

# **Enanta Pharmaceuticals 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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## **THOMSON REUTERS**

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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 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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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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Phase 2 Clinical	17
Phase 1 Clinical	25
Discovery	28
Suspended	53



## **Enanta Pharmaceuticals Inc**

## **COMPANY OVERVIEW**

Company Name	Enanta Pharmaceuticals Inc
Parent Company Name	Enanta Pharmaceuticals Inc
Website	http://www.enanta.com/
Country	US
Number of Drugs in Active Development	11
Number of Inactive Drugs	4
Number of Patents as Owner	158
Number of Patents as Third Party	0
Number of Deals	5
Key Indications	Hepatitis C virus infection,Bacterial infection,Gram positive bacterium infection,Bacterial respiratory tract infection,Hepatitis B virus infection,Neisseria gonorrhoeae infection,HIV infection,Inflammatory disease,Cystic fibrosis,Viral infection
Key Target-based Actions	Hepatitis C virus NS3 protease inhibitor,Hepatitis C virus protein NS5A inhibitor,Hepatitis C virus NS5B polymerase inhibitor,Peptidylprolyl isomerase inhibitor,Flavivirus NS3 protease inhibitor,Hepatitis C virus NS2-NS3 protease inhibitor,Hepatitis C virus protease inhibitor
Key Technologies	Small molecule therapeutic, Antibiotic, Oral formulation, Prodrug, Intravenous formulation, Dermatological formulation, Inhalant formulation, Drug combination, Antibiotic resistance, Local formulation unspecified, Systemic formulation unspecified, Tablet formulation

#### **COMPANY PROFILE**

#### **SUMMARY**

Enanta Pharmaceuticals is a drug discovery company specializing in the development of small molecule anti-infective agents, especially macrolide and ketolide antibiotics.

#### LICENSING AGREEMENTS

In March 2003, Enanta received a milestone payment from Chiron for the completion of the first phase of Enanta's research for the discovery and development of small molecule HCV therapeutics. In September 2002, Enanta signed an exclusive, joint collaboration with Chiron for the discovery and development of small molecule HCV therapeutics. Enanta was to apply its macrocyclic chemistry and medicinal chemistry expertise to design and synthesize of compounds targeting enzymes involved in the replication of the virus. Chiron gave Enanta a non-exclusive license to its HCV patents and Enanta gave Chiron an exclusive worldwide license to compounds that were developed. Enanta was also to receive research funding, milestone payments and royalties, while Chiron was to be responsible for preclinical and clinical development, manufacturing and sales and marketing.

## **FINANCIAL**

In June 2013, Enanta was added to the Russell 3000 and 2000 indexes.

In March 2013, Enanta announced the pricing of its initial public offering of 4 million common stock shares at a price of US \$14 each. The shares traded on the NASDAQ Global Select Market under the symbol 'ENTA'. The underwriters were granted a 30-day option to buy up to an additional 0.6 million common stock shares to cover over-allotments. The offering was expected to close on March 26, 2013; later that month, the offering was closed.

In November 2012, Enanta filed a registration statement with the U.S. Securities and Exchange Commission for proposed initial public offering of its common stock.

In August 2004, Enanta raised \$20 million in new financing, including contributions from Shionogi & Co Ltd, in order to advance its bridged bicyclic ketolide, EP-013420, into phase I trials, and to progress the company's discovery-stage anti-



infective programs.

In January 2004, Enanta raised \$12 million in financing to advance its lead macrolide antibiotic program into clinical trials.

In June 2002, raised \$18 million in a private financing.

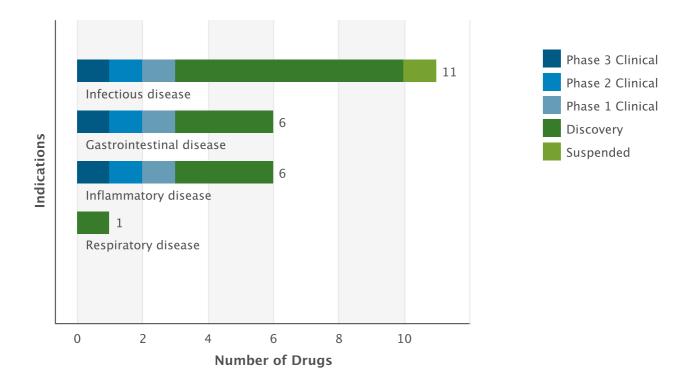
In 1999, Enanta raised \$5.1 million of equity financing and in July 2000, received \$20 million in a second round of private financing.

# PRODUCT PORTFOLIO SUMMARY

#### **DRUGS**

#### **Drugs by Indication**

Active Drugs by Indication Chart



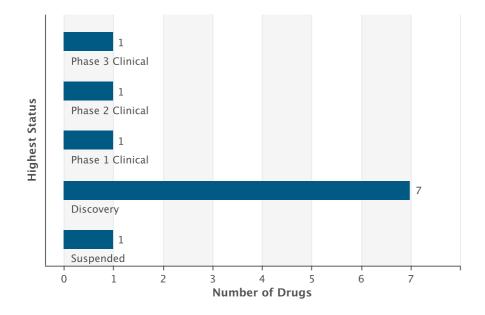


# Drugs by Indication Table

Indication	Active	Inactive	Total
Infectious disease	11	3	14
Gastrointestinal disease	6	2	8
Inflammatory disease	6	2	8
Respiratory disease	1	2	3
Immune disorder	0	1	1
Dermatological disease	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
Phase 2 Clinical	1
Phase 1 Clinical	1
Discovery	7
Suspended	1
Discontinued	2
No Development Reported	2

#### **DEALS**

Deal Type	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Drug - Funding	1	0	0	0	1
Drug - Development/Commercialization License	3	0	1	0	4

## **CLINICAL TRIALS**

# Trials by Condition Studied

Condition Studied	Ongoing	All
Infectious disease	0	9
Respiratory disease	0	4
Gastrointestinal disease	0	2
Inflammatory disease	0	2
Dermatological disease	0	1

