

# Cerulean Pharma Inc

# **COMPANY AND PIPELINE OVERVIEW REPORT**

A comprehensive coverage of the company and a summary of the drug pipeline portfolio.

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## ABOUT COMPANY AND PIPELINE OVERVIEW REPORT

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### **GLOSSARY**

### **Number of Drugs in Active Development**

Number of drugs associated with the company or subsidiary that are currently in active development, i.e. the development status for the drug(s) is one of the following: Discovery, Clinical, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

#### **Number of Inactive Drugs**

Number of drugs associated with the company or subsidiary that are currently classified as inactive, i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.

#### **Number of Patents as Owner**

Number of patents associated with the company where the company is listed as owner; i.e. the relationship type (or way the patent refers to the company) is: Patent Assignee/Owner, Patent owner (not assignee), Licensee for development and marketing, Licensee – marketing only (Distributor), Patent assignee of family member, Inferred assignee.

### **Number of Patents as Third Party**

Number of patents associated with the company where the company is listed as third party; i.e. the relationship type (or way the patent refers to the company) is: Patent assignee (not owner), Ex-Licensee for development and marketing, Ex-Licensee marketing only (Distributor), Customer of technology, Ex-Customer of technology, Patent opponent or infringer, Affiliate organization of inventor, Owner of underlying technology.

#### Patents summary table

This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.

#### **Number of Deals**

A count of deals where the company or one of its subsidiaries is the primary company.

#### **Key Indications**

Displays top ten key indications for the company and its subsidiaries based on frequency (indications occurring with high and identical frequency are always included, and this may result in more than ten Key Indications being listed). Includes both indications associated with patents where the company is patent owner and indications associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

### **Key Target-based Actions**

Displays top ten key target-based actions for the company and its subsidiaries based on frequency (actions occurring with high and identical frequency are always included, and this may result in more than ten Key Target-based Actions being listed). Includes both target-based actions associated with patents where the company patent owner and target-based actions associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended. A target-based action is one that is associated with a target.

#### **Key Technologies**

Displays top ten key technologies for the company and its subsidiaries based on frequency (technologies occurring with high and identical frequency are always included, and this may result in more than ten Key Technologies being listed). Includes both key technologies associated with patents where the company relationship is patent owner and key technologies associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

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**PLEASE NOTE:** the financials section where present in the report includes: Share Information, Stock Performance chart (including the consensus recommendation), and Major Shareholders. Financial Performance presents graphical and tabular data on Worldwide Sales, Operating Income and Net Income over time, together with a Quarterly earnings update. Balance Sheet lists Assets, Liabilities and Stockholders Equity, and Forecasts includes: EPS Forecast and Other Forecasts. The data reported in all sections (except share information and major stock holders) are correct as of the publication date of the report (and not the download date). For share information and major stock holders the data is correct for the date shown with these sections



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### Cerulean Pharma Inc

#### **COMPANY OVERVIEW**

Company Name	Cerulean Pharma Inc
Parent Company Name	Cerulean Pharma Inc
Website	http://ceruleanrx.com/
Country	US
Number of Drugs in Active Development	4
Number of Inactive Drugs	1
Number of Patents as Owner	26
Number of Patents as Third Party	3
Number of Deals	1
Key Indications	Cancer,Breast tumor,Non-small-cell lung cancer,Ovary tumor,Stomach tumor,Renal tumor,Cardiovascular disease,Advanced solid tumor,Rectal tumor,Small-cell lung cancer
Key Target-based Actions	Topoisomerase I inhibitor, Hypoxia inducible factor-1 alpha inhibitor, Proteasome inhibitor, Topoisomerase II inhibitor, DHFR inhibitor, DNA polymerase inhibitor, Hemagglutinin inhibitor, Hemagglutinin modulator, JAK tyrosine kinase inhibitor, PLK1 gene inhibitor, Thymidylate synthase inhibitor, Transferase inhibitor, VEGF receptor antagonist
Key Technologies	Nanoparticle formulation, Small molecule therapeutic, PEGylated formulation, Intravenous formulation, Nanoparticle formulation injectable, Biological therapeutic, Oligonucleotide, Formulation preservation, Peptide, Controlled release formulation

### **COMPANY PROFILE**

#### **SUMMARY**

Cerulean Pharma (formerly Tempo Pharmaceuticals Inc) is a biopharmaceutical company specializing in the development of nanoparticle-based therapeutics for oncology, autoimmune and inflammatory diseases, based on its Nanocell technology that was exclusively licensed from the Massachusetts Institute of Technology. In October 2008, the company changed its name to Cerulean Pharma.

