THOMSON REUTERS
CORTELLIS™

Immune Design Corp

CORTELLIS COMPANY DETAILED PIPELINE REPORT

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

Publication Date: 06-Jun-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

THOMSON REUTERS

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 accurateand 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.

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

TABLE OF CONTENTS

Return to Table of Contents

Immune Design Corp

COMPANY OVERVIEW

Company Name	Immune Design Corp
Parent Company Name	Immune Design Corp
Website	http://www.immunedesign.com/
Country	US
Number of Drugs in Active Development	9
Number of Inactive Drugs	2
Number of Patents as Owner	12
Number of Patents as Third Party	0
Number of Deals	16
Key Indications	Cancer,HSV-2 infection,Food hypersensitivity,SARS coronavirus infection,Solid tumor,Vaccination,Colon tumor,Merkel cell carcinoma,Prostate tumor,Viral infection
Key Target-based Actions	TLR-4 agonist,T-cell surface glycoprotein CD8 stimulator,Cancer testis antigen NY-ESO-1 inhibitor,Cancer testis antigen NY-ESO-1 modulator,TLR-4 antagonist,Carbonic anhydrase-IX stimulator,Glutamate carboxypeptidase II stimulator,HIV GAG protein stimulator,Hemagglutinin stimulator,Homeobox protein Nkx 3.1 stimulator,Prostate specific antigen stimulator,Prostatic acid phosphatase stimulator,Rev protein stimulator,TLR agonist,Viral envelope glycoprotein stimulator
Key Technologies	Biological therapeutic,Parenteral formulation unspecified,Virus recombinant,Systemic formulation unspecified,Drug combination,Intradermal formulation,Intramuscular formulation,Intratumoral formulation,Antigen,Lipid,Liquid formulation

COMPANY PROFILE

SUMMARY

Immune Design, founded in 2008, a spin-off of California Institute of Technology, aims to develop prophylactic and therapeutic vaccines for infectious diseases, cancer, allergy and autoimmune disorders. The company has identified improved adjuvants and novel technologies targeting and controlling dendritic cells.

In April 2014, the Paris Commercial Court found, among other things, that Henogen SA had breached its contractual obligations to THERAVECTYS by making lentiviral vectors for Immune Design Corp (IDC). In July 2014, THERAVECTYS filed a lawsuit against IDC in the Delaware Court of Chancery, to seek preliminary and permanent injunctive relief, and also monetary damages. THERAVECTYS raised claims of tortious interference with contractual relations, misappropriation of trade secrets, unfair competition and unjust enrichment, by manufacture of lentiviral vectors for IDC by Henogen.

COMPANY LOCATION

The company is headquartered in Seattle, WA.

By October 2013, the company had expanded operations to include a San Francisco office with plans to further expand in the Bay Area.

LICENSING AGREEMENTS

In November 2008, the Immune Design Corp was granted a license to the Infectious Disease Research Institute (IDRI)'s Glycopyranosyl Lipid Adjuvant (GLA) technology, for combination with undisclosed therapeutic vaccine products in a number of indications. IDRI would retain worldwide exclusive rights to develop the technology for products against certain indications, including infectious disease, in the developing world, and would retain rights to develop the technology non-commercially for provision to not-for-profit organizations. Immune Design concurrently established its Global Access Plan, to provide better access to GLA-formulated products for diseases in the developing world.

Return to Table of Contents

FINANCIAL

In April 2015, the company priced an underwritten public offering of 3 million common stock shares at a price of $26.50 per share to raise gross proceeds of approximately $79.5 million. The underwriters were granted a 30-day option to purchase up to 450,000 additional shares of common stock at the offering price. The offering was expected to close on April 21, 2015. Later that month, the company raised net proceeds of $74.2 million after deducting underwriting discounts, commissions and estimated expenses.

In October 2014, the company was added to the Russell 2000 Index.

In July 2014, immune design planned to raise $60 million from an initial offering of 5,000,000 shares, priced at $12 per share. The company also granted the underwriters a 30-day option to purchase up to 750,000 additional shares of common stock. At that time, the offering was expected to close on July 29, 2014. The shares had begun trading on the NASDAQ Global Market under the symbol "IMDZ". Later in July 2014, the company raised gross proceeds of $60 million from the closed offering.

In October 2013, the company raised $49 million in a series C financing which included an upfront investment of $32.5 million, with an additional investment of $16.5 million.

In July 2010, Immune Design secured $32 million in series B financing.

