COWEN AND COMPANY

Endocyte

Outperform (1)

Phase II data validation and EMA filing 1Q12; Doxil shortage remains an issue

November 11, 2011

Analysts
Simos Simeonidis, Ph.D.
(646) 562-1386
simos.simeonidis
@cowen.com

Yatin Suneja
(646) 562-1388
yatin.suneja@cowen.com

Conclusion: With validation of the Phase IIb data and the EMA filing for conditional approval still expected 1Q12, there is currently no visibility on the timing of the resolution of the Doxil shortage issue. We believe it is very likely that the shortage may translate to delays in the projected 2Q/mid 2013 release of topline PFS data from PROCEED. Even though any delay would obviously be viewed negatively by investors, we consider a delay as a preferable scenario over any potential changes in the Phase III protocol, which could complicate matters much more, since it could not only also result in delays (time to discuss with the FDA, time to include potential changes in IRBs, etc), but could present additional issues for investors, particularly having to predict a Phase III trial's chances for success (an oncology trial, especially), based on a differently-designed Phase II trial. This is obviously nothing management could have predicted or is at fault for, but is an unfortunate reality, nevertheless.

- **However, and despite all this potential new risk introduced by the Doxil issue, our thesis on ECYT remains unchanged, and, given the recent dip, we would be buyers at current levels.** Our thesis on ECYT is unchanged and we remain bullish on the name: our thesis is based on the strength of the Phase IIb data, which point to a truly active and safe compound, backed by solid scientific rationale. While we acknowledge the risk introduced by the Doxil shortage, we remain very impressed by the specificity, potency, and safety of the EC145/EC20 combo, and predict that the EMA will approve the compound and the diagnostic in 2013. We view the recent dip in the stock to an EV of $185M as a great entry point to the ECYT story, and continue to confidently recommend the stock.

- **What's Next?** The Doxil issue doesn't impact the next significant milestone: updated Overall Survival data and confirmation of the original PFS data from the Phase IIb trial are still expected in 1Q12, followed by the EMA filing for conditional approval shortly thereafter.

ECYT (11/10)	**$7.95**
Mkt cap	**$310.8MM**
Dil shares out	39.1MM
Avg daily vol	82.0K
52-wk range	$6.2-14.8
Dividend	Nil
Dividend yield	Nil
BV/sh	$3.15
Net cash/sh	$3.22
Debt/cap	NA
ROA (LTM)	NA
5-yr fwd EPS growth (Norm)	NA
S&P 500	**1239.7**

Revenue $MM

FY Dec	2010 Actual	2011E Prior	2011E Current	2012E Prior	2012E Current
Q1	—	—	—	—	0.0
Q2	—	—	—	—	0.0
Q3	—	—	—	—	0.0
Q4	—	—	—	—	10.0
Year	**0.0**	**—**	**0.0**	**10.0**	**10.0**
CY	—	—	—	—	—
EV/S	—	—	—	—	32.2x

EPS $

FY Dec	2010 Actual	2011E Prior	2011E Current	2012E Prior	2012E Current
Q1	(6.16)	—	(0.43)A	—	(0.34)
Q2	(5.93)	—	(0.35)A	—	(0.30)
Q3	(6.16)	—	(0.36)A	—	(0.29)
Q4	0.00	(0.33)	(0.34)	—	(0.06)
Year	**(21.77)**	**(1.40)**	**(1.45)**	**(0.79)**	**(0.96)**
P/E	—	—	—	—	—

No visibility on timing of resolution of Doxil shortage issue: Given that the ongoing Phase III PROCEED trial uses Doxil on both arms (Doxil +/- EC145), the drug's shortage continues to affect enrollment: no new patients are being started in the trial at US sites, even though patients already enrolled and treated are able to continue on therapy, and despite the shortage, the company is still able to continue to add sites in the US. Endocyte also announced that they have secured enough supply of Doxil to be used by patients in EU sites (for ~70 patients, depending on length of therapy), and that they plan to begin enrolling patients in EU sites by YE11. Management reiterated guidance that they are considering all options, including the following two scenarios: 1) adding considerably more sites to the trial, especially ex-US, in order to speed up enrollment and hopefully catch up, once Doxil becomes available, and 2) potential changes to the trial protocol, like switching from a Doxil +/- EC145 design to a topotecan (or paclitaxel) +/- EC145 design. Management has not yet discussed potential changes to the trial protocol with the FDA.

