

Marinus Pharmaceuticals Inc

COMPANY AND PIPELINE OVERVIEW REPORT

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

Publication Date: 01-Feb-2014

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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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

COMPANY OVERVIEW

Company Name	Marinus Pharmaceuticals Inc
Parent Company Name	Marinus Pharmaceuticals Inc
Website	http://www.marinuspharma.com/
Country	US
Number of Drugs in Active Development	2
Number of Inactive Drugs	1
Number of Patents as Owner	7
Number of Patents as Third Party	2
Number of Deals	4
Key Indications	Epilepsy, Central nervous system disease, Fragile X syndrome, Post traumatic stress disorder, Cancer, Allergic rhinitis, Attention deficit hyperactivity disorder, Bipolar disorder, Brain injury, Inflammatory disease, Nasal polyps, Schizophrenia, Seasonal allergic rhinitis
Key Target-based Actions	GABA A receptor agonist,AKT1 protein kinase modulator,Alpha 1 antichymotrypsin modulator,Angiotensinogen ligand modulator,Clusterin modulator,Contactin 1 modulator,Contactin 2 modulator,Dickkopf-3 ligand modulator,Erbb2 tyrosine kinase receptor modulator,Extracellular signal related kinase-1 modulator,Extracellular signal related kinase-4 modulator,MAP kinase modulator,Monocyte differentiation antigen CD14 modulator,Neuronal cell adhesion molecule modulator,Protein kinase C inhibitor,Serum amyloid P modulator,Topoisomerase I inhibitor,Topoisomerase II inhibitor,VEGF receptor modulator
Key Technologies	Oral formulation, Small molecule therapeutic, Steroid, Capsule formulation, Nanoparticle formulation oral, Oral liquid formulation, Oral suspension formulation, Fluorescence, Formulation preservation, Antibody conjugated, Chemical purification, Chromatography analytical, Drug screening, Electrophoresis, Immunoassay, Inhalant formulation, Labeling system, Luminescence, Nanoparticle formulation, Nasal formulation, Nucleophilic substitutional synthesis, Peptide, Polynucleotide sequence, Prodrug, Protein fusion, Spectrometry, Stereochemical synthesis, Steroid synthesis, Suspension, Vector expression

COMPANY PROFILE

SUMMARY

Marinus Pharmaceuticals focuses on the identification, development and commercialization of drugs to treat serious neurological, psychiatric and pain disorders.

FINANCIAL

In January 2013, Marinus raised \$21 million from a series C financing.

In April 2009, Marinus raised \$20 million from a series B financing round.

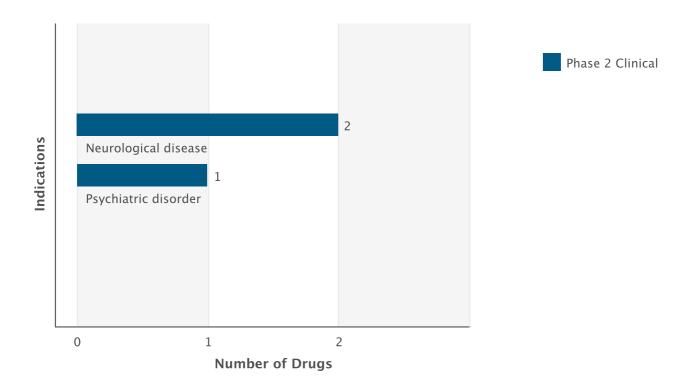
In October 2005, Marinus raised \$29.4 million in a series A financing.

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PRODUCT PORTFOLIO SUMMARY DRUGS

Drugs by Indication

Active Drugs by Indication Chart



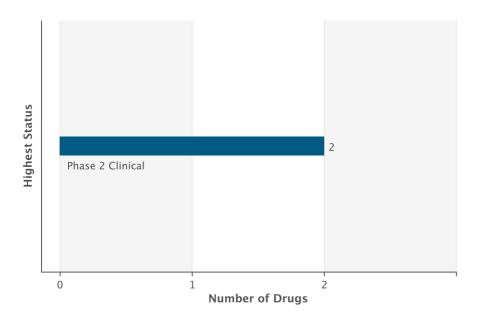
Drugs by Indication Table

Indication	Active	Inactive	Total
Psychiatric disorder	1	1	2
Neurological disease	2	0	2
Genetic disorder	0	1	1

