Cerulean Pharma

CERU : NASDAQ : US$6.75

BUY

Target: US$11.00

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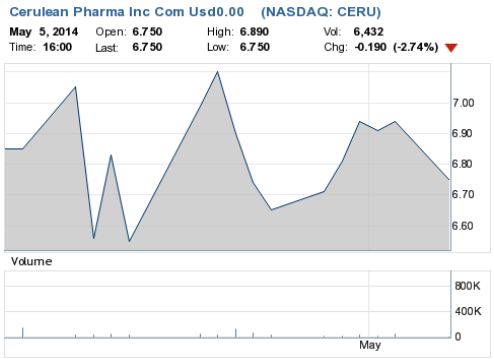
COMPANY STATISTICS:

Forecast Return %:	63.0
Market Cap (M):	$97
52-week Range:	6.10 - 8.06
Avg. Daily Vol. (000s):	6.2

EARNINGS SUMMARY:

FYE Dec		2013A	2014E	2015E
Revenue (M):		$0.0	$0.0	$0.0
EPS:		--	$(1.45)	$(2.26)
Revenue (M):	Q1	--	$0.0	$0.0
	Q2	--	$0.0	$0.0
	Q3	--	$0.0	$0.0
	Q4	--	$0.0	$0.0
Total		--	$0.0	$0.0
EPS:	Q1	--	$(0.27)	$(0.63)
	Q2	--	$(0.33)	$(0.53)
	Q3	--	$(0.39)	$(0.57)
	Q4	--	$(0.45)	$(0.53)
Total		--	$(1.45)	$(2.26)

SHARE PRICE PERFORMANCE:



Source: Interactive Data Corporation

COMPANY DESCRIPTION:
Cerulean is a development stage oncology company focused on developing novel cancer drugs using its tumor targeting platform. The company was founded in 2006 and is currently headquartered in Cambridge, MA.

All amounts in US$ unless otherwise noted.

Life Sciences -- Biotechnology

CANCER NANOTECHNOLOGY DRUGS TARGET HIGH POTENCY, BETTER SAFETY

Investment recommendation

We are initiating coverage on Cerulean Pharmaceuticals with a BUY rating and $11 price target. Cerulean's platform technology could vastly improve current oncology treatments by enhancing safety and efficacy. In addition, we see a number of catalysts over the next two years, potentially providing upside to the stock.

Investment highlights

We anticipate positive data for Cerulean's Phase 2 open-label trials in renal cell carcinoma, ovarian cancer, and neoadjuvant rectal cancer to arrive in 3Q/4Q14. Cerulean will begin randomized Phase 2 trials in each indication that shows positive data in the initial open-label trials except ovarian cancer where a potentially pivotal Phase 2/3 trial will begin.

Initial readouts for renal cell carcinoma and ovarian cancer were positive for CRLX101. In platinum-resistant ovarian cancer, 18 of 19 evaluable patients showed stable disease or better with three patients achieving RECIST-based partial responses, on CRLX101 monotherapy. In renal cell carcinoma, 3 of 11 patients (27%) in stages 2 or 3 achieved a RECIST-based partial response with CRLX101 + Avastin. These results compare with a 2%-4% historical partial response in third-line patients and <10% for second-line patients, suggesting a positive signal.

Cerulean's technology could improve efficacy and safety for multiple FDA-approved chemotherapy drugs, providing additional long-term upside to the stock. Additional advantages of the company's Cerulean cyclodextrin polymer (CDP) nanopharmaceutical platform include: (1) the ability to use different linkers to optimize the pK profile depending on the API; and (2) NCE status due to covalent binding of the API to the polymer backbone. Cerulean has also developed a delivery system for large molecules, which may work with siRNA, miRNA, and mRNA drugs, potentially solving the challenging issue of getting these therapies to the right location in the body.

TABLE OF CONTENTS

INVESTMENT THESIS

We are initiating coverage of Cerulean with a BUY rating and $11 price target based on expectations for positive data for the company's lead asset CRLX101 in two indications by YE14. Cerulean's nanopharmaceutical platform could be safer and more efficacious than current chemotherapy and combination chemotherapy/radiotherapy procedures, resulting in meaningful upside to the stock price. The lead molecule CRLX101 uses a highly potent topoisomerase-1 inhibitor called camptothecin, which is known to be extremely effective but much too toxic in its native form for use as chemotherapy. CRLX101 conjugates camptothecin within a cyclodextran nanoparticle, reducing toxicity and increasing efficacy. We believe that CRLX101 also downregulates HIF-1a, a cellular factor that enables cancer survival. CRLX101 may increase the potency of the blockbuster $6B drug Avastin when given in combination.

The lead molecule CRLX101 is being tested in renal cell carcinoma, ovarian cancer, and neoadjuvant rectal cancer, any of which would be lucrative markets should CRLX101 show positive data. We estimate $660M combined peak sales for CRLX101 by 2021 should the drug show success in all indications. Early data in relapsed/refractory renal cell carcinoma as well as platinum resistant ovarian cancer suggest activity in combination with Avastin, suggesting success in upcoming Phase 2 studies. Treatment for relapsed/refractory renal cell carcinoma and ovarian cancer is very limited, creating an attractive market opportunity for CRLX101 with rapid uptake assuming clinical success. We expect two signal generating readouts by YE14 in single-arm renal cell carcinoma and platinum resistant ovarian cancer studies to be positive, creating an inflection in stock value.

We believe CRLX101 could be expanded into multiple cancer indications outside of relapsed/refractory renal cell carcinoma, neoadjuvant rectal cancer and platinum resistant ovarian cancer, creating a very large revenue opportunity. Specifically, any cancer indication where FDA-approved topoisomerases irinotecan and topotecan are used could be viable market opportunities for CRLX101, including metastatic colorectal cancer, adjuvant colorectal cancer, and small cell lung cancer. Also, CRLX101 could be tested in combination with Avastin in other cancers, including Glioblastoma and Non-Small Cell Lung cancer.

Cerulean's nano-particle product platform is potentially viable for a number of other drugs, not limited to chemotherapy agents. The company has performed pre-clinical experiments on cabazitaxel, gemcitabine, methotrexate, and tofacitinib, yielding interesting results. The nanoparticle platform covalently links a therapeutic agent to a nano-particle backbone that selectively enters cancer tumor cells through leaky new blood cells, but does not persist in healthy tissue. The result is a targeted approach that potentially reduces toxicity, allowing for enhanced treatment over current options.

COMPANY OVERVIEW

Cerulean is a development-stage oncology company focused on developing novel cancer drugs using its tumor targeting platform. Cerulean's platform consists of anti-cancer therapeutics covalently linked to a nano-particle "backbone". Cerulean's products work by selectively targeting cancer cells by exploiting leaky new blood vessels associated with tumor growth where it then releases its therapeutic agent. The company's lead drug CRLX101 is in open-label Phase 2 studies for relapsed renal cell carcinoma, ovarian and

rectal cancer. Pending positive results, trials will be advanced to randomized Phase 2 trials. CRLX101 utilizes camptothecin to target topoisomerase-1 and HIF-1, believed to be involved in multiple cancer survival pathways. The company's second asset CRLX301 is a nanopharmaceutical with docetaxel, a microtubule stabilizer, and should enter the clinic in 2014.

Cerulean was founded in 2006 and is currently headquartered in Cambridge, MA. The company had 22 full-time employees as of January 31, 2014.

VALUATION

We establish an $11 price target for Cerulean based on a sum-of-the-parts probability-adjusted NPV analysis for CRLX101 in ovarian, renal cell carcinoma, and rectal cancer. Our market builds are based on SEER data for each type of cancer, which provides patients by stage and treatment type. We first estimate potential peak market share for CRLX101 in each indication, and also estimate duration of therapy. We then assume a monthly cost of therapy to arrive at our revenue forecast. Next we apply relevant COGS, R&D, and SG&A expenses to arrive at operating profit and a 37% tax rate to determine net income. We discount the net income streams back to the present using a discount rate of 14% to arrive at current value. Lastly, we apply a probability adjustment of ~30% based on the stage of clinical development to arrive at our probability-adjusted net present value.

Our valuation assumes $1 for CRLX101 in relapsed/refractory renal cell carcinoma based on peak sales of $136M, $7 for platinum resistant ovarian cancer based on $333M peak sales in 2020, and $3 in neoadjuvant rectal cancer based on peak sales of $191M by 2021.

Figure 1: Valuation

	Peak Sales	Year	Current Value	Probability Adjustment	Value Per Share
Ovarian	$333	2020	$425	30%	$7
RCC	$136	2021	$95	30%	$1
Rectal	$191	2021	$160	30%	$3
Total			**$680**	**30%**	**$11**

Risk Free Rate	2%
Beta	1.3
Risk Premium	9%
Discount Rate	14%

Shares outstanding (M's)	19

Source: Canaccord Genuity, Inc., company reports

CATALYSTS

Figure 2: Catalysts

Event	Timing	Drug	Description	Effect	Importance	Notes
Data	4Q14	CRLX101	Phase 2 RCC	↑	High	Single Arm Trial with Relapsed RCC patients
Data	3Q14	CRLX101	Phase 2 Ovarian	↑	High	Single Arm Trial with platinum resistant patients
Data	3Q14	CRLX101	Phase 1b Rectal	↑	Moderate	Maximum Tolerated Dose in neoadjuvant rectal cancer
Data	4Q14	CRLX101	Phase 2 Rectal	↑	High	Single arm, neoadjuvant rectal cancer
Data	4Q14	CRLX101	Phase 2 Ovarian	↑	High	Single arm, platinum resistant ovarian cancer, ORR
Data	1Q15	CRLX101	Phase 2 RCC	↑	High	Relapsed RCC, Final ORR, PFS Data
Data	3Q15	CRLX101	Phase 2 Ovarian	↑	Critical	Final ORR, PFS Data
Data	4Q15	CRLX101	Phase 2 Rectal	↑	Critical	Randomized neoadjuvant rectal cancer
Data	4Q15	CRLX101	Phase 2 RCC	↑	High	Randomized relapsed renal cell carcinoma
Data	4Q15	CRLX301	Phase 1	↑	Moderate	Maximum Tolerated Dose

Source: Canaccord Genuity, Inc

RISKS

Cerluean's lead drug CRLX101 may fail in any or all three currently ongoing clinical programs, resulting in downside to our price target and the current stock price. In addition, clinical studies may be successful but not meet investor expectations, also resulting in downside to our price target and the stock price. Even assuming clinical success for CRLX101, FDA approval could require more clinical data than originally anticipated, resulting in delayed revenue timelines, potentially pressuring the share price. In addition, CRLX101 may be deemed efficacious, but could generate unexpected toxicity, resulting in reduced market share and lower revenues than expected, even if FDA approval is attained.

