

# **Verastem Inc**

# **CORTELLIS COMPANY DETAILED PIPELINE REPORT**

A comprehensive coverage of the the company's drug pipeline portfolio including detailed product records.

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# ABOUT CORTELLIS COMPANY DETAILED PIPELINE 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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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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# **Verastem Inc**

#### **COMPANY OVERVIEW**

Company Name	Verastem Inc
Parent Company Name	Verastem Inc
Website	http://www.verastem.com/
Country	US
Number of Drugs in Active Development	6
Number of Inactive Drugs	0
Number of Patents as Owner	0
Number of Patents as Third Party	0
Number of Deals	6
Key Indications	Cancer
Key Target-based Actions	Beta-catenin inhibitor,Focal adhesion kinase modulator,Wnt ligand inhibitor
Key Technologies	Small molecule therapeutic, Natural product

# **COMPANY PROFILE**

#### **SUMMARY**

Verastem Inc is a biopharmaceutical company focused on discovering and developing drugs targeting cancer stem cells.

#### **FINANCIAL**

In November 2012, Verastem planned a pre-arranged personal stock purchasing plan to acquire its common stock shares. At that time, the transaction was expected to commence on December 21, 2012.

In March 2012, the company was added to the Russell 2000 index.

In November 2011, Verastem filed a registration statement for the proposed IPO of its common stock. In January 2012, the Securities and Exchange Commission declared the registration effective, and the company priced the IPO of 5.5 million shares at \$10.00 per share, with underwriters granted a 30-day option to purchase an additional 825,000 shares of common stock to cover overallotments. The shares were to begin trading on the NASDAQ global market on January 27, 2012 under the symbol "VSTM"; in February 2012, underwriters fully exercised their over-allotment option for the purchase of additional common stocks shares. Net proceeds from the IPO were approximately \$56.7 million.

In July 2011, Verastem raised \$32 million from a series B financing.

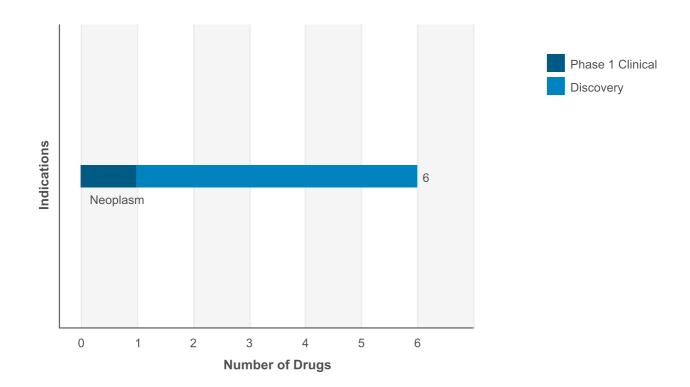
In November 2010, Verastem raised \$16 million from a series A financing.

# PRODUCT PORTFOLIO SUMMARY

# **DRUGS**

# Drugs by Indication

Active Drugs by Indication Chart

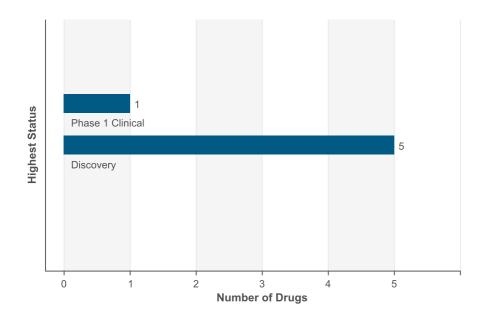


# Drugs by Indication Table

Indication	Active	Inactive	Total
Neoplasm	6	0	6

# **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	5

# PRODUCT PORTFOLIO DRUG PIPELINE DETAIL

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

#### **VS-6063**

#### **VS-6063 SNAPSHOT**

Drug Name	VS-6063
Key Synonyms	
Originator Company	Pfizer Inc
Active Companies	Verastem Inc
Inactive Companies	Pfizer Inc
Highest Status	Phase 1 Clinical
Active Indications	Cancer
Target-based Actions	Focal adhesion kinase inhibitor
Other Actions	Anticancer;Anticancer protein kinase inhibitor
Technologies	Small molecule therapeutic;Oral formulation;Capsule formulation
Last Change Date	14-Nov-2012

#### **VS-6063 DEVELOPMENT PROFILE**

#### **SUMMARY**

Verastem, under license from Pfizer, is developing VS-6063 (formerly PF-4554878, PF-04554878), the lead from a program of focal adhesion kinase (FAK) inhibitors for the potential treatment of cancer including solid tumors. In December 2008, a phase I trial began; by July 2012, the trial had been completed; later that month, phase II study for mesothelioma was expected to be initiated in mid-2013.