# Trials by Phase

Phase	Ongoing	All
Phase 2	0	3
Phase 1	0	6

## **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	3	0	3
Endocrine disease	2	0	2
Gastrointestinal disease	118	0	118
Genitourinary disease	1	0	1
Growth disorder	2	0	2
Degeneration	2	0	2
Immune disorder	14	0	14
Musculoskeletal disease	9	0	9
Neoplasm	4	0	4
Ocular disease	3	0	3
Metabolic disorder	3	0	3
Mouth disease	2	0	2
Neurological disease	2	0	2
Respiratory disease	38	0	38
Infectious disease	149	0	149
Inflammatory disease	121	0	121
Otorhinolaryngological disease	8	0	8
Gynecology and obstetrics	2	0	2
Temperature disorder	1	0	1
Dermatological disease	11	0	11
Ulcer	2	0	2
Surgical procedure	3	0	3

<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 DRUG PIPELINE DETAIL

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

## ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta

#### ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta SNAPSHOT

Drug Name	ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta
Key Synonyms	
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	AbbVie Inc;Enanta Pharmaceuticals Inc
Inactive Companies	Abbott Laboratories
Highest Status	Phase 3 Clinical
Active Indications	Hepatitis C virus infection
Target-based Actions	Hepatitis C virus NS3 protease inhibitor;Hepatitis C virus protein NS5A inhibitor
Other Actions	Hepatitis C virus replication inhibitor
Technologies	Drug combination;Oral formulation;Tablet formulation;Small molecule therapeutic
Last Change Date	25-Jun-2013

## ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta DEVELOPMENT PROFILE

## **SUMMARY**

Enanta and AbbVie, following its spin-out from Abbott in January 2013, are developing a fixed-dose tablet formulation containing the hepatitis C virus (HCV) NS3/4A protease inhibitor ABT-450 boosted with ritonavir (ABT-450/r) and the NS5A inhibitor ABT-267 for the potential oral treatment of HCV infection. In August 2012, a phase III (PEARL-II) trial was initiated in HCV patients. In October 2012, a phase III trial was initiated to study interferon-free treatment with the co-formulated product (ABT-450/r/ABT-267) plus the NS5B polymerase inhibitor ABT-333 and ribavirin in HCV genotype 1 patients. In December 2012, a phase III trial began to assess ABT-450/r/ABT-267, administered once daily, plus ABT-333, with and without ribavirin. In January 2012, a phase II trial was initiated in Japan.

## ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta DEVELOPMENT STATUS

## **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
AbbVie Inc	Hepatitis C virus infection	Europe	Phase 3 Clinical	31-Aug-2012
AbbVie Inc	Hepatitis C virus infection	Puerto Rico	Phase 3 Clinical	31-Aug-2012
AbbVie Inc	Hepatitis C virus infection	Sweden	Phase 3 Clinical	31-Aug-2012



Company	Indication	Country	<b>Development Status</b>	Date
AbbVie Inc	Hepatitis C virus infection	US	Phase 3 Clinical	31-Aug-2012
Enanta Pharmaceuticals Inc	Hepatitis C virus infection	US	Phase 3 Clinical	02-Jan-2013
AbbVie Inc	Hepatitis C virus infection	Japan	Phase 2 Clinical	31-Jan-2012
Enanta Pharmaceuticals Inc	Hepatitis C virus infection	Japan	Phase 2 Clinical	31-Jan-2012
Abbott Laboratories	Hepatitis C virus infection	US	Discontinued	02-Jan-2013

# ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta CHEMICAL STRUCTURES

CAS Registry Number:	Confidence Level:
155213-67-5	1
N OH OH	H N N N N N N N N N N N N N N N N N N N
Name	Туре
ritonavir	BANN; INN; USAN
Norvir	Trade Name
Abbott-84538	Research Code
ABT-538	Research Code
A-84538	Research Code

# ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta DRUG NAMES

Names	Туре
ABT-450/r/ABT-267	
ABT-450 + ritonavir + ABT-267 (oral, HCV infection), Abbott	
ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta	
ABT-450/r + ABT-267 (oral, HCV infection), Abbott	



## ABT-450 + ritonavir + ABT-267 (oral, HCV infection), AbbVie/Enanta CLINICAL TRIALS

## Trials by Phase and Condition Studied

	se 4 nical		ise 3 nical		se 2 nical		se 1 nical		ase ecified	То	tal
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All
Hepatitis C virus infection											
0	0	7	7	3	3	0	0	0	0	10	10

## Total Trials by Phase and Status

	se 4 nical		se 3 nical		se 2 nical		se 1 nical		ase ecified	То	tal
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All
Total by Phase and Status											
0	0	7	7	3	3	0	0	0	0	10	10

#### **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

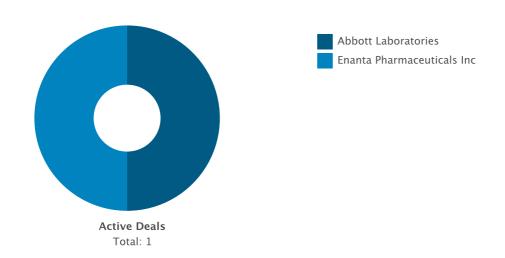
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

#### Phase 1 Clinical

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

DEALS

Deals by Parent Company Chart



## **Deals by Parent Company Table**

Company Name		<b>cipal</b> Inactive		tner Inactive	Total
Abbott Laboratories	0	0	1	0	1
Enanta Pharmaceuticals Inc	1	0	0	0	1