We view the use of CRLX101 in combination with Avastin for the treatment of ovarian cancer as potentially risky because Avastin has not been FDA approved for the treatment of ovarian cancer. While Avastin is approved in the EU for the treatment of ovarian cancer there have been issues with regards to safety in certain cancer indications, including ovarian. Specifically, adverse events and safety data may be skewed significantly higher as a result of the effects of Avastin, rather than from CRLX101. US studies of Avastin in

ovarian cancer resulted in some bowel perforations and deaths, which might limit the overall safety profile for CRLX101+Avastin in platinum resistant ovarian cancer in the clinic, resulting in downside to our price target and the stock price.

Although data readouts are expected throughout 2014 and 2015, critical randomized data are unlikely to be available until 2H15, a timeline which may be too long for certain investors, creating potential downside pressure on the stock. In addition, if timelines for any data readouts during 2014 and 2015 are delayed, investors could become skeptical regarding the results, also creating downward pressure on the stock and potential downside to our price target.

The oncology space is highly competitive, and other companies could generate data potentially limiting the commercial opportunity for Cerulean, resulting in downside to our revenue estimates and price target. Specifically, although we view recent data from Merrimack as a positive, some investors may believe that the drug will compete directly with CRLX101, limiting upside for Cerulean. Also, other companies are developing "reformulated" chemotherapy drugs including Sorrento, Nektar, Celgene, and others. Specifically, Nektar is also developing a reformulated, long-acting PEGylated formulation of irinotecan, which investors may also view as a threat to CRLX101 market share going forward, pressuring the stock.

Finally, capital is an ongoing concern for Cerulean as it proceeds through the development process. We anticipate Cerulean will have to raise meaningful capital over the next 3-4 years to fund clinical development, which could lower share price below our estimate. We expect Cerulean may have to raise as much as ~$200M over the next 3-4 years which may dilute share count and reduce share price.

Data for Cerulean's CRLX101 for ovarian, renal cell carcinoma, and rectal may be negative, resulting in downside to the stock and our price target. Moreover, trials may be delayed due to a number of reasons including slower-than-anticipated patient enrollment.

CRLX101 – CAMPTOTHECIN NANOTECHNOLOGY TARGETS RENAL CELL, OVARIAN CANCER

Cerulean is developing CRLX101 for the treatment of renal cell carcinoma (RCC), rectal, and ovarian cancers. CRLX101 is a cyclodextrin polymer nanopharmaceutical containing camptothecin. The drug utilizes a covalent linker to attach a therapeutic agent (camptothecin) to a nano-particle backbone. Camptothecin is a non-FDA approved therapeutic agent that was being developed as a HIF-1 alpha down-regulator and topoiosere-1 inhibitor. However, due to very high levels of toxicity, clinical development of camptothecin was halted may years ago. CRLX101 has the potential to reduce toxicities associated with camptothecin given its tumor targeting technology, potentially improving efficacy and safety.

CRLX101 is differentiated from normal cancer targeting therapies in three ways. The nano-particle backbone exploits the leakiness of new blood vessels in tumor cells to gain entry into cancer tumors where their size makes them difficult to remove from cancer cells. In the cell, the nano-particle backbone determines the release rate of the therapeutic agent. One the therapeutic agent is cleaved, the nano-particle backbone breaks down into polymer strands that are processed through the kidneys and into the urine. The combination of tumor cell targeting and sustained release caused by the nano-particle

backbone potentially make CRLX101 effective with high toxicity therapeutic agents. Once the nano-particle backbone breaks down into polymer strands, these strands are then released through the kidneys and into the patients' urine.

CRLX101 is being tested in combination with Avastin for the treatment of rectal and ovarian cancer. As cancer cells grow, the rate of growth sometimes outpaces the available oxygen supply, creating a hypoxic environment. Avastin, an anti angiogenic, enhances the hypoxic environment inside growing cancer tumors. Under hypoxic conditions cancer cells upregulate HIF-1alpha, which promotes the cancer cell-survival pathway, and allows for a stronger and more aggressive cancer to recur after treatment. By downregulating HIF-1alpha, camptothecin is believed to mitigate the effects of the cell-survival pathway causing a more permanent destruction of the cancer tumor. Therefore, CRLX101 combination with Avastin may reduce "resistance" to Avastin, resulting in better efficacy, in addition to camptothecin's direct topoisomerase inhibitor effects.

Estimate $136M peak sales in renal cell carcinoma

We model ~$136M peak sales in 2021 based on a market build of patients with stage 3 and 4 renal cell cancer utilizing data from SEER. Projected peak market share in 2021 is 2% of 15,071 first-line patients, 16% of 10,550 second-line patients and 31% of 8,343 third-line patients. We estimate treatment duration of 6, 3, and 2 months for first, second, and third-line patients, respectively, based on progression-free survival data. We estimate a cost of $10,000 per month in 2019, increasing 4% per annum. Our cost estimate is based on pricing data for FDA approved agents in renal cell carcinoma including Avastin, Sutent, Nexavar, Torisel, Axitinib, Everolimus, and Votrient. We include modest share for front-line patients at this time as no data are available for CRLX101 in these patients. We include data for second-line use as we believe that CRLX101+Avastin efficacy in 3rd/4th line relapsed patients could translate into some earlier usage prior to clinical data.

Figure 3: Renal Cell Carcinoma Revenue Build

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
First-line patients, stage III, IV													
Total 1st-line patients	14,157	14,456	14,760	15,071	15,388	15,713	16,044	16,382	16,727	17,079	17,439	17,806	18,181
Total 2nd-line patients	9,910	10,119	10,332	10,550	10,772	10,999	11,231	11,467	11,709	11,955	12,207	12,464	12,727
Total 3rd-line patients	8,002	8,171	8,343	8,519	8,698	8,882	9,069	9,260	9,455	9,654	9,857	10,065	10,277
Market Share													
First-Line		0%	1%	2%	2%	2%	2%	2%	2%	2%	2%	1%	0%
Second-Line		3%	8%	16%	16%	16%	17%	17%	17%	18%	18%	9%	3%
Third-Line		5%	16%	31%	32%	32%	33%	34%	35%	35%	36%	18%	6%
Number of Patients													
First-Line		48	157	311	325	339	354	369	385	401	417	213	76
Second-Line		253	827	1,635	1,707	1,782	1,859	1,938	2,020	2,104	2,191	1,119	400
Third-Line		409	1,335	2,641	2,757	2,878	3,002	3,130	3,262	3,398	3,539	1,807	646
Cost Per Month		$10,400	$10,816	$11,249	$11,699	$12,167	$12,653	$13,159	$13,686	$14,233	$14,802	$15,395	$16,010
Duration													
First-Line		6	6	6	6	6	6	6	6	6	6	6	6
Second-Line		3	3	3	3	3	3	3	3	3	3	3	3
Third-Line		2	2	2	2	2	2	2	2	2	2	2	2
Total Cost Per Patient													
First-Line		$62,400	$64,896	$67,492	$70,192	$72,999	$75,919	$78,956	$82,114	$85,399	$88,815	$92,367	$96,062
Second-Line		$31,200	$32,448	$33,746	$35,096	$36,500	$37,960	$39,478	$41,057	$42,699	$44,407	$46,184	$48,031
Third-Line		$20,800	$21,632	$22,497	$23,397	$24,333	$25,306	$26,319	$27,371	$28,466	$29,605	$30,789	$32,021
Total Revenues (000's)		$19,397	$65,914	$135,615	$147,262	$159,832	$173,394	$188,023	$203,798	$220,806	$239,139	$126,972	$47,191

Source: Canaccord Genuity, Inc., SEER

Ovarian cancer ~$333M peak sales by 2020

We model $333M peak sales for CRLX101 in ovarian cancer in 2020 based on patient data from SEER. We break the market into first-line, second-line platinum sensitive, second-line platinum resistant, and third-line patients. Projected peak market share in 2020 is 2% of 19,674 first-line patients, 4% of 9,640 second-line platinum sensitive patients, 24% of 11,362 platinum –refractory patients, and 30% of 15,751 third-line patients. Treatment duration is based on progression-free survival statistics for second and third-line patients and is based on standard platinum treatment duration for first-line patients, which is markedly less than progression-free survival due to the toxicity of platinum. We utilize treatment duration of 8, 7, 4, and 3 months for front-line, second-line platinum sensitive, second-line platinum resistant, and third line, respectively, based on data from prior studies in ovarian cancer. Arguably, CRLX101 could be used for a longer duration in first-line patients given its expectedly lower toxicity levels; however, we are not modeling for it at this time. We estimate a monthly cost of $10,816 in 2020 with 4% price increases per annum. Our cost estimate is based on pricing data for FDA approved agents in various cancers including renal cell carcinoma, non-small cell lung cancer, and pancreatic cancer, as currently used ovarian cancer agents are all currently generic.