Pfizer was previously developing the drug . However, by February 2012, Pfizer had discontinued development and Verastem planned to continue development in July 2012.

Pfizer was also developing PF-562271, a reversible inhibitor of FAK and Pyk2 (FAK2) kinase for the potential oral treatment of cancer.

#### **VS-6063 DEVELOPMENT STATUS**

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Verastem Inc	Cancer	US	Phase 1 Clinical	11-Jul-2012
Pfizer Inc	Cancer	US	Discontinued	28-Feb-2012



# **VS-6063 CHEMICAL STRUCTURES**

CAS Registry Number:	Confidence Level:
	4
HN	N H N N N N N N N N N N N N N N N N N N
Name	Туре
PF-941222	Research Code

## **VS-6063 DRUG NAMES**

Names	Туре
PF-941222	Research Code
PF-04554878	Research Code
VS-6063	Research Code
FAK inhibitors (cancer), Pfizer	
PF-4554878	Research Code

# **VS-6063 CLINICAL TRIALS**

# Trials by Phase and Condition Studied

Phase 4 Clinical		Phase 3 Clinical		Phase 2 Clinical			Phase 1 Clinical		Phase Unspecified		tal
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All
Cancer											
0	0	0	0	0	0	0	1	0	0	0	1



# Total Trials by Phase and Status

	Phase 4 Clinical		Phase 3 Clinical		Phase 2 Clinical		Phase 1 Clinical		Phase Unspecified		tal
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All
Total by	Total by Phase and Status										
0	0	0	0	0	0	0	1	0	0	0	1

#### **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

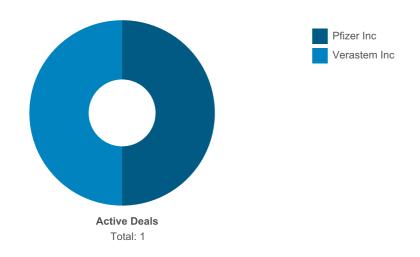
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

#### Phase 1 Clinical

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

#### **VS-6063 DEALS AND PATENTS**

# DEALS Deals by Parent Company Chart

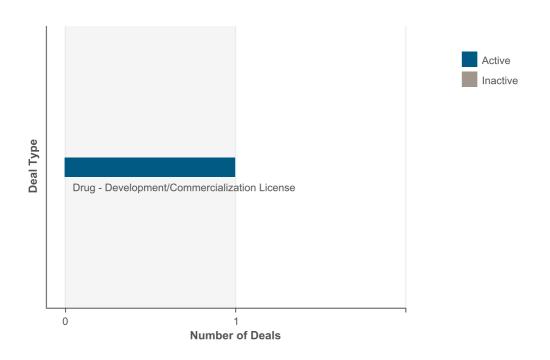




# **Deals by Parent Company Table**

Company Name	<b>Principal</b> Active Inactive		ipal Partner nactive Active Inactive		Total
Verastem Inc	0	0	1	0	1
Pfizer Inc	1	0	0	0	1

# **Deals by Type Chart**



# **Deals by Type Table**

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



# salinomycin (cancer), Verastem

## salinomycin (cancer), Verastem SNAPSHOT

B. M. M.	. Programme to the control of
Drug Name	salinomycin (cancer), Verastem
Key Synonyms	salinomycin
Originator Company	Verastem Inc
Active Companies	Verastem Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	Beta-catenin inhibitor;Wnt ligand inhibitor
Other Actions	Anticancer
Technologies	Natural product;Small molecule therapeutic
Last Change Date	03-Jan-2013

## salinomycin (cancer), Verastem DEVELOPMENT PROFILE

#### **SUMMARY**

Verastem is investigating VS-507, a formulation of salinomycin, from a Wnt/beta-catenin inhibitor program, for the potential treatment of cancer. In March 2012, VS-507 was in IND-enabling toxicology studies. At that time, the company planned to initiate clinical trials with VS-507 over the next 12 to 15 months.

Verastem, in collaboration with Eisai, is also investigating next-generation Wnt inhibitor, for the potential treatment of cancer.