# **Deals by Type Chart**



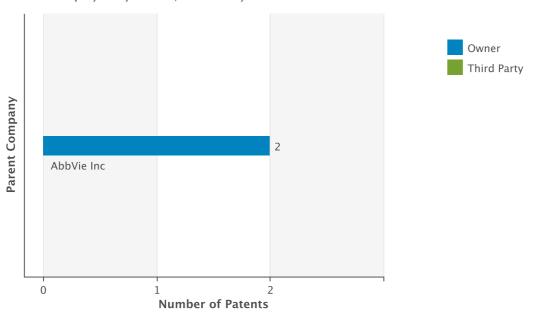
# **Deals by Type Table**

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

#### **PATENTS**

# **Patents by Parent Company Chart**

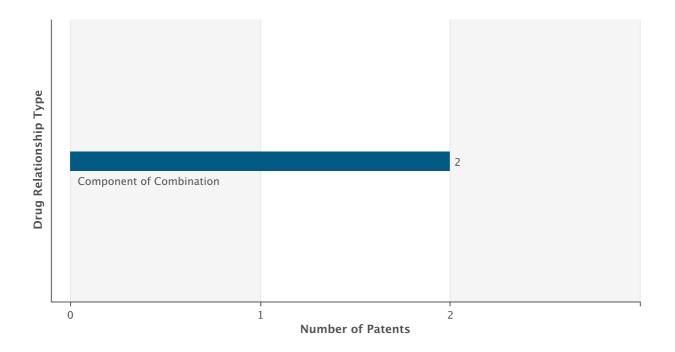
Chart displayed by Owner/Third Party



# **Patents by Parent Company Table**

Company Name	As Owner	As Third Party	Total
AbbVie Inc	2	0	2

# **Patents by Drug Relationship Type Chart**





# **Patents by Drug Relationship Type Table**

Drug Relationship	Total
Component of Combination	2



## **ABT-450**

#### **ABT-450 SNAPSHOT**

Drug Name	ABT-450
Key Synonyms	
Originator Company	Chiron Corp
Active Companies	AbbVie Inc;Enanta Pharmaceuticals Inc
Inactive Companies	Abbott Laboratories;Chiron Corp
Highest Status	Phase 2 Clinical
Active Indications	Hepatitis C virus infection
Target-based Actions	Hepatitis C virus NS3 protease inhibitor
Other Actions	Hepatitis C virus replication inhibitor
Technologies	Oral formulation;Capsule formulation;Tablet formulation;Small molecule therapeutic
Last Change Date	10-May-2013

#### **ABT-450 DEVELOPMENT PROFILE**

#### **SUMMARY**

Enanta, under license from Chiron (now Novartis) and in collaboration with AbbVie (following its spin-out from Abbott in January 2013), is developing ABT-450, a hepatitis C virus (HCV) NS3/4A protease inhibitor, for the potential oral treatment of HCV infection,. In March 2010, a phase II trial began. In October 2011, a phase II study of a combination of ABT-450 boosted with ritonavir (ABT-450/r) with the NS5A inhibitor ABT-267 and/or the NS5B polymerase inhibitor ABT-333, with or without ribavirin, began; in October 2012, initial data were reported.

Abbott is also developing a combination of ABT-450/r and ABT-267 in a fixed-dose tablet formulation (ABT-450/r/ABT-267). In October 2012, a phase III trial of ABT-450/r/ABT-267 with ABT-333 and ribavirin began.

#### **ABT-450 DEVELOPMENT STATUS**

## **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
AbbVie Inc	Hepatitis C virus infection	Japan	Phase 2 Clinical	02-Jan-2013
AbbVie Inc	Hepatitis C virus infection	US	Phase 2 Clinical	02-Jan-2013
Enanta Pharmaceuticals Inc	Hepatitis C virus infection	US	Phase 2 Clinical	02-Mar-2010
Abbott Laboratories	Hepatitis C virus infection	Japan	Discontinued	02-Jan-2013



Company	Indication	Country	<b>Development Status</b>	Date
Abbott Laboratories	Hepatitis C virus infection	US	Discontinued	02-Jan-2013
Chiron Corp	Hepatitis C virus infection	US	Discontinued	19-May-2005

# **ABT-450 CHEMICAL STRUCTURES**

CAS Registry Number:	Confidence Level:
	4
	N N N N N N N N N N N N N N N N N N N

CAS Registry Number:	Confidence Level:
	4
	NH H
Name	Туре
EA-084	Research Code



CAS Registry Number:	Confidence Level:
	4
N N N N N N N N N N N N N N N N N N N	HZ H

#### **ABT-450 DRUG NAMES**

Names	Туре
HCV protease inhibitors (capsule), Enanta/Abbott	
EA-084	Research Code
EA-058	Research Code
ABT-450	Research Code
NS3 and NS3/4A protease inhibitors, Enanta/Abbott	
HCV protease inhibitors, Chiron/Enanta	
hepatitis C virus protease inhibitors, Chiron/Enanta/Abbott	
EA-063	Research Code

# **ABT-450 CLINICAL TRIALS**

## Trials by Phase and Condition Studied

	ise 4 nical		se 3 nical						Phase Unspecified		Total	
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	
Hepatitis	C virus in	fection										
0	0	0	0	6	10	0	5	0	0	6	15	
HIV infection												
0	0	0	0	0	0	0	1	0	0	0	1	

# Total Trials by Phase and Status

	se 4 nical		se 3 nical		se 2 nical		se 1 nical		ase ecified	То	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	6	10	0	5	0	0	6	15

## **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)

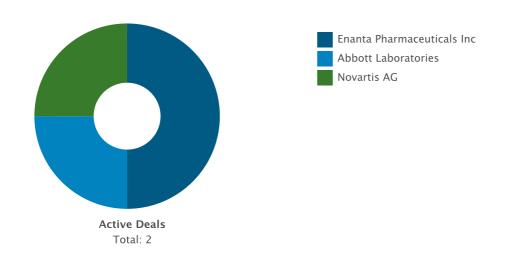
## Phase 1 Clinical

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

#### **ABT-450 DEALS AND PATENTS**

DEALS

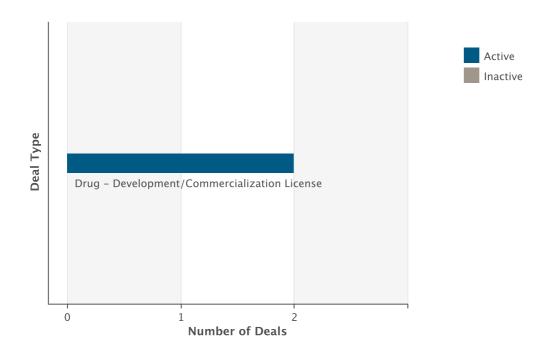
Deals by Parent Company Chart



## **Deals by Parent Company Table**

Company Name	<b>Principal</b> Active Inactive A		Partner Active Inactive		Total
Enanta Pharmaceuticals Inc	1	0	1	0	2
Abbott Laboratories	0	0	1	0	1
Novartis AG	1	0	0	0	1

