

Achaogen Inc

COMPANY AND PIPELINE OVERVIEW REPORT

A comprehensive coverage of the company and a summary of the drug pipeline portfolio.

Publication Date: 07-Feb-2015

THOMSON REUTERS

3 Times Square
New York, New York 10036
United States

Tel: +1 646 223 4000

thomsonreuters.com

[Return to Table of Contents](#)



ABOUT COMPANY AND PIPELINE OVERVIEW REPORT

Thomson Reuters provides the knowledge, tools, and expertise to help support drug discovery and development activities, IP portfolio optimization, identification of licensing and partnering opportunities, delivery of successful regulatory submissions, and the ability to keep current with the rapidly-changing pharmaceutical and chemical markets, supporting informed, early decisions.

This report was created by Thomson Reuters, using information from *Thomson Reuters Cortellis™ for Competitive Intelligence*; a comprehensive, proven intelligence solution that leverages the most accurate, complete, and widely respected drug pipeline information. From drug discovery and development activities to patent reports, the latest deals, and partnering opportunities, *Cortellis* can provide the confidence to make the most informed business decisions, faster. *Cortellis for Competitive Intelligence* provides accurate and validated information on pharmaceutical and biotechnology companies globally, their drug pipelines, deals, patents, and clinical trials, plus breaking industry news and conference coverage. All contained in one simple, highly intuitive research platform.

Cortellis Company and Pipeline Overview reports are the first in a series of reports that track pharmaceutical and biotechnology companies worldwide. Further report offerings planned to follow include: Company Detailed Pipeline and Company Competitive Landscape reports. All *Cortellis for Competitive Intelligence* content is subject to the most comprehensive editorial review process available, conducted by scientists, pharma professionals, regulatory experts, and generics specialists. Featuring timely drug pipeline information expertly uncovered and integrated from a significant number of global meetings each year, you'll always be on top of the latest developments.

Chosen by leading life sciences companies, their executives and investors, *Cortellis for Competitive Intelligence* accelerates your deal-making and gives you timely insights on the development landscape.

Discover undiscovered opportunities in drug development and licensing faster with *Thomson Reuters Cortellis™ for Competitive Intelligence*

DISCLAIMER

The information contained in this report is based on sources believed to be correct but Thomson Reuters does not guarantee the accuracy, timeliness, or completeness of this information. Opinions, if any, are those held by the author of any individual report or article at the time of initial publication and do not necessarily reflect the views of Thomson Reuters.

Information in this report on companies is intended for reference use only, and does not constitute a recommendation to buy or sell any particular security or other investment and does not constitute an offer to buy from or sell to any particular investor. Any company or securities mentioned in this report may not be suitable for any particular investor, depending on that investor's financial position and needs.

[Return to Table of Contents](#)



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.

[Return to Table of Contents](#)



PLEASE NOTE: the financials section where present in the report includes: Share Information, Stock Performance chart (including the consensus recommendation), and Major Shareholders. Financial Performance presents graphical and tabular data on Worldwide Sales, Operating Income and Net Income over time, together with a Quarterly earnings update. Balance Sheet lists Assets, Liabilities and Stockholders Equity, and Forecasts includes: EPS Forecast and Other Forecasts. The data reported in all sections (except share information and major stock holders) are correct as of the publication date of the report (and not the download date). For share information and major stock holders the data is correct for the date shown with these sections

[Return to Table of Contents](#)



TABLE OF CONTENTS

Company Overview..... 7

Company Profile..... 7

Company Financials..... 8

Product Portfolio Summary..... 12

Product Portfolio Financials..... 15

Product Portfolio Drugs..... 16

[Return to Table of Contents](#)