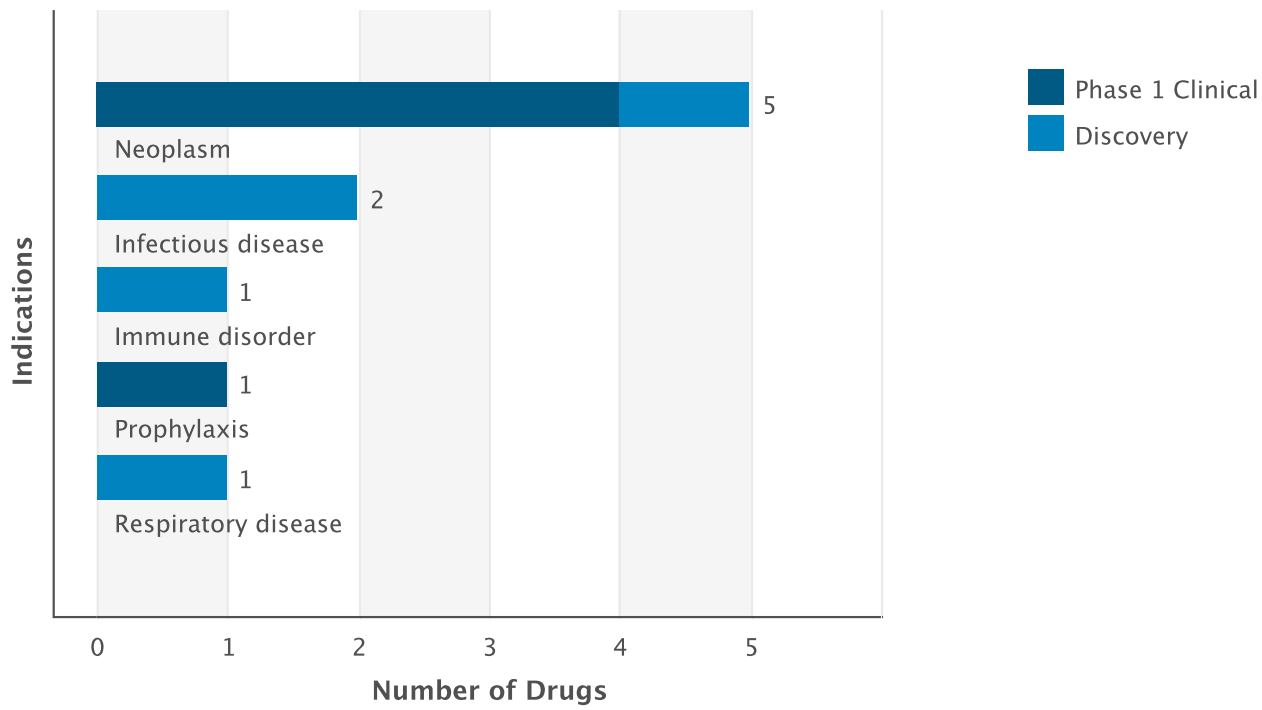
In June 2008, Immune Design raised $18 million in series A financing.

PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



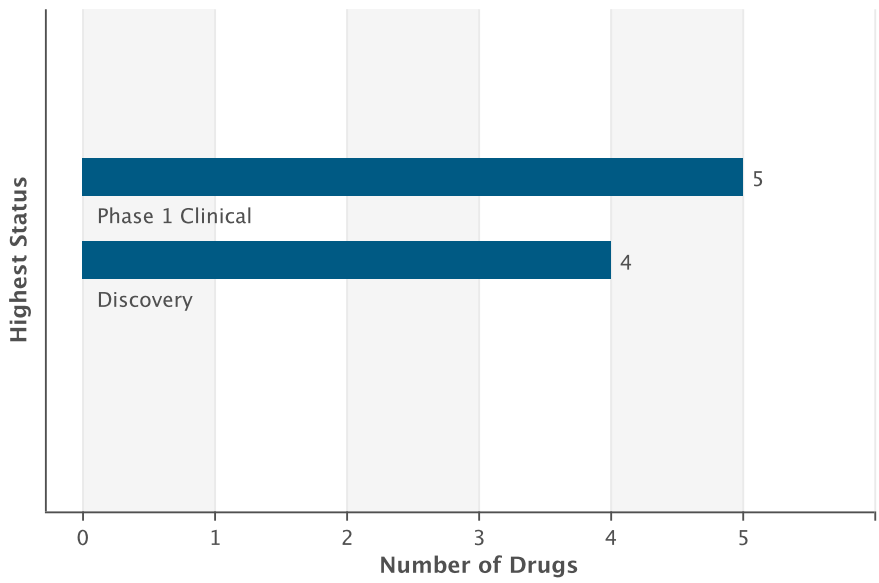
Return to Table of Contents

Drugs by Indication Table

Indication	Active	Inactive	Total
Neoplasm	5	0	5
Infectious disease	2	2	4
Respiratory disease	1	2	3
Prophylaxis	1	1	2
Immune disorder	1	0	1

Drugs by Highest Status

Active Drugs by Highest Status Chart



Drugs by Highest Status Table

Development Status	Number of Drugs
Phase 1 Clinical	5
Discovery	4
No Development Reported	2

Return to Table of Contents

DEALS

Deal Type	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Technology - Other Proprietary	1	0	0	0	1
Drug - Early Research/Development	1	0	0	0	1
Drug - Development/Commercialization License	5	0	1	0	6
Drug - Development Services	0	0	6	0	6
Technology - Delivery/Formulation	1	0	1	0	2

CLINICAL TRIALS

Trials by Condition Studied

Condition Studied	Ongoing	All
Neoplasm	4	6
Dermatological disease	3	4
Endocrine disease	3	3
Gynecology and obstetrics	3	3
Genitourinary disease	3	3
Respiratory disease	3	3
Musculoskeletal disease	1	1

Trials by Phase

Phase	Ongoing	All
Phase 2	0	1
Phase 1	4	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

Return to Table of Contents

PATENTS *

Indication	As Owner	As Third Party	Total
Endocrine disease	1	0	1
Gastrointestinal disease	1	0	1
Genitourinary disease	1	0	1
Andrology	1	0	1
Immune disorder	4	0	4
Psychiatric disorder	1	0	1
Neoplasm	8	0	8
Neurological disease	1	0	1
Respiratory disease	4	0	4
Infectious disease	11	0	11
Toxicity and intoxication	1	0	1
Inflammatory disease	1	0	1
Otorhinolaryngological disease	1	0	1
Gynecology and obstetrics	1	0	1
Dermatological 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.

