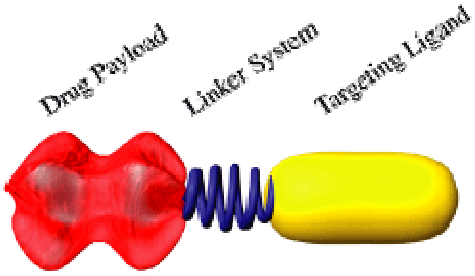
NSCLC Market Opportunity

Lung cancer is a leading cause of cancer-related death globally and an area of high unmet medical need. In 2010, approximately 178,000 patients in the United States were diagnosed with NSCLC and approximately 126,000 died of the disease (SEER and NCI). Several therapies are available for first and second line NSCLC, although 75% of patients fail these therapies and progress (Lung Cancer 2003). According to Endocyte's research, approximately 80% of NSCLC patients express the folate receptor, making EC145 a potentially useful therapeutic in this indication.

Small Molecule Drug Conjugate Technology Platform

Endocyte's small molecule drug conjugate (SMDC) technology has enabled multiple new candidates for a range of disease indications through a modular approach. The company's SMDCs each contain three components; 1) a targeting ligand that binds to over-expressed receptors on target cells—largely avoiding healthy ones; 2) a linker system attaching the small molecule drug payload to the targeting ligand that facilitates blood stream stability and release inside diseased cells; 3) the small molecule drug payload, often potent compounds that are highly toxic when administered in an untargeted form (Figure 4). The linker component of drug conjugate technologies has historically been the most difficult component to perfect to allow for optimal control of drug release, although results, AEs in particular, suggest that Endocyte has solve this problem with EC145. Endocyte has designed a linker system that facilitates conjugating multiple drug payloads to a single targeting ligand, offering the possibility to disrupt multiple signaling pathways within cancer cells—offering a potential strategy to address drug resistance. Endocyte's SMDCs also facilitate companion imaging prognostics that employ the same modular structure as SMDCs, replacing the drug payload with an imaging agent. Endocyte's companion imaging prognostic and could potentially differentiates its drug conjugate technology from others.