### **FINANCIAL**

In January 2015, the company entered into a loan and security agreement with Hercules Technology Growth Capital for a term loan of up to \$26.0 million and completed a private placement for \$1.0 million of Cerulean common stock with Hercules. Cerulean issued Hercules a warrant to purchase 171,901 shares of Cerulean common stock at an exercise price of \$6.05 per share. At that time, Hercules purchased 135,501 shares of unregistered Cerulean common stock at \$7.38 per share for an aggregate purchase price of \$1.0 million.

In April 2014, Cerulean priced its IPO of 8,500,000 shares of its common stock US \$7.00 per share. Underwriters were granted a 30-day option to purchase an additional 1,275,000 shares. Stock to be listed on the NASDAQ Global Market under the ticker symbol 'CERU'. At that time, the offering was expected to close on April 15, 2014. Later that month, the offering was closed. In May 2014, underwriters for the IPO exercised their over-allotment option and purchased an additional 1,069,715 shares, bringing total number of shares sold to 9,569,715 shares and total gross proceeds to \$67 million

In December 2011, Cerulean raised \$15 million from a series D financing.

In November 2010, Cerulean raised \$24 million from a series C financing.

In July 2009, Cerulean raised \$10 million from a series B-1 financing.

In January 2008, Tempo raised \$8.1 million from a series B financing.



In May 2007, Tempo raised \$12.1 million from a series A financing round.

In December 2006, Tempo raised \$2 million from a seed round.

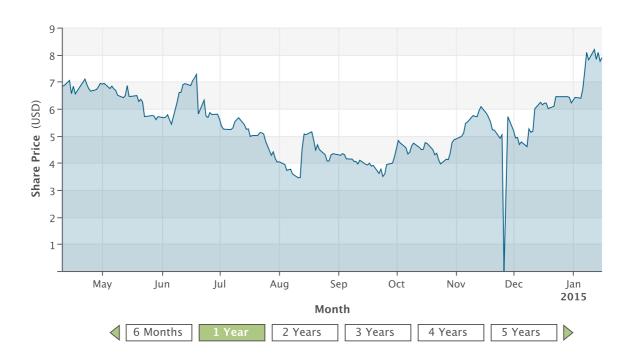
## **COMPANY FINANCIALS**

### **SHARE INFORMATION**

Close Price (USD)	7.89
Change (USD)	0.13 (1.68%)
Previous Close Price (USD)	7.76
Volume	9,866
52-Week High (USD)	8.25
52-Week Low (USD)	3.35
Date	16-Jan-2015
Exchange	NASDAQ(COMPOSITE)
Current Number of Shares Outstanding	20,125,049
Current Market Capitalization	158,786,637
EPS (Date Reported)	-1.19837



### **Stock Performance**



### **MAJOR SHAREHOLDERS**

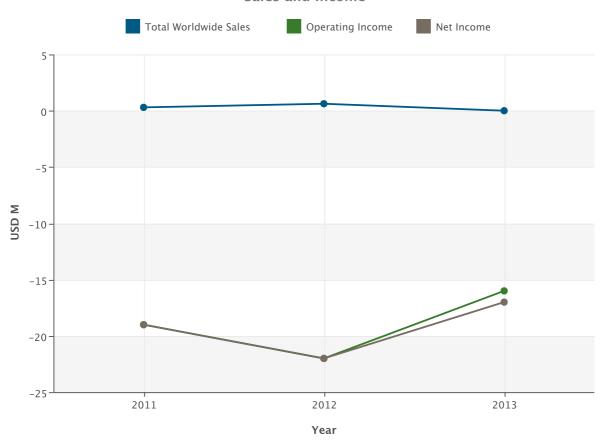
Shareholder	Туре	Country	Shares held	% of shares held	Change in holding	% changes in shares held	Date
Fidelity Select Biotechnology Portfolio	Mutual Fund	United States	1,901,400	9.45	0	0	30-Nov-2014
Fidelity Advisor Biotechnology Fund	Mutual Fund	United States	530,000	2.63	0	0	30-Nov-2014
Principal SmallCap Blend Fund	Mutual Fund	United States	98,000	0.49	0	0	30-Nov-2014
Vanguard Total Stock Market Index Fund	Mutual Fund	United States	28,566	0.14	4,400	0.18	30-Nov-2014
Fidelity Spartan Extended Market Index Fund	Mutual Fund	United States	13,898	0.07	3,056	0.28	30-Nov-2014
Principal Variable Contract SmallCap Blend Account	Mutual Fund	United States	12,120	0.06	0	0	30-Nov-2014
Fidelity NASDAQ Composite Index Fund	Mutual Fund	United States	4,980	0.02	0	0	30-Nov-2014
AXA/Lord Abbett Micro Cap Portfolio	Mutual Fund	United States	1,752	0.01	0	0	30-Nov-2014
Guggenheim	Investme	United	1,568	0.01	0	0	31-Dec-2014