Return to Table of Contents

PRODUCT PORTFOLIO DRUG PIPELINE DETAIL

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

glucopyranosyl lipid A adjuvant, Immune Design Corp

glucopyranosyl lipid A adjuvant, Immune Design Corp SNAPSHOT

Drug Name	glucopyranosyl lipid A adjuvant, Immune Design Corp
Key Synonyms	
Originator Company	Infectious Disease Research Institute
Active Companies	Immune Design Corp
Inactive Companies	Infectious Disease Research Institute
Highest Status	Phase 1 Clinical
Active Indications	Vaccination
Target-based Actions	TLR-4 agonist
Other Actions	Adjuvant;Immunostimulant
Technologies	Small molecule therapeutic;Systemic formulation unspecified
Last Change Date	28-Jan-2015

glucopyranosyl lipid A adjuvant, Immune Design Corp DEVELOPMENT PROFILE

SUMMARY

Immune Design Corp, under license licensed from Infectious Disease Research Institute, is developing a glucopyranosyl lipid A (GLA) adjuvant, a small molecule toll-like receptor 4 (TLR-4) agonist, which stimulates TH1 cytokine production to enhance an immune response, to be used in combination with vaccines,. In July 2011, a phase I trial was initiated. In February 2013, development was ongoing. In April 2014, a proof-of-concept trial assessing the intratumoral injection of GLA in patients with merkel cell carcinoma (MCC) was planned. In January 2015, a phase I trial was planned to be initiated. At that time, the trial was expected to complete in May 2016

MedImmune and Sanofi are investigating vaccines comprising Immune Design's GLA adjuvant for the potential treatment of infections and allergy respectively.

glucopyranosyl lipid A adjuvant, Immune Design Corp DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	Vaccination	US	Phase 1 Clinical	31-Jul-2011
Infectious Disease Research Institute	Vaccination	US	Discontinued	20-Nov-2008

Return to Table of Contents

glucopyranosyl lipid A adjuvant, Immune Design Corp DRUG NAMES

Names	Type
GLA-AF	Research Code
glycopyranosyl lipid adjuvant, Immune Design Corp	
GLA-SE	Research Code
glucopyranosyl lipid A adjuvant, Immune Design Corp	
glycopyranosyl lipid adjuvant, Infectious Disease Research Institute	
glucopyranosyl lipid adjuvant, MedImmune	
glucopyranosyl lipid adjuvant, Infectious Disease Research Institute	

glucopyranosyl lipid A adjuvant, Immune Design Corp 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
Hookworm infection											
0	0	0	0	0	0	1	2	0	0	1	2
Sarcoma											
0	0	0	0	0	0	1	1	0	0	1	1
Stage III melanoma											
0	0	0	0	0	0	0	0	1	1	1	1
Stage IV melanoma											
0	0	0	0	0	0	0	0	1	1	1	1
Stage II melanoma											
0	0	0	0	0	0	0	0	1	1	1	1

Return to Table of Contents

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	5	9	1	1	6	10

Phase Definitions

Phase 3 Clinical
Includes Phase 3, Phase 3b, Phase 3a, Phase 2/3 (where enrolment count is 300 or over)

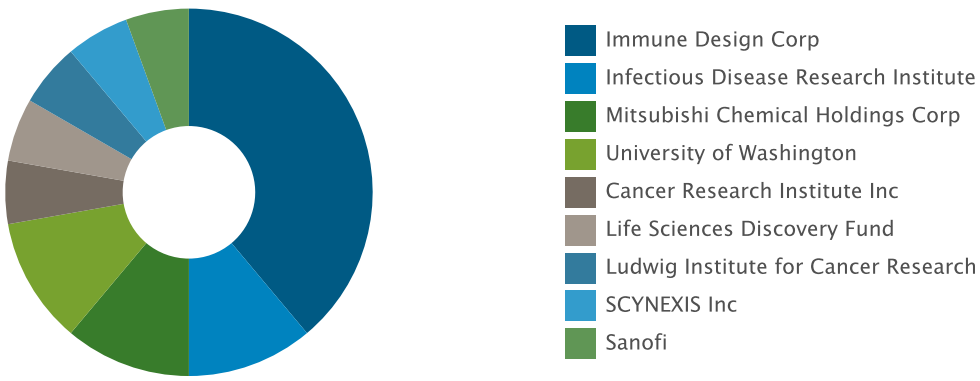
Phase 2 Clinical
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