We obviously don't like this potential delay…but we'll take it over a change in the protocol: We believe it is very likely that the Doxil shortage may translate to delays in the projected 2Q/mid 2013 release of topline PFS data from PROCEED. If the shortage issue is resolved soon (i.e. in the next 3-4 months), it is possible that the delay may be eliminated or minimized by the addition of extra sites. Even though any delay would obviously be viewed negatively by investors, we consider a delay as a preferable scenario over any potential changes in the Phase III protocol, which could complicate matters much more, since it could not only also result in delays (time to discuss with the FDA, time to include potential changes in IRBs, etc), but could present additional issues for investors, particularly having to predict a Phase III trial's chances for success (an oncology trial, especially), based on a differently-designed Phase II trial. This is obviously nothing management could have predicted or is at fault for, but is an unfortunate reality, nevertheless.

However, and despite all this potential new risk introduced by the Doxil issue, our thesis on ECYT remains unchanged and, given the recent dip, we would be buyers at current levels: Our thesis on ECYT is unchanged and we remain bullish on the name: our thesis is based on the strength of the Phase IIb data, which point to a truly active and safe compound, backed by solid scientific rationale. While we acknowledge the risk introduced by the Doxil shortage, we remain very impressed by the specificity, potency and safety of the EC145/EC20 combo, and predict that the EMA will approve the compound and the diagnostic in 2013. We view the recent dip in the stock as a unique buying opportunity and continue to confidently recommend the stock.

Updated Overall Survival data and confirmation of original PFS data still expected 1Q12, followed by EMA filing for conditional approval: Management reiterated guidance for 1Q12 release of the three supplemental analyses requested by the EMA before submitting the MAA for conditional approval of EC145 and EC20 for the treatment of PROC (platinum resistant ovarian cancer). The results of all three analyses are still expected in 1Q12, and management has guided that they would disclose at least topline information on all three either all at once, or by separate announcements, depending on when they are received.

Reminder: what are these three supplemental analyses the EMA wants? We remind investors that the expected data that were requested by the EMA prior to submission of the MAA for conditional approval are: 1) updated Overall Survival data from the Phase IIb PRECEDENT trial, 2) independent reads of patient scans to confirm the PFS results from the study (*i.e. confirmation that a patient was correctly*

categorized as having progressed), and 3) independent reads of the patient scans in the study in order to validate the EC20 diagnostic (*i.e. confirmation that a patient that was categorized, for example, as being EC20++, did indeed have all their tumors express the folate receptor*). Once these data are received and processed by the company, they will be included in the MAA for conditional approval of EC145 and EC20 for the treatment of PROC, which is expected to be filed with the EMA in 1Q12.

For the record: 3Q11 numbers. Endocyte reported a net loss for the quarter of $12.1M or ($0.36)/share, compared to a 3Q10 net loss of $5.7M or ($6.16)/share, and our and consensus net loss estimates of $11.2M or ($0.33)/share, and $11.1M or ($0.33)/share, respectively. Total operating expenses this quarter were $11.6M, compared to the $5.4M spent in 3Q10, mainly due to higher R&D ($8.9M in 3Q11 vs. $3.7M in 3Q10), with the increase primarily due to the expenses related to the Phase III PROCEED trial and preparation of the EU marketing application for EC145. SG&A expenses came in at $2.7M, compared to the $1.7M spent in 3Q10. The company raised $66.7M in net proceeds during the quarter by issuing 5.8M shares at $12.26/share, ended 3Q11 with $138.9M in cash and has $13M in debt, so its net cash position is $126M or $3.22/share. Finally, Endocyte announced the renegotiation of their debt agreement with their lender, extending the interest-only payment period through December 2012, which the company estimates provides an additional $7.4M of working capital over the next 15 months.