# **Deals by Type Chart**



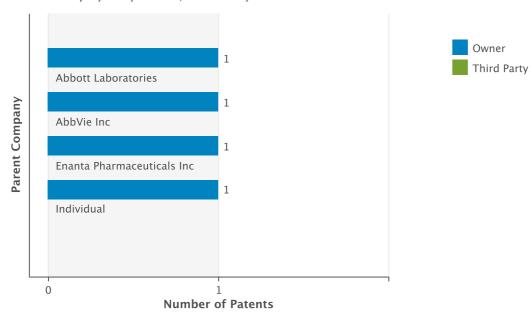
# **Deals by Type Table**

Deal Type	Active	Inactive	Total
Drug - Development/Commercialization License	2	0	2

#### **PATENTS**

# **Patents by Parent Company Chart**

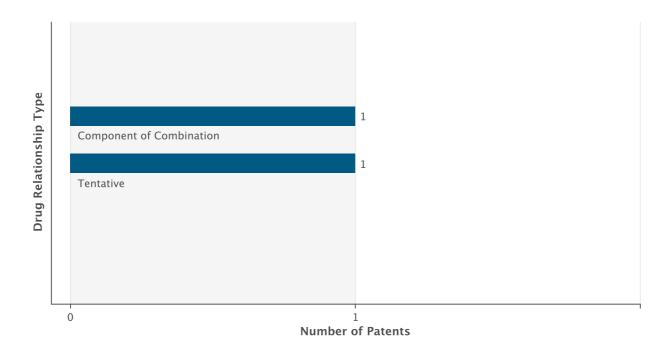
Chart displayed by Owner/Third Party



# **Patents by Parent Company Table**

Company Name	As Owner	As Third Party	Total
Abbott Laboratories	1	0	1
Individual	1	0	1
Enanta Pharmaceuticals Inc	1	0	1
AbbVie Inc	1	0	1

# **Patents by Drug Relationship Type Chart**



# **Patents by Drug Relationship Type Table**

Drug Relationship	Total
Component of Combination	1
Tentative	1

# next generation HCV protease inhibitor, AbbVie/Enanta

## next generation HCV protease inhibitor, AbbVie/Enanta SNAPSHOT

Drug Name	next generation HCV protease inhibitor, AbbVie/Enanta
Key Synonyms	
Originator Company	AbbVie Inc
Active Companies	AbbVie Inc;Enanta Pharmaceuticals Inc
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Hepatitis C virus infection
Target-based Actions	Hepatitis C virus protease inhibitor
Other Actions	
Technologies	Systemic formulation unspecified;Small molecule therapeutic
Last Change Date	09-Mar-2013

### next generation HCV protease inhibitor, AbbVie/Enanta DEVELOPMENT PROFILE

## **SUMMARY**

AbbVie, in collaboration with Enanta, is developing a once-daily next generation protease inhibitor for the potential treatment of HCV infection. In November 2012, a phase I trial was initiated.

## next generation HCV protease inhibitor, AbbVie/Enanta DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
AbbVie Inc	Hepatitis C virus infection	US	Phase 1 Clinical	30-Nov-2012
Enanta Pharmaceuticals Inc	Hepatitis C virus infection	US	Phase 1 Clinical	30-Nov-2012

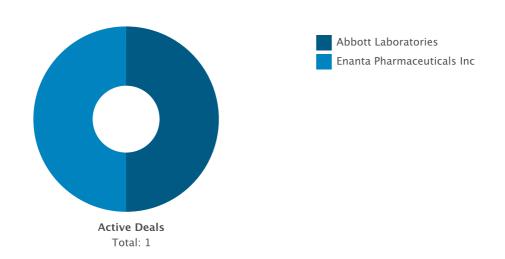
## next generation HCV protease inhibitor, AbbVie/Enanta DRUG NAMES

Names	Туре
next generation HCV protease inhibitor, AbbVie/Enanta	



DEALS

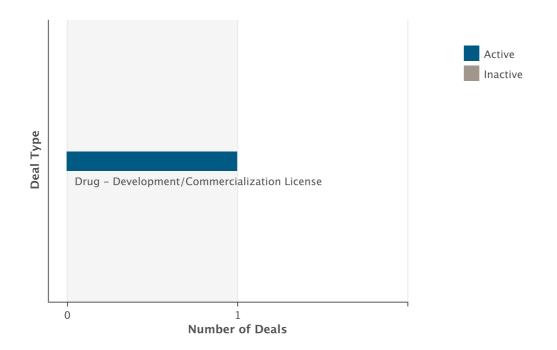
Deals by Parent Company Chart



## **Deals by Parent Company Table**

Company Name	Principal Active Inactive		Partner Active Inactive		Total
Abbott Laboratories	0	0	1	0	1
Enanta Pharmaceuticals 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

# modithromycin

## modithromycin SNAPSHOT

Drug Name	modithromycin
Key Synonyms	modithromycin
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	Enanta Pharmaceuticals Inc
Inactive Companies	Shionogi & Co Ltd
Highest Status	Discovery
Active Indications	Neisseria gonorrhoeae infection
Target-based Actions	
Other Actions	Macrolide antibiotic
Technologies	Oral formulation;Small molecule therapeutic
Last Change Date	18-Sep-2012

#### modithromycin DEVELOPMENT PROFILE

#### **SUMMARY**

Enanta is investigating EDP-420 for the potential treatment of Neisseria gonorrhoeae infection. In September 2012, preclinical data were presented.

Enanta, and Japanese and East Asian licensee Shionogi, were developing modithromycin (EDP-420, EP-13420, S-013420, structure shown), the oral lead from a series of bicyclic macrolide antibiotics (14-membered macrolides), for the potential treatment of respiratory tract infections,. In January 2006, a North American phase II trial started. By March 2008, Shionogi had completed a phase IIb study in Japan. The compound was still listed as in phase IIb in February 2010; however, in Ausgust 2010, the drug was no longer listed on Shionogi's pipeline and no recent development has been reported on the compound by Enanta.

