

Portola Pharmaceuticals Inc

COMPANY AND PIPELINE OVERVIEW REPORT

Coverage of the company and a summary of the drug pipeline portfolio.

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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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

COMPANY OVERVIEW

Company Name	Portola Pharmaceuticals Inc
Parent Company Name	Portola Pharmaceuticals Inc
Website	http://www.portola.com/
Country	US
Number of Drugs in Active Development	9
Number of Inactive Drugs	2
Number of Patents as Owner	51
Number of Patents as Third Party	0
Number of Deals	13
Key Indications	Rheumatoid arthritis,Inflammatory disease,Non-Hodgkin lymphoma,Cardiovascular disease,Coronary artery disease,Cancer,Chronic lymphocytic leukemia,Bleeding,Thrombosis,Allergy
Key Target-based Actions	Syk tyrosine kinase inhibitor,P2Y12 purinoceptor antagonist,Factor Xa antagonist,JAK tyrosine kinase inhibitor,Jak3 tyrosine kinase inhibitor,Jak1 tyrosine kinase inhibitor,Jak2 tyrosine kinase inhibitor,Factor Xa agonist,DNA polymerase alpha inhibitor,DNA primase inhibitor,Factor VIIa agonist,Factor X agonist,Ribonucleotide reductase inhibitor
Key Technologies	Small molecule therapeutic,Oral formulation,Intravenous formulation,Protein recombinant,Biological therapeutic,Infusion,Parenteral formulation unspecified,Stereochemistry,Drug combination,Peptide,Polynucleotide

COMPANY PROFILE

SUMMARY

Portola Pharmaceuticals Inc was spun-out from Millennium Pharmaceuticals in 2003 with cardiovascular technology formerly owned by COR Therapeutics, which was acquired by, and merged into, Millennium in February 2002. Portola is a privately-held biopharmaceutical company focused on the discovery and development of therapeutics for the treatment and prevention of severe cardiovascular diseases, especially thrombosis. Its R&D is particularly focused on well validated targets in odder to reduce safety and efficacy risks. Portola is currently interested to inlicense cardiology or inflammation treatments.

COMPANY LOCATION

Portola is located in South San Francisco, CA.

LICENSING AGREEMENTS

In June 2005, Portola and Astellas entered a license agreement to develop a selection Astellas's preclinical cardiovascular compounds.

FINANCIAL

In October 2013, Portola began an underwritten public offering of its common stock shares and was to raise approximately \$100 million from the offering. Also, the offering would include shares from certain existing shareholders. Later that month, the company raised \$100 million by the closing of the offering.

In October 2013, a lock-up restriction of 95,962 shares of the company's common stock was released.

In April 2013, Portola was planning an IPO of its stock. In May 2013, Portola priced the offering of 8,422,758 shares of its common stock at a price of \$14.50 each. The underwriters were granted a 30-day over-allotment option to purchase up to an additional 1,263,413 shares at the offering price. The shares were expected to begin trading on the NASDAQ Global Market on May 22, 2013 under the trading symbol 'PTLA' and the offering was expected to close on May 28, 2013. Later that month, the offering was closed and raised net proceeds of \$126 million. In December 2013, NASDAQ reported that, Portola would be added to the NASDAQ Biotechnology Index, as a result of the annual re-ranking under



the trading symbol 'PTLA', which would become effective prior to market open on December 23, 2013.

In November 2011, the company raised \$89 million in a preferred stock financing.

In July 2008, the company raised \$60 million in a preferred stock financing.

In May 2007, Portola raised \$70 million in a series C preferred stock financing.

In October 2006, Portola secured \$20 million in debt financing from Hercules Technology Growth Capital. The company planned to use the funds to advance development of its pipeline candidates.

In November 2005, Portola raised \$46 million in a series B financing.

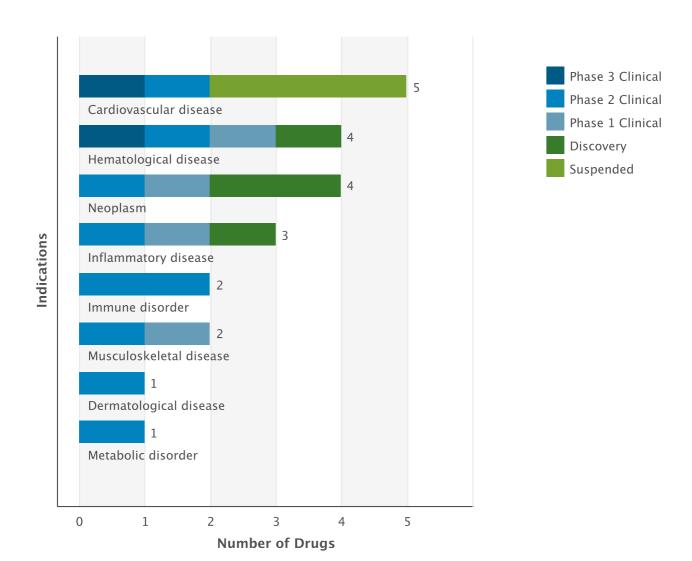
In December 2003, Portola raised \$21 million in its series A financing round. The company intended to use the funding to support its R&D program in vascular thrombosis and inflammation underlying atherosclerosis.

PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



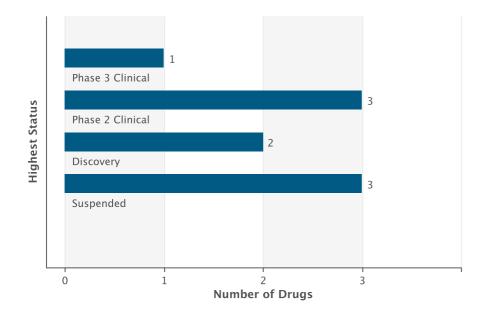


Drugs by Indication Table

Indication	Active	Inactive	Total
Cardiovascular disease	5	3	8
Hematological disease	4	0	4
Neoplasm	4	0	4
Inflammatory disease	3	0	3
Musculoskeletal disease	2	0	2
Immune disorder	2	0	2
Neurological disease	0	1	1
Metabolic disorder	1	0	1
Dermatological 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 3 Clinical	1
Phase 2 Clinical	3
Discovery	2
Suspended	3
No Development Reported	2

DEALS

Deal Type	Prin	cipal	Par	tner	Total
	Active	Inactive	Active	Inactive	
Drug - Screening/Evaluation	0	0	2	0	2
Drug - Early Research/Development	1	0	0	0	1
Drug - Development/Commercialization License	3	0	2	0	6
Drug - Development Services	3	0	1	0	4

CLINICAL TRIALS

Trials by Condition Studied

Condition Studied	Ongoing	All
Cardiovascular disease	1	11
Hematological disease	1	10
Immune disorder	0	2
Neoplasm	0	2
Genitourinary disease	0	1
Neurological disease	0	1

Trials by Phase

Phase	Ongoing	All
Phase 3	1	2
Phase 2	0	6
Phase 1	0	12
Phase not specified	1	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 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	49	0	49
Endocrine disease	8	0	8
Gastrointestinal disease	10	0	10
Growth disorder	1	0	1
Hematological disease	42	0	42
Degeneration	2	0	2
Immune disorder	15	0	15
Psychiatric disorder	2	0	2
Musculoskeletal disease	12	0	12
Neoplasm	13	0	13
Ocular disease	6	0	6
Genetic disorder	8	0	8
Metabolic disorder	11	0	11
Mouth disease	6	0	6
Neurological disease	27	0	27
Respiratory disease	4	0	4
Inflammatory disease	15	0	15
Otorhinolaryngological disease	1	0	1
Gynecology and obstetrics	2	0	2
Dermatological disease	7	0	7

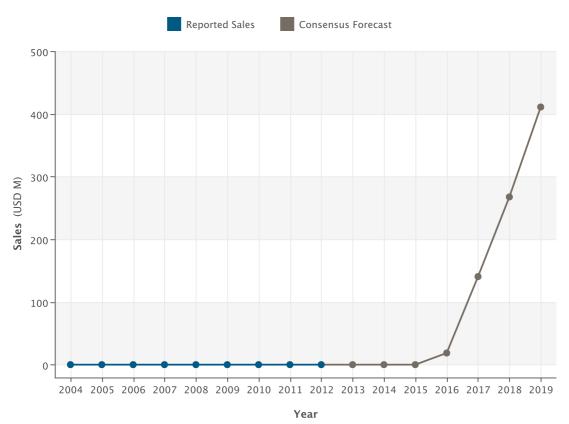
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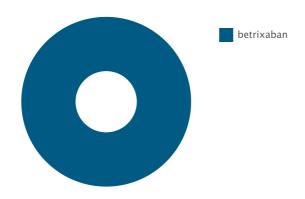
PRODUCT PORTFOLIO FINANCIALS

DRUG SALES AND FORECASTS





Drug Sales as a Share of the Total Sales 2016





PRODUCT PORTFOLIO DRUGS

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

betrixaban

Drug Name	betrixaban
Key Synonyms	betrixaban
Originator Company	Takeda Pharmaceutical Co Ltd
Active Companies	Lee's Pharmaceutical Holdings (Hong Kong) Ltd, Portola Pharmaceuticals Inc
Inactive Companies	Merck & Co Inc, Millennium Pharmaceuticals Inc
Highest Status	Phase 3 Clinical
Active Indications	Phlebothrombosis, Thromboembolism
Target-based Actions	Factor Xa antagonist
Other Actions	Neuroprotectant, Coagulation inhibitor
Technologies	Oral formulation, Oral sustained release formulation, Small molecule therapeutic
Last Change Date	14-Jan-2014

