

Heat Biologics Inc

CORTELLIS COMPANY DETAILED PIPELINE REPORT

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

Publication Date: 18-Feb-2014

THOMSON REUTERS

3 Times Square New York, New York 10036 United States

Tel: +1 646 223 4000

thomsonreuters.com



ABOUT CORTELLIS COMPANY DETAILED PIPELINE 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 Detailed Pipeline reports are the second in a series of that track pharmaceutical and biotechnology companies worldwide. 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 over 400 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.



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.

THOMSON REUTERS

TABLE OF CONTENTS

Company Overview	5
Company Profile	6
Product Portfolio Summary	6
Product Portfolio Drug Pipeline Detail	10
Phase 2 Clinical	11
Discovery	18



Heat Biologics Inc

COMPANY OVERVIEW

Company Name	Heat Biologics Inc
Parent Company Name	Heat Biologics Inc
Website	http://www.heatbio.com/
Country	US
Number of Drugs in Active Development	7
Number of Inactive Drugs	2
Number of Patents as Owner	1
Number of Patents as Third Party	2
Number of Deals	1
Key Indications	Ovary tumor,HIV infection,Non-small-cell lung cancer,Bladder cancer,Breast tumor,Hepatitis C virus infection,Metastatic non small cell lung cancer,Lung tumor,Adenocarcinoma,Cancer,Lymphoma
Key Target-based Actions	Endoplasmin modulator,CD80 modulator,Death receptor-3 antagonist,HLA antigen modulator,Tumor necrosis factor 15 ligand inhibitor,Tumor necrosis factor 15 ligand modulator,Endoplasmin stimulator,B-lymphocyte antigen CD20 inhibitor,CD74 antagonist,CD80 gene stimulator,HIV gp120 protein stimulator,HLA gene stimulator
Key Technologies	Biological therapeutic, Cell therapy, Parenteral formulation unspecified, Protein fusion, Antigen, Antibody fragment, Monoclonal antibody, Injectable formulation, Chimeric antibody, Drug combination, Polynucleotide sequence, Protein recombinant, Tumor antigen, Vector expression

COMPANY PROFILE

SUMMARY

Heat Biologics Inc is a clinical-stage company, formed in July 2008, by Seed One Ventures and The University of Miami Miller School of Medicine to advance Heatshock and Inhibicor technology developed by researchers at the University. The company focuses on development of its novel "ImPACT" (Immune Pan-Antigen Cytotoxic Therapy) off-the-shelf therapeutic vaccines to combat a wide range of cancers and other diseases.

FINANCIAL

In July 2013, Heat Biologics joined the NASDAQ Stock Market under the ticker symbol 'HTBX'.

In July 2013, the company priced an IPO of 2.5 million shares at \$10 per share for gross proceeds of \$25 million. Underwriters were granted a 45-day overallotment option to purchase up to 375,000 additional shares. The offering was expected to close on July 29, 2013. Later that month, the offering was completed. In August 2013, the company announced the partial exercise of the over-allotment option granted to the underwriters to purchase an additional 100,000 shares of its common stock, at a price of \$10 per share. The total gross proceeds from the offering was bought to \$26 million. In September 2013, the company announced the partial exercise of the over-allotment option granted to the underwriters to purchase an additional 100,000 shares of its common stock, at a price of \$10 per share. The total gross proceeds from the offering were expected to be \$27 million.

In May 2010, the company closed an initial round of funding.

