

Calithera Biosciences

COMPANY AND PIPELINE OVERVIEW REPORT

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

Publication Date: 04-Oct-2015

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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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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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Calithera Biosciences

COMPANY OVERVIEW

Company Name	Calithera Biosciences
Parent Company Name	Calithera Biosciences
Website	http://www.calithera.com/
Country	US
Number of Drugs in Active Development	3
Number of Inactive Drugs	2
Number of Patents as Owner	8
Number of Patents as Third Party	0
Number of Deals	4
Key Indications	Cancer,Advanced solid tumor,Hematological neoplasm,Autoimmune disease,Cardiovascular disease,Gastrointestinal disease,Infectious disease,Lung disease,Wound healing,Autoimmune hemolytic anemia,Crohns disease,Erectile dysfunction,Hodgkins disease,Leukemia,Multiple myeloma,Multiple sclerosis,Sexual dysfunction,Thalassemia
Key Target-based Actions	McI-1 differentiation protein inhibitor, Arginase-I inhibitor, Arginase-II inhibitor, Mitochondrial kidney glutaminase inhibitor
Key Technologies	Small molecule therapeutic,Oral formulation,Drug combination

COMPANY PROFILE

SUMMARY

Calithera Biosciences, founded in 2010 with technology licensed from the University of California, San Francisco, is focused on the development of cancer therapies based on the activation of caspase and other enzymes.

FINANCIAL

In October 2014, the company priced its initial public offering of 8 million shares of common stock at \$10 per share. The underwriters were granted a 30-day option to purchase up to 1.2 million additional shares of common stock. At that time, the common stock of the company began trading on the NASDAQ global select market, under the ticker symbol "CALA".

In October 2013, Calithera raised \$35 million in series D financing.

In July 2010, Calithera raised \$40 million in a series A financing.

COMPANY FINANCIALS

SHARE INFORMATION

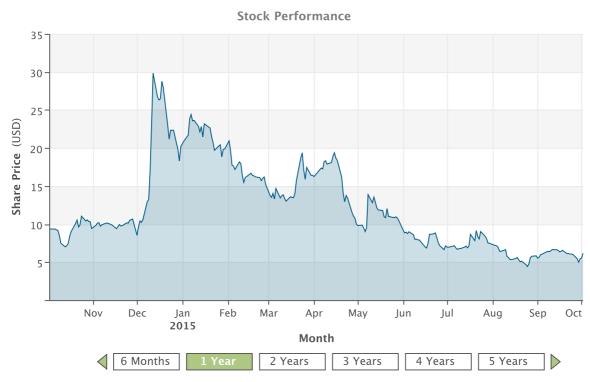
Close Price (USD)	6.17
Change (USD)	0.62 (11.17%)
Previous Close Price (USD)	5.55
Volume	340,537
52-Week High (USD)	33.48



52-Week Low (USD)	4.31
Date	02-Oct-2015
Exchange	NASDAQ(COMPOSITE)
Current Number of Shares Outstanding	18,113,448
Current Market Capitalization	90,567,240
EPS (Date Reported)	-2.4057

STOCK PERFORMANCE

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MAJOR SHAREHOLDERS

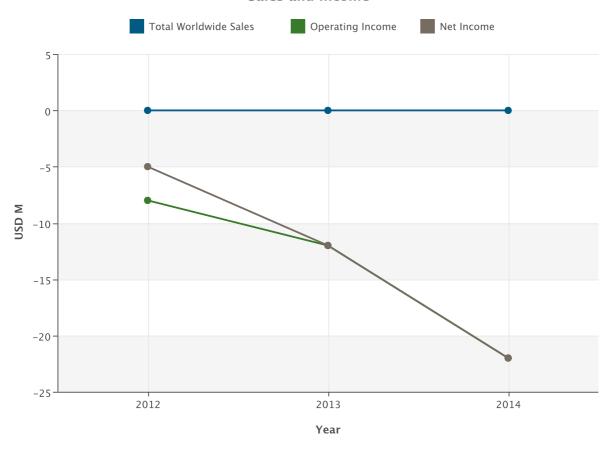
Shareholder	Туре	Country	Shares held	% of shares held	Change in holding	% changes in shares held	Date
Fidelity Select Biotechnology Portfolio	Mutual Fund	United States	1,794,600	9.91	0	0	31-Aug-2015
Fidelity Advisor Biotechnology Fund	Mutual Fund	United States	497,158	2.74	0	0	31-Aug-2015
Candriam Belgium S.A.	Investme nt Advisor/ Hedge	Belgium	220,999	1.22	-9,001	-0.04	31-Jul-2015