Company Description

Endocyte is a biotech company developing therapeutics for the treatment of cancer and inflammatory diseases. The company uses its proprietary technology to create novel small molecule drug conjugates (SMDCs) and companion imaging diagnostics for personalized, targeted therapies. Endocyte's lead development candidate is EC145, a modular, three-part compound comprised of 1) the chemotherapeutic agent DAVLBH, joined by 2) a linker system to 3) the targeting ligand, folate. EC145 has demonstrated strong efficacy in the randomized Phase IIb PRECEDENT trial in patients with advanced ovarian cancer and is currently in the Phase III PROCEED trial for the treatment of women with platinum-resistant ovarian cancer (PROC). Endocyte is currently planning on filing an application for conditional approval in Europe in 1Q12 based on the data from the Phase IIb PRECEDENT trial. EC145 has also been tested in a Phase IIa trial in third-line non-small cell lung cancer (NSCLC), and the company plans to initiate a 200-patient, randomized Phase IIb trial in second-line NSCLC in 1Q 2012. In addition to its lead compound EC145, Endocyte has used its SMDC technology to develop a number of other, earlier-stage compounds in oncology and inflammation, mixing and matching different agents with different targeting ligands. Endocyte was founded in 1995, is headquartered in West Lafayette, Indiana, and currently has 57 employees.

Endocyte: Clinical and preclinical pipeline

Candidate name	Indication	P-C	I	II	III	FILING	MKT	Comments
EC145	***PROC***				•			***O/S data from Phase IIb trial expected in 1Q 2012***
EC145	NSCLC			•				Planning to initiate Phase IIb trial in 2nd-line NSCLC
EC0489	Solid tumors		•					Folate Receptor with DAVLBH as payload
EC0225	Solid tumors		•					Folate Receptor with DAVLBH/Mitomycin-c as payload
EC017	Solid tumors		•					Folate Receptor with Hapten as payload
EC0531	Solid tumors	•						Folate Receptor with Tubulysin-B as payload
EC20	PROC				•			Imaging agent studies in Phase III with EC145
EC1069	Prostate cancer	•						PSMA with Tubulysin-B as payload
EC0652	PSMA	•						Imaging agent to be used with EC1069
EC0746	Inflammation	•						Folate Receptor with Aminopterin as payload
EC0565	Inflammation	•						Folate Receptor with mTor as payload
Total Drugs in Development		**5**	**3**	**1**	**2**	**0**	**0**	
West Lafayette, IN	**Investor Relations Contact: Stephanie Ascher - 212.362.1200**							

Source: Cowen and Company, Endocyte

Endocyte: Upcoming milestones

Milestones	Timing
Mature Overall Survival data from the PRECEDENT trial	1Q 2012
Submit application in the EU for EC145 for the treatment of PROC	1Q 2012
Initiate a Phase IIb trial of EC145 in NSCLC (n=200)	1Q 2012
Partnership for EC145	2012
EU conditional approval for EC145 in PROC	**1H 2013**
PFS data from the PROCEED trial	**mid 2013*** * timing dependent on resolution of Doxil supply issue
Launch EC145 in EU	2H 2013
Data from the Phase IIb trial of EC145 in NSCLC	2H 2013
Overall Survival data from the PROCEED trial	Late 2015/early 2016 * timing dependent on resolution of Doxil supply issue

Source: Cowen and Company, Endocyte

Investment Thesis

Endocyte's lead asset, EC145, is a tumor-targeted, small molecule drug conjugate (SMDC) that is currently in the Phase III PROCEED trial in patients with platinum-resistant ovarian cancer (PROC). The compound has shown very promising efficacy (85% improvement in PFS, 21.7 vs. 11.7 weeks) and benign safety in the randomized Phase IIb PRECEDENT trial in ovarian cancer. EC145's efficacy is even more pronounced (263% improvement in PFS, 24 vs. 6.6 weeks) in patients whose every tumor(s) overexpressed the folate receptor (FR). The scientific rationale behind this impressive efficacy is that this compound was specifically designed to be delivered only to tumor cells that overexpress the folate receptor. This tumor-specific targeting is accomplished by the compound's modular design, which pairs up a ligand (*in this case, folate*) with a chemotherapeutic (*in this case, DAVLBH*), with the goal of having the compound delivered to the specific cell type (*in this case, ovarian cancer cell*) that overexpresses the ligand's receptor (*in this case, folate and folate receptor*).