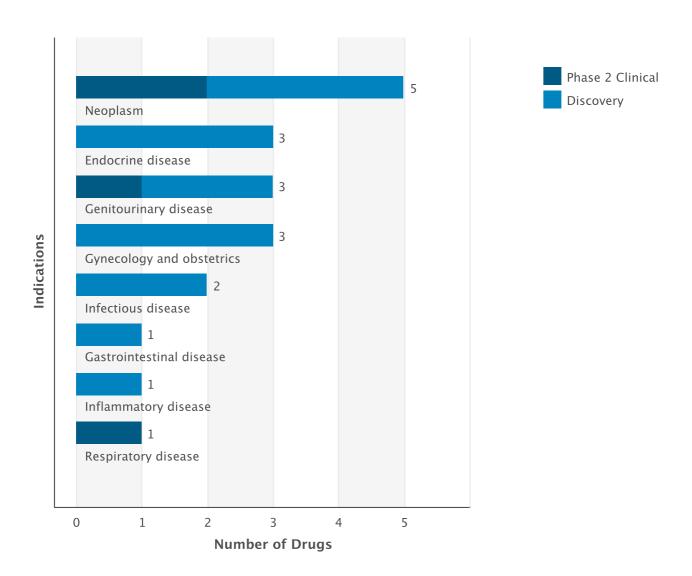
THOMSON REUTERS

PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



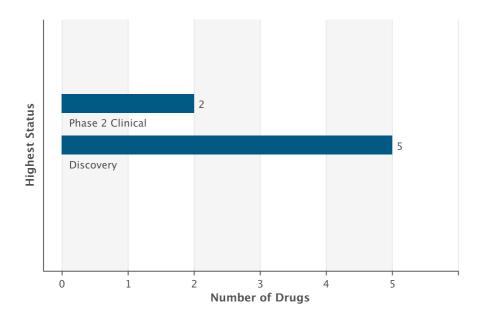


Drugs by Indication Table

Indication	Active	Inactive	Total
Neoplasm	5	0	5
Gynecology and obstetrics	3	0	3
Endocrine disease	3	0	3
Genitourinary disease	3	0	3
Gastrointestinal disease	1	1	2
Respiratory disease	1	1	2
Infectious disease	2	0	2
Inflammatory disease	1	1	2
Surgical procedure	0	1	1
Immune disorder	0	1	1
Prophylaxis	0	1	1

Drugs by Highest Status

Active Drugs by Highest Status Chart





Drugs by Highest Status Table

Development Status	Number of Drugs
Phase 2 Clinical	2
Discovery	5
No Development Reported	2

DEALS

Deal Type	Prin	cipal	Par	tner	Total
	Active	Inactive	Active	Inactive	
Drug - Funding	1	0	0	0	1

CLINICAL TRIALS

Trials by Condition Studied

Condition Studied	Ongoing	All
Neoplasm	1	3
Genitourinary disease	1	2
Respiratory disease	0	1

Trials by Phase

Phase	Ongoing	All
Phase 2	0	1
Phase 1	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 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
Hematological disease	0	1	1
Immune disorder	0	1	1
Neoplasm	0	2	2



Respiratory disease	0	2	2
Infectious 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.



PRODUCT PORTFOLIO DRUG PIPELINE DETAIL

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

HS-110

HS-110 SNAPSHOT

Drug Name	HS-110
Key Synonyms	
Originator Company	Heat Biologics Inc
Active Companies	Heat Biologics Inc
Inactive Companies	
Highest Status	Phase 2 Clinical
Active Indications	Metastatic non small cell lung cancer;Non-small-cell lung cancer
Target-based Actions	HLA antigen modulator;CD80 modulator;Endoplasmin modulator
Other Actions	Anticancer; Genetically engineered autologous cell vaccine; Therapeutic vaccine
Technologies	Injectable formulation;Biological therapeutic;Parenteral formulation unspecified;Antigen;Protein fusion;Cell therapy
Last Change Date	16-Nov-2013

HS-110 DEVELOPMENT PROFILE

SUMMARY

Heat Biologics, a spin out from the University of Miami, is developing HS-110 (HS-L1), an injectable adenocarcinoma cell vaccine, genetically engineered to secrete a gp96 (endoplasmin)-antibody fragment fusion protein (gp-96-lg), bound to antigen proteins presumed to be B7-1 (CD80) plus human leukocyte antigen A1or A2 (HLA-A1, HLA-A2), created using the company's ImPACT therapy technology, for the potential treatment of non-small cell lung cancer (NSCLC),.. In November 2011, phase IIa trials were underwayincluding a trial in metastatic non-small-cell cancer patients. In June 2013, the vaccine was listed as being in phase II development. At that time, phase II/IIb monotherapy trial, and phase I/II and phase II/IIb combination trials were planned. In November 2013, a phase IIIb/IV trial was planned for NSCLC.