## salinomycin (cancer), Verastem DEVELOPMENT STATUS

## **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Verastem Inc	Cancer	US	Discovery	14-Oct-2009

salinomycin (cancer), Verastem CHEMICAL STRUCTURES

CAS Registry Number:	Confidence Level:
53003-10-4	2
HO HO O IIII	······································
Name	Туре
salinomycin	BANN; INN
VS-507	Research Code

# salinomycin (cancer), Verastem DRUG NAMES

Names	Туре
VS-507	Research Code
Wnt/beta-catenin program (cancer), Verastem Inc	
salinomycin (cancer), Verastem	
salinomycin	INN, BANN

# **VS-4718**

#### **VS-4718 SNAPSHOT**

Drug Name	VS-4718
Key Synonyms	
Originator Company	Verastem Inc
Active Companies	Verastem Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	Focal adhesion kinase modulator
Other Actions	Anticancer protein kinase inhibitor
Technologies	Small molecule therapeutic
Last Change Date	03-Jan-2013

## **VS-4718 DEVELOPMENT PROFILE**

## **SUMMARY**

Verastem, under license from an undisclosed company, is investigating VS-4718, the lead from a focal adhesion kinase (FAK) program, including VS-5095 (selective FAK inhibitors), for the potential treatment of cancer,. In June 2012, IND-enabling toxicology studies were initiated. At that time, the company planned to initate phase I trial in the first quarter of 2013.

## **VS-4718 DEVELOPMENT STATUS**

#### **CURRENT DEVELOPMENT STATUS**

Company Indic	cation	Country	Development Status	Date
Verastem Inc Cance	cer L	JS	Discovery	14-Mar-2012

#### **VS-4718 DRUG NAMES**

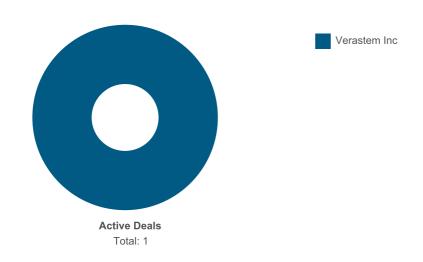
Names	Туре
VS-4718	Research Code
focal adhesion kinase program (cancer), Verastem Inc	
VS-5095	Research Code
FAK program (cancer), Verastem Inc	



## **VS-4718 DEALS AND PATENTS**

DEALS

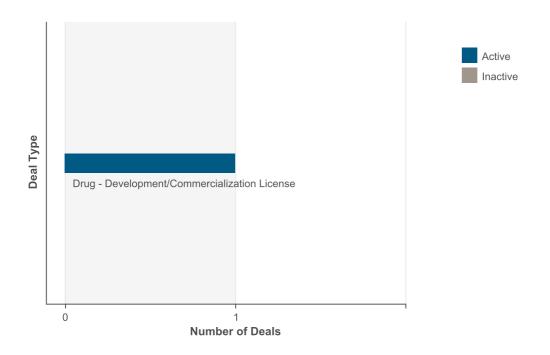
Deals by Parent Company Chart



# **Deals by Parent Company Table**

Company Name		<b>cipal</b> Inactive		tner Inactive	Total
Verastem Inc	0	0	1	0	1

# **Deals by Type Chart**



# **Deals by Type Table**

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

# **VS-5584**

#### **VS-5584 SNAPSHOT**

Drug Name	VS-5584
Key Synonyms	
Originator Company	S*BIO Pte Ltd
Active Companies	Verastem Inc
Inactive Companies	S*BIO Pte Ltd
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	mTOR inhibitor;Phosphoinositide-3 kinase alpha inhibitor
Other Actions	Anticancer protein kinase inhibitor
Technologies	Small molecule therapeutic;Oral formulation
Last Change Date	05-Dec-2012

#### **VS-5584 DEVELOPMENT PROFILE**

## **SUMMARY**

Verastem, under license from S\*Bio, is investigating VS-5584 (formerly SB-2343, SB-2312), the lead from a series of orally-available mammalian target of rapamycin/phosphoinositide 3 kinase (mTOR/PI3K) alpha dual inhibitor, for the potential treatment of cancer,. In July 2012, clinical development for advanced solid tumors was expected to be initiated in mid-2013.

The company is also investigating selective mTOR inhibitors for cancer.

#### **VS-5584 DEVELOPMENT STATUS**

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Verastem Inc	Cancer	US	Discovery	12-Jul-2012
S*BIO Pte Ltd	Cancer	Singapore	Discontinued	12-Jul-2012

#### **VS-5584 CHEMICAL STRUCTURES**

CAS Registry Number:	Confidence Level:
	4
NH <sub>2</sub>	N NH NH

## **VS-5584 DRUG NAMES**

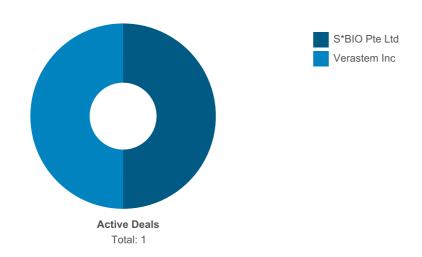
Names	Туре
mTOR/PI3K alpha dual inhibitors (cancer), S*BIO	
SB-2343	Research Code
VS-5584	Research Code
SB-2312	Research Code
mammalian target of rapamycin/phosphoinositide 3 kinase alpha dual inhibitors (cancer), S*Bio	