Investments	nt Advisor/ Hedge Fund	States					
Wilshire Micro-Cap ETF	Mutual Fund	United States	1,568	0.01	0	0	30-Nov-2014
Vanguard Extended Market Index Fund	Mutual Fund	United States	1,415	0.01	0	0	30-Nov-2014
Candriam Belgium S.A.	Investme nt Advisor	Belgium	0	0	-100,000	-1	31-Oct-2014
Dexia Equities L Biotechnology	Mutual Fund	Belgium	0	0	-100,000	-1	31-Oct-2014

## FINANCIAL PERFORMANCE

## Sales and Income



	2011	2012	2013	
Sales (USD M)	0.305	0.625	0.006	
Operating Income (USD M)	-18.878	-21.575	-15.86	
Net Income (USD M)	-18.942	-22.101	-17.143	



# Quarterly earnings update

Period	Sales (USD M)	Operating Income (USD M)	Net Income (USD M)
2014 Q3	0	-5.369	-5.558
2014 Q2	0.033	-4.644	-7.403
2014 Q1	0.047	-2.958	-2.914
2013 Q4	0.006	-3.009	-3.48
2013 Q3	0	-2.813	-3.198
2013 Q2	0	-4.587	-4.893
2013 Q1	0	-5.451	-5.572
2012 Q4	0	-5.188	-5.526

### **BALANCE SHEET**

## Assets (USD M)

	2011	2012	2013	
Cash & Short Term Investments	15.345	16.707	5.488	
Inventories - Total	0	0	0	
Current Assets - Total	15.677	17.064	6.447	
Property, Plant And Equipment - Net	0.611	0.442	0.245	
Other Assets - Total	0.402	0.155	0.135	
Total Assets	16.69	17.661	6.827	

# Liabilities (USD M)

	2011	2012	2013	
Accounts Payable	1.063	0.9	0.914	
Short Term Debt & Current Portion Of Long Term Debt	0.127	2.869	11.958	
Current Liabilities - Total	3.514	6.524	15.146	
Long Term Debt	0	6.258	3.124	
Deferred Taxes	0	0	0	
Other Liabilities	0.822	1.167	1.331	
Total Liabilities	4.336	13.949	19.601	



# Stockholders Equity (USD M)

	2011	2012	2013	
Minority Interest	0	0	0	
Preferred Stock	70.751	83.751	81.525	
Common Stock	0.001	0.001	0	
Treasury Stock	0	0	0	
Total Liabilities & Shareholders' Equity	16.69	17.661	6.827	

### **FORECASTS**

### **EPS Forecast**

Year ending	Current Forecast	1 month ago	3 months ago
31-Dec-2015	-2.16	-2.16	-2.06
31-Dec-2016	-2.36	-2.36	-2.37
31-Dec-2017	-3.31	-3.31	-3.06

### **Other Forecasts**

Year ending	DPS	CPS	Pretax	Sales
31-Dec-2015			-45.34	0
31-Dec-2016			-57.99	0
31-Dec-2017			-77.55	2.14

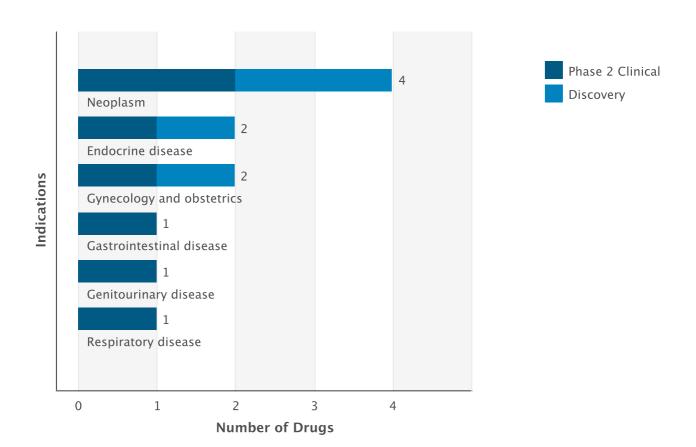
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## PRODUCT PORTFOLIO SUMMARY

### **DRUGS**

# Drugs by Indication

Active Drugs by Indication Chart



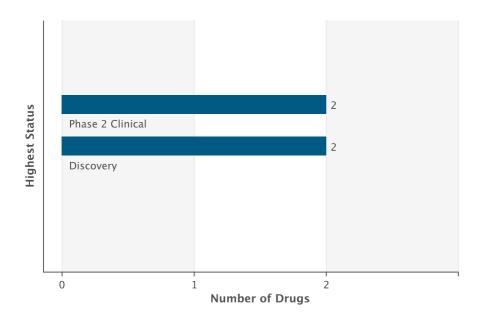
# Drugs by Indication Table

Indication	Active	Inactive	Total
Neoplasm	4	1	5
Endocrine disease	2	0	2
Gynecology and obstetrics	2	0	2
Gastrointestinal disease	1	0	1
Respiratory disease	1	0	1
Genitourinary disease	1	0	1