Achaogen Inc

COMPANY OVERVIEW

Company Name	Achaogen Inc
Parent Company Name	Achaogen Inc
Website	http://www.achaogen.com/
Country	US
Number of Drugs in Active Development	5
Number of Inactive Drugs	3
Number of Patents as Owner	41
Number of Patents as Third Party	1
Number of Deals	13
Key Indications	Gram negative bacterium infection, Bacterial infection, Pseudomonas aeruginosa infection, Enterobacteriaceae infection, Escherichia coli infection, Multidrug resistant infection, Bacterial pneumonia, Bacterial urinary tract infection, Pyelonephritis, Sepsis
Key Target-based Actions	LpxC inhibitor, Acetyl CoA carboxylase inhibitor, SOS gene inhibitor, Penicillin binding protein inhibitor
Key Technologies	Small molecule therapeutic, Antibiotic, Biological therapeutic, Monoclonal antibody, Oral formulation, Systemic formulation unspecified, Infusion, Intravenous formulation, Drug combination, Crystalline form, Formulation preservation, Pharmaceutical carrier

COMPANY PROFILE

SUMMARY

Achaogen Inc is a biotechnology company, established by August 2004, focused on the development of small molecule compounds to combat multi-drug resistance in bacteria. It takes products to the early clinical development stage at which point it seeks worldwide external resources for late-stage clinical work. The company is pursuing several unique strategies to combat these pathogens, including the development of drugs (achaogens) against the induced mutation process that is upregulated in bacteria during antibiotic exposure and that leads to the introduction of mutations that may confer antibiotic resistance.

COMPANY LOCATION

Achaogen Inc is headquartered in San Francisco, CA where it has a state-of-the-art research facility.

LICENSING AGREEMENTS

In January 2008, ChemDiv entered into an agreement with Achaogen to discover and develop antibacterial compounds. Financial terms were not disclosed.

In June 2007, Albany Molecular Research (AMRI) agreed to screen its natural product libraries against Achaogen's therapeutic targets for antibiotic resistance. AMRI would also provide other discovery and follow-up services, and will receive upfront fees, milestones and royalties.

In August 2004, Achaogen entered into a small-molecule research and discovery collaboration with NeoGenesis Pharmaceuticals Inc. NeoGenesis would use its drug discovery technologies, including its ALIS (Automated Ligand Identification System) platform, NeoMorph compound libraries and lead optimization technologies to discover drug candidates against selected targets.

EARLY R&D

By April 2010, the company was investigating 'neoglycosides', next generation aminoglycosides, which have demonstrated broad-spectrum activity against multi-drug resistant gram-negative bacterial infections.

[Return to Table of Contents](#)



FINANCIAL

In January 2014, Achaogen filed a registration statement with the US SEC for a proposed initial public offering of its common stock shares. In March 2014, the company priced an IPO of 6 million shares of common stock at \$12.00 per share and granted the underwriters a 30-day option to buy up to an additional 900,000 shares to cover any over-allotments. The shares were expected to begin trading on the NASDAQ Global Market under the ticker symbol "AKAO" on March 12, 2014. At that time, the offering was expected to close on March 17, 2014. Later that month, the offering was closed and the company raised gross proceeds of \$82.8 million and net proceeds of approximately \$73.9 million, from the IPO of 6.9 million shares, including full exercise of underwriters overallotment option. The shares had begun trading on the NASDAQ under the ticker symbol "AKAO".

In April 2010, the company raised \$56 million from the closing of a series C financing round.

In October 2006, Achaogen was awarded a 4-year, \$24.7 million contract from the Defense Threat Reduction Agency for the development of therapies for anthrax and other biothreat agents.

Earlier in October 2006, Achaogen raised over \$26 million from a series B financing round.

COMPANY FINANCIALS

SHARE INFORMATION

Close Price (USD)	11.58
Change (USD)	-0.20 (-1.70%)
Previous Close Price (USD)	11.78
Volume	56,864
52-Week High (USD)	19.69
52-Week Low (USD)	7.72
Date	06-Feb-2015
Exchange	NASDAQ(COMPOSITE)
Current Number of Shares Outstanding	17,757,874
Current Market Capitalization	205,636,181
EPS (Date Reported)	-0.83088

[Return to Table of Contents](#)



