

## **SAGE Therapeutics 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 I, 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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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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## **SAGE Therapeutics Inc**

## **COMPANY OVERVIEW**

Company Name	SAGE Therapeutics Inc
Parent Company Name	SAGE Therapeutics Inc
Website	http://www.sagerx.com/
Country	US
Number of Drugs in Active Development	6
Number of Inactive Drugs	4
Number of Patents as Owner	16
Number of Patents as Third Party	0
Number of Deals	4
Key Indications	Status epilepticus, Central nervous system disease, Psychiatric disorder, Epilepsy, Anesthesia, Rett syndrome, Essential tremor, Mood disorder, Neurological disease, Postnatal depression
Key Target-based Actions	GABA A receptor modulator,NMDA receptor modulator,GABA A receptor alpha-1 subunit modulator,GABA A receptor alpha-4 subunit modulator,GABA A receptor beta-2 subunit inhibitor,GABA A receptor beta-3 subunit inhibitor,GABA A receptor gamma-2 subunit inhibitor,GABA A receptor agonist,GABA A receptor alpha-1 subunit stimulator,GABA A receptor beta-2 subunit modulator,GABA A receptor beta-2 subunit stimulator,GABA A receptor beta-3 subunit modulator,GABA A receptor gamma-2 subunit modulator,GABA A receptor gamma-2 subunit stimulator,GABA B receptor agonist,GABA receptor antagonist,GABA receptor modulator,NMDA receptor agonist
Key Technologies	Small molecule therapeutic,Intravenous formulation,Oral formulation,Steroid,Infusion,Analytical method,Pharmaceutical carrier

### **COMPANY PROFILE**

#### SUMMARY

SAGE Therapeutics is a pharmaceutical company, focused on developing medicines for central nervous system disorders.

#### **FINANCIAL**

In April 2015, the company priced an underwritten public offering of 2,285,714 shares of its common stock at a public offering price of \$52.50 per share. The company granted the underwriters a 30-day option to purchase up to an additional 342,857 shares of common stock. At that time, the offering was expected to close on or about April 20, 2015. Later that month, the offering was closed with 2,628,571 shares sold including the full exercise of the additional shares offered. At that time, the company raised gross proceeds of approximately \$138 million.

In April 2015, the company proposed an underwritten public offering of \$100 million of shares of its common stock. The company granted the underwriters a 30-day option to purchase up to an additional \$15 million of shares of common stock.

In December 2014, the company was added to the NASDAQ Biotechnology Index (NBI) which would become effective upon market open on December 22, 2014.

In July 2014, the company announced the pricing of its initial public offering of 5 million shares of common stock at a price of \$18 per share. The underwriters were also granted a 30-day option to buy up to an additional 0.75 shares at the same offering price to cover over-allotments, if any. The company's shares were expected to begin trading on the NASDAQ Global market on July 18, 2014, under the ticker symbol 'SAGE'. Later that month, the underwriters exercised their full option to purchase additional shares of the IPO. At that time, the company raised a capital of \$103.5 million from a total of 5.75 million shares sold and the offering was closed.



In March 2014, the company raised \$38 million from an oversubscribed series C financing.

In October 2013, the company raised \$20 million from a series B financing.

In October 2011, SAGE secured \$35 million in series A financing. By September 2013, the company raised \$37.8 million totally from the completion of series A financing.

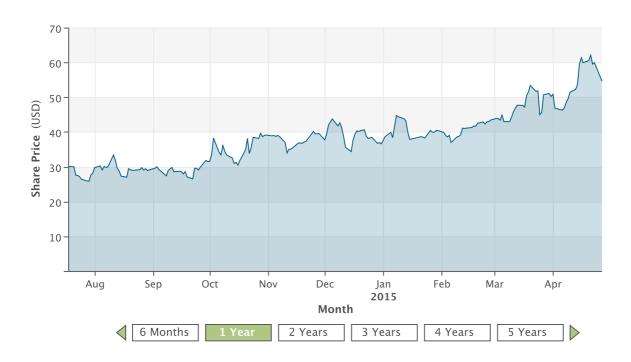
## **COMPANY FINANCIALS**

#### **SHARE INFORMATION**

Close Price (USD)	54.58
Change (USD)	-3.99 (-6.81%)
Previous Close Price (USD)	58.57
Volume	258,367
52-Week High (USD)	63.77
52-Week Low (USD)	24.25
Date	27-Apr-2015
Exchange	NASDAQ(COMPOSITE)
Current Number of Shares Outstanding	25,621,791
Current Market Capitalization	1,511,614,856
EPS (Date Reported)	-1.67352