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

glucopyranosyl lipid A adjuvant, Immune Design Corp DEALS AND PATENTS

DEALS

Deals by Parent Company Chart



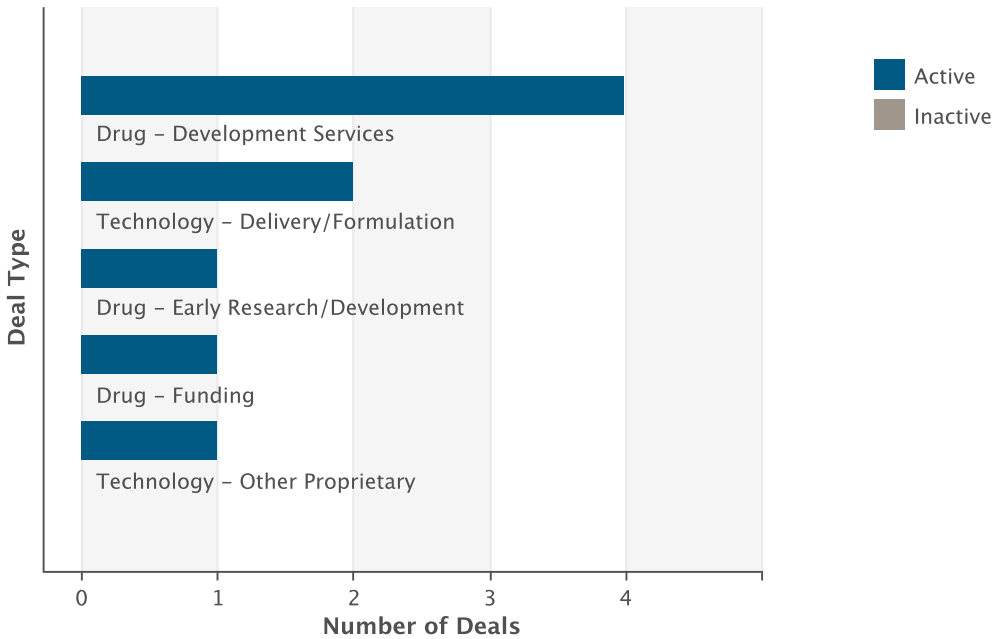
Active Deals
Total: 9

Return to Table of Contents

Deals by Parent Company Table

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Immune Design Corp	2	0	5	0	7
Mitsubishi Chemical Holdings Corp	1	0	1	0	2
Infectious Disease Research Institute	1	0	1	0	2
University of Washington	2	0	0	0	2
Life Sciences Discovery Fund	0	0	1	0	1
Sanofi	0	0	1	0	1
Ludwig Institute for Cancer Research	1	0	0	0	1
SCYNEXIS Inc	1	0	0	0	1
Cancer Research Institute Inc	1	0	0	0	1

Deals by Type Chart



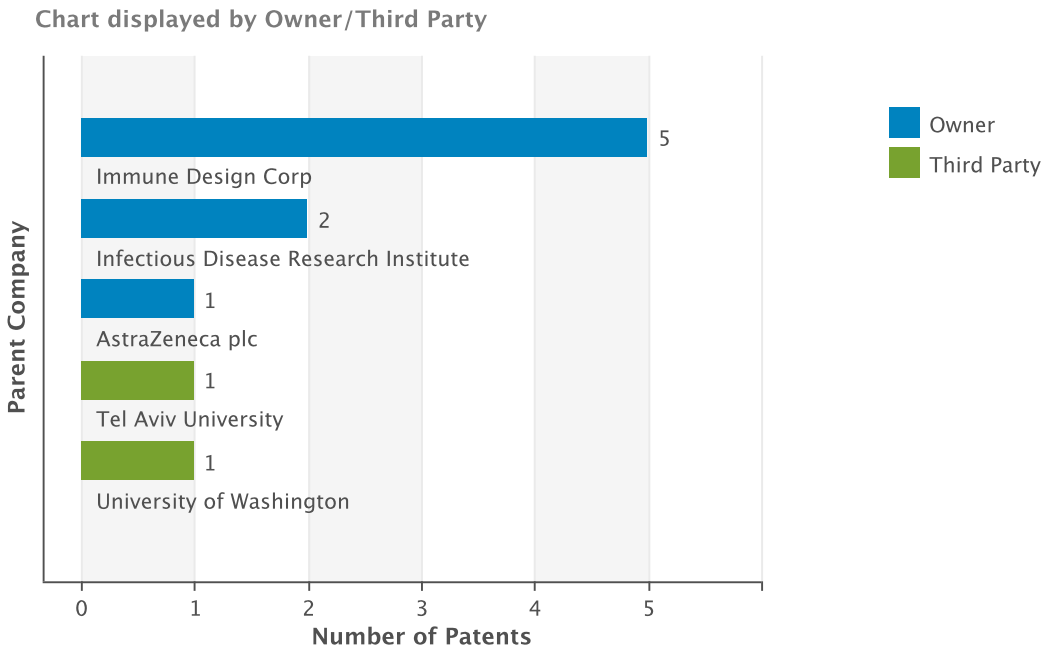
Return to Table of Contents

Deals by Type Table

Deal Type	Active	Inactive	Total
Drug - Development Services	4	0	4
Technology - Delivery/Formulation	2	0	2
Drug - Early Research/Development	1	0	1
Drug - Funding	1	0	1
Technology - Other Proprietary	1	0	1