Figure 4: The Endocyte Small Molecule Drug Conjugate

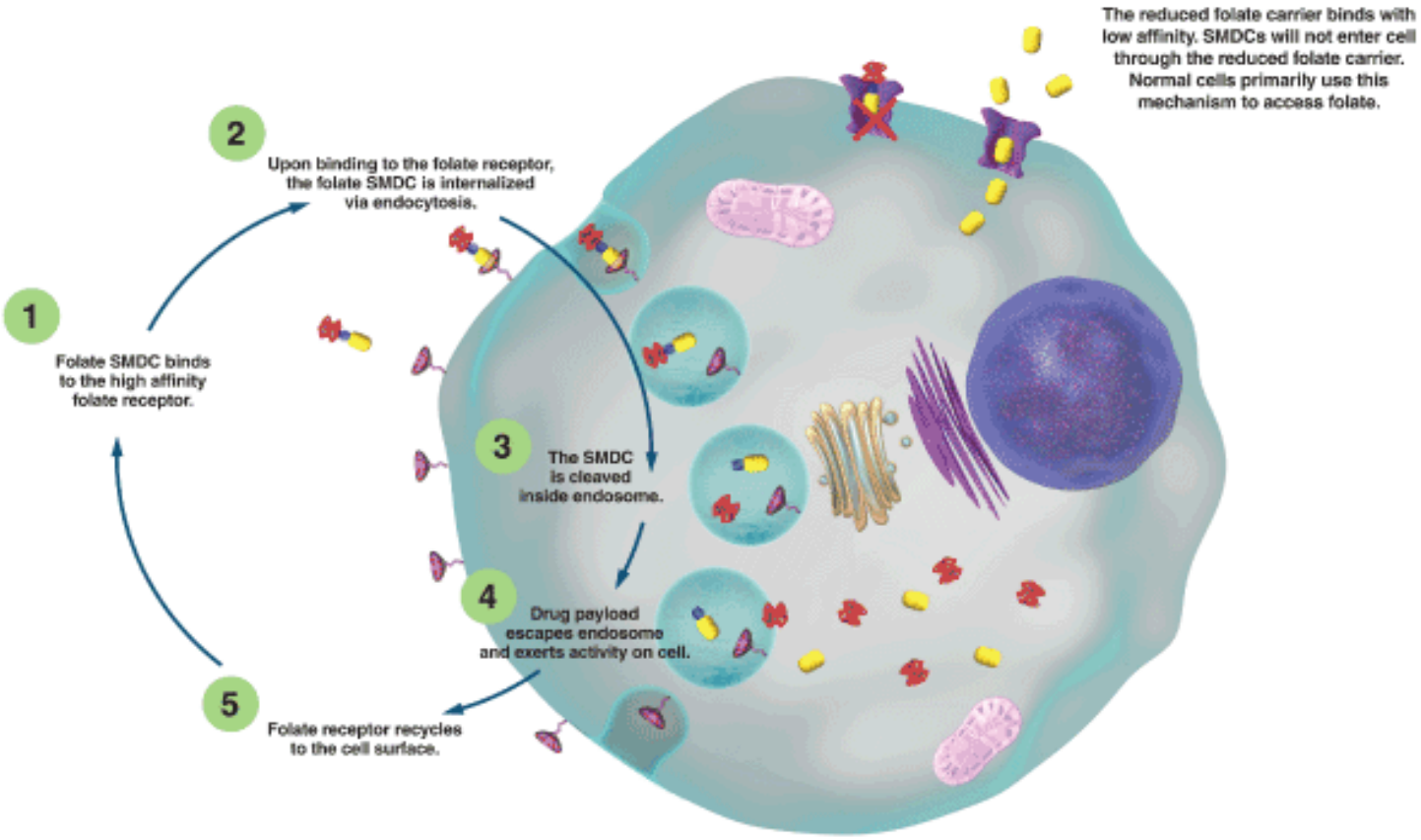


Sources: Endocyte S-1

Folate Receptors as a SMDC Target

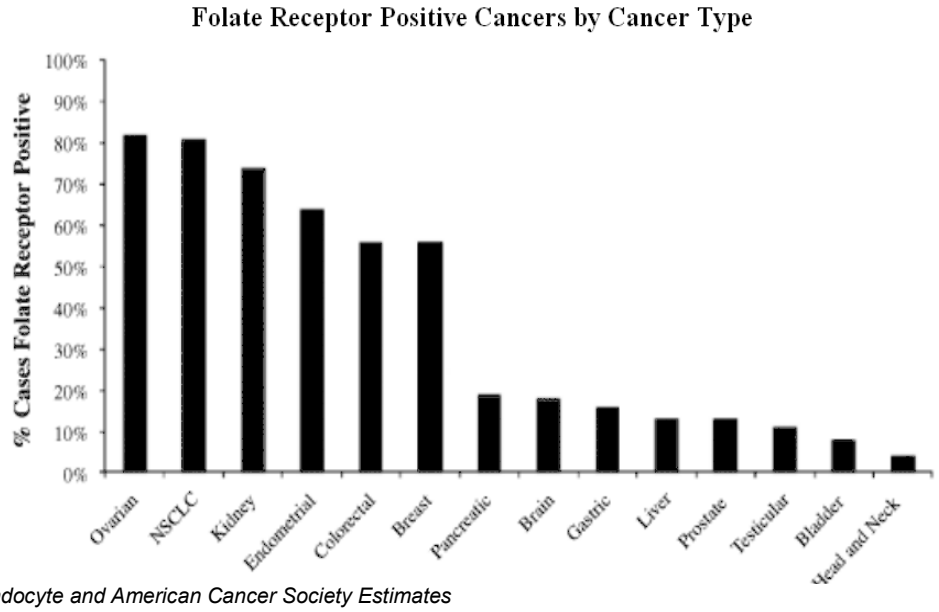
Endocyte's primary clinically-tested SMDC target is the folate receptor, and the basis of late-stage candidate EC145 and its companion prognostic tool EC20. The folate receptor along with the reduced folate carrier path (RFC) functions as part of two mechanisms that bring folate, a nutrient essential for cellular division, into the cell. The RFC path can not deliver the SMDC across the membrane due to its specificity for folate. The folate receptor, however, captures folate from outside the cell, internalizing it through endocytosis, facilitating transfer of the SMDC. 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 (Figure 2). The folate receptor is over-expressed on rapidly dividing cancer cells, and is not significantly expressed in normal tissues. In the normal cells of the lung, brain and small intestine, the folate receptor does not face the bloodstream, and as such is not accessible to folate-targeted SMDCs. In the kidney, the folate receptor functions to capture folates and transport them back into the blood to prevent folate deficiency. Endocyte's SMDCs are also shuttled from the urine back into the blood using this folate receptor-based system. The SMDCs linker system remains stable during this re-absorptive process preventing release of the drug payload within the kidney. The folate receptor is highly expressed on many tumor cell types, including ovarian, NSCLC, kidney, colorectal and breast cancers (Figure 3).