EC20 companion diagnostic helps select the right (FR+) patients for treatment: In addition to the tumor-targeted compound EC145, the second, and just as important, part to the Endocyte story is the companion diagnostic the company has designed to be used along with this compound. EC20 is a companion diagnostic that helps clinicians select patients and categorize them on the basis of whether their tumors overexpress the compound's target, the folate receptor. The idea is that if a patient's tumor indeed overexpresses the folate receptor, that patient has a better chance of benefiting from treatment with this specific drug, since EC145 will only enter (and eventually kill) cells that have the folate receptor present on their membrane, and would thus allow EC145 entry into these cells. Indeed, the clinical data thus far demonstrate a strong correlation between the expression of the folate receptor in patients' tumors with improved outcomes for these patients, following treatment with EC145.

The more mature Overall Survival data from the Phase IIb PRECEDENT trial expected in 1Q12 could be a significant catalyst for ECYT shares. In addition to the PFS data that has been released thus far, the company expects to announce more mature Overall Survival data from the Phase IIb PRECEDENT trial around 1Q12. Despite the fact that the PRECEDENT trial was not powered for Overall Survival, we believe that release of these data could be an important catalyst for ECYT shares, since it could provide additional evidence regarding EC145's potential clinical benefit and its eventual approvability. Despite the fact that ovarian cancer is one of the few solid tumor settings in which PFS is an acceptable endpoint for approval, Overall Survival remains the gold standard for the FDA. If EC145 were to couple its impressive PFS benefit with a clinically (not necessarily statistically) significant improvement in Overall Survival, this could go a long way towards de-risking its profile and providing investors with more evidence of its approvability. On the other hand, if the mature data from the PRECEDENT trial do not show that the compound has an impact on Overall Survival (and depending, of course, on the magnitude of the effect), investors may have considerable doubts about whether the compound can indeed be eventually approved in the US. In such case, EC145 would probably have to demonstrate extraordinary benefits in terms of PFS in the PROCEED Phase III trial, probably close to what was seen in the PRECEDENT trial, in order to have a chance of being approved without the help of supporting evidence of an improvement in Overall Survival.

Overall Survival data to be filed as part of EMA conditional approval application in 1Q12; EC145 could be in the market in mid-2013: On the basis of the strong PFS benefit seen in the Phase IIb PRECEDENT trial, and after discussions with the EMA (European Medicines Agency), Endocyte plans to submit a MAA (Marketing Authorization Application) to the EMA in 1Q12, which, if approved, could result in EU sales of EC145 in 2013. In the meantime, and if one assumes that the Doxil shortage has not yet and will not result in significant delays, PFS data from the Phase III PROCEED trial could be available in the middle of 2013; if positive, these data could support an NDA for accelerated approval in the US, with the Overall Survival data expected approximately two years later, in the 2015-2016 timeframe. Obviously, these timelines are sensitive to what happens with the Doxil shortage, with the company currently evaluating a number of options to address the issue.

The folate: folate receptor pair can also target chemo to NSCLC cells. In addition to the promising data from the ovarian cancer trials, EC145 has also shown promising efficacy in a small (n=28) Phase IIa trial in third-line NSCLC patients, with significant differences in both PFS and Overall Survival between groups of patients based on their expression levels of the folate receptor. The company is planning on testing EC145 in a randomized, three-arm (EC145+docetaxel, EC145 alone, docetaxel alone), 200-patient Phase IIb trial in second-line NSCLC. This trial is expected to start in 1Q12, with topline PFS data expected in the second half of 2013.

Despite the stock's strength since the February 2011 IPO, we see room for upside in ECYT shares. Even by using conservative assumptions, we project EC145 that can be a >$500M drug in worldwide sales in the ovarian cancer indication alone; we see potential upside eventually coming from other oncology indications and the use of the technology to build new molecules that combine folate and other ligands with different chemotherapies. With the stock trading at an EV ~$185M, and despite the strong performance since the company's IPO on February 4, 2011 (at $6/share), we see room for significant upside in ECYT shares in the next 12-18 months, even on the basis of the PROC opportunity alone.