PATENTS

Patents by Parent Company Chart

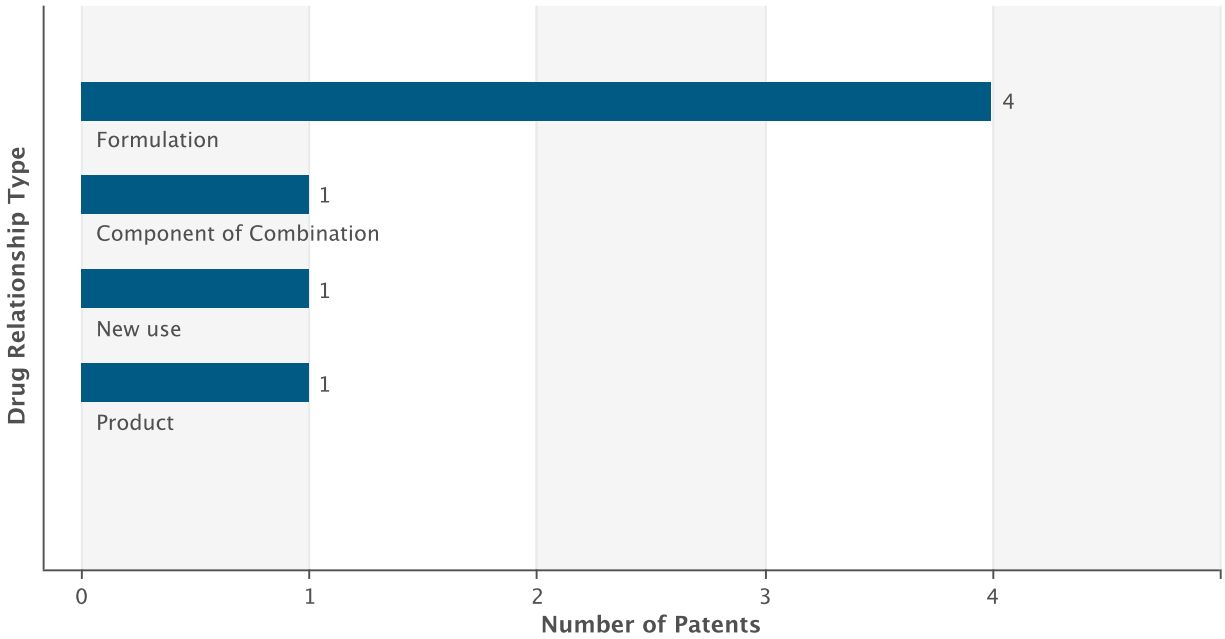


Patents by Parent Company Table

Company Name	As Owner	As Third Party	Total
Immune Design Corp	5	0	5
Infectious Disease Research Institute	2	0	2
University of Washington	0	1	1
AstraZeneca plc	1	0	1
Tel Aviv University	0	1	1

Return to Table of Contents

Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

Drug Relationship	Total
Formulation	4
Product	1
Component of Combination	1
New use	1

Return to Table of Contents

LV-305

LV-305 SNAPSHOT

Drug Name	LV-305
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Cancer
Target-based Actions	T-cell surface glycoprotein CD8 stimulator;Cancer testis antigen NY-ESO-1 inhibitor
Other Actions	Retrovirus based gene therapy;Anticancer;Therapeutic vaccine
Technologies	Intradermal formulation;Biological therapeutic;Parenteral formulation unspecified;Virus recombinant
Last Change Date	28-Apr-2015

LV-305 DEVELOPMENT PROFILE

SUMMARY

Immune Design is developing LV-305 (ID-LV305), a vaccine based on ID-LV (presumed to be DC-NILV), an integration-defective dendritic cell-targeted lentiviral vector acting by producing CD8 T cell responses and expresses three undisclosed tumor antigens, which target NY-ESO-1 antigen, developed from DCVex lentiviral vector platform, for the potential treatment of cancer including prostate cancer,,,. In April 2014, a phase I trial was initiated. In November 2014, a phase I expansion study was expected to be initiated in the first quarter of 2015.

The company is also investigating LV-305, in combination with G-305 for solid tumors.

LV-305 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	Cancer	US	Phase 1 Clinical	25-Apr-2014

Return to Table of Contents

LV-305 DRUG NAMES

Names	Type
DC-NILV-based cancer vaccine, Immune Design	
LV-305	Research Code
ID-LV305	Research Code
ID-LV based cancer vaccine, Immune Design	

LV-305 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
Metastatic non small cell lung cancer											
0	0	0	0	0	0	1	1	0	0	1	1
Stage IV melanoma											
0	0	0	0	0	0	1	1	0	0	1	1
Metastatic ovary cancer											
0	0	0	0	0	0	1	1	0	0	1	1
Fallopian tube cancer											
0	0	0	0	0	0	1	1	0	0	1	1
Metastatic breast cancer											
0	0	0	0	0	0	1	1	0	0	1	1
Sarcoma											
0	0	0	0	0	0	1	1	0	0	1	1

Return to Table of Contents

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	1	1	0	0	1	1

Phase Definitions

Phase 3 Clinical
Includes Phase 3, Phase 3b, Phase 3a, Phase 2/3 (where enrolment count is 300 or over)