HS-110 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Heat Biologics Inc	Metastatic non small cell lung cancer	US	Phase 2 Clinical	04-Jan-2012
Heat Biologics Inc	Non-small-cell lung cancer	US	Phase 2 Clinical	12-Apr-2010



HS-110 DRUG NAMES

Names	Туре
Ad100-gp96lg-HLA A1	Research Code
gp-96-lg + CD80 and HLA antigen secreting adenocarcinoma cell vaccine (NSCLC, HeatShock), Heat Biologics	
endoplasmin modulator (NSCLC, HeatShock/fusion protein/antigen), Heat Biologics	
HS-L1	Research Code
HS-110	Research Code

HS-110 CLINICAL TRIALS

Trials by Phase and Condition Studied

	se 4 lical		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
Metastati	c non sma	all cell lung	cancer								
0	0	0	0	0	1	1	2	0	0	1	3
Non-sma	II-cell lung	cancer									
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								
Total by	Phase an	d Status									
0	0	0	0	0	1	1	3	0	0	1	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)

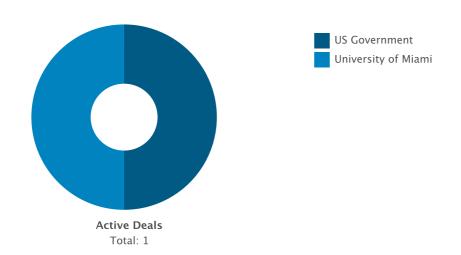
Phase 1 Clinical

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



HS-110 DEALS AND PATENTS

DEALS Deals by Parent Company Chart

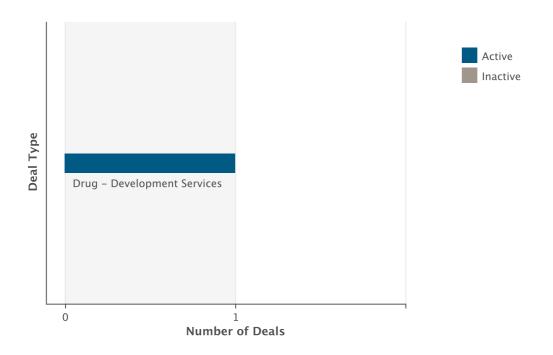


Deals by Parent Company Table

Company Name	Principal Active Inactive				Total
University of Miami	1	0	0	0	1
US Government	0	0	1	0	1

THOMSON REUTERS

Deals by Type Chart



Deals by Type Table

Deal Type	Active	Inactive	Total
Drug - Development Services	1	0	1

HS-410

HS-410 SNAPSHOT

Drug Name	HS-410
Key Synonyms	
Originator Company	Heat Biologics Inc
Active Companies	Heat Biologics Inc
Inactive Companies	
Highest Status	Phase 2 Clinical
Active Indications	Bladder cancer
Target-based Actions	Endoplasmin modulator
Other Actions	Therapeutic vaccine; Anticancer; Genetically engineered autologous cell vaccine
Technologies	Biological therapeutic;Parenteral formulation unspecified;Protein fusion;Antibody fragment;Cell therapy
Last Change Date	31-Dec-2013

HS-410 DEVELOPMENT PROFILE

SUMMARY

Heat Biologics is investigating HS-410, presumed to be a live cell vaccine genetically engineered to secrete a gp96 (endoplasmin) antibody fragment fusion protein (gp96-lg) bound to an unspecified tumor antigen, created using the company's ImPACT technology, for the potential treatment of bladder cancer. In October 2013, the company filed an IND to the US FDA. In March 2013, the company planned to initiate additional clinical trials later that year. In December 2013, patient enrollment in a phase I/II trial was initiated. In June 2013, the company planned to initiate phase II/IIb trials.