Endocyte P&L ($MM)

($MM)	Q1:11A	Q2:11A	Q3:11A	Q4:11E	2011E	Q1:12E	Q2:12E	Q3:12E	Q4:12E	2012E
Total EC145 US Sales ($MM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Royalties on EC145 EU sales ($MM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Royalties on EC145 ROW sales ($MM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total revenue from EC145	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Upfront and milestone payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0
Total revenue	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**10.0**	**10.0**
COGS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross margin on US sales										
R&D	4.4	7.7	8.9	9.2	30.3	9.3	9.2	9.2	9.3	37.0
SG&A	2.1	2.3	2.7	2.8	9.9	2.8	2.8	2.9	2.9	11.4
Total Operating expenses	**6.5**	**10.1**	**11.6**	**12.0**	**40.2**	**12.1**	**12.0**	**12.1**	**12.2**	**48.4**
Operating Income/Loss	**(6.5)**	**(10.1)**	**(11.6)**	**(12.0)**	**(40.2)**	**(12.1)**	**(12.0)**	**(12.1)**	**(2.2)**	**(38.4)**
Interest income	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4
Interest expense	(0.7)	(0.5)	(0.4)	(0.4)	(2.0)	(0.3)	(0.3)	(0.3)	(0.3)	(1.3)
Other income	0.0	(0.0)	(0.0)	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0
Pretax income	(7.2)	(10.5)	(12.1)	(12.3)	(42.1)	(12.3)	(12.2)	(12.3)	(2.4)	(39.3)
Income tax expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tax rate	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
Net Income (Loss)	**(7.2)**	**(10.5)**	**(12.1)**	**(12.3)**	**(42.1)**	**(12.3)**	**(12.2)**	**(12.3)**	**(2.4)**	**(39.3)**
GAAP EPS										
Basic	**($0.43)**	**($0.35)**	**($0.36)**	**($0.34)**	**($1.45)**	**($0.34)**	**($0.30)**	**($0.29)**	**($0.06)**	**($0.96)**
Diluted	**($0.43)**	**($0.35)**	**($0.36)**	**($0.34)**	**($1.45)**	**($0.34)**	**($0.30)**	**($0.29)**	**($0.06)**	**($0.96)**
Basic shares	16.91	29.69	33.41	35.83	29.0	36.2	40.9	42.8	43.2	40.8
Diluted shares	31.93	32.96	39.13	39.52	35.9	39.9	46.2	47.1	47.6	45.2

Source: Cowen and Company

EC145 WW ovarian cancer model

US EC145 Ovarian Cancer Revenue Model	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
# of newly-diagnosed Ovarian Cancer (OC) patients	21,880	22,073	22,267	22,463	22,660	22,860	23,061	23,264	23,469	23,675	23,884	24,094	24,306
Population growth	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*	*0.88%*
% of OC patients diagnosed with advanced disease (Stage II-IV) and treated with chemotherapy	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*
# of OC patients diagnosed with advanced disease (Stage II-IV) and treated with chemotherapy	16,410	16,554	16,700	16,847	16,995	17,145	17,296	17,448	17,601	17,756	17,913	18,070	18,229
% of patients progressing/relapsing after treatment with chemotherapy	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*
# of patients progressing/relapsing after treatment with chemotherapy	12,308	12,416	12,525	12,635	12,746	12,859	12,972	13,086	13,201	13,317	13,434	13,553	13,672
% of PROC patients being treated with 2nd-line therapies	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*
# of PROC patients being treated with 2nd-line therapies	8,615	8,691	8,768	8,845	8,923	9,001	9,080	9,160	9,241	9,322	9,404	9,487	9,570
% of PROC patients overexpressing the folate receptor (EC20++)	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*
# of PROC overexpressing the folate receptor (EC20++)	3,446	3,476	3,507	3,538	3,569	3,600	3,632	3,664	3,696	3,729	3,762	3,795	3,828
EC145 Penetration						*7%*	*22%*	*40%*	*40%*	*40%*	*40%*	*39%*	*38%*
# of PROC patients treated						252	799	1,477	1,479	1,492	1,523	1,480	1,464
Cost of therapy per year						$78,030	$79,591	$81,182	$82,806	$84,462	$86,151	$87,874	$89,632
% price increase						*2%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*
Total US Sales ($MM)	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$19.7**	**$63.6**	**$119.9**	**$122.4**	**$126.0**	**$131.2**	**$130.1**	**$131.2**