STOCK PERFORMANCE



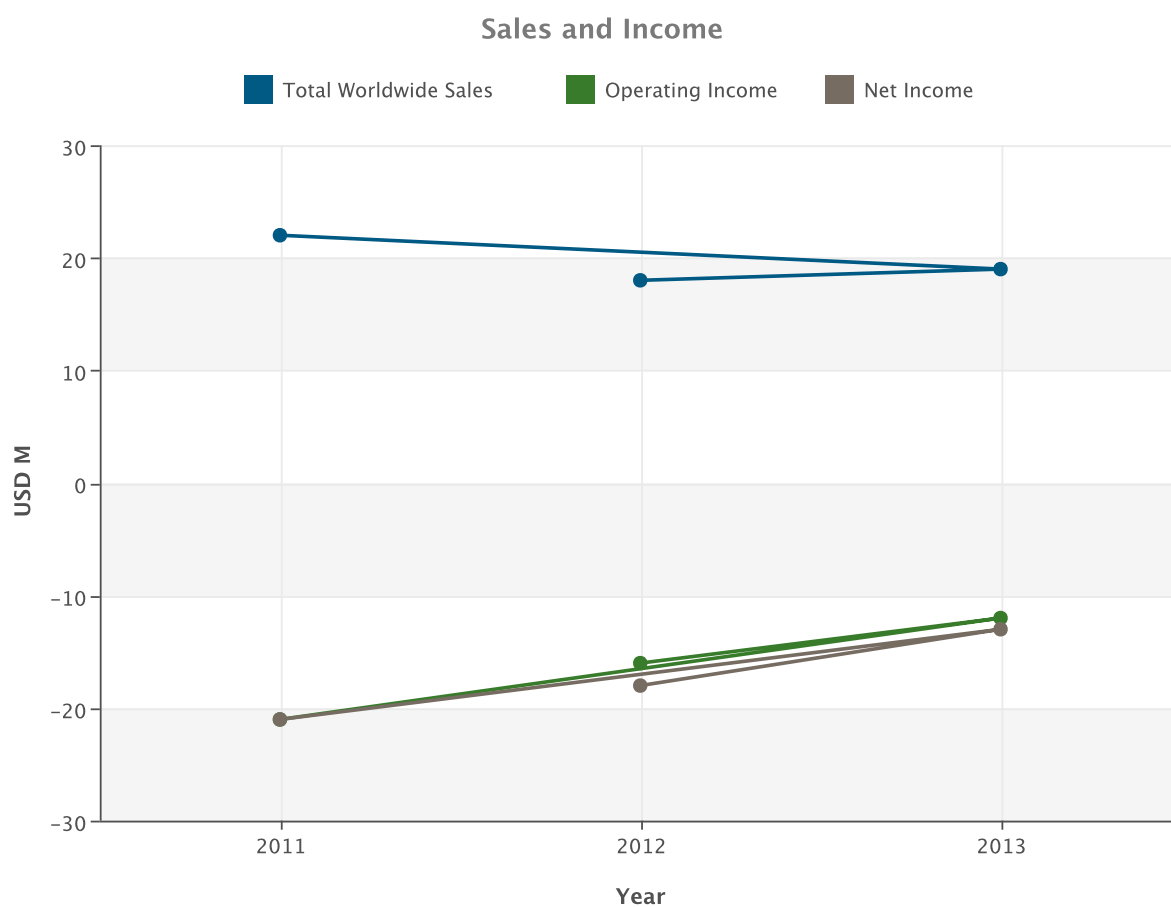
MAJOR SHAREHOLDERS

Shareholder	Type	Country	Shares held	% of shares held	Change in holding	% changes in shares held	Date
iShares Russell 2000 Growth ETF	Mutual Fund	United States	50,260	0.28	-810	-0.02	31-Jan-2015
iShares Micro-Cap ETF	Mutual Fund	United States	19,309	0.11	1,120	0.06	31-Jan-2015
Guggenheim Investments	Investment Advisor/Hedge Fund	United States	2,400	0.01	0	0	31-Jan-2015
iShares Russell 3000 ETF	Mutual Fund	United States	1,935	0.01	38	0.02	31-Jan-2015
DB Platinum Advisors	Investment Advisor	Luxembourg	1,507	0.01	0	0	31-Jan-2015
ProFund Advisors LLC	Investment Advisor	United States	1,484	0.01	0	0	31-Jan-2015
Nuveen Asset Management, LLC	Investment Advisor/Hedge	United States	556	0	0	0	31-Jan-2015