Figure 2: The Folate Receptor Cycle



Source: Endocyte S-1

Figure 3: Folate Receptor Positive Cancer by Cancer Type



Source: Endocyte and American Cancer Society Estimates

Companion Imaging Prognostics

Endocyte's SMDC technology allows the Company to create complementary imaging prognostics for each SMDC by replacement of the drug payload with an imaging agent. This technology facilitates real-time images of tumors that over express targets incorporated into the SMDC and can be used both clinically and in the development of compounds. This technology has been utilized in Endocyte's Phase II clinical trials with EC145 and resulted in correlations between therapeutic outcome and imagining information that helps support the approach and potentially represents a predictor of prognosis and/or response for a particular therapy.

EC20 Companion Imaging Prognostic for Folate Receptors

EC20 is the companion prognostic for EC145 and Endocyte's other folate targeted therapeutics. ECYT is collecting imaging information to correlate with response, progression and survival in order to assess the utility of EC20 as a prognostic tool in the ovarian cancer setting. In contrast to other tests for appropriateness of treatment (i.e., FISH for Her2) EC20 is minimally invasive—not requiring a biopsy), more sensitive than tissue sample analysis, has greater specificity (since it distinguishes between accessible folate receptors and non-accessible ones) and facilitates full-body evaluation. Based on the SMDC technology, EC20 incorporates an imaging agent in the place of the drug payload. EC20 incorporates the radioisotope imaging agent Technetium-99m (Tc-99m) administered by intravenous then rapidly binds to tumors that over-express the folate receptor, allowing the treating physician in one to two hours following administration to distinguish between patients who are EC20(++), EC20(+) or EC20(-) with high quality prognostic scans. EC20 is quickly cleared from the blood and not taken up by cells expressing folate receptors. In subgroup analysis from the PRECEDENT trial, EC20 facilitated a subgroup analysis that showed patients expressing folate in primary and secondary tumors EC20(++), showed 263% improvement in PFS compared 85% of all treated patients in trials of EC145 + PLD versus PLD alone. We're confident that the improvement versus the untreated group was not driven by just the efficacy in the ++ group based upon the overlapping PFS curves for all and ++ EC145 treated groups. The data suggests to us that over expression of a folate transporter is a negative prognostic factor.

Milestones for EC20

H1:11 Initiate Phase III trial for EC20 folate imaging agent (companion prognostic for EC145)

Additional Early Stage Pipeline Candidates

Endocyte has several additional early-stage pipeline candidates for solid tumor indications (Table 5).

Table 5: Additional Early Stage Pipeline Candidates

Candidate	Phase and Indication	Description
EC17	Phase I, Solid Tumors	Folate targeting with hapten payload
EC0489	Phase I, Solid Tumors	Folate receptor targeting with DAVLBH payload (modified linker)
EC0225	Phase I, Solid Tumors	Folate receptor targeting with DAVLBH/mitomycin-C payload

Sources: Endocyte S-1 and Wedbush Pac Grow Life Sciences

Preclinical Pipeline

Endocyte has several additional early-stage pipeline candidates utilizing SMDC to target PSMA receptors and activated macrophages for prostate cancer and inflammation based indications (Table 6).