HS-410 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Heat Biologics Inc	Bladder cancer	US	Phase 2 Clinical	30-Dec-2013

HS-410 DRUG NAMES

Names	Туре
HS-410	Research Code
bladder cancer therapeutic, Heat Biologics	



HS-410 CLINICAL TRIALS

Trials by Phase and Condition Studied

	se 4 nical		se 3 nical		se 2 lical	Pha Clir	se 1 lical	Pha Unspe	ase ecified	То	tal
On- going	All	On- going	All								
Bladder	cancer										
0	0	0	0	0	0	1	2	0	0	1	2

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								
Total by	Phase an	d Status									
0	0	0	0	0	0	1	2	0	0	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 1a, Phase 1, Phase 1/2 (where enrolment count is under 100 or not specified), Phase 0

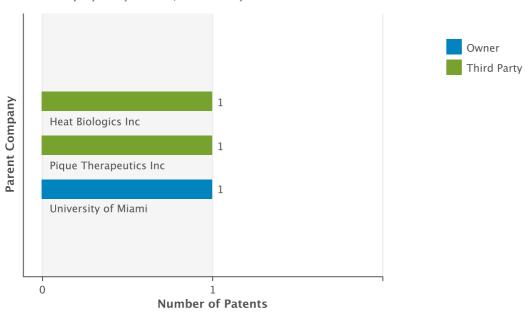
THOMSON REUTERS

HS-410 DEALS AND PATENTS

PATENTS

Patents by Parent Company Chart

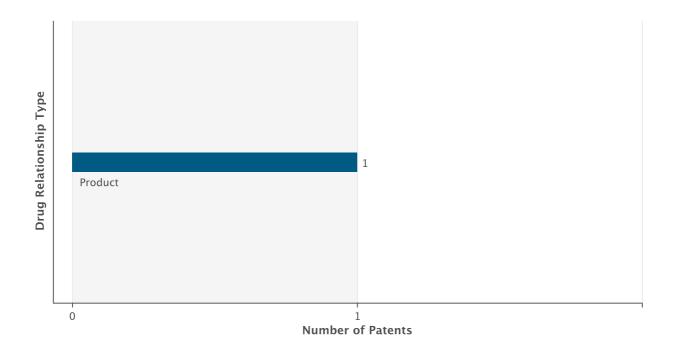
Chart displayed by Owner/Third Party



Patents by Parent Company Table

Company Name	As Owner	As Third Party	Total
Heat Biologics Inc	0	1	1
University of Miami	1	0	1
Pique Therapeutics Inc	0	1	1

Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

Drug Relationship	Total
Product	1

HS-210

HS-210 SNAPSHOT

Drug Name	HS-210
Key Synonyms	
Originator Company	Heat Biologics Inc
Active Companies	Heat Biologics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Ovary tumor
Target-based Actions	Endoplasmin modulator
Other Actions	Therapeutic vaccine; Genetically engineered autologous cell vaccine; Anticancer
Technologies	Biological therapeutic;Parenteral formulation unspecified;Antigen;Protein fusion;Antibody fragment;Cell therapy
Last Change Date	19-Jun-2013

HS-210 DEVELOPMENT PROFILE

SUMMARY

Heat Biologics is investigating HS-210 (HS-P1), a live cell vaccine, genetically engineered to secrete a gp96 (endoplasmin)-antibody fragment fusion protein (gp96-lg), bound to an unspecified tumor antigen, created using the company's HeatShock technology, for the potential treatment of pancreatic cancer,. In April 2012, the drug was in preclinical development; in June 2013, this was still the case.

