

# Calithera Biosciences

## **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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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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## 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<br>Development | 4  |
| Number of Inactive Drugs                 | 1  |
| Number of Patents as Owner               | 6  |
| 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,Erectile dysfunction,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   |

#### **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**

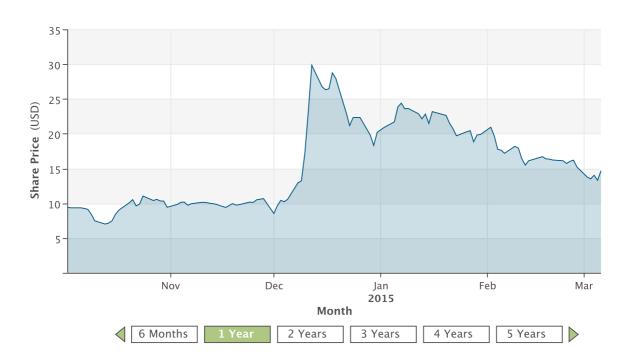
| Close Price (USD)          | 14.67         |
|----------------------------|---------------|
| Change (USD)               | 1.36 (10.22%) |
| Previous Close Price (USD) | 13.31         |
| Volume                     | 1,635,667     |
| 52-Week High (USD)         | 33.48         |
| 52-Week Low (USD)          | 6.51          |



| Date                                    | 06-Mar-2015       |
|---|-------------------|
| Exchange                                | NASDAQ(COMPOSITE) |
| Current Number of Shares<br>Outstanding | 17,930,394        |
| Current Market<br>Capitalization        | 272,900,597       |
| EPS (Date Reported)                     | -0.32024          |

## STOCK PERFORMANCE

## **Stock Performance**



## **MAJOR SHAREHOLDERS**

| Shareholder                                 | Туре           | Country          | Shares<br>held | % of shares held | Change in holding | % changes in shares held | Date        |
|---|----------------|------------------|----------------|------------------|-------------------|--------------------------|-------------|
| Fidelity Select<br>Biotechnology Portfolio  | Mutual<br>Fund | United<br>States | 1,378,700      | 7.69             | 0                 | 0                        | 31-Jan-2015 |
| Prudential Jennison<br>Health Sciences Fund | Mutual<br>Fund | United<br>States | 428,224        | 2.39             | 0                 | 0                        | 31-Jan-2015 |
| Fidelity Advisor<br>Biotechnology Fund      | Mutual<br>Fund | United<br>States | 353,800        | 1.97             | 0                 | 0                        | 31-Jan-2015 |
| Fidelity Blue Chip<br>Growth Fund           | Mutual<br>Fund | United<br>States | 266,400        | 1.49             | 0                 | 0                        | 31-Jan-2015 |
| BlackRock Institutional                     | Investme       | United           | 222,517        | 1.24             | -7,539            | -0.03                    | 28-Feb-2015 |



| Trust Company, N.A.  | nt<br>Advisor  | States           |         |      |        |       |             |
|--|----------------|------------------|---------|------|--------|-------|-------------|
| Vanguard Total Stock<br>Market Index Fund                  | Mutual<br>Fund | United<br>States | 144,120 | 0.8  | 0      | 0     | 31-Jan-2015 |
| Fidelity Series Blue<br>Chip Growth Fund                   | Mutual<br>Fund | United<br>States | 121,000 | 0.67 | 0      | 0     | 31-Jan-2015 |
| iShares Russell 2000<br>ETF                                | Mutual<br>Fund | United<br>States | 127,397 | 0.71 | -8,000 | -0.06 | 28-Feb-2015 |
| Vanguard Extended<br>Market Index Fund                     | Mutual<br>Fund | United<br>States | 73,473  | 0.41 | 22,003 | 0.43  | 31-Jan-2015 |
| JPMorgan U.S. Small<br>Company Fund                        | Mutual<br>Fund | United<br>States | 44,500  | 0.25 | 2,700  | 0.06  | 31-Jan-2015 |
| iShares Russell 2000<br>Growth ETF                         | Mutual<br>Fund | United<br>States | 54,247  | 0.3  | 1,568  | 0.03  | 28-Feb-2015 |
| JP Morgan Small Cap<br>Core Fund                           | Mutual<br>Fund | United<br>States | 35,200  | 0.2  | -1,400 | -0.04 | 31-Jan-2015 |
| Fidelity Spartan<br>Extended Market Index<br>Fund          | Mutual<br>Fund | United<br>States | 27,885  | 0.16 | 0      | 0     | 31-Jan-2015 |
| iShares Micro-Cap ETF                                      | Mutual<br>Fund | United<br>States | 19,317  | 0.11 | -1,312 | -0.06 | 28-Feb-2015 |
| Fidelity Spartan Total<br>Market Index Fund                | Mutual<br>Fund | United<br>States | 11,343  | 0.06 | 0      | 0     | 31-Jan-2015 |
| Vanguard Institutional<br>Total Stock Market<br>Index Fund | Mutual<br>Fund | United<br>States | 10,162  | 0.06 | 3,200  | 0.46  | 31-Jan-2015 |
| AXA Tactical Manager<br>2000 Portfolio                     | Mutual<br>Fund | United<br>States | 8,095   | 0.05 | 0      | 0     | 31-Jan-2015 |
| iShares Russell 2000<br>Value ETF                          | Mutual<br>Fund | United<br>States | 7,273   | 0.04 | 252    | 0.04  | 28-Feb-2015 |
| John Hancock VIT -<br>Health Sciences Trust                | Mutual<br>Fund | United<br>States | 5,500   | 0.03 | 0      | 0     | 31-Jan-2015 |
| Seasons Series Trust<br>Small Cap Portfolio                | Mutual<br>Fund | United<br>States | 4,700   | 0.03 | 0      | 0     | 31-Jan-2015 |