[Return to Table of Contents](#)

	Fund						
iShares Russell 3000 Growth ETF	Mutual Fund	United States	333	0	-80	-0.19	31-Jan-2015
ProShares Hedge Replication ETF	Mutual Fund	United States	7	0	0	0	31-Jan-2015

FINANCIAL PERFORMANCE



	2012	2013	2011		
Sales (USD M)	17.941	18.512	22.474		
Operating Income (USD M)	-15.989	-11.964	-20.715		
Net Income (USD M)	-18.365	-13.112	-20.866		

[Return to Table of Contents](#)

Quarterly earnings update

Period	Sales (USD M)	Operating Income (USD M)	Net Income (USD M)
2014 Q3	4.52	-8.333	-8.312
2014 Q2	5.203	-3.338	-3.555
2014 Q1	5.988	-3.234	-3.455
2013 Q4	6.192	-2.181	-2.486
2013 Q3	4.289	-2.295	-2.563
2013 Q2	4.498	-4.206	-4.31
2013 Q1	3.533	-3.282	-3.753
2012 Q4	3.97	-1.256	-1.88

BALANCE SHEET

Assets (USD M)

	2011	2012	2013		
Cash & Short Term Investments	12.528	7.073	10.738		
Inventories - Total	0	0	0		
Current Assets - Total	17.884	11.728	19.841		
Property, Plant And Equipment - Net	1.341	1.344	0.743		
Other Assets - Total	0.091	0.067	0.047		
Total Assets	19.478	13.266	20.758		

Liabilities (USD M)

	2011	2012	2013		
Accounts Payable	2.93	2.91	2.923		
Short Term Debt & Current Portion Of Long Term Debt	0.447	7.223	4.989		
Current Liabilities - Total	7.124	12.034	10.989		
Long Term Debt	6.648	11.752	1.698		
Other Liabilities	0.256	1.635	0.244		
Total Liabilities	14.34	25.49	13.056		

[Return to Table of Contents](#)



Stockholders Equity (USD M)

	2011	2012	2013		
Minority Interest	0	0	0		
Preferred Stock	100.354	100.354	132.278		
Common Stock	0.003	0.004	0		
Treasury Stock	0	0			
Total Liabilities & Shareholders' Equity	19.478	13.266	20.758		

FORECASTS

EPS Forecast

Year ending	Current Forecast	1 month ago	3 months ago
31-Dec-2015	-1.19	-1.07	-1.19
31-Dec-2016	-1.33	-1.25	-1.33
31-Dec-2017	-1.59	-1.42	-1.61

Other Forecasts

Year ending	DPS	CPS	Pretax	Sales
31-Dec-2015	0	-0.8	-20.6	24.29
31-Dec-2016	0	-1	-27.32	20.59
31-Dec-2017			-34.4	13.03