## modithromycin DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Neisseria gonorrhoeae infection	US	Discovery	11-Sep-2012
Enanta Pharmaceuticals Inc	Bacterial respiratory tract infection	North America	No Development Reported	02-Aug-2010
Shionogi & Co Ltd	Bacterial respiratory tract infection	Japan	No Development Reported	02-Aug-2010



# modithromycin CHEMICAL STRUCTURES

CAS Registry Number:	Confidence Level:
748796-41-0	1
	HO N N N N N N N N N N N N N N N N N N N
Name	Туре
modithromycin	INN; USAN
EDP-420	Research Code
EP-13420	Research Code
S-013420	Research Code

# modithromycin DRUG NAMES

Names	Туре
EDP-420	Research Code
S-013420	Research Code
EP-13420	Research Code
modithromycin	INN, USAN

## modithromycin CLINICAL TRIALS

# Trials by Phase and Condition Studied

Pha Clin	se 4 ical		se 3 nical		se 2 nical		se 1 nical	Pha Unspe		То	tal
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All
Bacterial	respirator	y tract infe	ection								
0	0	0	0	0	2	0	1	0	0	0	3
Pneumor	nia										
0	0	0	0	0	2	0	0	0	0	0	2



## Total Trials by Phase and Status

	se 4 nical		se 3 nical		se 2 nical	Pha Clir	se 1 nical		ase ecified	То	tal
On- going	All	On- going	All								
Total by	Phase an	d Status									
0	0	0	0	0	3	0	1	0	0	0	4

#### **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

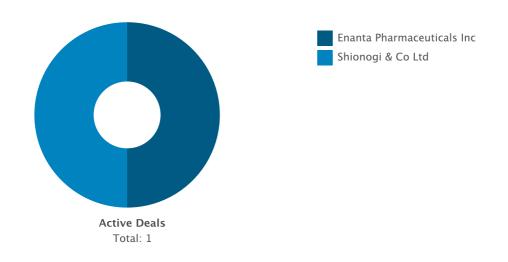
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

#### Phase 1 Clinical

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

## modithromycin DEALS AND PATENTS

# DEALS Deals by Parent Company Chart

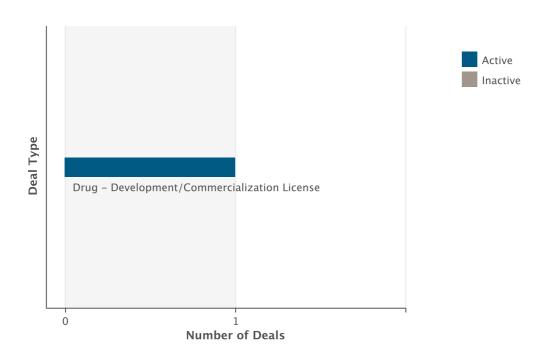




# **Deals by Parent Company Table**

Company Name	Principal Active Inactive		Partner Active Inactive		Total
Enanta Pharmaceuticals Inc	1	0	0	0	1
Shionogi & Co Ltd	0	0	1	0	1

# **Deals by Type Chart**



# **Deals by Type Table**

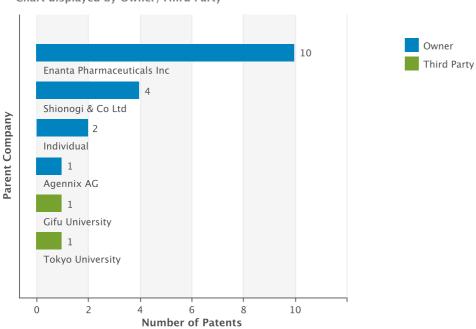
Deal Type	Active	Inactive	Total
Drug - Development/Commercialization License	1	0	1



#### **PATENTS**

# **Patents by Parent Company Chart**

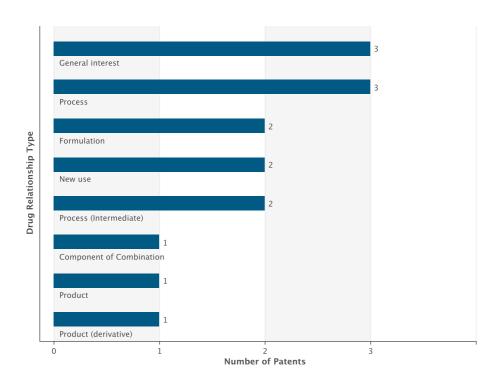
Chart displayed by Owner/Third Party



# **Patents by Parent Company Table**

Company Name	As Owner	As Third Party	Total
Enanta Pharmaceuticals Inc	10	0	10
Shionogi & Co Ltd	4	0	4
Individual	2	0	2
Agennix AG	1	0	1
Tokyo University	0	1	1
Gifu University	0	1	1

# **Patents by Drug Relationship Type Chart**



# **Patents by Drug Relationship Type Table**

Drug Relationship	Total
General interest	3
Process	3
New use	2
Process (Intermediate)	2
Formulation	2
Product	1
Component of Combination	1
Product (derivative)	1



# **HCV** polymerase inhibitors, Enanta

## **HCV** polymerase inhibitors, Enanta SNAPSHOT

Drug Name	HCV polymerase inhibitors, Enanta
Key Synonyms	
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	Enanta Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Hepatitis C virus infection
Target-based Actions	Hepatitis C virus NS5B polymerase inhibitor
Other Actions	
Technologies	Small molecule therapeutic
Last Change Date	26-Apr-2012

## **HCV** polymerase inhibitors, Enanta DEVELOPMENT PROFILE

## **SUMMARY**

Enanta Pharmaceuticals is investigating nucleoside and non-nucleoside HCV polymerase inhibitors, including EP-NI266, for the potential HCV infection. In February 2012, development was ongoing.