#### **Stock Performance**

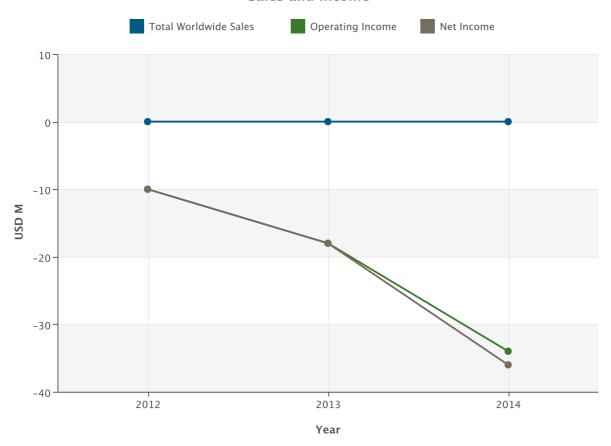


#### **MAJOR SHAREHOLDERS**

Shareholder	Туре	Country	Shares held	% of shares held	Change in holding	% changes in shares held	Date
Paul (Steven M)	Individua I Investor	United States	783,650	2.79	-20,000	-0.02	01-Apr-2015



## Sales and Income



	2012	2013	2014	
Sales (USD M)	0	0	0	
Operating Income (USD M)	-9.631	-18.279	-33.81	
Net Income (USD M)	-9.636	-18.288	-36.105	



## **Quarterly earnings update**

Period	Sales (USD M)	Operating Income (USD M)	Net Income (USD M)
2014 Q4	0	-12.361	-12.361
2014 Q3	0	-9.47	-9.859
2014 Q2	0	-6.188	-7.769
2014 Q1	0	-5.79	-6.116
2013 Q3	0	-4.519	-4.519
2013 Q2	0	-4.655	-4.655
2013 Q1	0	-3.389	-3.389

## **BALANCE SHEET**

## Assets (USD M)

	2012	2013	2014	
Cash & Short Term Investments	2.802	8.066	127.766	
Inventories - Total	0	0	0	
Current Assets - Total	2.826	8.407	128.822	
Property, Plant And Equipment - Net	0.13	0.086	0.163	
Other Assets - Total	0	0	0	
Total Assets	2.995	8.532	129.024	

## Liabilities (USD M)

	2012	2013	2014	
Accounts Payable	1.314	1.988	2.429	
Short Term Debt & Current Portion Of Long Term Debt	0	0	0	
Current Liabilities - Total	1.419	2.315	7.757	
Long Term Debt	0	0	0	
Deferred Taxes			-0.641	
Other Liabilities	0	0.044	0.023	
Total Liabilities	1.419	2.359	7.139	



## Stockholders Equity (USD M)

	2012	2013	2014	
Minority Interest	0	0	0	
Preferred Stock	14.97	37.709	0	
Common Stock	0	0	0.003	
Treasury Stock	0			
Total Liabilities & Shareholders' Equity	2.995	8.532	129.024	

#### **FORECASTS**

#### **EPS Forecast**

Year ending	Current Forecast	1 month ago	3 months ago
31-Dec-2015	-2.36	-2.18	-2.05
31-Dec-2016	-2.8	-2.76	-2.74
31-Dec-2017	-2.53	-2.93	-2.53

## **Other Forecasts**

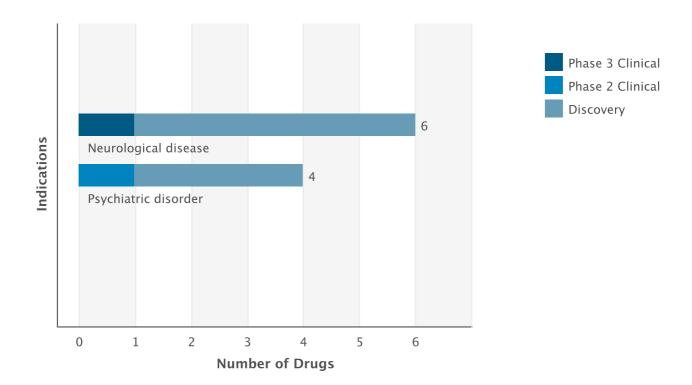
Year ending	DPS	CPS	Pretax	Sales
31-Dec-2015	0	-2.43	-63.39	0
31-Dec-2016	0		-74.37	0
31-Dec-2017			-75.48	20.78