This program was previously described as HS-310, however, Heat Biologics subsequently HS-210 to describe a pancreas tumor vaccine.

HS-210 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Heat Biologics Inc	Ovary tumor	US	Discovery	25-Apr-2012
Heat Biologics Inc	Pancreas tumor	US	No Development Reported	25-Apr-2012



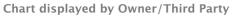
HS-210 DRUG NAMES

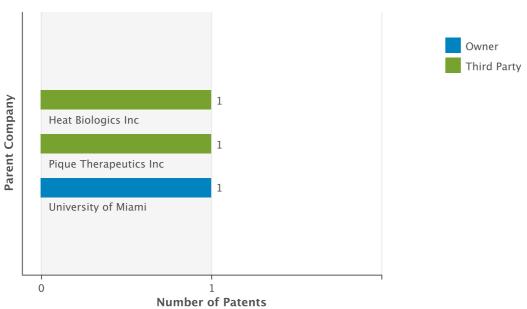
Names	Туре
HS-P1	Research Code
gp-96-lg + unspecified tumor antigen secreting live cell vaccine (pancreas tumor, HeatShock), Heat Biologics	
HS-210	Research Code
endoplasmin modulator (pancreas tumor, HeatShock/fusion protein/antigen), Heat Biologics	

HS-210 DEALS AND PATENTS

PATENTS

Patents by Parent Company Chart



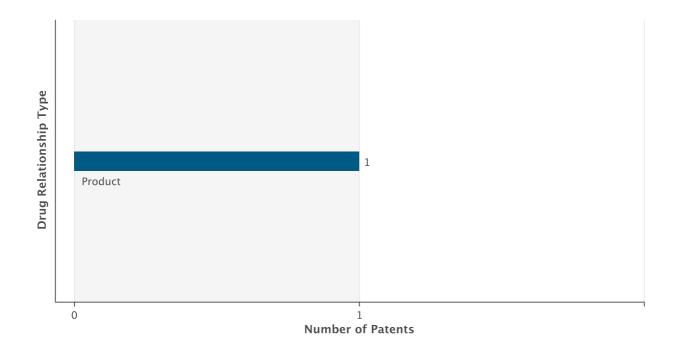


Patents by Parent Company Table

Company Name	As Owner	As Third Party	Total
University of Miami	1	0	1
Heat Biologics Inc	0	1	1
Pique Therapeutics Inc	0	1	1



Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

Drug Relationship	Total
Product	1

HS-HIV/SIV

HS-HIV/SIV SNAPSHOT

Drug Name	HS-HIV/SIV
Key Synonyms	
Originator Company	Heat Biologics Inc
Active Companies	Heat Biologics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	HIV infection
Target-based Actions	Endoplasmin modulator
Other Actions	Prophylactic vaccine;Genetically engineered autologous cell vaccine;Therapeutic vaccine;Antiviral
Technologies	Biological therapeutic;Antigen;Protein fusion;Antibody fragment;Cell therapy
Last Change Date	15-Mar-2013

HS-HIV/SIV DEVELOPMENT PROFILE

SUMMARY

Heat Biologics is investigating HS-HIV/SIV (HS-HIV; HS-HIV1), a live cell vaccine, genetically engineered to secrete a gp96 (endoplasmin)-antibody fragment fusion protein (gp96-lg), bound to an unspecified viral antigen, created using the company's ImPACT technology, for the potential prevention and treatment of HIV infection,. In March 2013, proof-of-concept preclinical results were published. In August 2009, the company was planning to initiate a phase I trial.

The company is also investigating a HeatShock based vaccine HS-HCV, for the potential prevention and treatment of HCV infection.