	Fund						
Candriam Equities L Biotechnology	Mutual Fund	Belgium	220,999	1.22	-9,001	-0.04	31-Jul-2015
Fidelity Blue Chip Growth Fund	Mutual Fund	United States	264,600	1.46	0	0	31-Aug-2015
Molineaux (Susan M)	Individua I Investor	United States	194,249	1.07	76,287	0.65	13-Jul-2015
Vanguard Extended Market Index Fund	Mutual Fund	United States	201,878	1.11	108,550	1.16	31-Aug-2015
Vanguard Total Stock Market Index Fund	Mutual Fund	United States	169,025	0.93	24,905	0.17	31-Aug-2015
iShares Russell 2000 ETF	Mutual Fund	United States	161,547	0.89	-11,035	-0.06	31-Aug-2015
Fidelity Series Blue Chip Growth Fund	Mutual Fund	United States	121,000	0.67	0	0	31-Aug-2015
Alger Health Sciences Fund	Mutual Fund	United States	93,540	0.52	41,290	0.79	31-Jul-2015
iShares Russell 2000 Value ETF	Mutual Fund	United States	75,823	0.42	63	0	31-Aug-2015
iShares Micro-Cap ETF	Mutual Fund	United States	35,397	0.2	13,432	0.61	31-Aug-2015
Fidelity Spartan Extended Market Index Fund	Mutual Fund	United States	27,885	0.15	0	0	31-Aug-2015
Waddill William D	Individua I Investor	United States	19,922	0.11	13,125	1.93	14-Jul-2015
Vanguard Institutional Total Stock Market Index Fund	Mutual Fund	United States	18,562	0.1	0	0	31-Aug-2015
CREF Equity Index Account	Mutual Fund	United States	11,074	0.06	0	0	31-Jul-2015
Fidelity Spartan Total Market Index Fund	Mutual Fund	United States	11,343	0.06	0	0	31-Aug-2015
TIAA-CREF Small Cap Blend Index Fund	Mutual Fund	United States	10,769	0.06	0	0	31-Aug-2015
Spartan Small Cap Index Fund	Mutual Fund	United States	8,033	0.04	2,259	0.39	31-Jul-2015



Sales and Income



	2012	2013	2014	
Sales (USD M)	0	0	0	
Operating Income (USD M)	-7.975	-12.378	-21.721	
Net Income (USD M)	-5.086	-12.377	-21.712	

Quarterly earnings update

Period	Sales (USD M)	Operating Income (USD M)	Net Income (USD M)
2015 Q2	0	-7.874	-7.818
2015 Q1	0	-7.867	-7.858
2014 Q3	0	-5.241	-5.239
2014 Q2	0	-5.492	-5.491
2014 Q1	0	-4.15	-4.149
2013 Q3	0	-3.318	-3.318



BALANCE SHEET

Assets (USD M)

	2012	2013	2014	
Cash & Short Term Investments	2.205	33.82	101.969	
Inventories - Total	0	0	0	
Current Assets - Total	2.272	34.169	103.863	
Property, Plant And Equipment - Net	0.681	0.559	0.861	
Other Assets - Total	0	0	0	
Total Assets	3.06	34.844	104.77	

Liabilities (USD M)

	2012	2013	2014	
Accounts Payable	0.025	0.15	0.693	
Short Term Debt & Current Portion Of Long Term Debt	0	0	0	
Current Liabilities - Total	0.909	1.344	4.121	
Long Term Debt	0	0	0	
Deferred Taxes	0	0		
Other Liabilities	0	0.031	0.283	
Total Liabilities	0.909	1.375	4.404	

Stockholders Equity (USD M)

	2012	2013	2014	
Minority Interest	0	0	0	
Preferred Stock	10.722	54.282	0	
Common Stock	0	0	0.002	
Treasury Stock	0		0	
Total Liabilities & Shareholders' Equity	3.06	34.844	104.77	

FORECASTS



EPS Forecast

Year ending	Current Forecast	1 month ago	3 months ago
31-Dec-2015	-1.94	-1.88	-1.93
31-Dec-2016	-2.93	-2.59	-2.82
31-Dec-2017	-4.02	-3.47	-4.02