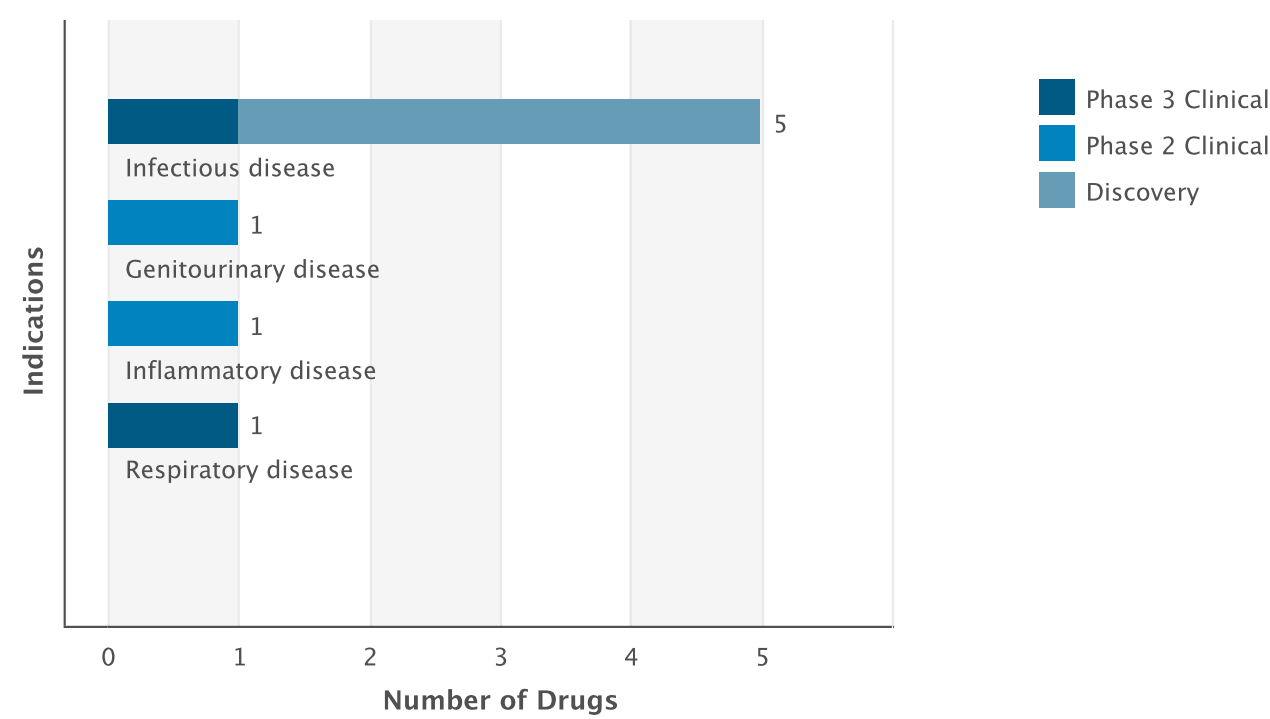
[Return to Table of Contents](#)

PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



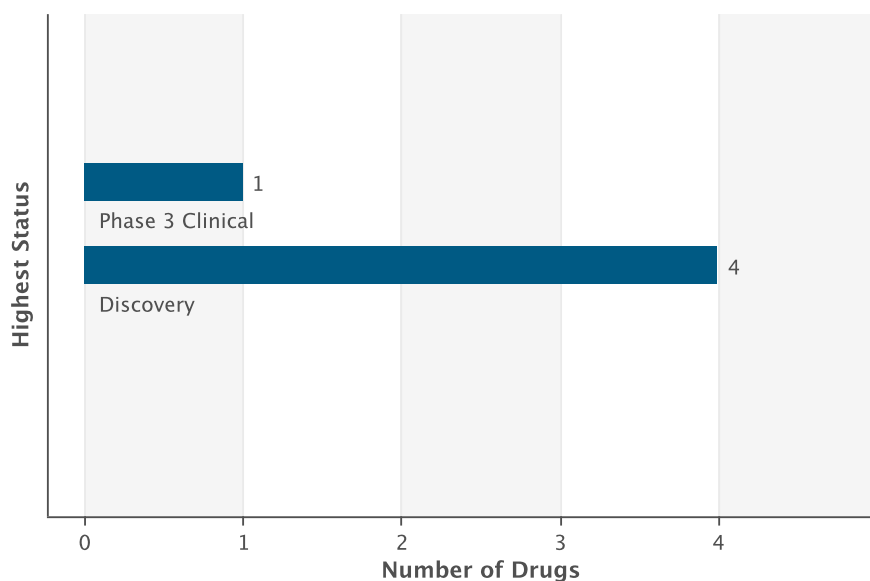
Drugs by Indication Table

Indication	Active	Inactive	Total
Infectious disease	5	3	8
Inflammatory disease	1	0	1
Respiratory disease	1	0	1
Genitourinary disease	1	0	1