Figure 4: Ovarian cancer revenue build

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Chemotherapy													
First-line patients													
Stage III	9,463	9,634	9,807	9,984	10,163	10,346	10,533	10,722	10,915	11,112	11,312	11,515	11,723
Stage IV	9,185	9,350	9,519	9,690	9,864	10,042	10,223	10,407	10,594	10,785	10,979	11,176	11,378
1st-line patients	18,649	18,984	19,326	19,674	20,028	20,388	20,755	21,129	21,509	21,896	22,291	22,692	23,100
2nd-line platinum refractory/resistant patients	10,770	10,963	11,161	11,362	11,566	11,774	11,986	12,202	12,422	12,645	12,873	13,105	13,340
2nd-line relapsed platinum sensitive patients	9,138	9,302	9,470	9,640	9,814	9,990	10,170	10,353	10,540	10,729	10,922	11,119	11,319
Potential 3rd-line patients	14,930	15,199	15,473	15,751	16,035	16,323	16,617	16,916	17,221	17,531	17,846	18,168	18,495
Market Share													
First-Line		0%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%
Second-Line Platinum Sensitive		1%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	1%
Second-Line Platinum Resistant		5%	14%	24%	25%	25%	25%	25%	25%	25%	25%	25%	5%
Third-Line		5%	18%	31%	31%	31%	31%	31%	31%	31%	31%	31%	16%
Number of Patients													
First-Line		63	180	315	330	345	351	358	364	371	377	384	78
Second-Line Platinum Sensitive		78	221	386	404	423	431	438	446	454	462	471	96
Second-Line Platinum Resistant		548	1,562	2,727	2,857	2,991	3,045	3,099	3,155	3,212	3,270	3,329	678
Third-Line		760	2,785	4,883	4,971	5,060	5,151	5,244	5,338	5,435	5,532	5,632	2,867
Cost Per Month		$10,000	$10,400	$10,816	$11,249	$11,699	$12,167	$12,653	$13,159	$13,686	$14,233	$14,802	$15,395
Duration													
First-Line		8	8	8	8	8	8	8	8	8	8	8	8
Second-Line Platinum Sensitive		7	7	7	7	7	7	7	7	7	7	7	7
Second-Line Platinum Resistant		4	4	4	4	4	4	4	4	4	4	4	4
Third-Line		3	3	3	3	3	3	3	3	3	3	3	3
Total Cost Per Patient													
First-Line		$80,000	$83,200	$86,528	$89,989	$93,589	$97,332	$101,226	$105,275	$109,486	$113,865	$118,420	$123,156
Second-Line Platinum Sensitive		$70,000	$72,800	$75,712	$78,740	$81,890	$85,166	$88,572	$92,115	$95,800	$99,632	$103,617	$107,762
Second-Line Platinum Resistant		$40,000	$41,600	$43,264	$44,995	$46,794	$48,666	$50,613	$52,637	$54,743	$56,932	$59,210	$61,578
Third-Line		$30,000	$31,200	$32,448	$33,746	$35,096	$36,500	$37,960	$39,478	$41,057	$42,699	$44,407	$46,184
Total Revenues (000's)		55,214	182,988	332,844	357,774	384,485	407,062	430,964	456,271	483,063	511,428	541,459	194,087

Source: Canaccord Genuity, Inc., SEER

Neoadjuvant rectal cancer – $191M peak sales by 2021

We model $191M peak sales for CRLX101 in neoadjuvant rectal cancer in 2021 based on patient data from SEER. We identify the number of surgery eligible and surgery + radiation eligible patients based on historical data for these treatments as the neoadjuvant patient population for CRLX101 treatment. Projected peak market share in 2021 is 35% of 32,403 patients. CRLX101 Treatment duration is based on typical neoadjuvant treatment duration of 6 weeks. We estimate a monthly cost of $11,249 per month in 2021 with 4% price

increases per annum. Our cost estimate is based on pricing data for FDA approved agents in various cancers including renal cell carcinoma, non-small cell lung cancer, and pancreatic cancer, as currently used ovarian cancer agents are all currently generic.

Figure 5: Neoadjuvant rectal cancer revenue build

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Patients Receiving Surgery	30,468	31,099	31,744	32,402	33,074	33,759	34,459	35,174	35,903	36,647	37,407	38,182	38,974
Market Share		5%	24%	35%	35%	35%	35%	35%	35%	35%	35%	18%	6%
Number of Patients		1,555	7,619	11,341	11,576	11,816	12,061	12,311	12,566	12,826	13,092	6,682	2,387
Cost per month		$10,400	$10,816	$11,249	$11,699	$12,167	$12,653	$13,159	$13,686	$14,233	$14,802	$15,395	$16,010
Duration		2	2	2	2	2	2	2	2	2	2	2	2
Total Cost per Patient		$15,600	$16,224	$16,873	$17,548	$18,250	$18,980	$19,739	$20,529	$21,350	$22,204	$23,092	$24,015
Total Revenues (000's)		24,257	123,603	191,351	203,131	215,635	228,910	243,001	257,960	273,840	290,697	154,296	57,328

Source: Canaccord Genuity, Inc., SEER

Neoadjuvant rectal cancer treatment logical choice

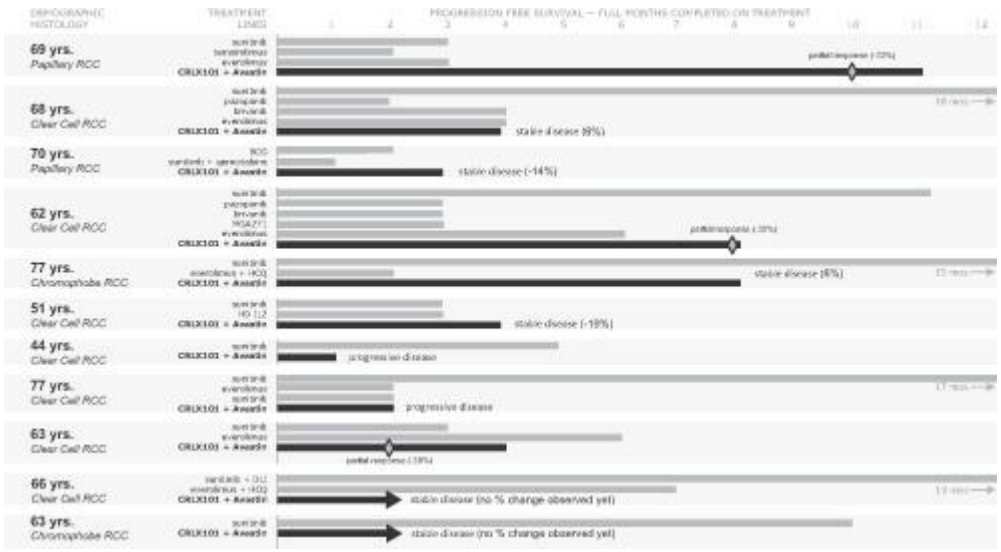
Rectal cancer patients without distant metastases are candidates for neoadjuvant therapy, which is used to reduce the size of patients' tumors before surgery. Neoadjuvant therapy consists of radiotherapy and chemotherapy and typically lasts for 5-6 weeks prior to surgery. Radiotherapy initiates cell apoptosis by causing DNA single strand breaks. However, cell repair mechanisms such as topo- 1 work to re-ligate DNA strand breaks, mitigating radiotherapy damage to tumor cells. We expect that a topo-1 inhibitor would more effectively reduce tumor size when used in conjunction with radiotherapy. For example, a combination of irinotecan plus Xeloda administered with radiotherapy has demonstrated pathologic complete response rates of 21% to 37% across a number of trials. This is greater than the complete response rate achieved with Xeloda plus radiotherapy. However, due to unacceptably high toxicity levels, irinotecan has not been approved for use with Xeloda and radiotherapy.

CRLX101 is a durable topo 1 inhibitor and potent HIF-1alpha down-regulator. In addition, to topo 1 mitigating the effectiveness of radiotherapy, HIF-1alpha is also upregulated after radiotherapy as a result of the hypoxic conditions it causes in cells. For these reasons, we believe CRLX101 could be an important treatment in neoadjuvant rectal cancer therapy.

Phase 1b renal cell carcinoma data

CRLX101+Avastin demonstrated a ~27% overall response rate (ORR) in a single-arm relapsed/refractory renal cell carcinoma study (n=11), better than expected for Avastin monotherapy, suggesting strong efficacy for CRLX101. Cerulean is testing CRLX101+Avastin in second and third-line renal cell carcinoma via an investigator sponsored study at UPenn. Historically, third-line patients that previously received a TKI treatment, including Sutent, have achieved RECIST partial response rates of 2% to 4% from subsequent therapies, including Avastin alone. Even moving to second-line, response rates are generally <10% based on independent review. Cerulean is treating patients with semi-monthly doses of either 12mg² or 15mg² of CRXL101 delivered intravenously in addition to a standard Avastin dose of 10mg/kg.

Figure 6: Phase 1b renal cell carcinoma



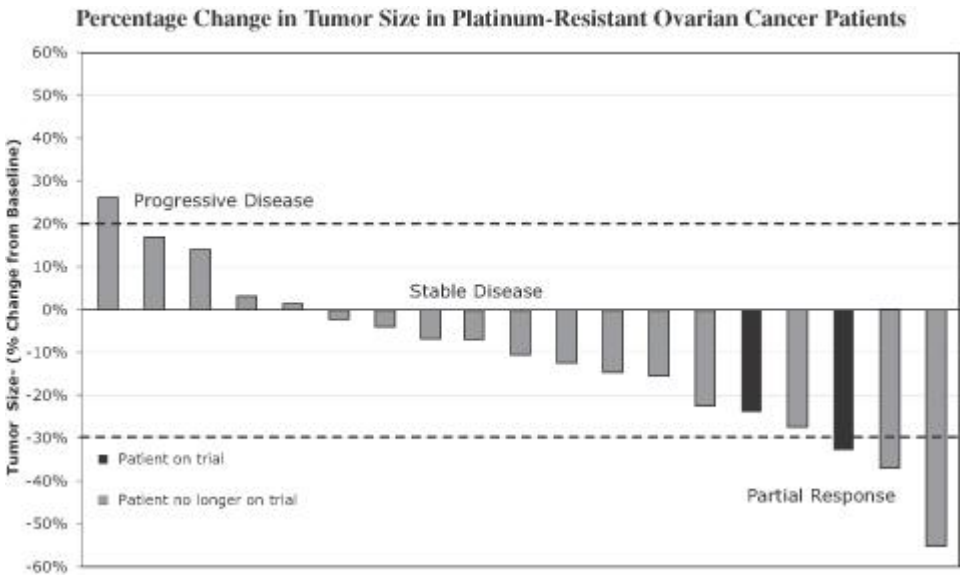
Source: Company Filings

Clinical development in ovarian cancer

CRLX101 has shown interesting early data in platinum resistant ovarian cancer, with a ~14% response rate versus ~3% historically for topotecan, suggesting an efficacy signal for CRLX101. Cerulean is currently testing CRLX101 in a Phase 2 monotherapy study in platinum resistant ovarian cancer, with n=22 patients enrolled. Importantly, >85% of patients are >2nd line. As of March 25, 2014, n=19 patients were evaluable with 18 showing scan results of stable disease or better, and three patients achieving RECIST-based partial responses. Importantly, data from this trial showed CRLX101 was well tolerated.

Cerulean has initiated a Phase 2 study for the treatment of platinum resistant ovarian cancer with CRLX101 plus Avastin. As of March 25, 2014 two patients were enrolled in this study. The company will look for an Overall Response Rate of ≥20% in order to initiate a randomized Phase 2 study in combination with Avastin. Importantly, results in combination with Avastin may be substantially better than what was seen for CRLX101 monotherapy in platinum resistant ovarian cancer.