## **Drugs by Highest Status**

Active Drugs by Highest Status Chart



# Drugs by Highest Status Table

Development Status	Number of Drugs
Phase 2 Clinical	2
Discovery	2
No Development Reported	1

### **DEALS**

Deal Type		cipal Inactive		tner Inactive	Total
Drug - Development/Commercialization License	0	0	1	0	1

# **CLINICAL TRIALS**

# Trials by Condition Studied

Condition Studied	Ongoing	All
Neoplasm	2	6
Genitourinary disease	1	2
Gastrointestinal disease	1	1
Gynecology and obstetrics	0	1



Respiratory disease	0	1
Endocrine disease	0	1

# Trials by Phase

Phase	Ongoing	All
Phase 2	1	3
Phase 1	1	3

### **Phase Definitions**

### Phase 3 Clinical

Includes Phase 3, Phase 3b, Phase 3a, Phase 2/3 (where enrolment count is 300 or over)

#### Phase 2 Clinical

Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

### Phase 1 Clinical

Includes Phase 1, Phase 1a, Phase 1, Phase 1/2 (where enrolment count is under 100 or not specified), Phase 0

### **PATENTS** \*

Indication	As Owner	As Third Party	Total
Cardiovascular disease	10	1	11
Endocrine disease	12	0	12
Gastrointestinal disease	12	0	12
Genitourinary disease	8	0	8
Growth disorder	1	0	1
Hematological disease	4	0	4
Degeneration	2	0	2
Andrology	2	0	2
Immune disorder	15	1	16
Psychiatric disorder	1	0	1
Musculoskeletal disease	6	0	6
Neoplasm	24	1	25
Ocular disease	2	0	2
Genetic disorder	2	0	2
Metabolic disorder	11	0	11



Neurological disease	6	0	6
Nutritional disorder	3	0	3
Respiratory disease	6	2	8
Infectious disease	5	2	7
Inflammatory disease	14	1	15
Otorhinolaryngological disease	1	0	1
Gynecology and obstetrics	8	0	8
Dermatological disease	6	0	6

<sup>\*</sup> This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.



### **PRODUCT PORTFOLIO DRUGS**

PLEASE NOTE: Highest status refers to highest development of that drug for one of the active companies

## camptothecin nanoparticle (cancer), Cerulean Pharma

Drug Name	camptothecin nanoparticle (cancer), Cerulean Pharma
Key Synonyms	
Originator Company	Calando Pharmaceuticals Inc
Active Companies	Cerulean Pharma Inc
Inactive Companies	Calando Pharmaceuticals Inc
Highest Status	Phase 2 Clinical
Active Indications	Small-cell lung cancer, Non-small-cell lung cancer, Renal tumor, Ovary tumor, Stomach tumor, Rectal tumor
Target-based Actions	Topoisomerase I inhibitor, Hypoxia inducible factor-1 alpha inhibitor
Other Actions	Synergist, Anticancer
Technologies	Nanoparticle formulation injectable, Controlled release formulation, Intravenous formulation, Small molecule therapeutic
Last Change Date	07-Jan-2015

# docetaxel (Cyclodextrin Nanoparticle Technology), Cerulean

Drug Name	docetaxel (Cyclodextrin Nanoparticle Technology), Cerulean
Key Synonyms	
Originator Company	Cerulean Pharma Inc
Active Companies	Cerulean Pharma Inc
Inactive Companies	
Highest Status	Phase 2 Clinical
Active Indications	Advanced solid tumor, Cancer
Target-based Actions	
Other Actions	Microtubule inhibitor, Anticancer, Cell cycle inhibitor
Technologies	Nanoparticle formulation injectable, Intravenous formulation, Small molecule therapeutic
Last Change Date	23-Dec-2014



# siRNA-containing polymeric nanoparticle technology (cancer), Cerulean

Drug Name	siRNA-containing polymeric nanoparticle technology (cancer), Cerulean
Key Synonyms	
Originator Company	Cerulean Pharma Inc
Active Companies	Cerulean Pharma Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Breast tumor
Target-based Actions	
Other Actions	Anticancer, siRNA agent
Technologies	Oligonucleotide, Nanoparticle formulation, Biological therapeutic
Last Change Date	24-Sep-2014

## **CRLX-522**

Drug Name	CRLX-522
Key Synonyms	
Originator Company	Cerulean Pharma Inc
Active Companies	Cerulean Pharma Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	
Other Actions	Anticancer
Technologies	Nanoparticle formulation, Small molecule therapeutic
Last Change Date	17-Apr-2014

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