[Return to Table of Contents](#)

Drugs by Highest Status

Active Drugs by Highest Status Chart



Drugs by Highest Status Table

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

DEALS

Deal Type	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Drug - Discovery/Design	0	0	3	0	3
Technology - Other Proprietary	0	0	1	0	1
Patent - Exclusive Rights	0	0	1	0	1
Drug - Funding	3	0	1	0	6
Drug - Development/Commercialization License	0	0	1	0	1
Technology - Target Validation	0	0	1	0	1

[Return to Table of Contents](#)

CLINICAL TRIALS

Trials by Condition Studied

Condition Studied	Ongoing	All
Infectious disease	1	5
Respiratory disease	1	2
Inflammatory disease	0	1
Genitourinary disease	0	1

Trials by Phase

Phase	Ongoing	All
Phase 3	1	3
Phase 2	0	1
Phase 1	0	7
Phase not specified	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 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
Gastrointestinal disease	5	0	5
Genitourinary disease	1	0	1
Neoplasm	2	1	3
Respiratory disease	9	0	9
Infectious disease	36	1	37
Toxicity and intoxication	1	0	1

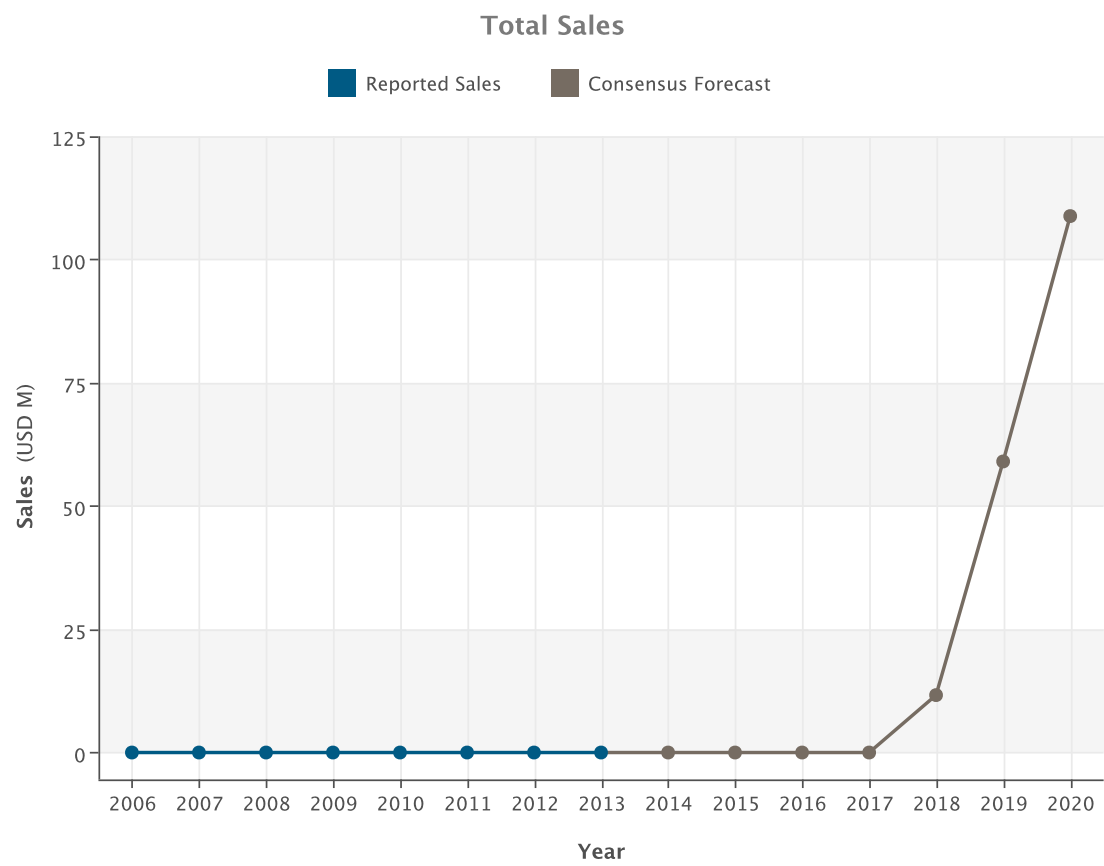
* This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.