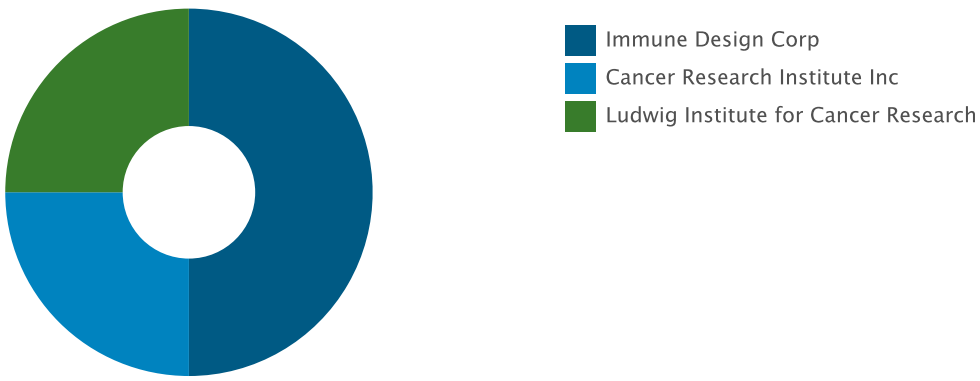
Phase 2 Clinical
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

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

LV-305 DEALS AND PATENTS

DEALS

Deals by Parent Company Chart



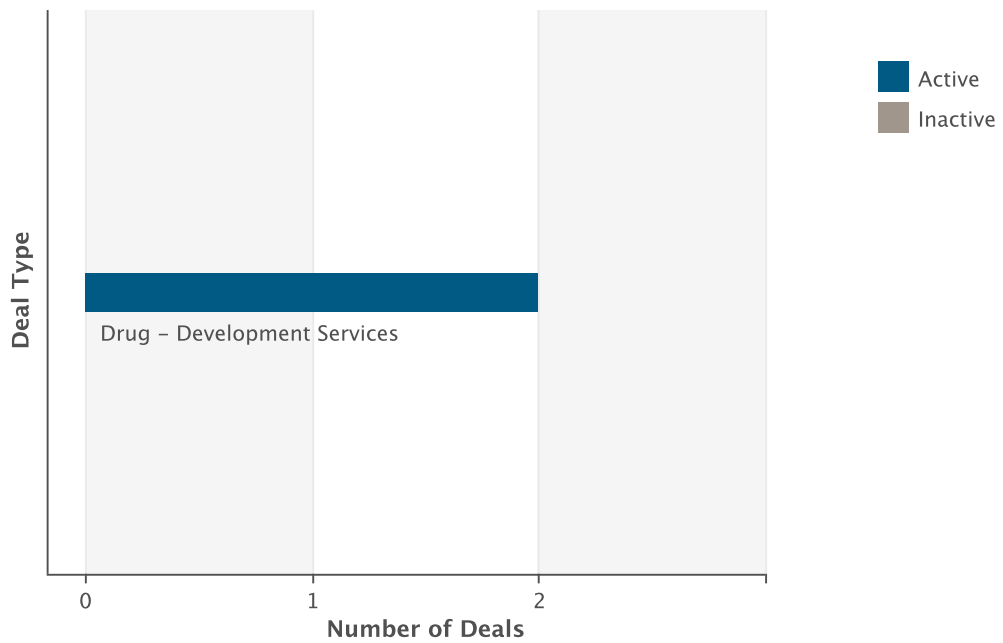
Active Deals
Total: 2

Return to Table of Contents

Deals by Parent Company Table

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Immune Design Corp	0	0	2	0	2
Ludwig Institute for Cancer Research	1	0	0	0	1
Cancer Research Institute Inc	1	0	0	0	1