Figure 7: Phase 1b ovarian cancer data



Source: Canaccord Filings

Failed lung cancer trial due to control arm, protocol violations

In 2011, Cerulean began an unsuccessful open-label, randomized Phase 2 clinical trial testing CRLX101 for the treatment of non-small cell lung cancer (NSCLC), but failure was due to control arm protocol violations, suggesting CRLX101 is still a viable asset. The trial enrolled n=157 patients at sites in Russia and the Ukraine into two arms: a treatment arm consisting of CRLX101 as well as best supportive care, and a comparator arm consisting of best supportive care. The primary endpoint - median overall survival - was not met with 6.3 months versus 11.9 months for CRLX101 and best supportive care, respectively.

We believe the results of the primary endpoint were skewed by (1) selective patient withdrawal and (2) access to post-treatment therapy. Effectively, when patients learned that they had been randomized to the control arm, (study was open label) many withdrew from the study to seek active therapy, skewing results. Importantly, 9/57 (16%) of best supportive care patients withdrew before or during the first treatment cycle compared with only 5% in the CRLX101 arm. We suspect that these patients were sicker, and their removal from the control arm likely biased Overall Survival and Progression Free Survival to the upside for control patients. In addition, 40% of best supportive care patients received post-trial cancer therapy, compared with 28% of CRLX101 patients, suggesting control arm patients had access to better therapy, potentially biasing results (Figure 14).

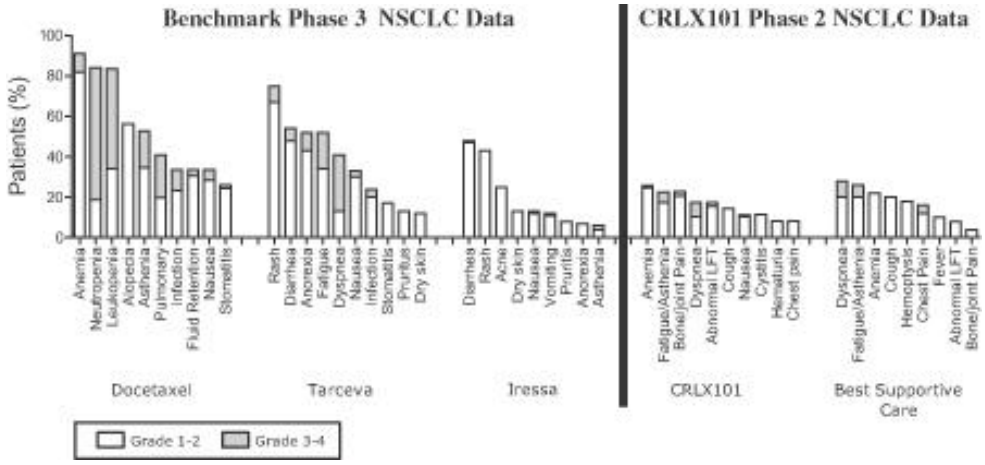
Interestingly, Progression Free Survival was similar between the CRLX101 and BSC arms (2.2 vs. 2.1 mo), but Overall Survival was significantly higher for the BSC arm vs. CRLX101 (11.9 vs. 6.3 mo). We believe early patient withdrawal from the BSC arm and treatment with chemotherapy as well as other protocol violations likely inflated BSC Overall Survival. BSC patients that withdrew from treatment had faster disease progression, suggesting that they were sicker. The remaining BSC patients were healthier, which likely inflated BSC Overall Survival (Figure 11). Adjusting for early withdraw patients results in OS that is

more similar between treatment arms. BSC Overall Survival drops to 7.9 months, which is similar to the 6.3 months seen for CRLX101 (Figure 12).

Median overall survival results of ~6.3 mo for CRLX101 compare with 5.6 to 7.5 months for approved treatments, similar to OS data for FDA-approved agents in the second and third-line (5.6-7.5 mo). However, median overall survival for second and third-line patients treated with best supportive care range from 4.6 to 5.1 months, generally. Also, patients receiving a higher number of doses of CRLX101 generally experienced a better response, suggesting CRLX101 is active (Figure 18).

Safety data for CRLX101 in the NSCLC study was very informative and encouraging, confirming expectations for lower toxicity. Adverse events in the CRLX101 arm were generally low grade and similar in nature to the best supportive care arm. Importantly, the adverse events experienced in this trial were relatively less severe and fewer in number than adverse events experienced in clinical trials of docexatel, Tarceva, and Iressa.

Figure 8: Non-small cell lung cancer safety data



Source: Company Report

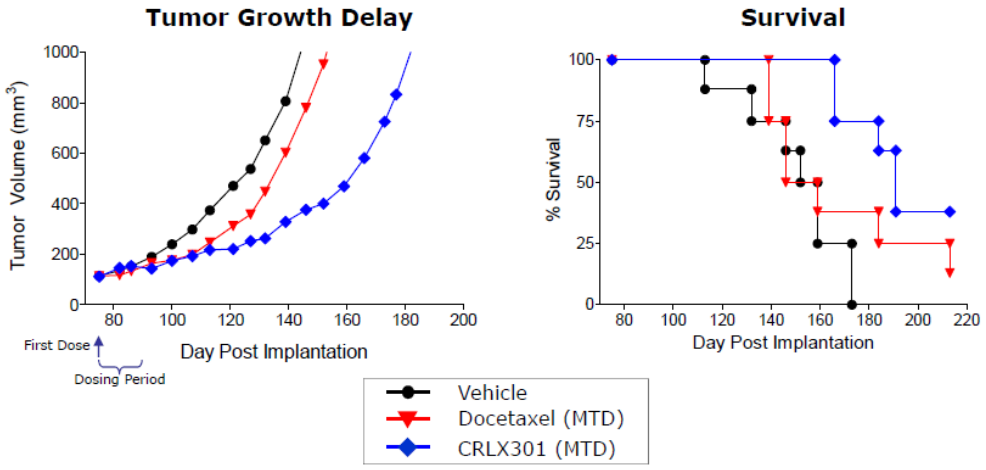
CRLX301 – SECOND PRODUCT TARGETING LARGE DOCETAXEL MARKET

Cerulean is developing a second product, CLRX301, a second-generation version of docetaxel, which could address solubility and safety issues, potentially resulting in better efficacy. Importantly, docetaxel is used to treat breast, head and neck, gastric, prostate, and non-small cell lung cancer, representing a large collective revenue opportunity. CRLX301 is a docetaxel-containing nanoparticle with potentially improved efficacy versus docetaxel alone. The conjugated molecules self-assemble into ~25nm biocompatible nanoparticles and docetaxel is released from the nanoparticles within tumor cells.

CRLX301 is scheduled to enter Phase 1 MTD studies by YE14 with Maximum Tolerated Dose (MTD) data expected by YE2015. Preclinical data from five separate cancer models suggests improved efficacy for CRLX301 versus docetaxel alone. Specifically, CRLX301 showed both tumor growth delay and improved survival in a multi-drug resistant ovarian cancer xenograft model, triple-negative breast cancer xenograft model (Figure 9, 10)

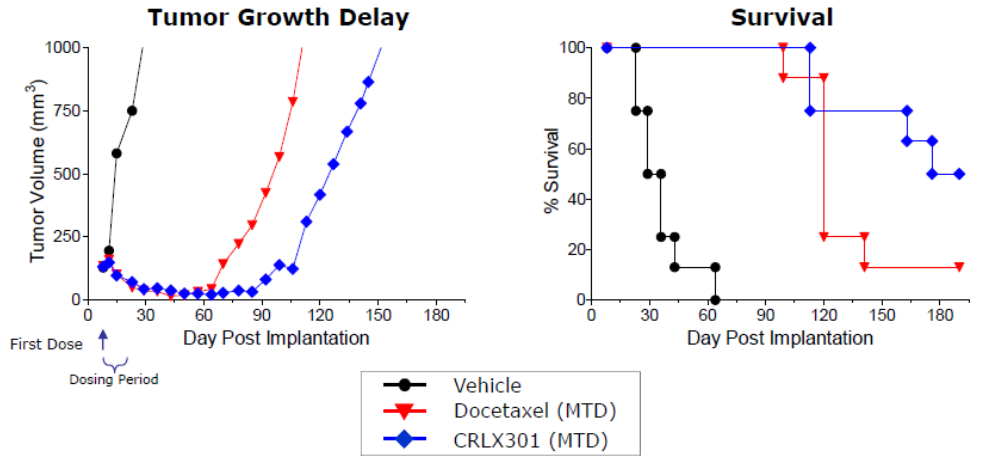
T790M NSCLC xenograft model (Figure 11) and squamous NSCLC model (Figure 12). CRLX301 was also tested against docetaxel and cabazitaxel in a melanoma synergistic tumor study, with CRLX301 showing improved tumor growth delay and better survival (Figure 13). These data suggest improved activity versus docetaxel in pre-clinical tumor models which could translate into better efficacy in the clinic, especially in melanoma.