EU EC145 Ovarian Cancer Revenue Model	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
# of newly-diagnosed Ovarian Cancer patients	45,390	45,435	45,480	45,526	45,571	45,617	45,663	45,708	45,754	45,800	45,846	45,891	45,937
Population growth	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*
% of OC patients diagnosed with advanced disease (Stage II-IV) and treated with chemotherapy	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*
# of OC patients diagnosed with advanced disease (Stage II-IV) and treated with chemotherapy	34,042	34,076	34,110	34,144	34,179	34,213	34,247	34,281	34,316	34,350	34,384	34,419	34,453
% of patients progressing/relapsing after treatment with chemotherapy	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*
# of patients progressing/relapsing after treatment with chemotherapy	25,532	25,557	25,583	25,608	25,634	25,660	25,685	25,711	25,737	25,762	25,788	25,814	25,840
% of PROC patients being treated with 2nd-line therapies	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*
# of PROC patients being treated with 2nd-line therapies	17,872	17,890	17,908	17,926	17,944	17,962	17,980	17,998	18,016	18,034	18,052	18,070	18,088
% of PROC patients overexpressing the folate receptor (EC20++)	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*
# of PROC overexpressing the folate receptor (EC20++)	7,149	7,156	7,163	7,170	7,178	7,185	7,192	7,199	7,206	7,213	7,221	7,228	7,235
EC145 Penetration				*6%*	*18%*	*25%*	*34%*	*40%*	*40%*	*40%*	*40%*	*39%*	*38%*
# of PROC patients treated				430	1,292	1,796	2,445	2,880	2,883	2,885	2,888	2,819	2,771
Cost of therapy per year				$56,250	$57,375	$58,523	$59,693	$60,887	$62,105	$63,347	$64,614	$65,906	$67,224
% price increase				*2%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*
Total EU Sales ($MM)	**$0.0**	**$0.0**	**$0.0**	**$24.2**	**$74.1**	**$105.1**	**$146.0**	**$175.3**	**$179.0**	**$182.8**	**$186.6**	**$185.8**	**$186.3**

ROW EC145 Ovarian Cancer Revenue Model	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
# of newly-diagnosed Ovarian Cancer patients	158,230	158,389	158,547	158,706	158,864	159,023	159,182	159,341	159,501	159,660	159,820	159,980	160,140
Population growth	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*	*0.10%*
% of OC patients diagnosed with advanced disease (Stage II-IV) and treated with chemotherapy	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*
# of OC patients diagnosed with advanced disease (Stage II-IV) and treated with chemotherapy	118,673	118,791	118,910	119,029	119,148	119,267	119,387	119,506	119,625	119,745	119,865	119,985	120,105
% of patients progressing/relapsing after treatment with chemotherapy	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*
# of patients progressing/relapsing after treatment with chemotherapy	89,005	89,094	89,183	89,272	89,361	89,450	89,540	89,629	89,719	89,809	89,899	89,989	90,079
% of PROC patients being treated with 2nd-line therapies	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*
# of PROC patients being treated with 2nd-line therapies	62,303	62,366	62,428	62,490	62,553	62,615	62,678	62,741	62,803	62,866	62,929	62,992	63,055
% of PROC patients overexpressing the folate receptor (EC20++)	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*
# of PROC overexpressing the folate receptor (EC20++)	24,921	24,946	24,971	24,996	25,021	25,046	25,071	25,096	25,121	25,146	25,172	25,197	25,222
EC145 Penetration							*4%*	*17%*	*18%*	*20%*	*20%*	*20%*	*19%*
# of PROC patients treated							1,003	4,266	4,522	5,029	5,034	4,926	4,817
Cost of therapy per year							$39,795	$40,591	$41,403	$42,231	$43,076	$43,937	$44,816
% price increase							*2%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*
Total ROW Sales ($MM)	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$39.9**	**$173.2**	**$187.2**	**$212.4**	**$216.9**	**$216.4**	**$215.9**