Table 6: Preclinical Pipeline

Candidate	Potential Indication	Description
EC0531	Solid Tumors	Folate receptor targeting with Tubulysin-B payload
EC1069	Prostate Cancer	PSMA receptor targeting with Tubulysin-B payload
EC0746	Inflammation	Activated Macrophages with Aminopterin
EC0565	Inflammation	Activated Macrophages with mTor inhibitor

Sources: Endocyte S-1 and Wedbush Pac Grow Life Sciences

Licensing Agreements

Endocyte 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 2007. Endocyte paid an upfront fee and has since paid annual maintenance fees. Endocyte could pay in additional contingent payments upon the achievement of specific scientific, clinical, and regulatory milestones, in addition to royalties upon commercial sales. Endocyte also entered into an exclusive license agreement with Purdue Research Foundation, which licenses the rights to certain patents to the company.

Management Team

Name	Position	Past Experience
P. Ron Ellis	President, Chief Executive Officer and Director	Vice President of Strategy and Corporate Development at Hill-Rom Company
Michael A. Sherman	Chief Financial Officer	Vice President of Finance and Strategic Planning of Guidant Corporation (acquired by Boston Scientific)
Philip S. Low, Ph.D.	Chief Science Officer and Director	Ralph C. Corley Distinguished Professor of Chemistry, at Purdue University.
Christopher P. Leamon, Ph.D.	Vice President of Research	Researcher of peptide, liposome and DNA drug delivery for GlaxoWellcome
Chandra D. Lovejoy	Vice President of Regulatory Affairs	Manager of Regulatory Affairs at Genentech
Richard A. Messmann, M.D.	Vice President of Medical Affairs	Director of Cancer Research for the Great Lakes Cancer Institute
Allen R. Ritter, Ph.D.	Vice President of Manufacturing and Chemistry Manufacturing Control	Dr. Ritter has been Vice President of Manufacturing and Chemistry Manufacturing Control at Endocyte since 2003.

Model

WEDBUSH
PAC GROW LIFE SCIENCES

Gregory R. Wade, Ph.D.

3/15/2011

Endocyte Inc.

Annual Financial Results & Projections
($ in thousands except per share data)
Ticker: ECYT (Nasdaq)

	FY:10E	FY:11E	FY:12E	FY:13E	FY:14E	FY:15E
Revenue:						
Sales	0	0	0	0	12,862	137,433
License fee and other revenues	0	0	0	9,772	38,395	83,402
Contracts	0	0	0	0	0	0
Total Revenues	**$0**	**$0**	**$0**	**$9,772**	**$51,257**	**$220,836**
Cost and Expenses:						
Costs of goods sold	0	0	0	0	1,929	20,615
Research and Development	14,561	26,393	26,393	1,466	28,423	40,604
Sales, General and Administrative	6,039	17,000	20,702	0	24,362	25,352
Other	0	0	0	1,466	0	0
Total Costs and Expenses	**$20,600**	**$43,393**	**$47,095**	**$2,931**	**$54,715**	**$86,571**
Operating Income (loss)	(20,600)	(43,393)	(47,095)	(40,171)	(3,458)	134,265
Net Interest Income (Expense)	(1,059)	854	758	877	520	999
Other income / (Expense)	1,564	0	0	0	0	0
Income Before Income Taxes	(20,095)	(42,538)	(46,336)	(39,295)	(2,938)	135,264
Net Income	**($20,095)**	**($42,538)**	**($46,336)**	**($39,295)**	**$1,888**	**$123,884**
GAAP Basic EPS with sFAS123	**(1.32)**	**(1.56)**	**(1.55)**	**(1.28)**	**0.06**	**4.06**
GAAP Diluted EPS with sFAS123	**(1.32)**	**(1.44)**	**(1.55)**	**(1.28)**	**0.06**	**4.06**
Weighted shares outstanding	15,220	27,208	29,857	30,607	30,295	30,514
Fully diluted shares outstanding	15,220	27,208	29,857	30,622	30,302	30,525

Source: Wedbush Securities

Analyst Certification
I, Gregory R. Wade, Ph.D., David M. Nierengarten, Ph.D., Christopher N. Marai, Ph.D., certify that the views expressed in this report accurately reflect my personal opinion and that I have not and will not, directly or indirectly, receive compensation or other payments in connection with my specific recommendations or views contained in this report.