Figure 9: NCI-ADR/RES MDR ovarian xenograft study



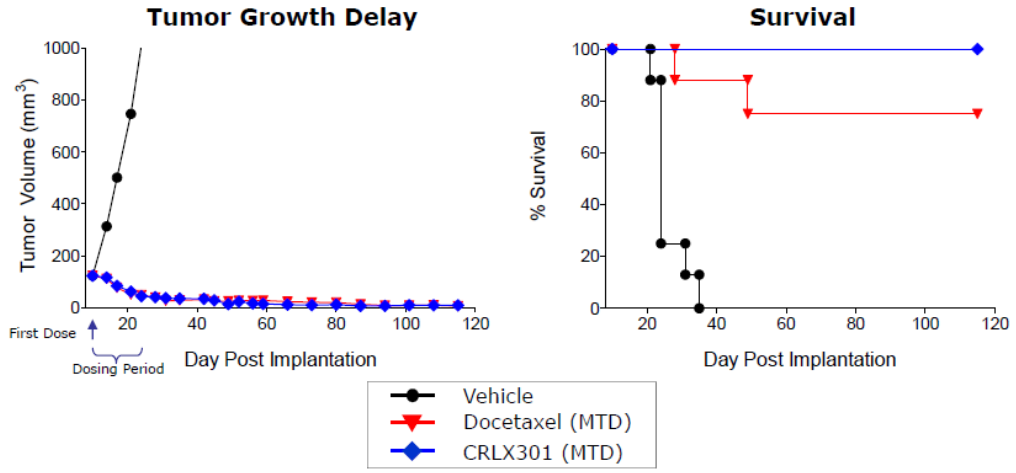
Source: Company Filings

Figure 10: MDA-MB-435 triple negative breast xenograft study



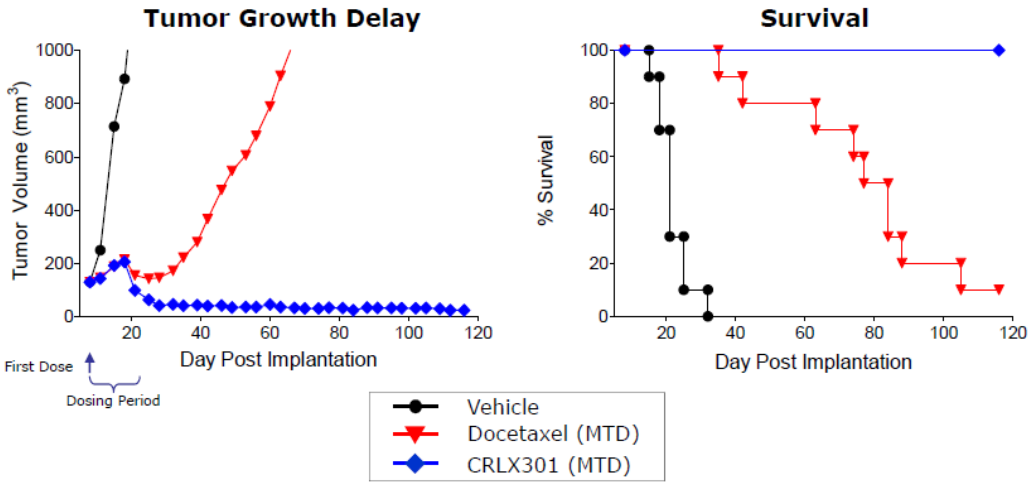
Source: Company Filings

Figure 11: H1975 NSCLC xenograft study



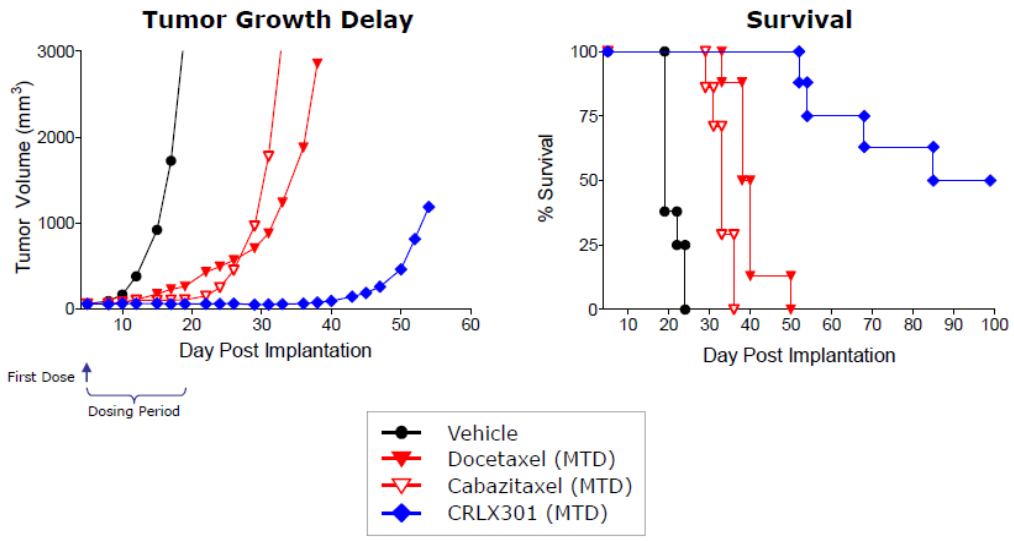
Source: Company Filings

Figure 12: H520 squamous NSCLC xenograft study



Source: Company Filings

Figure 13: B16.F10 melanoma syngeneic tumor study



Source: Company Filings

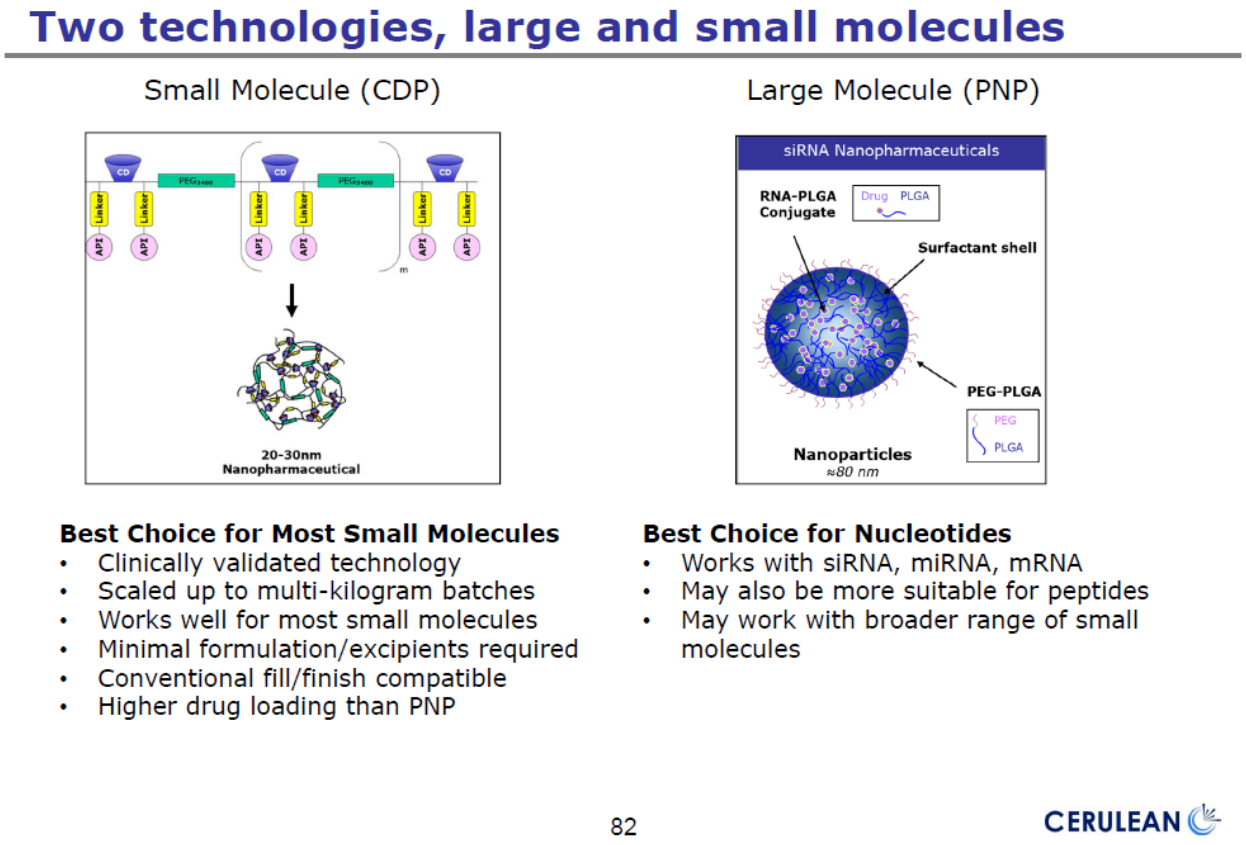
CERULEAN'S NANOPARTICLE PLATFORM APPLICABLE TO MULTIPLE CHEMOTHERAPY, OTHER AGENTS

Cerulean's technology could improve efficacy and safety for multiple FDA-approved chemotherapy drugs, providing additional long-term upside to the stock. The company's Cerulean cyclodextrin polymer (CDP) nanopharmaceutical platform offers many advantages including: (1) self-assembly into stable nanoparticles that shield the API payload, improving safety; (2) release of the API controlled by linker chemistry; (3) the ability to use different linkers to optimize the pK profile depending on the API; and (4) NCE status due to covalent binding of the API to the polymer backbone. Cerulean has also developed a delivery system for large molecules, which may work with siRNA, miRNA, and mRNA drugs, potentially solving the challenging issue of getting these therapies to the right location in the body. (Figure 14).

Cerulean's CDP technology involves Active Pharmaceutical Ingredients (APIs) tethered to a tunable linker which can adjust release kinetics and conditions. These API-linker strands are held together via guest-host complexes between the API and cyclodextran, effectively "protecting" the API, and minimizing exposure until it is released inside the target cells. The cyclodextran-linker-API complexes are then PEGylated, with each unit repeating. The strands self-assemble, with 4-5 forming one nanoparticle for CRLX101, for example. Since the API is covalently attached to the linker, the API will not release unless hydrolyzed, which tends to occur to a greater extent inside the target cells versus healthy tissue.

Cerulean has also developed a Polymeric NanoParticle (PNP) technology designed for targeted delivery of large molecules. The PNP nanoparticles are ~60-100nM in diameter and can contain SIRNA, miRNA, or RNA molecules. These nanoparticles contain a surfactant shell surrounding a drug-poly(d,l-lactic-co-glycolic acid) conjugate which is PEGYlated to prevent recognition by the immune system.

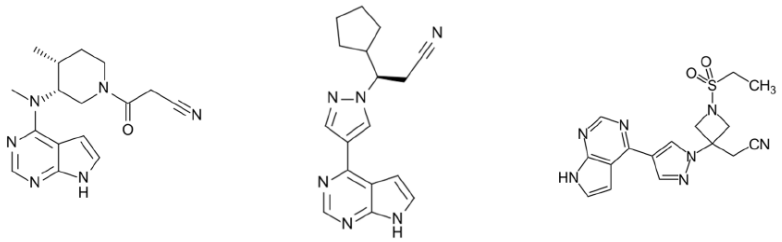
Figure 14: Technology



Source: Company Filings

Interestingly, Cerulean has conducted early work with JAK inhibitors, suggesting the ability to dramatically increase pharmacokinetic properties, decreasing the frequency of dosing (Figure 15). The company has also tested cabazitaxel, gemcitabine, and methotrexate, generating interesting pK and tumor survival data.