HS-HIV/SIV DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Heat Biologics Inc	HIV infection	US	Discovery	10-Aug-2009

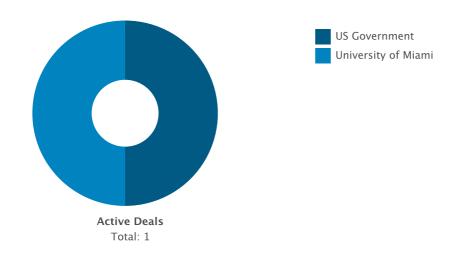


HS-HIV/SIV DRUG NAMES

Names	Туре
HS-HIV1	
antiviral therapy (HIV infection, HeatShock), Heat Biologics	
endoplasmin modulator (HIV infection), Heat Biologics	
HS-HIV/SIV	Research Code
gp-96-lg + unspecified viral antigen secreting live cell vaccine (HIV, HeatShock), Heat Biologics	
HS-HIV	Research Code

HS-HIV/SIV DEALS AND PATENTS

DEALS Deals by Parent Company Chart

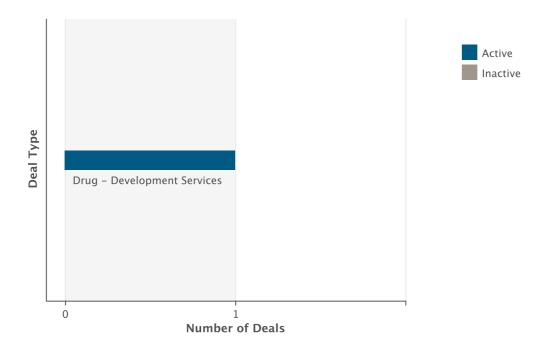


Deals by Parent Company Table

Company Name		cipal Inactive		tner Inactive	Total
University of Miami	1	0	0	0	1
US Government	0	0	1	0	1



Deals by Type Chart



Deals by Type Table

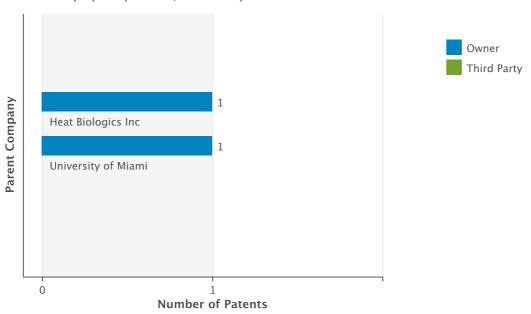
Deal Type	Active	Inactive	Total
Drug - Development Services	1	0	1

THOMSON REUTERS

PATENTS

Patents by Parent Company Chart

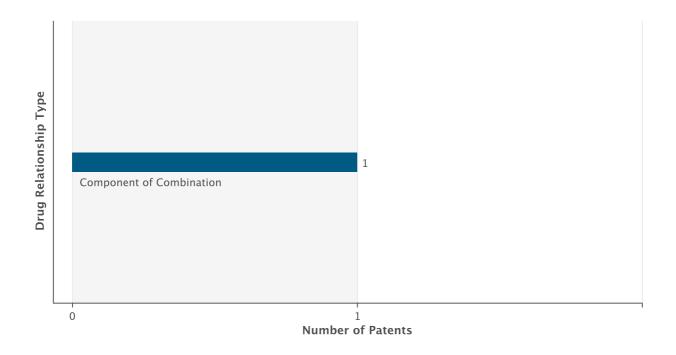
Chart displayed by Owner/Third Party



Patents by Parent Company Table

Company Name	As Owner	As Third Party	Total
University of Miami	1	0	1
Heat Biologics Inc	1	0	1

Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

Drug Relationship	Total
Component of Combination	1

HS-HCV

HS-HCV SNAPSHOT

Drug Name	HS-HCV
Key Synonyms	
Originator Company	Heat Biologics Inc
Active Companies	Heat Biologics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Hepatitis C virus infection
Target-based Actions	Endoplasmin modulator
Other Actions	Genetically engineered autologous cell vaccine;Prophylactic vaccine;Antiviral;Therapeutic vaccine
Technologies	Biological therapeutic;Parenteral formulation unspecified;Antigen;Protein fusion;Cell therapy
Last Change Date	29-Aug-2013