Total WW Sales ($MM)	**$0.0**	**$0.0**	**$0.0**	**$24.2**	**$74.1**	**$124.8**	**$249.5**	**$468.4**	**$488.7**	**$521.2**	**$534.7**	**$532.3**	**$533.4**

Source: Cowen and Company

Addendum

STOCKS MENTIONED IN IMPORTANT DISCLOSURES

Ticker	Company Name
ECYT	Endocyte

ANALYST CERTIFICATION

Each author of this research report hereby certifies that (i) the views expressed in the research report accurately reflect his or her personal views about any and all of the subject securities or issuers, and (ii) no part of his or her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed in this report.

IMPORTANT DISCLOSURES

Cowen and Company, LLC and or its affiliates make a market in the stock of ECYT securities.

Cowen and Company, LLC and/or its affiliates managed or co-managed a public offering of ECYT within the past twelve months.

Cowen and Company, LLC and/or its affiliates received in the past 12 months compensation for investment banking services from ECYT.

ECYT is or was in the past 12 months a client of Cowen and Company, LLC; during the past 12 months, Cowen and Company, LLC provided IB services.

ECYT has been client(s) of Cowen and Company, LLC in the past 12 months.

Cowen and Company, LLC compensates research analysts for activities and services intended to benefit the firm's investor clients. Individual compensation determinations for research analysts, including the author(s) of this report, are based on a variety of factors, including the overall profitability of the firm and the total revenue derived from all sources, including revenues from investment banking. Cowen and Company, LLC does not compensate research analysts based on specific investment banking transactions.

DISCLAIMER

This research is for our clients only. Our research is disseminated primarily electronically and, in some cases, in printed form. Research distributed electronically is available simultaneously to all Cowen and Company, LLC clients. All published research, including required disclosures, can be obtained on the Firm's client website, www.cowenresearch.com.

Further information on any of the above securities may be obtained from our offices. This report is published solely for information purposes, and is not to be construed as an offer to sell or the solicitation of an offer to buy any security in any state where such an offer or solicitation would be illegal. Other than disclosures relating to Cowen and Company, LLC, the information herein is based on sources we believe to be reliable but is not guaranteed by us and does not purport to be a complete statement or summary of the available data. Any opinions expressed herein are statements of our judgment on this date and are subject to change without notice.

Notice to UK Investors: This publication is produced by Cowen and Company, LLC, which is regulated in the United States by FINRA and is disseminated in the United Kingdom by Cowen International Limited ("CIL"). In the United Kingdom, 'Cowen and Company' is a Trading Name of CIL. It is communicated only to persons of a kind described in Articles 19 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005. It must not be further transmitted to any other person without the consent of CIL.

Cowen and Company, LLC. New York (646) 562-1000 **Boston** (617) 946-3700 **San Francisco** (415) 646-7200 **Chicago** (312) 577-2240 **Cleveland** (440) 331-3531 **Atlanta** (866) 544-7009 **Dallas** (214) 978-0107 **London (affiliate)** 44-207-071-7500 **Geneva (affiliate)** 41-22-707-6900

COWEN AND COMPANY RATING DEFINITIONS (a)