Figure 15: Opportunity to develop next generation JAK inhibitors

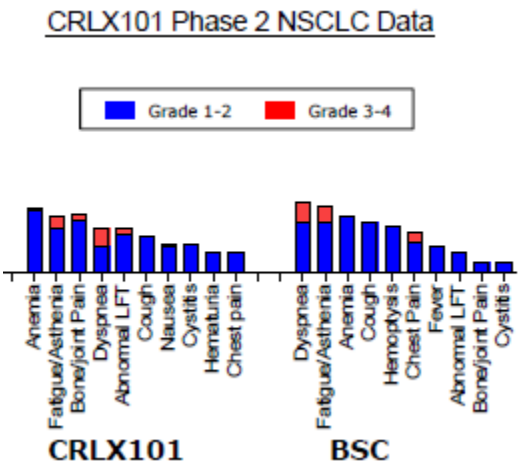


Source: Company Filings

Nanotechnology enables lower CRLX101 toxicity, higher dosing

Cerulean's nanotechnology should allow for higher dosing and better efficacy in various cancers due to its nanotechnology platform. CRLX101 showed similar safety versus placebo in a prior Phase 2b study in lung cancer, and significantly less toxicity versus other agents (Figure 16). Most interestingly, neutropenia was not seen at appreciable levels at the CRLX101 dose used in Phase 2b. CRLX101 is a conjugated form of camptothecin, a highly potent but toxic topoisomerase inhibitor when given alone. Cerulean also believes that its technology dramatically increases plasma PK, but that drug is not released unless inside the tumor, an additional advantage.

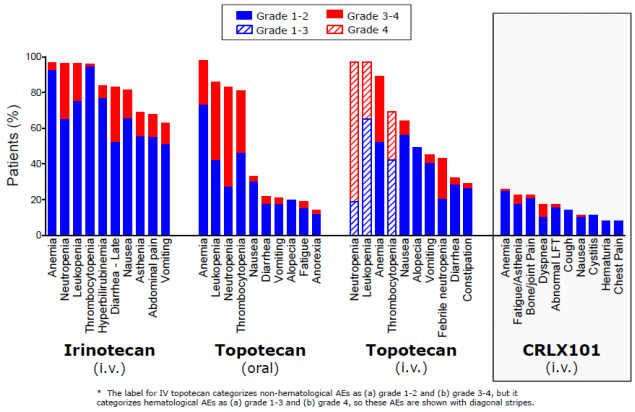
Figure 16: Adverse events NSCLC trial



Source: Company Filings

Safety for CRLX101 seen in the Phase 2b NSCLC trial is much more tolerable than other FDA approved topoisomerase drugs, suggesting better results in ongoing clinical studies (Figure 17). For example, neutropenia was seen in ~90-100% of patients receiving irinotecan or topotecan in clinical studies versus virtually no patients at the administered 15mg/m2 dose for CRLX101. Also, anemia rates for CRLX101 were ~25% versus >90% for irinotecan and topotecan. We believe that the lack of toxicity for CRLX101 will enable higher dosing and better efficacy in Phase 2 and 3 studies.

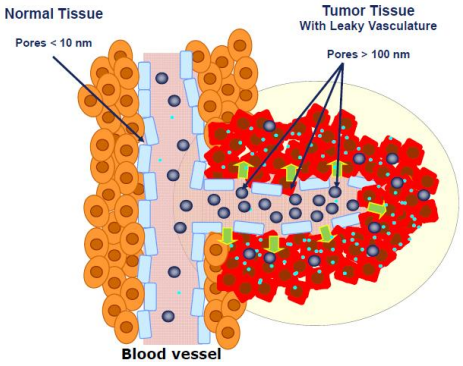
Figure 17: Adverse events



Source: Company Filings

CRLX101 is dynamically targeted to tumors due to its uniform size, which results in uptake via tumor vasculature, but not healthy cells, lowering toxicity. Normal tissue blood vessels are <10nm in diameter, too small for 20-40nm CRLX101 particles to enter, preventing off-target toxicity. However, tumor tissue vasculature is leaky, with pores >100nm, allowing CRLX101 to accumulate within tumor cells, and release its payload over a long period of time.

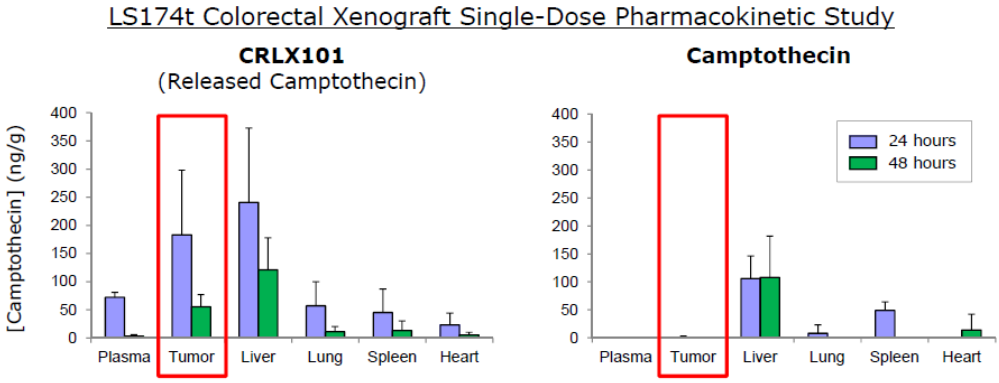
Figure 18: Targeting technology overview



Source: Company Filings

CRLX101 remains inside tumors for up to 14 days post a single dose, and continues to release the camptothecin payload, but does not enter or persist in surrounding healthy tissue. CRLX101 also has a favorable biodistribution profile versus camptothecin alone, with meaningful CRLX101 levels in tumors 24-48 hours post dose. Unconjugated camptothecin levels are barely detectable within xenograft tumors at 24-48 hours post-dose.

Figure 19: Colorectal pharmacokinetic study

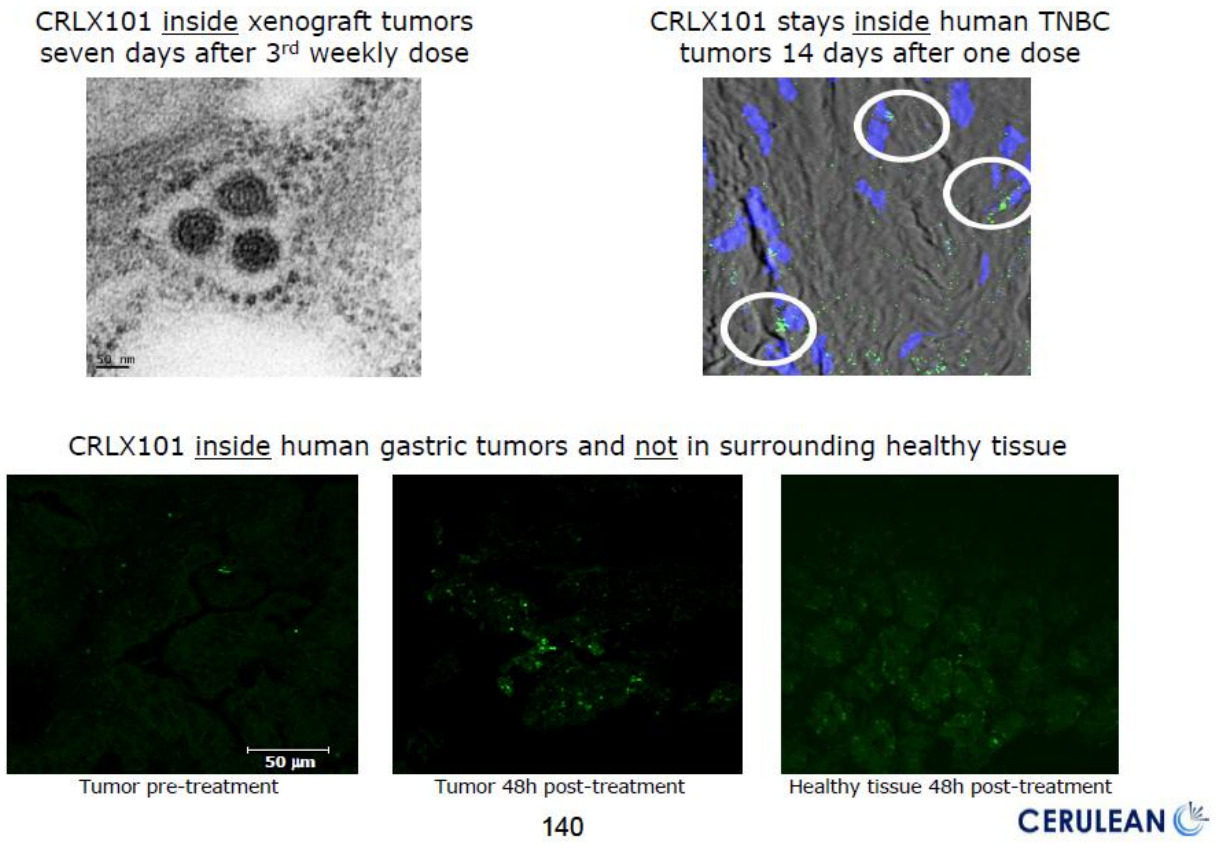


Plasma and tissue collection at 24 and 48 hours after single-dose administration at respective MTDs (3 mg/kg intraperitoneally for Camptothecin and 24 mg/kg CPT equivalent dose intravenously for CRLX101)

Source: Company Filings

Importantly, experiments have specifically shown that CRLX101 does not persist in healthy tissue, only tumor cells. CRLX101 has been shown to remain inside xenograft tumors for seven days after three weekly doses. The drug has also been shown to remain inside TNBC tumors 14 days after one dose. Most importantly, CRLX101 persists inside human gastric tumors, but not in surrounding healthy tissue, which should result in a targeted killing effect on tumors but not healthy tissue.