Deals by Type Chart



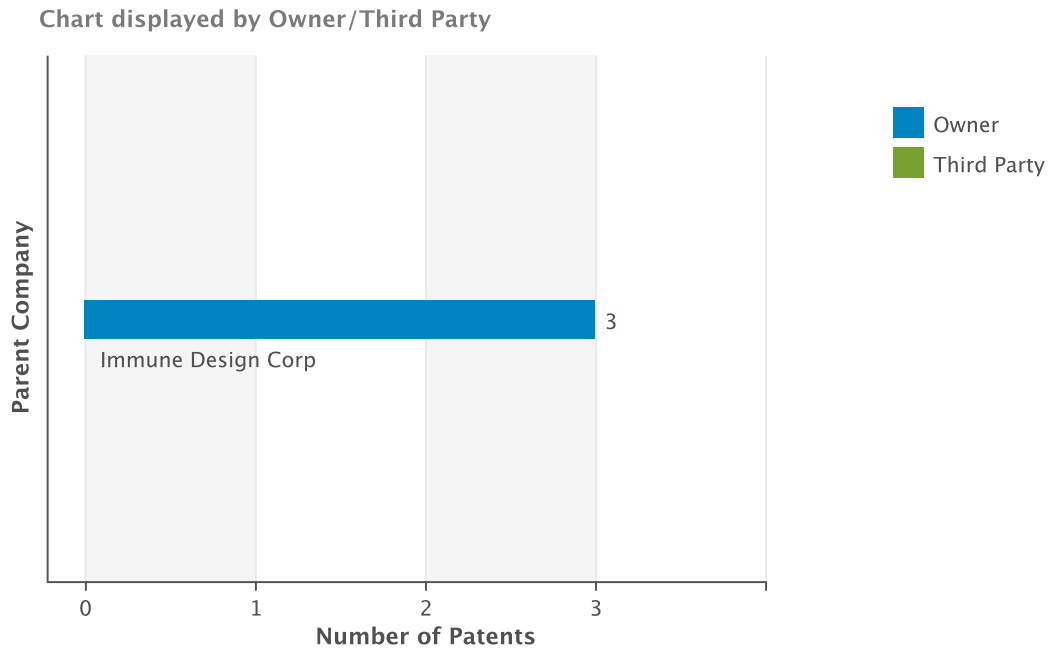
Deals by Type Table

Deal Type	Active	Inactive	Total
Drug - Development Services	2	0	2

Return to Table of Contents

PATENTS

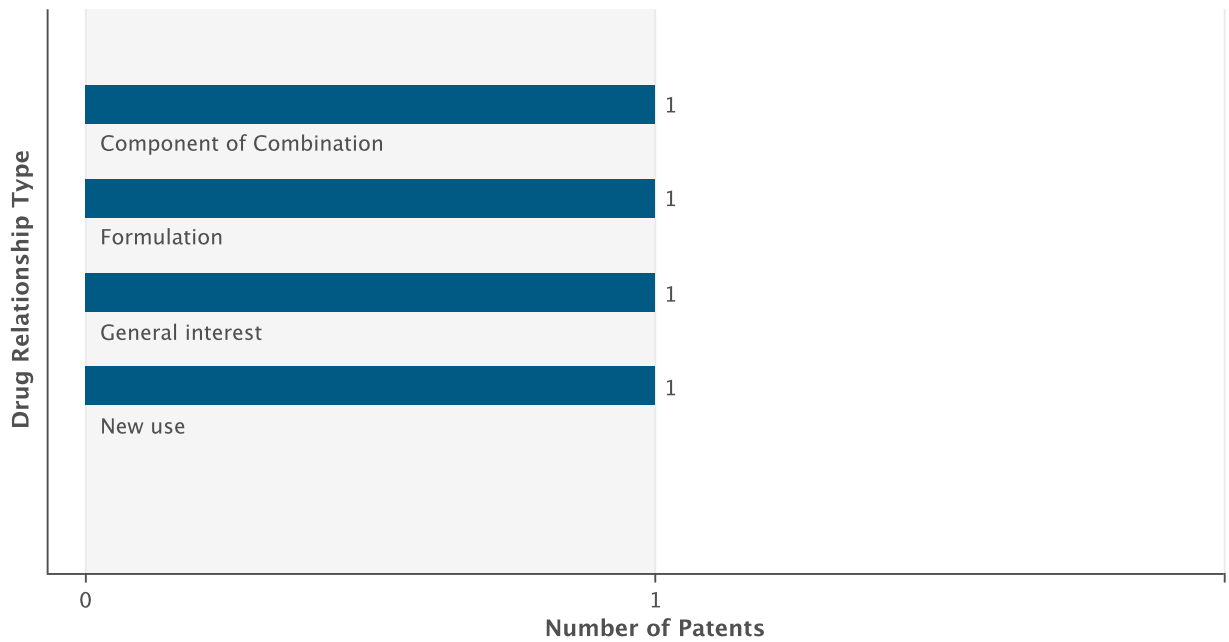
Patents by Parent Company Chart



Patents by Parent Company Table

Company Name	As Owner	As Third Party	Total
Immune Design Corp	3	0	3

Patents by Drug Relationship Type Chart



Return to Table of Contents

Patents by Drug Relationship Type Table

Drug Relationship	Total
New use	1
Formulation	1
General interest	1
Component of Combination	1

Return to Table of Contents

G-100, Immune

G-100, Immune SNAPSHOT

Drug Name	G-100, Immune
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Cancer
Target-based Actions	TLR-4 agonist
Other Actions	Therapeutic vaccine;Anticancer
Technologies	Intratumoral formulation;Biological therapeutic
Last Change Date	14-May-2015

G-100, Immune DEVELOPMENT PROFILE

SUMMARY

Immune Design is developing a vaccine, G-100 (G-MCC1; ID-G100), that includes glucopyranosyl lipid A, a toll-like receptor (TLR)-4 agonist, developed using company's GLAAS platform, for the potential intratumoral injection treatment of cancer including Merkel cell carcinoma (MCC), non-Hodgkin lymphoma and soft tissue sarcoma ,. In January 2014, a phase I study was initiated, and at that time, the study was expected to complete in January 2017. In February 2015, a phase I study for metastatic soft tissue sarcoma was initiated. In May 2015, a phase I/II trial in non-Hodgkin's lymphoma was planned. In November 2014, another phase I trial was planned to be initiated in the second quarter of 2015.