[Return to Table of Contents](#)



PRODUCT PORTFOLIO FINANCIALS

DRUG SALES AND FORECASTS



Drug Sales as a Share of the Total Sales 2018



[Return to Table of Contents](#)

PRODUCT PORTFOLIO DRUGS

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

plazomicin

Drug Name	plazomicin
Key Synonyms	plazomicin sulfate, plazomicin
Originator Company	Ibis Therapeutics
Active Companies	Achaogen Inc
Inactive Companies	Ibis Therapeutics
Highest Status	Phase 3 Clinical
Active Indications	Bacterial urinary tract infection, Bacterial pneumonia, Sepsis, Pyelonephritis, Enterobacteriaceae infection
Target-based Actions	
Other Actions	Aminoglycoside antibiotic, Antibacterial multidrug resistance inhibitor, Antibacterial
Technologies	Intravenous formulation, Antibiotic, Infusion, Small molecule therapeutic
Last Change Date	01-Feb-2015

expanded-spectrum neoglycosides (Gram-negative bacterial infection), Achaogen

Drug Name	expanded-spectrum neoglycosides (Gram-negative bacterial infection), Achaogen
Key Synonyms	
Originator Company	Achaogen Inc
Active Companies	Achaogen Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Gram negative bacterium infection
Target-based Actions	
Other Actions	Antibacterial multidrug resistance inhibitor, Aminoglycoside antibiotic, RNA modulator
Technologies	Antibiotic, Small molecule therapeutic
Last Change Date	30-Jan-2015

[Return to Table of Contents](#)

LpxC membrane biosynthesis inhibitors (multidrug-resistant bacterial infection), Achaogen

Drug Name	LpxC membrane biosynthesis inhibitors (multidrug-resistant bacterial infection), Achaogen
Key Synonyms	
Originator Company	Achaogen Inc
Active Companies	Achaogen Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Gram negative bacterium infection, Multidrug resistant infection
Target-based Actions	LpxC inhibitor
Other Actions	Antibacterial multidrug resistance inhibitor
Technologies	Systemic formulation unspecified, Antibiotic, Small molecule therapeutic
Last Change Date	30-Jan-2015

biotin carboxylase inhibitors (gram-negative bacterial infection), Achaogen

Drug Name	biotin carboxylase inhibitors (gram-negative bacterial infection), Achaogen
Key Synonyms	
Originator Company	Achaogen Inc
Active Companies	Achaogen Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Gram negative bacterium infection
Target-based Actions	Acetyl CoA carboxylase inhibitor
Other Actions	Antibacterial
Technologies	Small molecule therapeutic
Last Change Date	20-Jan-2015

[Return to Table of Contents](#)

therapeutic mAbs (gram-negative infections), Achaogen

Drug Name	therapeutic mAbs (gram-negative infections), Achaogen
Key Synonyms	
Originator Company	Achaogen Inc
Active Companies	Achaogen Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Gram negative bacterium infection
Target-based Actions	
Other Actions	Antibacterial, Unspecified drug target
Technologies	Monoclonal antibody, Biological therapeutic
Last Change Date	03-Feb-2015

This report was created by Thomson Reuters, using information from *Thomson Reuters Cortellis™ for Competitive Intelligence*; a comprehensive, proven intelligence solution that leverages the most accurate, complete, and widely respected drug pipeline information.

For more information about *Cortellis for Competitive Intelligence*, visit:

http://cortellis.thomsonreuters.com/cortellis_for_you/?cid=thomsonone.

For subscription information, e-mail scientific.lifesciences@thomsonreuters.com.

© 2012 Thomson Reuters. All rights reserved.
Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks and trademarks of Thomson Reuters and its affiliated companies.

[Return to Table of Contents](#)