Figure 20: CRLX101 healthy tissue effect

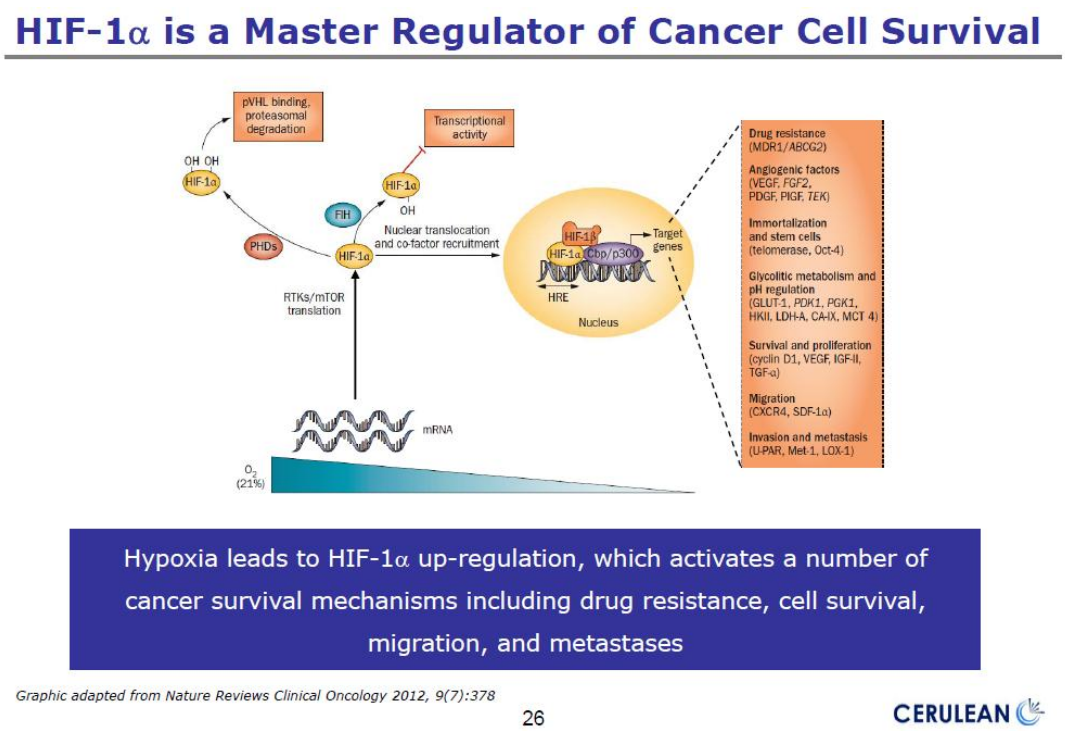


Source: Company Filings

HIF-1a inhibition by CRLX101 key advantage

Cerulean's CRLX101 camptothecin drug inhibits Hypoxia-Inducible Factor-1-alpha (HIF-1a) in a colorectal xenograft model, suggesting CRLX101 could deactivate a major cancer survival pathway. HIF-1a is a previously undruggable transcription factor activated by low oxygen that activates cancer survival pathways. When oxygen levels inside tumors decrease, HIF-1a is upregulated, and then translocates to the nucleus. Upon translocation, HIF-1a upregulates expression of many target genes including MDR!/ABCG2, responsible for drug resistance, angiogenic factors including VEGF, FGF2, PDGF, PIGF, and TEK, and Immortalization and stem cells including telomerase and Oct-4. Hif-1a nuclear translocation also affects expression levels of Glycolytic metabolism and pH regulation including GLUT-1, PDK1, PGK1, HKII, LDH-A, CA-IX, and MCT4, as well as genes responsible for survival and proliferation (cyclin D1, VEGF, IGF-II, and TGF-1), Migration (CXCR4, SDF1a), and Invasion and metastasis (U-PAR, Met-1, LOX-1)

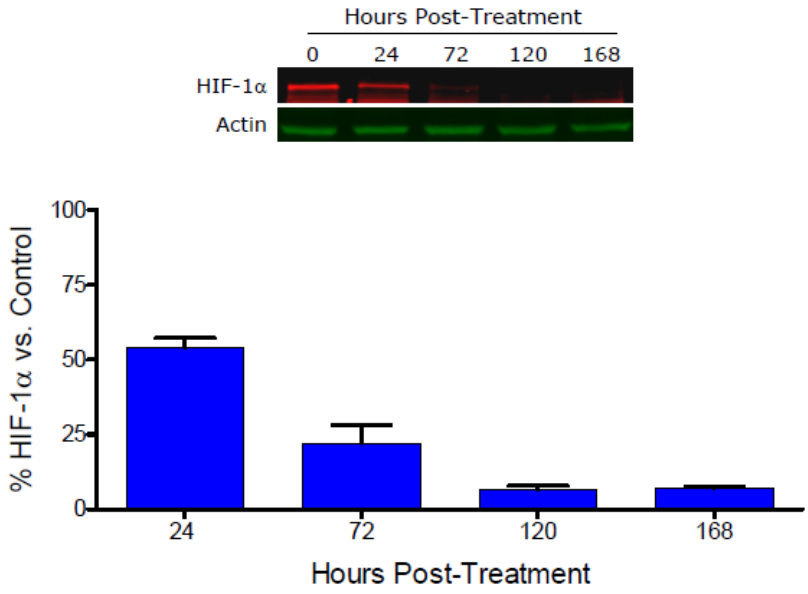
Figure 21: HIF-1 Overview



Source: Company Filings

It is known that naked, unconjugated camptothecins inhibit HIF-1a, but impractical metronomic, or tightly controlled daily repetitive dosing is required. Interestingly, CRLX101 inhibits HIF-1a for >1 week following a single dose in a HCT-116 colorectal xenograft tumor model (Figure 22). By contrast, inhibition by a different topoisomerase inhibitor, topotecan, is transient and only maintained by daily dosing. Importantly, CRLX101 has been shown to inhibit not just HIF-1a, but various genes regulated by HIF-1a in multiple tumor types.

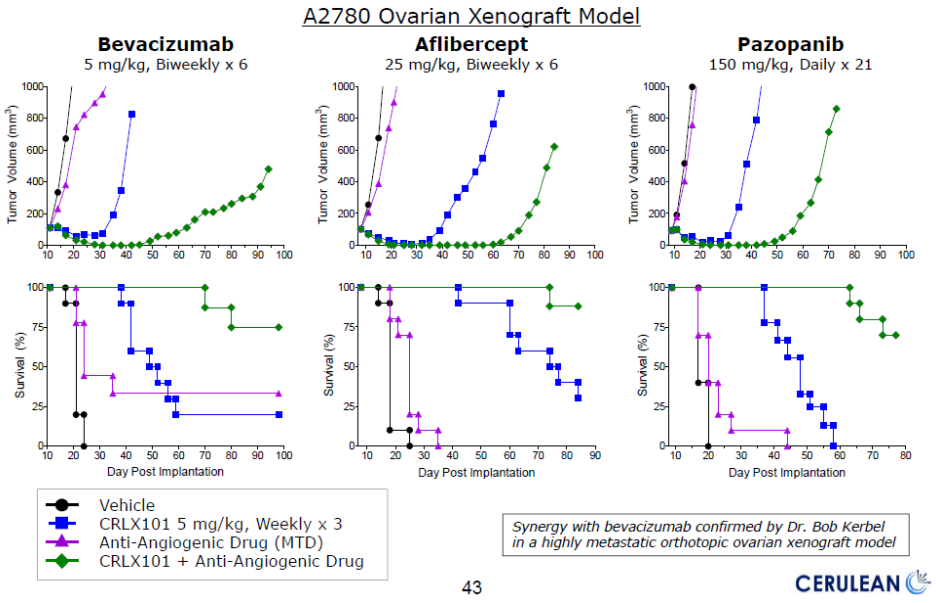
Figure 22: HCT-116 colorectal xenograft tumor model



Source: Company Filings

CRLX101 also appears synergistic with antiangiogenic agents and radiation, suggesting the drug could "lift" resistance to these treatments, resulting in better outcomes. CRLX101+various antiangiogenic agents including Avastin, Votrient, Stivarga, and Zaltrap showed strong inhibition of HIF-1a in an ovarian xenograft model, suggesting synergy is possible. The combination of CRLX101+antiangiogeneic drugs also showed reduced tumor growth and longer survival in the same models. These data are early, but could indicate improved potency for existing drugs as well as high activity for CRLX101

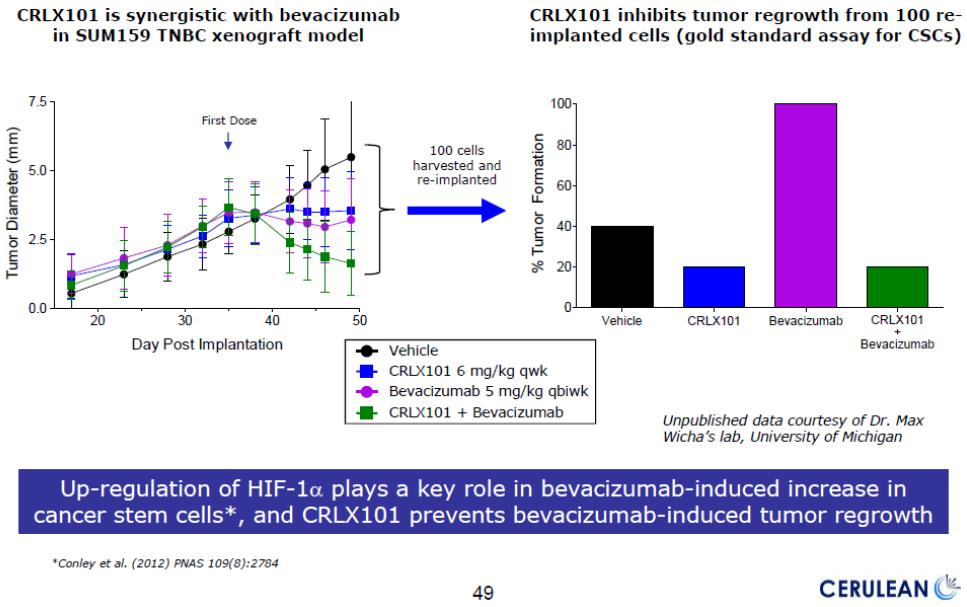
Figure 23: A278- ovarian xenograft model



Source: Company Filings

CRLX101's inhibition of HIF-1a may also have an effect on preventing cancer metastasis and cancer stem cell formation, resulting in improved efficacy. CRLX101 was tested in a TNBC xenograft model with and without Avastin in terms of tumor growth. After treatment with control, or CRLX101+/-Avastin, tumor cells were harvested and then re-implanted. Interestingly, CRLX101 and CRLX101+Avastin showed a low ~20% rate of tumor formation versus ~40% for control and nearly 100% for Avastin alone. These data suggest that combining CRLX101+Avastin can inhibit cancer stem cells which could have a very positive effect on efficacy

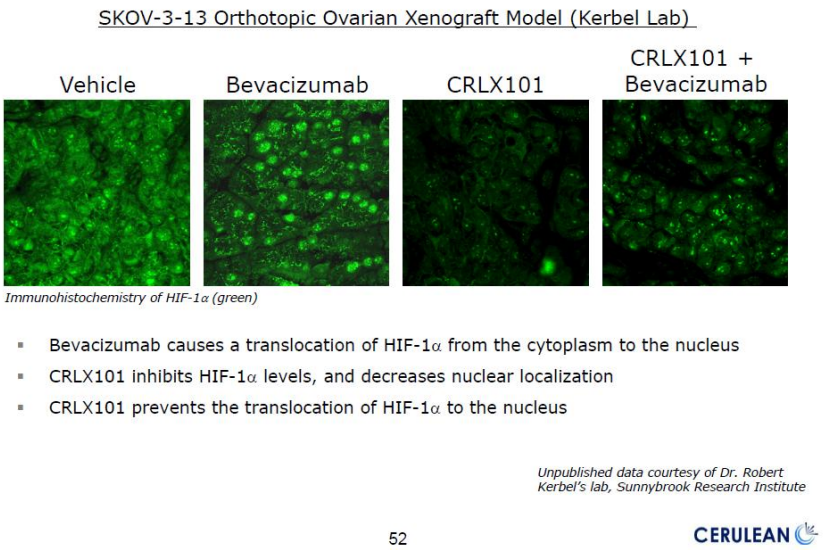
Figure 24: CRLX101 inhibits cancer stem cells



Source: Company Filings

Finally, CRLX101 also seems to inhibit translocation of HIF-1a to the nucleus, required for upregulation of various cancer survival genes. Importantly, Avastin is thought to cause a translocation of HIF-1a from the cytoplasm to the nucleus, up-regulating cancer resistance mechanisms. When CRLX101 is combined with Avastin in an ovarian xenograft model, HIF-1a translocation seems to be mitigated, which may increase Avastin's effectiveness resulting in better efficacy.