andexanet alfa

Drug Name	andexanet alfa
Key Synonyms	andexanet alfa
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Portola Pharmaceuticals Inc
Inactive Companies	
Highest Status	Phase 2 Clinical
Active Indications	Bleeding
Target-based Actions	Factor Xa antagonist
Other Actions	Antidote, Coagulation stimulator
Technologies	Intravenous formulation, Infusion, Biological therapeutic, Parenteral formulation unspecified, Protein recombinant
Last Change Date	14-Jan-2014



cerdulatinib

Drug Name	cerdulatinib
Key Synonyms	cerdulatinib
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Aciex Therapeutics Inc, Portola Pharmaceuticals Inc
Inactive Companies	
Highest Status	Phase 2 Clinical
Active Indications	Non-Hodgkin lymphoma, Ocular disease, Chronic lymphocytic leukemia, Rheumatoid arthritis
Target-based Actions	JAK tyrosine kinase inhibitor, Syk tyrosine kinase inhibitor
Other Actions	Apoptosis stimulator, Anticancer protein kinase inhibitor, Anti-inflammatory
Technologies	Oral formulation, Small molecule therapeutic
Last Change Date	14-Jan-2014

PRT-2607

Drug Name	PRT-2607
Key Synonyms	
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Portola Pharmaceuticals Inc, Biogen Idec Inc
Inactive Companies	
Highest Status	Phase 2 Clinical
Active Indications	Chronic lymphocytic leukemia, Rheumatoid arthritis, Allergy, Systemic lupus erythematosus, Non-Hodgkin lymphoma, Cancer, Inflammatory disease
Target-based Actions	Syk tyrosine kinase inhibitor
Other Actions	Coagulation inhibitor, Anticancer protein kinase inhibitor, Anti-inflammatory
Technologies	Oral formulation, Small molecule therapeutic
Last Change Date	20-Aug-2013

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PRT-060318

Drug Name	PRT-060318
Key Synonyms	
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Portola Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	B-cell acute lymphoblastic leukemia, Heparin induced thrombocytopenia
Target-based Actions	Syk tyrosine kinase inhibitor
Other Actions	Anticancer protein kinase inhibitor, Coagulation inhibitor
Technologies	Oral formulation, Small molecule therapeutic
Last Change Date	08-Jan-2013

JAK tyrosine kinase inhibitors (oral, inflammatory disease/myelodysplastic syndromes), Portola

Drug Name	JAK tyrosine kinase inhibitors (oral, inflammatory disease/myelodysplastic syndromes), Portola
Key Synonyms	
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Portola Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Inflammatory disease, Myelodysplastic syndrome
Target-based Actions	Jak1 tyrosine kinase inhibitor, Jak2 tyrosine kinase inhibitor, Jak3 tyrosine kinase inhibitor
Other Actions	Anti-inflammatory, Anticancer
Technologies	Oral formulation, Small molecule therapeutic
Last Change Date	17-Jan-2012



non-sulfonylurea P2Y12 antagonists (cardiovascular disease), Portola

Drug Name	non-sulfonylurea P2Y12 antagonists (cardiovascular disease), Portola
Key Synonyms	
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Portola Pharmaceuticals Inc
Inactive Companies	
Highest Status	Suspended
Active Indications	Cardiovascular disease
Target-based Actions	P2Y12 purinoceptor antagonist
Other Actions	Platelet aggregation inhibitor, Coagulation inhibitor
Technologies	Stereochemistry, Small molecule therapeutic
Last Change Date	25-Sep-2009

elinogrel (oral, cardiovascular events), Portola/Novartis

Drug Name	elinogrel (oral, cardiovascular events), Portola/Novartis
Key Synonyms	elinogrel, elinogrel potassium
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Portola Pharmaceuticals Inc
Inactive Companies	Novartis AG
Highest Status	Suspended
Active Indications	Coronary artery disease
Target-based Actions	P2Y12 purinoceptor antagonist
Other Actions	Coagulation inhibitor, Platelet aggregation inhibitor
Technologies	Oral formulation, Small molecule therapeutic
Last Change Date	16-Aug-2012



elinogrel (intravenous, cardiovascular events), Portola/Novartis

Drug Name	elinogrel (intravenous, cardiovascular events), Portola/Novartis
Key Synonyms	elinogrel potassium, elinogrel
Originator Company	Portola Pharmaceuticals Inc
Active Companies	Portola Pharmaceuticals Inc
Inactive Companies	Novartis AG
Highest Status	Suspended
Active Indications	Coronary artery disease
Target-based Actions	P2Y12 purinoceptor antagonist
Other Actions	Coagulation inhibitor, Platelet aggregation inhibitor
Technologies	Intravenous formulation, Small molecule therapeutic
Last Change Date	16-Aug-2012



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