HS-HCV DEVELOPMENT PROFILE

SUMMARY

Heat Biologics is investigating a live cell vaccine, presumed to be HS-HCV, genetically engineered to secrete a gp96 (endoplasmin)-antibody fragment fusion protein (gp96-lg), bound to an unspecified viral antigen, created using the company's HeatShock technology, for the potential prevention and treatment of hepatitis C virus infection. In August 2009, the vaccine was in preclinical development; in June 2013, preclinical development was ongoing.

The company is also investigating a HeatShock based vaccine HS-HIV1, for the potential prevention and treatment of HIV infection.

HS-HCV DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Heat Biologics Inc	Hepatitis C virus infection	US	Discovery	10-Aug-2009



HS-HCV DRUG NAMES

Names	Туре
gp-96-lg + unspecified viral antigen secreting live cell vaccine (hepatitis C virus infection, HeatShock), Heat Biologics	
antiviral therapy (HCV infection, HeatShock), Heat Biologics	
endoplasmin modulator (hepatitis C virus infection, HeatShock/fusion protein/antigen), Heat Biologics	
HS-HCV	Research Code



HS-510

HS-510 SNAPSHOT

Drug Name	HS-510
Key Synonyms	
Originator Company	Heat Biologics Inc
Active Companies	Heat Biologics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Breast tumor
Target-based Actions	
Other Actions	Anticancer
Technologies	Cell therapy;Biological therapeutic
Last Change Date	21-Jun-2013

HS-510 DEVELOPMENT PROFILE

SUMMARY

Heat Biologics is investigating HS-510, created using the company's ImPACT therapy technology, for the potential treatment of triple negative breast cancer. In June 2013, the drug was listed as being in preclinical development.

HS-510 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Heat Biologics Inc	Breast tumor	US	Discovery	19-Jun-2013

HS-510 DRUG NAMES

Names	Туре
HS-510	Research Code
anticancer therapuetics, Heat Biologics	



HS-310

HS-310 SNAPSHOT

Drug Name	HS-310
Key Synonyms	
Originator Company	Heat Biologics Inc
Active Companies	Heat Biologics Inc
Inactive Companies	
Highest Status	Discovery
Active Indications	Ovary tumor
Target-based Actions	Endoplasmin modulator
Other Actions	Anticancer;Therapeutic vaccine;Genetically engineered autologous cell vaccine
Technologies	Antibody fragment;Cell therapy;Antigen;Biological therapeutic;Parenteral formulation unspecified;Protein fusion
Last Change Date	21-Jun-2013

HS-310 DEVELOPMENT PROFILE

SUMMARY

Heat Biologics is investigating HS-310 (HS-01), a live cell vaccine, genetically engineered to secrete a gp96 (endoplasmin)-antibody fragment fusion protein (gp96-lg), bound to an unspecified tumor antigen, created using the company's ImPACT therapy technology, for the potential treatment of ovary tumors,. In August 2009, the vaccine was in preclinical development; in June 2013, this was still the case.

This program was previously described as HS-510, however, Heat Biologics subsequently used the research code HS-510 to describe a triple negative breast cancer program.

This program was previously described as HS-210, however, Heat Biologics subsequently used the research code HS-210 to describe a pancreas cancer vaccine.

HS-310 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Heat Biologics Inc	Ovary tumor	US	Discovery	08-Jul-2009



HS-310 DRUG NAMES

Names	Туре
endoplasmin modulator (ovary tumor, HeatShock/fusion protein/antigen), Heat Biologics	
HS-310	
HS-01	Research Code
gp-96-lg + unspecified tumor antigen secreting live cell vaccine (ovary tumor, HeatShock), Heat Biologics	



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.

THOMSON REUTERS