Figure 25: CRLX101 inhibits bevacizumab-induced translocation of HIF-1a to the nucleus



Source: Company Filings

INTELLECTUAL PROPERTY

Cerulean holds the rights to a broad patent portfolio that covers their platform technology, nano-particle "backbone" and molecular design with composition of matter, method of use, and formulation patents. Cerulean's patent portfolios are in-licensed from both MIT and CalTech. Currently, Cerulean holds the rights to 18 issued patents in the United States with 25 issued foreign counterparts. In addition, Cerulean's patent portfolio has over 19 pending United States patent applications with over 54 pending foreign applications. The entirety of these patents and applications, if issued, expire between 2018 and 2034.

FINANCIALS

Cerulean is a clinical-stage biopharmaceutical company currently running at an operating loss which we expect will continue throughout the development process. On March 25, 2014 Cerulean had ~$56M in cash and cash equivalents and we forecast a cash burn rate of ~$30M in 2014. We anticipate Cerulean will raise equity capital in 1H15, contingent upon receiving positive data in either or all of their renal cell carcinoma, rectal, and ovarian cancer trials and initiating randomized phase 2 trials. Cerulean currently has no debt, but has 128,672 shares issuable upon warrant exercise at a weighted-average price of $11.50 per share. In addition, Cerulean has 1,215,315 shares of common stock issuable upon the exercise of stock options with a weighted-average exercise price of $4.84.

Figure 26: Income Statement

(000's) [FY - JUN]	2013A	Mar-14E	Jun-14E	Sep-14E	Dec-14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenues												
Rectal									-	-	24,257	123,603
RCC									-	-	19,397	65,914
Ovarian									-	55,214	182,988	332,844
Total									-	55,214	226,643	522,362

Income Statement	2013A	Mar-14E	Jun-14E	Sep-14E	Dec-14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenues												
Total Revenue	6								-	55,214	226,643	522,362
COGS									-	8,282	33,996	78,354
Gross Profit	6								-	46,932	192,646	444,007
Operating Expenses												
Research and development	9,700	3,000	4,500	5,500	6,500	19,500	46,667	49,000	51,450	54,023	48,620	48,620
General and administrative	6,166	2,500	2,300	2,500	2,700	10,000	13,200	14,520	15,972	24,972	33,972	42,972
Total Operating Expense	15,866	5,500	6,800	8,000	9,200	29,500	59,867	63,520	67,422	78,995	82,592	91,592
EBITDA												
Operating income	(15,860)	(5,500)	(6,800)	(8,000)	(9,200)	(29,500)	(59,867)	(63,520)	(67,422)	(32,062)	110,054	352,415
Investment income, net												
Interest Income	2											
Interest Expense	(1,487)	-	-	-	-	-	-	-	-	-	-	-
Decrease in value of pref stock	202											
Pre-tax income (GAAP)	(17,143)	(5,500)	(6,800)	(8,000)	(9,200)	(29,500)	(59,867)	(63,520)	(67,422)	(32,062)	110,054	352,415
Pre-tax income (non-GAAP)												
Taxes (GAAP)	-	-	-	-	-	-	-	-	-	-	40,720	130,394
Tax rate (GAAP)	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%
Net Income (GAAP)	(17,143)	(5,500)	(6,800)	(8,000)	(9,200)	(29,500)	(59,867)	(63,520)	(67,422)	(32,062)	69,334	222,022
GAAP adjustments												
Adjusted Net Income	-											
GAAP EPS (diluted)		**($0.27)**	**($0.33)**	**($0.39)**	**($0.45)**	**($1.45)**	**($2.26)**	**($1.82)**	**($1.64)**	**($0.72)**	**$1.56**	**$4.96**
Basic shares outstanding		19	19	19	19	19	26	35	41	44	45	45
Diluted shares outstanding		20	20	20	21	20	26	35	41	44	45	45

Source: Canaccord Genuity, Inc.

Figure 27: Cash Flow Statement

($000's) [FY- Dec]	2013A	Mar-14E	Jun-14E	Sep-14E	Dec-14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Cerulean statement of cash flows												
Net Income	(17,143)	(5,500)	(6,800)	(8,000)	(9,200)	(29,500)	(59,867)	(63,520)	(67,422)	(32,062)	69,334	222,022
Stock based Comp	622											
Noncash R&D												
Noncash Rent	(1)											
Change in carrying value of pref stock	(202)											
D&A	197	(6)	(6)	(7)	(7)	(26)	(31)	(35)	(42)	(50)	(30)	(33)
Loss on P&E	7											
Noncash interest expense	588											
Accounts Receivable	(229)	(77)	(83)	(89)	(97)	(346)	(405)	(342)	(410)	(493)	(296)	(325)
Accounts Payable	14	73	79	85	92	329	386	326	391	469	282	310
Accrued Expenses	(467)	182	196	212	229	820	962	811	973	1,168	701	771
Change in working capital												
Cash from Operating Activities	(16,614)	(5,328)	(6,614)	(7,799)	(8,983)	(28,723)	(58,955)	(62,760)	(66,510)	(30,968)	69,991	222,744
P&E	(7)	(20)	(21)	(23)	(25)	(88)	(104)	(87)	(105)	(126)	(75)	(83)
Restricted Cash												
Payments from settlement of forward cont												
Cash from Investing Activities	(7)	(20)	(21)	(23)	(25)	(88)	(104)	(87)	(105)	(126)	(75)	(83)
Proceeds from Issuance of Common Stock		56,000				56,000	80,000	70,000	60,000	30,000		
Payments on capital lease												
Proceeds from sale of common stock	35											
Proceeds from issuance of convertible notes	8,824											
Proceeds from loans payable												
Payments on loans payable	(3,084)											
Cash paid for debt issuance costs	(373)											
Proceeds from sale of conv. Pref stock												
Cash from Financing Activities	5,402	56,000	-	-	-			70,000	60,000	30,000	-	-
Net Change in Cash	(11,219)	50,653	(6,635)	(7,822)	(9,007)	27,189	20,941	7,153	(6,615)	(1,094)	69,915	222,661
Net Cash - Beginning Balance	16,707	5,488	56,141	49,506	41,684	5,488	32,677	53,618	60,771	54,156	53,062	122,977
Net Cash - Ending Balance	5,488	56,141	49,506	41,684	32,677	32,677	53,618	60,771	54,156	53,062	122,977	345,638

Source: Canaccord Genuity, Inc.

Figure 28: Balance Sheet

Cerulean Balance Sheet

Assets	2013A	Mar-14E	Jun-14E	Sep-14E	Dec-14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Cash and cash equivalents	5,488	56,141	49,506	41,684	32,677	32,677	53,618	60,771	54,156	53,062	122,977	345,638
Accounts receivable, prepaid and other	959	1,036	1,119	1,208	1,305	1,305	1,710	2,052	2,463	2,955	3,251	3,576
Total Current Assets	**6,447**	57,177	50,624	42,892	33,981	**33,981**	**55,328**	**62,823**	**56,618**	**56,017**	**126,228**	**349,214**
Property/Equipment, Net	245	265	286	309	333	333	437	524	629	755	830	914
Other assets	135	146	157	170	184	184	241	289	347	416	458	503
Total Assets	**6,827**	57,587	51,068	43,371	34,498	**34,498**	**56,006**	**63,636**	**57,594**	**57,188**	**127,516**	**350,631**
Liabilities												
Current portion of loan payable	3,134	3,385	3,655	3,948	4,264	4,264	5,589	6,707	8,048	9,658	10,623	11,686
convertible promissory notes payable	8,824	9,530	10,292	11,116	12,005	12,005	15,736	18,883	22,660	27,192	29,911	32,902
accounts payable	914	987	1,066	1,151	1,243	1,243	1,630	1,956	2,347	2,817	3,098	3,408
accrued expenses	2,274	2,456	2,652	2,865	3,094	3,094	4,055	4,866	5,840	7,008	7,708	8,479
other liabilities		-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	**15,146**	16,358	17,666	19,080	20,606	**20,606**	**27,010**	**32,412**	**38,895**	**46,674**	**51,341**	**56,475**
Loan Payable - net of current portion	3,124	3,374	3,644	3,935	4,250	4,250	5,571	6,685	8,022	9,627	10,590	11,649
Preferred Stock warrant Liability	928	1,002	1,082	1,169	1,263	1,263	1,655	1,986	2,383	2,860	3,146	3,460
Noncurrent accrued interest	391	422	456	493	532	532	697	837	1,004	1,205	1,325	1,458
Other	12	13	14	15	16	16	21	26	31	37	41	45
Total Liabilities	**19,601**	21,169	22,863	24,692	26,667	**26,667**	**34,955**	**41,946**	**50,335**	**60,402**	**66,442**	**73,087**
Preferred stock	81,525											
Common stock		8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500
Add'l Paid In Capital	4,140	47,500	47,500	47,500	47,500	47,500	127,500	197,500	257,500	287,500	287,500	287,500
Total Liabilities & Shareholders' Equity	**6,827**	36,418	28,205	18,679	7,831	**7,831**	**21,051**	**21,690**	**7,259**	**(3,214)**	**61,074**	**277,544**

Source: Canaccord Genuity, Inc.

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Company	Disclosure
Cerulean Pharma	1A, 2, 3, 5, 7

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