Other Forecasts

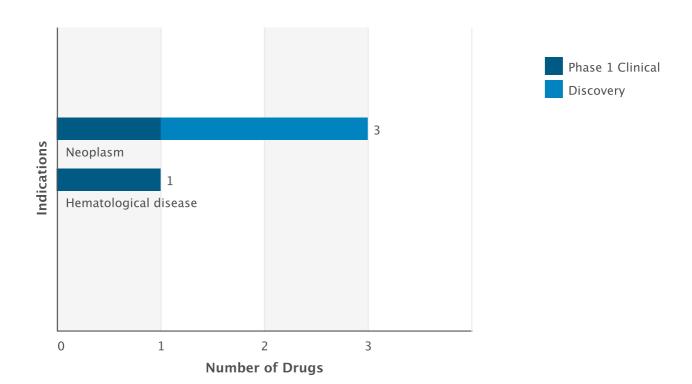
Year ending	DPS	CPS	Pretax	Sales
31-Dec-2015	0		-36.02	0
31-Dec-2016	0		-55.77	0
31-Dec-2017	0		-96.95	0

PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



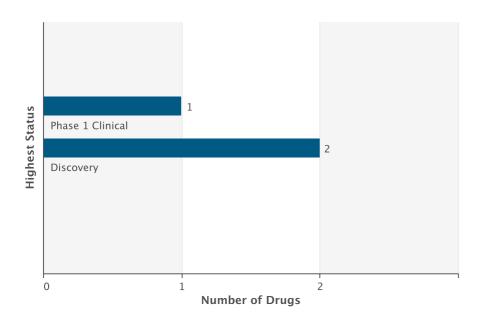


Drugs by Indication Table

Indication	Active	Inactive	Total
Neoplasm	3	2	5
Hematological 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 1 Clinical	1
Discovery	2
No Development Reported	2

DEALS

Deal Type	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Drug - Development/Commercialization License	0	0	3	0	3
Drug - Early Research/Development	0	0	1	0	1

CLINICAL TRIALS



Trials by Condition Studied

Condition Studied	Ongoing	All
Neoplasm	3	3
Immune disorder	2	2
Hematological disease	2	2
Gynecology and obstetrics	1	1
Endocrine disease	1	1
Genitourinary disease	1	1
Respiratory disease	1	1
Gastrointestinal disease	1	1

Trials by Phase

Phase	Ongoing	All
Phase 1	3	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
Immune disorder	7	0	7
Neoplasm	3	0	3
Genetic disorder	2	0	2
Metabolic disorder	2	0	2
Neurological disease	6	0	6
Respiratory disease	6	0	6
Infectious disease	4	0	4
Injury	3	0	3



Cardiovascular disease	4	0	4
Endocrine disease	2	0	2
Gastrointestinal disease	6	0	6
Genitourinary disease	5	0	5
Hematological disease	5	0	5
Andrology	2	0	2
Dermatological disease	1	0	1
Gynecology and obstetrics	1	0	1
Inflammatory disease	4	0	4

 $^{^{\}star}$ 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

CB-839

Drug Name	CB-839
Key Synonyms	
Originator Company	Calithera Biosciences
Active Companies	Sanford-Burnham Medical Research Institute, Calithera Biosciences
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Hematological neoplasm, Advanced solid tumor
Target-based Actions	
Other Actions	Anticancer, Synergist, Glutaminase inhibitor, Apoptosis stimulator, Cell cycle inhibitor
Technologies	Oral formulation, Small molecule therapeutic
Last Change Date	11-Aug-2015

hexokinase 2 inhibitors (cancer), Calithera

Drug Name	hexokinase 2 inhibitors (cancer), Calithera
Key Synonyms	
Originator Company	vTv Therapeutics LLC
Active Companies	Calithera Biosciences
Inactive Companies	vTv Therapeutics LLC
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	Hexokinase 2 inhibitor
Other Actions	Anticancer, Cell cycle inhibitor
Technologies	Small molecule therapeutic
Last Change Date	06-Mar-2015

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CB-1158

Drug Name	CB-1158
Key Synonyms	
Originator Company	Mars Symbioscience
Active Companies	Calithera Biosciences
Inactive Companies	Mars Symbioscience
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	Arginase inhibitor
Other Actions	Anticancer
Technologies	Oral formulation, Small molecule therapeutic
Last Change Date	24-Jun-2015



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