# **VS-5584 DEALS AND PATENTS**

DEALS

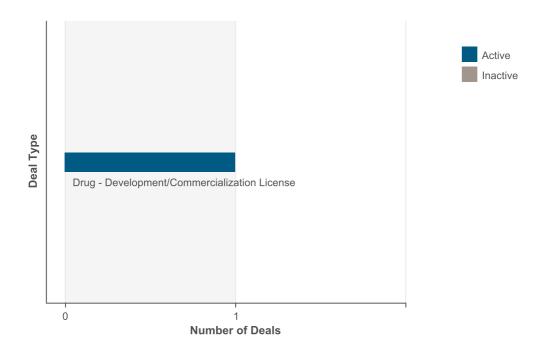
Deals by Parent Company Chart



# **Deals by Parent Company Table**

Company Name		<b>cipal</b> Inactive		tner Inactive	Total
Verastem Inc	0	0	1	0	1
S*BIO Pte Ltd	1	0	0	0	1

# **Deals by Type Chart**



# **Deals by Type Table**

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

# stem cell inhibitors (cancer), Verastem

## stem cell inhibitors (cancer), Verastem SNAPSHOT

Drug Name	stem cell inhibitors (cancer), Verastem
Key Synonyms	
Originator Company	Verastem Inc
Active Companies	Verastem Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	
Other Actions	Anticancer;Stem cell inhibitor
Technologies	Small molecule therapeutic
Last Change Date	21-Nov-2012

## stem cell inhibitors (cancer), Verastem DEVELOPMENT PROFILE

## **SUMMARY**

Verastem is investigating a series of compounds targeting stem cells, including ML-239, for the potential treatment of cancer including breast cancer. In July 2011, the first candidate from the series was expected to enter clinical development in 2012.

# stem cell inhibitors (cancer), Verastem DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Verastem Inc	Cancer	US	Discovery	16-Nov-2010

## stem cell inhibitors (cancer), Verastem DRUG NAMES

Names	Туре
stem cell inhibitors (cancer), Verastem	
ML-239	Research Code



# next-generation Wnt inhibitors (cancer), Eisai/Verastem

## next-generation Wnt inhibitors (cancer), Eisai/Verastem SNAPSHOT

Drug Name	next-generation Wnt inhibitors (cancer), Eisai/Verastem
Key Synonyms	
Originator Company	Verastem Inc
Active Companies	Verastem Inc;Eisai Co Ltd
Inactive Companies	
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	Beta-catenin inhibitor
Other Actions	Anticancer
Technologies	Small molecule therapeutic
Last Change Date	18-Jul-2012

## next-generation Wnt inhibitors (cancer), Eisai/Verastem DEVELOPMENT PROFILE

#### **SUMMARY**

Verastem, in collaboration with Eisai, is investigating next-generation small molecule Wnt inhibitors, including the analogs of VS-507 (salinomycin), for the potential treatment of cancer. In July 2012, development was ongoing.

## next-generation Wnt inhibitors (cancer), Eisai/Verastem DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Eisai Co Ltd	Cancer	Japan	Discovery	12-Jul-2012
Verastem Inc	Cancer	US	Discovery	12-Jul-2012

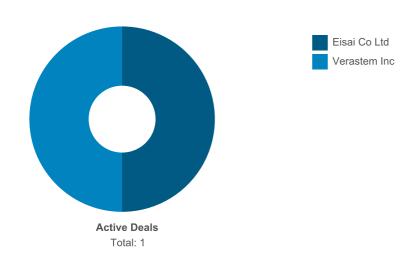
# next-generation Wnt inhibitors (cancer), Eisai/Verastem DRUG NAMES

Names	Туре
next-generation Wnt inhibitors (cancer), Eisai/Verastem	



DEALS

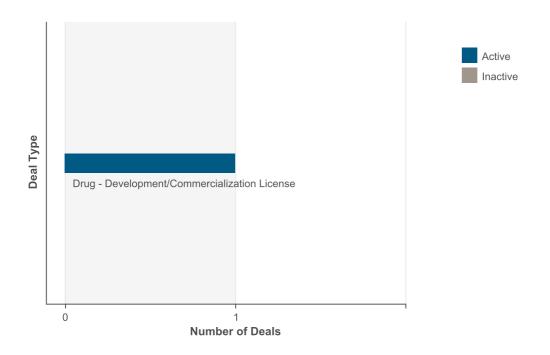
Deals by Parent Company Chart



## **Deals by Parent Company Table**

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Eisai Co Ltd	0	0	1	0	1
Verastem Inc	1	0	0	0	1

# **Deals by Type Chart**



# **Deals by Type Table**

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

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