# **HCV** polymerase inhibitors, Enanta DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Hepatitis C virus infection	US	Discovery	12-Jan-2009

## **HCV** polymerase inhibitors, Enanta DRUG NAMES

Names	Туре
HCV polymerase inhibitors, Enanta	
EP-NI266	Research Code



# **HCV** cyclophilin binders/replication inhibitors, Enanta

## **HCV** cyclophilin binders/replication inhibitors, Enanta SNAPSHOT

Drug Name	HCV cyclophilin binders/replication inhibitors, Enanta	
Key Synonyms		
Originator Company	Enanta Pharmaceuticals Inc	
Active Companies	Enanta Pharmaceuticals Inc	
Inactive Companies		
Highest Status	Discovery	
Active Indications	Hepatitis C virus infection	
Target-based Actions	Peptidylprolyl isomerase inhibitor	
Other Actions	Hepatitis C virus replication inhibitor	
Technologies	Small molecule therapeutic	
Last Change Date	04-May-2013	

## HCV cyclophilin binders/replication inhibitors, Enanta DEVELOPMENT PROFILE

#### **SUMMARY**

Enanta Pharmaceuticals is investigating non-immunosuppressive cyclophilin binders which inhibit viral replication, including the lead EDP-546 (EP-CyP546), for the potential treatment of HCV infection,. In October 2011, development was ongoing; in October 2012, the program was in preclinical development. In February 2013, Enanta was continuing to generate and characterize additional compounds in the discovery phase and at that time, preclinical candidate selection was expected in 2013.

#### HCV cyclophilin binders/replication inhibitors, Enanta DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Hepatitis C virus infection	US	Discovery	12-Jan-2009

## **HCV** cyclophilin binders/replication inhibitors, Enanta DRUG NAMES

Names	Туре
HCV cyclophilin binders/replication inhibitors, Enanta	
EDP-546	Research Code
EP-CyP546	Research Code



## bicyclolide antibiotics (respiratory tract infection), Enanta

### bicyclolide antibiotics (respiratory tract infection), Enanta SNAPSHOT

Drug Name	bicyclolide antibiotics (respiratory tract infection), Enanta
Key Synonyms	
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	Enanta Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Bacterial respiratory tract infection
Target-based Actions	
Other Actions	Macrolide antibiotic
Technologies	Antibiotic;Small molecule therapeutic
Last Change Date	31-Oct-2012

### bicyclolide antibiotics (respiratory tract infection), Enanta DEVELOPMENT PROFILE

### **SUMMARY**

Enanta is investigating a series of bicyclic macrolide antibiotics (bicyclolides) for the potential treatment of hospital and community-acquired respiratory tract infections, including MRSA infections,. In October 2012, development was ongoing.

The company, in collaboration with Shionogi, was previously developing modithromycin as a lead from the series.

## bicyclolide antibiotics (respiratory tract infection), Enanta DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Bacterial respiratory tract infection	US	Discovery	19-Mar-2002

bicyclolide antibiotics (respiratory tract infection), Enanta CHEMICAL STRUCTURES

CAS Registry Number:	Confidence Level:
	4
Name	Туре
EP-017796	Research Code

CAS Registry Number:	Confidence Level:
628699-95-6	4
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Name	Туре
EP-013159	Research Code
EP-13159	Research Code

CAS Registry Number:	Confidence Level:
	4
	N OH
Name	Туре
EP-14413	Research Code



Name	Туре
EP-014413	Research Code

CAS Registry Number:	Confidence Level:
	4
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	-N ESH
Name	Туре
EP-014598	Research Code

CAS Registry Number:	Confidence Level:
	4
H M M M M M M M M M M M M M M M M M M M	
Name	Туре
EP-014831	Research Code

CAS Registry Number:	Confidence Level:
628698-53-3	4
но	,
	OH OH



Name	Туре
EP-1304	Research Code

CAS Registry Number:	Confidence Level:
628700-35-6	4
	HO NING ON
Name	Туре
EP-13417	Research Code

CAS Registry Number:	Confidence Level:
628700-71-0	4
14.3N	NO PLANT OF THE PART OF THE PA
Name	Туре
EP-13543	Research Code

CAS Registry Number:	Confidence Level:
	4
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Name	Туре
EP-13645	Research Code

CAS Registry Number:	Confidence Level:
	5
HO	
Name	Туре
EP-1475	Research Code



# bicyclolide antibiotics (respiratory tract infection), Enanta DRUG NAMES

Names	Туре
EP-12371	Research Code
EP-14414	Research Code
EP-013529	Research Code
EP-13543	Research Code
bicyclic macrolide antibiotics (respiratory tract infection), Enanta	
bicyclolides (respiratory tract infection), Enanta	
EP-14008	Research Code
EP-14524	Research Code
EP-001304	Research Code
EP-01304	Research Code
EP-263	Research Code
EP-13994	Research Code
EP-13958	Research Code
EP-12355	Research Code
EP-14401	Research Code
EP-13366	Research Code
EP-12996	Research Code
EP-13043	Research Code
EP-14424	Research Code
EP-014413	Research Code
EP-13015	Research Code
EP-1112	Research Code
bicyclolide antibiotics (respiratory tract infection), Enanta	
EP-015024	Research Code
EP-015037	Research Code



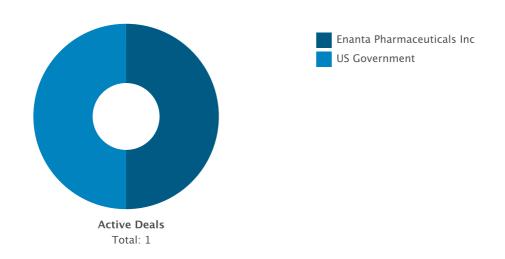
EP-13065	Research Code
EP-14395	Research Code
EP-935	Research Code
EP-13417	Research Code
EP-13159	Research Code
EP-14452	Research Code
EP-14541	Research Code
EP-14389	Research Code
EP-014831	Research Code
EP-013159	Research Code
EP-014887	Research Code
bridged bicyclic ketolides (respiratory tract infections), Enanta	
EP-14007	Research Code
EP-13645	Research Code
EP-12344	Research Code
EP-1562	Research Code
bridged bicyclic macrolides (respiratory tract infections), Enanta	
EP-017796	Research Code
EP-14823	Research Code
EP-14124	Research Code
EP-13097	Research Code
EP-14413	Research Code
EP-1475	Research Code
EP-13118	Research Code
EP-1304	Research Code
EP-014598	Research Code
SuperMac-1	