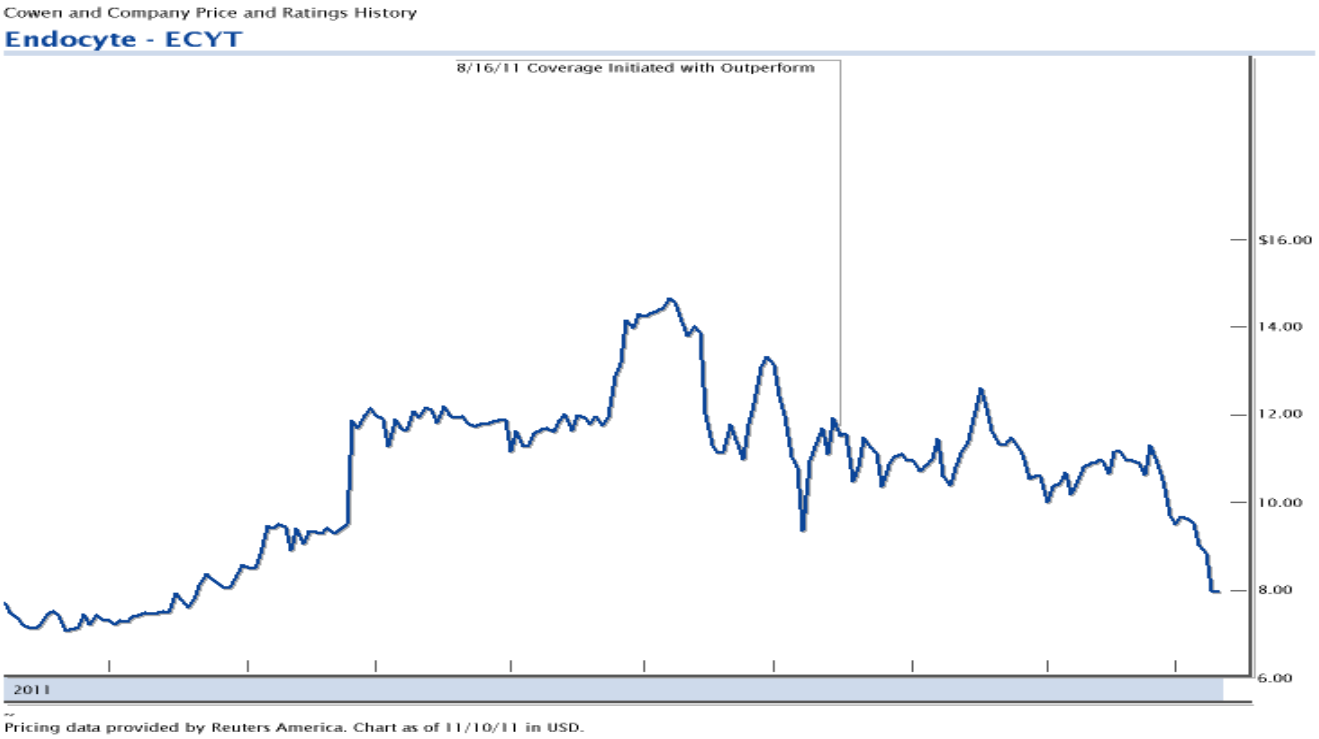
Rating	Definition
Outperform (1)	Stock expected to outperform the S&P 500
Neutral (2)	Stock expected to perform in line with the S&P 500
Underperform (3)	Stock expected to underperform the S&P 500

(a) Assumptions: Time horizon is 12 months; S&P 500 is flat over forecast period.

COWEN AND COMPANY RATING ALLOCATION (a)

Rating	Pct of companies under coverage with this rating	Pct for which Investment Banking services have been provided within the past 12 months
Buy (b)	51.3%	7.7%
Hold (c)	46.4%	2.3%
Sell (d)	2.3%	0.0%

(a) As of 09/30/2011. (b) Corresponds to "Outperform" rated stocks as defined in Cowen and Company, LLC's rating definitions (see above). (c) Corresponds to "Neutral" as defined in Cowen and Company, LLC's ratings definitions (see above). (d) Corresponds to "Underperform" as defined in Cowen and Company, LLC's ratings definitions (see above). Note: "Buy," "Hold" and "Sell" are not terms that Cowen and Company, LLC uses in its ratings system and should not be construed as investment options. Rather, these ratings terms are used illustratively to comply with NASD and NYSE regulations.


Cowen and Company Price and Ratings History
Endocyte - ECYT
8/16/11 Coverage Initiated with Outperform
$16.00
14.00
12.00
10.00
8.00
6.00
2011
Pricing data provided by Reuters America. Chart as of 11/10/11 in USD.