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Drugs by Highest Status

Active Drugs by Highest Status Chart



Drugs by Highest Status Table

Development Status	Number of Drugs
Phase 2 Clinical	2
No Development Reported	1

DEALS

Deal Type	Prin Active	icipal Inactive	Par Active	tner Inactive	Total
Drug - Funding	1	0	0	0	1
Drug - Early Research/Development	0	0	1	0	1
Drug - Development Services	0	0	2	0	2

CLINICAL TRIALS

Trials by Condition Studied

Condition Studied	Ongoing	All
Neurological disease	1	6
Psychiatric disorder	2	2



Trials by Phase

Phase	Ongoing	All
Phase 2	3	8

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
Immune disorder	1	0	1
Psychiatric disorder	1	0	1
Musculoskeletal disease	1	0	1
Neoplasm	2	1	3
Genetic disorder	1	0	1
Neurological disease	4	1	5
Respiratory disease	1	0	1
Infectious disease	2	0	2
Injury	0	1	1
Inflammatory disease	2	0	2
Otorhinolaryngological disease	1	0	1

^{*} This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.

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PRODUCT PORTFOLIO DRUGS

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

ganaxolone (oral liquid suspension, epilepsy/fragile X syndrome), Marinus/NovaMedica

Drug Name ganaxolone (oral liquid suspension, epilepsy/fragile X syndrome), Marinus/NovaMedica Key Synonyms ganaxolone Originator Company Marinus Pharmaceuticals Inc Active Companies Marinus Pharmaceuticals Inc, NovaMedica Inactive Companies Phase 2 Clinical Active Indications Fragile X syndrome, Epilepsy, Central nervous system disease Target-based Actions GABA A receptor agonist Other Actions Anticonvulsant agent, CNS modulator Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid Last Change Date 21-Aug-2013		
Originator Company Marinus Pharmaceuticals Inc Marinus Pharmaceuticals Inc, NovaMedica Inactive Companies Highest Status Phase 2 Clinical Active Indications Fragile X syndrome, Epilepsy, Central nervous system disease Target-based Actions GABA A receptor agonist Other Actions Anticonvulsant agent, CNS modulator Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Drug Name	
Active Companies Inactive Companies Highest Status Phase 2 Clinical Active Indications Fragile X syndrome, Epilepsy, Central nervous system disease Target-based Actions GABA A receptor agonist Other Actions Anticonvulsant agent, CNS modulator Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Key Synonyms	ganaxolone
Inactive Companies Highest Status Phase 2 Clinical Active Indications Fragile X syndrome, Epilepsy, Central nervous system disease Target-based Actions GABA A receptor agonist Other Actions Anticonvulsant agent, CNS modulator Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Originator Company	Marinus Pharmaceuticals Inc
Highest Status Phase 2 Clinical Active Indications Fragile X syndrome, Epilepsy, Central nervous system disease Target-based Actions GABA A receptor agonist Other Actions Anticonvulsant agent, CNS modulator Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Active Companies	Marinus Pharmaceuticals Inc, NovaMedica
Active Indications Fragile X syndrome, Epilepsy, Central nervous system disease Target-based Actions GABA A receptor agonist Other Actions Anticonvulsant agent, CNS modulator Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Inactive Companies	
Target-based Actions GABA A receptor agonist Other Actions Anticonvulsant agent, CNS modulator Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Highest Status	Phase 2 Clinical
Other Actions Anticonvulsant agent, CNS modulator Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Active Indications	Fragile X syndrome, Epilepsy, Central nervous system disease
Technologies Oral formulation, Oral liquid formulation, Oral suspension formulation, Small molecule therapeutic, Steroid	Target-based Actions	GABA A receptor agonist
molecule therapeutic, Steroid	Other Actions	Anticonvulsant agent, CNS modulator
Last Change Date 21-Aug-2013	Technologies	
	Last Change Date	21-Aug-2013

ganaxolone (oral capsule/nanoparticle, PTSD/CNS disorders), Marinus/NovaMedica

Drug Name	ganaxolone (oral capsule/nanoparticle, PTSD/CNS disorders), Marinus/NovaMedica
Key Synonyms	ganaxolone
Originator Company	Marinus Pharmaceuticals Inc
Active Companies	Marinus Pharmaceuticals Inc, NovaMedica
Inactive Companies	
Highest Status	Phase 2 Clinical
Active Indications	Post traumatic stress disorder, Epilepsy, Central nervous system disease
Target-based Actions	GABA A receptor agonist
Other Actions	Anticonvulsant agent, CNS modulator
Technologies	Oral formulation, Capsule formulation, Nanoparticle formulation oral, Small molecule therapeutic, Steroid
Last Change Date	10-Jan-2014



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