## PRODUCT PORTFOLIO SUMMARY

## **DRUGS**

## Drugs by Indication

Active Drugs by Indication Chart

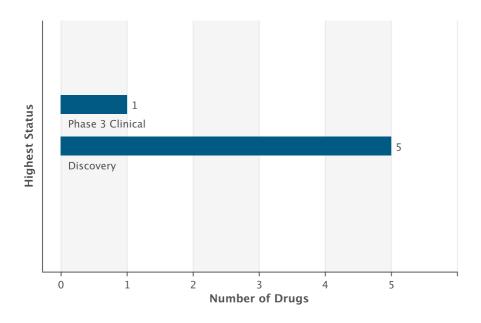


## Drugs by Indication Table

Indication	Active	Inactive	Total
Neurological disease	6	4	10
Psychiatric disorder	4	0	4
Injury	0	1	1

## **Drugs by Highest Status**

Active Drugs by Highest Status Chart



## Drugs by Highest Status Table

Development Status	Number of Drugs
Phase 3 Clinical	1
Discovery	5
No Development Reported	4

#### **DEALS**

Deal Type	Prin	cipal	Par	tner	Total
	Active	Inactive	Active	Inactive	
Technology - Other Proprietary	0	0	1	0	1
Drug - Funding	1	0	0	0	1
Drug - Early Research/Development	0	0	1	0	1
Drug - Development/Commercialization License	0	0	1	0	1

## **CLINICAL TRIALS**

Trials by Condition Studied

Condition Studied	Ongoing	All



## Trials by Condition Studied

Condition Studied	Ongoing	All
Neurological disease	2	7
Psychiatric disorder	0	1

## Trials by Phase

Phase	Ongoing	All
Phase 3	0	1
Phase 2	1	4
Phase 1	1	1
Phase not specified	0	2

#### **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	7	0	7
Degeneration	1	0	1
Psychiatric disorder	12	0	12
Genetic disorder	8	0	8
Neurological disease	17	0	17
Injury	8	0	8
Toxicity and intoxication	10	0	10
Otorhinolaryngological 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

#### **SAGE-547**

Drug Name	SAGE-547
Key Synonyms	
Originator Company	SAGE Therapeutics Inc
Active Companies	SAGE Therapeutics Inc
Inactive Companies	
Highest Status	Phase 3 Clinical
Active Indications	Status epilepticus, Postnatal depression, Essential tremor
Target-based Actions	GABA A receptor modulator
Other Actions	Neuroprotectant, Anticonvulsant agent
Technologies	Intravenous formulation, Infusion, Small molecule therapeutic
Last Change Date	23-Apr-2015

## allosteric NMDA receptor modulators (CNS disorders), SAGE

Drug Name	allosteric NMDA receptor modulators (CNS disorders), SAGE
Key Synonyms	
Originator Company	SAGE Therapeutics Inc
Active Companies	SAGE Therapeutics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Psychiatric disorder, Central nervous system disease
Target-based Actions	NMDA receptor modulator
Other Actions	Neuroprotectant
Technologies	Small molecule therapeutic
Last Change Date	24-Feb-2015

## allosteric modulators (Captisol, CNS disorders), Ligand/ SAGE

Drug Name	allosteric modulators (Captisol, CNS disorders), Ligand/ SAGE
Key Synonyms	
Originator Company	Ligand Pharmaceuticals Inc
Active Companies	SAGE Therapeutics Inc, Ligand Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Central nervous system disease
Target-based Actions	
Other Actions	CNS modulator, Unspecified drug target
Technologies	Small molecule therapeutic
Last Change Date	25-Mar-2015

## **SAGE-689**

Drug Name	SAGE-689
Key Synonyms	
Originator Company	SAGE Therapeutics Inc
Active Companies	SAGE Therapeutics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Status epilepticus, Anesthesia
Target-based Actions	
Other Actions	Unspecified drug target, Anesthetic, Anticonvulsant agent
Technologies	Intravenous formulation, Small molecule therapeutic
Last Change Date	02-Mar-2015

# GABA A allosteric modulators (neuropsychiatric diseases), SAGE Therapeutics / Washington University in St. Louis

Drug Name	GABA A allosteric modulators (neuropsychiatric diseases), SAGE Therapeutics / Washington University in St. Louis
Key Synonyms	
Originator Company	SAGE Therapeutics Inc
Active Companies	Washington University in St Louis, SAGE Therapeutics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Neurological disease, Psychiatric disorder
Target-based Actions	GABA A receptor modulator
Other Actions	Neuroprotectant
Technologies	Small molecule therapeutic
Last Change Date	26-Nov-2014

## **SAGE-217**

Drug Name	SAGE-217
Key Synonyms	
Originator Company	SAGE Therapeutics Inc
Active Companies	SAGE Therapeutics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Rett syndrome, Epilepsy
Target-based Actions	GABA A receptor modulator
Other Actions	Anticonvulsant agent, Neuroprotectant
Technologies	Oral formulation, Small molecule therapeutic, Steroid
Last Change Date	12-Nov-2014

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