Disclosure information regarding historical ratings and price targets is available at http://www.wedbush.com/ResearchDisclosure/DisclosureQ410.pdf

Investment Rating System:
Outperform: Expect the total return of the stock to outperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.
Neutral: Expect the total return of the stock to perform in-line with the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.
Underperform: Expect the total return of the stock to underperform relative to the median total return of the analyst's (or the analyst's team) coverage universe over the next 6-12 months.

The Investment Ratings are based on the expected performance of a stock (based on anticipated total return to price target) relative to the other stocks in the analyst's coverage universe (or the analyst's team coverage).*

Rating Distribution (as of December 31, 2010)	**Investment Banking Relationships (as of December 31, 2010)**
Outperform: 53% Neutral: 38% Underperform: 9%	Outperform: 11% Neutral: 1% Underperform: 0%

The Distribution of Ratings is required by FINRA rules; however, WS' stock ratings of Outperform, Neutral, and Underperform most closely conform to Buy, Hold, and Sell, respectively. Please note, however, the definitions are not the same as WS' stock ratings are on a relative basis.

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Capital Markets Disclosures as of March 16, 2011

Company	Disclosure
Endocyte, Inc.	1,3,4,5,7

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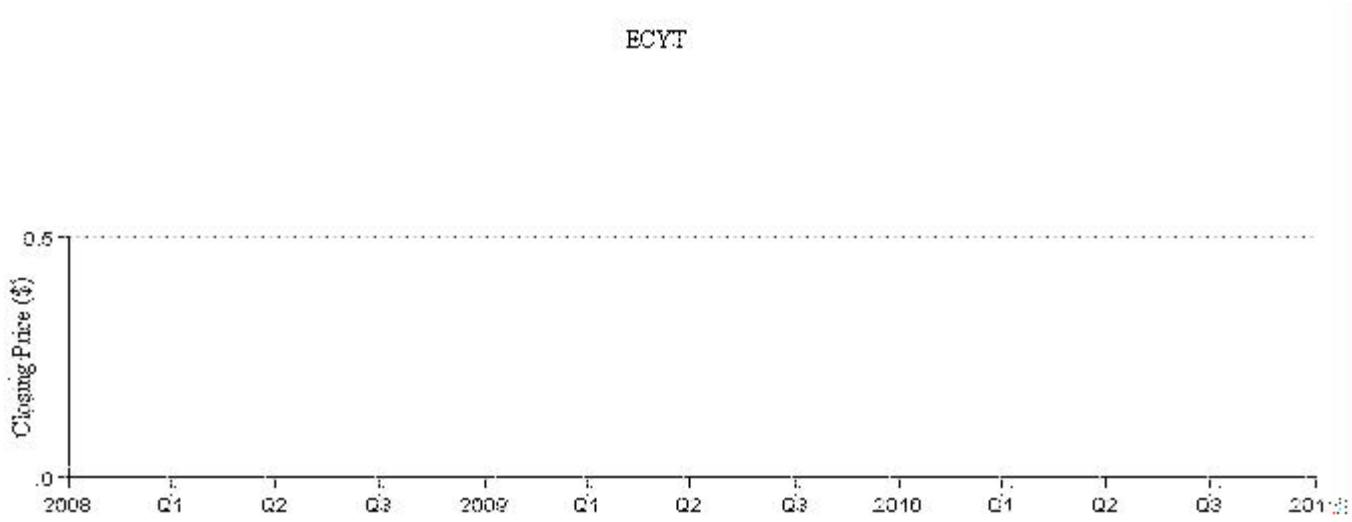

* WS changed its rating system from (Strong Buy/Buy/Hold/Sell) to (Outperform/ Neutral/Underperform) on July 14, 2009.
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