## Sales and Income



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

## **Quarterly earnings update**

| Period  | Sales (USD M) | Operating Income (USD M) | Net Income (USD M) |
|---------|---------------|--------------------------|--------------------|
| 2014 Q3 | 0             | -5.241                   | -5.239             |
| 2013 Q3 | 0             | -3.318                   | -3.318             |

## **BALANCE SHEET**

## Assets (USD M)

|                                     | 2012  | 2013   |  |  |
|-------------------------------------|-------|--------|--|--|
| Cash & Short Term<br>Investments    | 2.205 | 33.82  |  |  |
| Inventories - Total                 | 0     | 0      |  |  |
| Current Assets - Total              | 2.272 | 34.169 |  |  |
| Property, Plant And Equipment - Net | 0.681 | 0.559  |  |  |
| Other Assets - Total                | 0     | 0      |  |  |
| Total Assets                        | 3.06  | 34.844 |  |  |

## Liabilities (USD M)

|   | 2012  | 2013  |  |
|---|-------|-------|--|
| Accounts Payable  | 0.025 | 0.15  |  |
| Short Term Debt &<br>Current Portion Of Long<br>Term Debt | 0     | 0     |  |
| Current Liabilities - Total                               | 0.909 | 1.344 |  |
| Long Term Debt  | 0     | 0     |  |
| Deferred Taxes  | 0     | 0     |  |
| Other Liabilities   | 0     | 0.031 |  |
| Total Liabilities   | 0.909 | 1.375 |  |

## Stockholders Equity (USD M)

|  | 2012   | 2013   |  |
|--|--------|--------|--|
| Minority Interest                        | 0      | 0      |  |
| Preferred Stock                          | 10.722 | 54.282 |  |
| Common Stock                             | 0      | 0.001  |  |
| Treasury Stock                           | 0      | 0      |  |
| Total Liabilities & Shareholders' Equity | 3.06   | 34.844 |  |

## **FORECASTS**

## **EPS Forecast**

| Year ending | Current Forecast | 1 month ago | 3 months ago |
|-------------|------------------|-------------|--------------|
| 31-Dec-2015 | -1.77            | -2.29       | -2.35        |
| 31-Dec-2016 | -2.5             | -2.11       | -2.5         |
| 31-Dec-2017 | -1.79            | -1.79       | -1.79        |

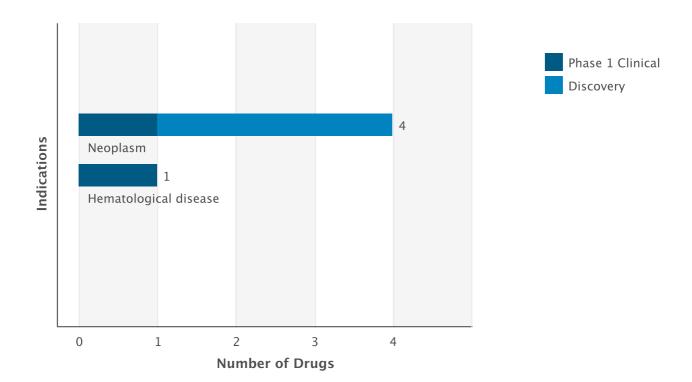
#### **Other Forecasts**

| Year ending | DPS | CPS | Pretax | Sales |
|-------------|-----|-----|--------|-------|
| 31-Dec-2015 | 0   |     | -28.13 | 0     |
| 31-Dec-2016 | 0   |     | -29.53 | 0     |
| 31-Dec-2017 |     |     | -38.35 | 0     |