## bicyclolide antibiotics (respiratory tract infection), Enanta DEALS AND PATENTS

DEALS

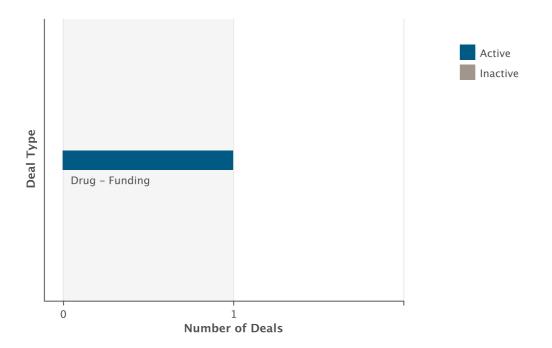
Deals by Parent Company Chart



## **Deals by Parent Company Table**

Company Name		<b>cipal</b> Inactive		tner Inactive	Total
US Government	0	0	1	0	1
Enanta Pharmaceuticals Inc	1	0	0	0	1

# **Deals by Type Chart**



## **Deals by Type Table**

Deal Type	Active	Inactive	Total
Drug - Funding	1	0	1

# NS5B nucleotide polymerase inhibitors (HCV infection), Enanta

### NS5B nucleotide polymerase inhibitors (HCV infection), Enanta SNAPSHOT

Drug Name	NS5B nucleotide polymerase inhibitors (HCV infection), Enanta
Key Synonyms	
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	Enanta Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Hepatitis C virus infection
Target-based Actions	Hepatitis C virus NS5B polymerase inhibitor
Other Actions	
Technologies	Small molecule therapeutic
Last Change Date	08-Feb-2013

### NS5B nucleotide polymerase inhibitors (HCV infection), Enanta DEVELOPMENT PROFILE

#### **SUMMARY**

Enanta is investigating NS5B nucleotide polymerase inhibitors for the potential treatment of HCV infection. In January 2013, the program was listed as being in preclinical development. In February 2013, a preclinical candidate was expected to be selected in 2013.

### NS5B nucleotide polymerase inhibitors (HCV infection), Enanta DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Hepatitis C virus infection	US	Discovery	30-Jan-2013

## NS5B nucleotide polymerase inhibitors (HCV infection), Enanta DRUG NAMES

Names	Туре
NS5B nucleotide polymerase inhibitors (HCV infection), Enanta	



## EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals

### EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals SNAPSHOT

Drug Name	EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals
Key Synonyms	
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	Enanta Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Bacterial infection
Target-based Actions	
Other Actions	Macrolide antibiotic
Technologies	Prodrug;Intravenous formulation;Antibiotic;Small molecule therapeutic
Last Change Date	12-Feb-2013

### EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals DEVELOPMENT PROFILE

#### **SUMMARY**

Enanta Pharmaceuticals is investigating EDP-788, a lead bicyclolide antibiotic and the iv prodrug of EDP-322, for the potential treatment of bacterial infections, including MRSA infection, in hospital settings. In October 2012, IND enabling studies were underway. In February 2013, the company planned to file an IND and initiate phase I trials in the first half of 2014.

The company is also investigating oral EDP-788 for bacterial infections in home settings.

### EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Bacterial infection	US	Discovery	30-Oct-2012

#### EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals DRUG NAMES

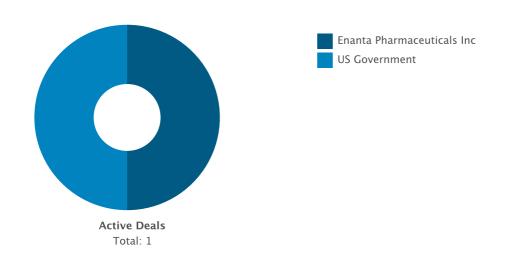
Names	Туре
EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals	



## EDP-788 (iv prodrug, bacterial infections), Enanta Pharmaceuticals DEALS AND PATENTS

DEALS

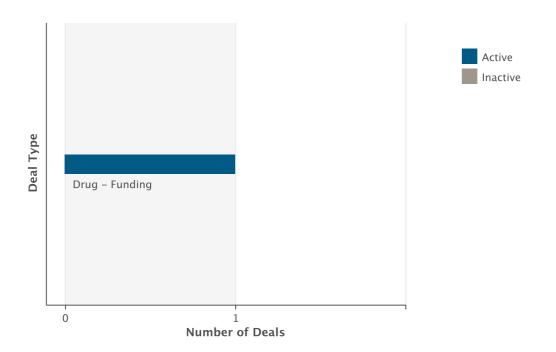
Deals by Parent Company Chart



## **Deals by Parent Company Table**

Company Name		<b>cipal</b> Inactive		tner Inactive	Total
Enanta Pharmaceuticals Inc	1	0	0	0	1
US Government	0	0	1	0	1

# **Deals by Type Chart**



## **Deals by Type Table**

Deal Type	Active	Inactive	Total
Drug - Funding	1	0	1



# EDP-788 (oral prodrug, bacterial infections), Enanta

### EDP-788 (oral prodrug, bacterial infections), Enanta SNAPSHOT

Drug Name	EDP-788 (oral prodrug, bacterial infections), Enanta
Key Synonyms	
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	Enanta Pharmaceuticals Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Bacterial infection
Target-based Actions	
Other Actions	Macrolide antibiotic
Technologies	Prodrug;Oral formulation;Antibiotic;Small molecule therapeutic
Last Change Date	08-Feb-2013

### EDP-788 (oral prodrug, bacterial infections), Enanta DEVELOPMENT PROFILE

## **SUMMARY**

Enanta Pharmaceuticals is investigating EDP-788, a lead bicyclolide antibiotic and the oral prodrug of EDP-322, for the potential treatment of bacterial infections, including MRSA infection, in home setting. In October 2012, IND enabling studies were underway. In February 2013, an IND was expected to be filed and a phase I trial was expected to be initiated in the first half of 2014.

The company is also investigating iv EDP-788 for bacterial infections in hospital setting.

### EDP-788 (oral prodrug, bacterial infections), Enanta DEVELOPMENT STATUS

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Bacterial infection	US	Discovery	30-Oct-2012

### EDP-788 (oral prodrug, bacterial infections), Enanta DRUG NAMES

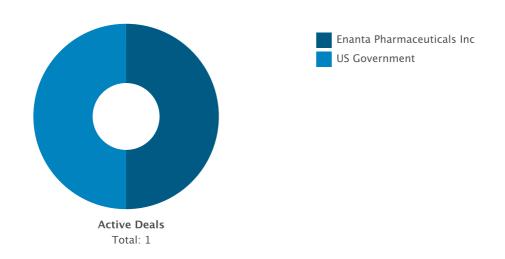
Names	Туре
EDP-788 (oral prodrug, bacterial infections), Enanta	



## EDP-788 (oral prodrug, bacterial infections), Enanta DEALS AND PATENTS

DEALS

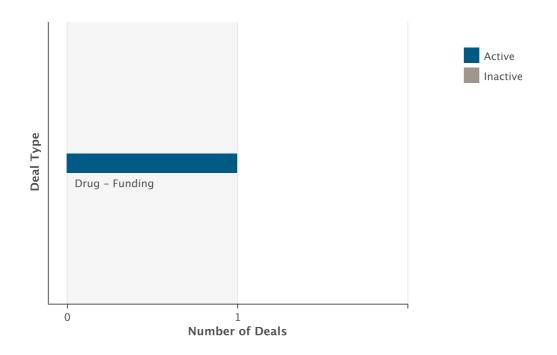
Deals by Parent Company Chart



## **Deals by Parent Company Table**

Company Name		<b>cipal</b> Inactive		tner Inactive	Total
Enanta Pharmaceuticals Inc	1	0	0	0	1
US Government	0	0	1	0	1

# **Deals by Type Chart**



## **Deals by Type Table**

Deal Type	Active	Inactive	Total
Drug - Funding	1	0	1

### **EDP-322**

#### **EDP-322 SNAPSHOT**

Drug Name	EDP-322
Key Synonyms	
Originator Company	Enanta Pharmaceuticals Inc
Active Companies	Enanta Pharmaceuticals Inc
Inactive Companies	
Highest Status	Suspended
Active Indications	Gram positive bacterium infection
Target-based Actions	
Other Actions	Macrolide antibiotic
Technologies	Oral formulation;Antibiotic;Small molecule therapeutic
Last Change Date	31-Oct-2012

#### **EDP-322 DEVELOPMENT PROFILE**

#### **SUMMARY**

Enanta Pharmaceuticals was developing EDP-322, an oral formulation of the bicyclolide (bridged bicyclic ketolide) antibiotic EDP-MRSA-1, for the potential treatment of Gram-positive bacterial infections including Methicillin-resistant Staphylococcus aureus (MRSA) infection and vancomycin resistant Enterococcus (VRE) infection. In September 2008, the company began a phase la trial; by October 2009, the trial was completed. In February 2012, development was ongoing; however, in October 2012, Enanta decided to focus its current development activities on iv and oral formulations of EDP-788 and therefore, development of EDP-322 was presumed to be suspended.

## **EDP-322 DEVELOPMENT STATUS**

#### **CURRENT DEVELOPMENT STATUS**

Company	Indication	Country	<b>Development Status</b>	Date
Enanta Pharmaceuticals Inc	Gram positive bacterium infection	US	Suspended	30-Oct-2012

### **EDP-322 CHEMICAL STRUCTURES**

CAS Registry Number:	Confidence Level:
	4
H <sub>J</sub> N S	
	OP YE ON THE STATE OF THE STATE
Name	Туре
EP-16322	Research Code

## **EDP-322 DRUG NAMES**

Names	Туре
antibacterial (oral, Gram-positive infections), Enanta	
EDP-322	Research Code
EP-16322	Research Code
EDP-MRSA-1 (oral), Enanta	

## **EDP-322 CLINICAL TRIALS**

## Trials by Phase and Condition Studied

Phase 4 Clinical		Phase 3 Clinical		Phase 2 Clinical		Phase 1 Clinical		Phase Unspecified		Total	
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All
Skin infection											
0	0	0	0	0	0	0	1	0	0	0	1
Gram positive bacterium infection											
0	0	0	0	0	0	0	1	0	0	0	1
MRSA infection											
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		Total	
On- going	All	On- going	All	On- going	All	On- going	All	On- going	All	On- going	All
Total by Phase and Status											
0	0	0	0	0	0	0	3	0	0	0	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

#### **EDP-322 DEALS AND PATENTS**

#### **PATENTS**

## **Patents by Parent Company Chart**

Chart displayed by Owner/Third Party

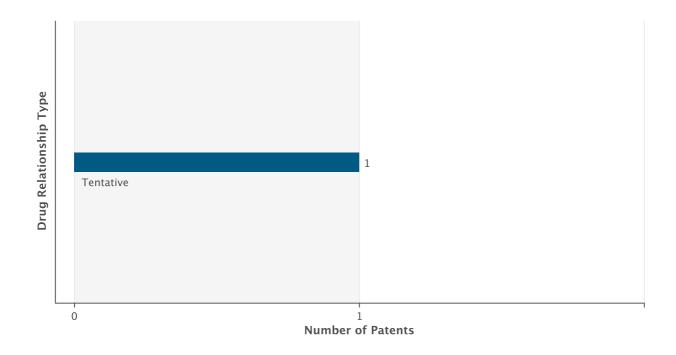


### **Patents by Parent Company Table**

Company Name	As Owner	As Third Party	Total
Enanta Pharmaceuticals Inc	1	0	1
Individual	1	0	1



# **Patents by Drug Relationship Type Chart**



## **Patents by Drug Relationship Type Table**

Drug Relationship	Total
Tentative	1

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