# PRODUCT PORTFOLIO SUMMARY DRUGS

## Drugs by Indication

Active Drugs by Indication Chart



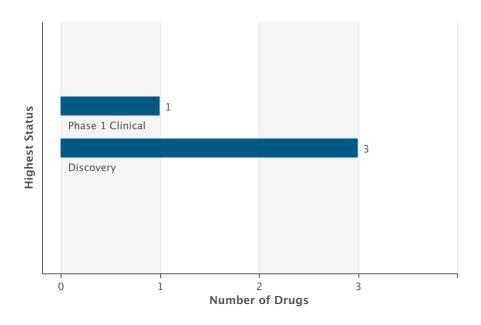


## Drugs by Indication Table

| Indication            | Active | Inactive | Total |
|-----------------------|--------|----------|-------|
| Neoplasm              | 4      | 1        | 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               | 3               |
| No Development Reported | 1               |

## **DEALS**

| Deal Type                                    | Prin   | cipal    | Par    | tner     | Total |
|--|--------|----------|--------|----------|-------|
|  | Active | Inactive | Active | Inactive |       |
| Drug - Early Research/Development            | 0      | 0        | 1      | 0        | 1     |
| Drug - Development/Commercialization License | 0      | 0        | 3      | 0        | 3     |

## **CLINICAL TRIALS**



## Trials by Condition Studied

| Condition Studied         | Ongoing | All |
|---------------------------|---------|-----|
| Neoplasm                  | 3       | 3   |
| Hematological disease     | 2       | 2   |
| Gynecology and obstetrics | 1       | 1   |
| Genitourinary disease     | 1       | 1   |
| Respiratory disease       | 1       | 1   |
| Gastrointestinal disease  | 1       | 1   |
| Endocrine disease         | 1       | 1   |
| Immune disorder           | 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 1, 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   | 4        | 0              | 4     |
| Endocrine disease        | 2        | 0              | 2     |
| Gastrointestinal disease | 4        | 0              | 4     |
| Genitourinary disease    | 5        | 0              | 5     |
| Hematological disease    | 4        | 0              | 4     |
| Andrology                | 2        | 0              | 2     |
| Immune disorder          | 6        | 0              | 6     |
| Neoplasm                 | 2        | 0              | 2     |



| Genetic disorder          | 2 | 0 | 2 |
|---------------------------|---|---|---|
| Metabolic disorder        | 2 | 0 | 2 |
| Neurological disease      | 4 | 0 | 4 |
| Respiratory disease       | 5 | 0 | 5 |
| Infectious disease        | 3 | 0 | 3 |
| Injury                    | 3 | 0 | 3 |
| Inflammatory disease      | 2 | 0 | 2 |
| Gynecology and obstetrics | 1 | 0 | 1 |

<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

## **CB-839**

| CB-839   |
|--|
|  |
| Calithera Biosciences  |
| Sanford-Burnham Medical Research Institute, Calithera Biosciences                        |
|  |
| Phase 1 Clinical   |
| Hematological neoplasm, Advanced solid tumor   |
|  |
| Synergist, Apoptosis stimulator, Anticancer, Cell cycle inhibitor, Glutaminase inhibitor |
| Oral formulation, Small molecule therapeutic   |
| 19-Feb-2015  |
|  |

## hexokinase 2 inhibitors (cancer), Calithera

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

# McI-1 inhibitors (cancer), Calithera Biosciences

| Drug Name            | McI-1 inhibitors (cancer), Calithera Biosciences |
|----------------------|--|
| Key Synonyms         |  |
| Originator Company   | Calithera Biosciences                            |
| Active Companies     | Calithera Biosciences                            |
| Inactive Companies   |  |
| Highest Status       | Discovery  |
| Active Indications   | Cancer   |
| Target-based Actions | McI-1 differentiation protein inhibitor          |
| Other Actions        | Anticancer, Apoptosis stimulator                 |
| Technologies         | Small molecule therapeutic                       |
| Last Change Date     | 02-Nov-2013                                      |

## arginase inhibitors (cancer), Calithera Biosciences

| Drug Name            | arginase inhibitors (cancer), Calithera Biosciences |
|----------------------|---|
| 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         | Small molecule therapeutic                          |
| Last Change Date     | 05-Jan-2015   |

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