G-100, Immune DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	Cancer	US	Phase 1 Clinical	14-Jan-2014

Return to Table of Contents

G-100, Immune DRUG NAMES

Names	Type
TLR-4 agonist (GLAAS, merkel cell carcinoma), Immune Design	
G-100, Immune	Research Code
ID-G100	Research Code
G-MCC1	Research Code

G-100, Immune 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
Merkel cell carcinoma											
0	0	0	0	0	0	1	1	0	0	1	1
Soft tissue sarcoma											
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	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)

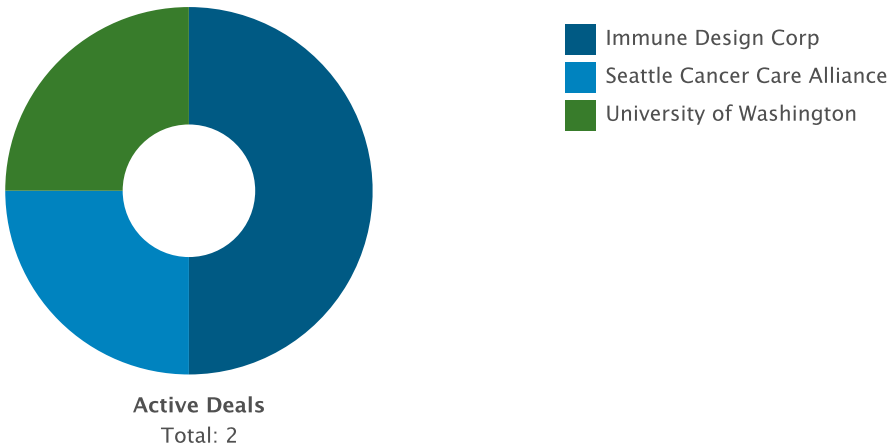
Phase 1 Clinical
Includes Phase 1, Phase 1a, Phase 1, Phase 1/2 (where enrolment count is under 100 or not specified), Phase 0

Return to Table of Contents

G-100, Immune DEALS AND PATENTS

DEALS

Deals by Parent Company Chart

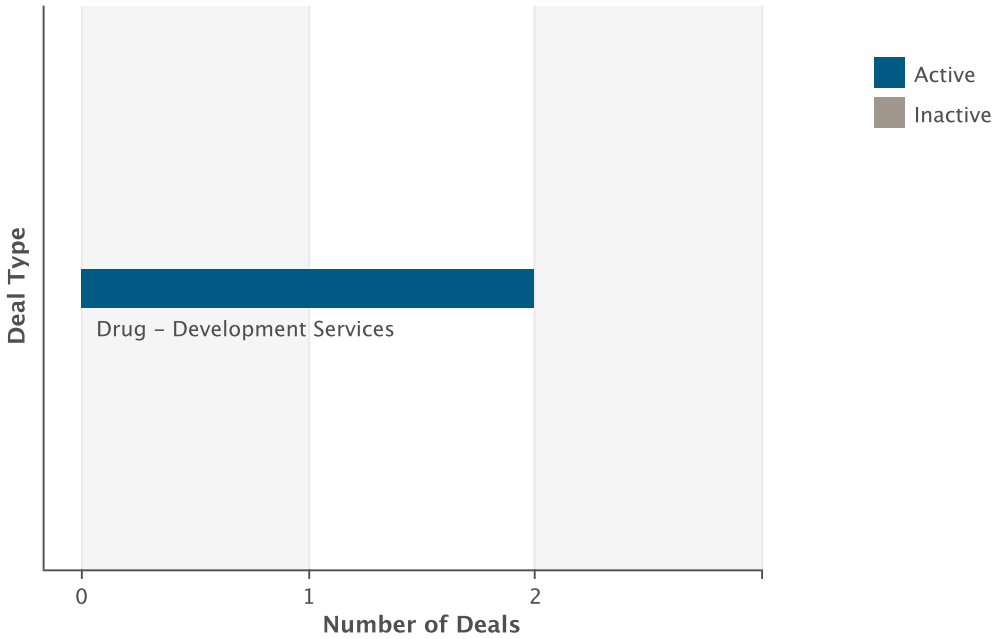


Deals by Parent Company Table

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Immune Design Corp	0	0	2	0	2
University of Washington	1	0	0	0	1
Seattle Cancer Care Alliance	1	0	0	0	1

Return to Table of Contents

Deals by Type Chart



Deals by Type Table

Deal Type	Active	Inactive	Total
Drug - Development Services	2	0	2

Return to Table of Contents

CMB-305

CMB-305 SNAPSHOT

Drug Name	CMB-305
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Solid tumor
Target-based Actions	Cancer testis antigen NY-ESO-1 modulator;T-cell surface glycoprotein CD8 stimulator;TLR-4 agonist
Other Actions	Anticancer;Therapeutic vaccine;Retrovirus based gene therapy
Technologies	Biological therapeutic;Parenteral formulation unspecified;Virus recombinant;Drug combination
Last Change Date	01-Apr-2015

CMB-305 DEVELOPMENT PROFILE

SUMMARY

Immune Design is developing CMB-305 (ID-CMB305), a vaccine consisting of LV-305, a vaccine based on integration-defective dendritic cell-targeted lentiviral vector which acts by producing CD8 T cell responses that expresses three undisclosed tumor antigens, and G-305, a therapeutic vaccine comprising multiple melanoma antigens and glucopyranosyl lipid A adjuvant (GLA) which stimulates toll-like receptor 4, and targets NY-ESO-1 antigen, using the company's two synergistic discovery platforms, ZVex and GLAAS, for the potential treatment of solid tumors,. In March 2015, a phase Ib study was initiated for metastatic cancer. At that time, the study was expected to complete in August 2017 ; later that month, the first patient was dosed.

CMB-305 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	Solid tumor	US	Phase 1 Clinical	26-Mar-2015

Return to Table of Contents

CMB-305 DRUG NAMES

Names	Type
ID-CMB305	Research Code
CMB-305	Research Code
LV-305 + G-305	

CMB-305 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
Myxosarcoma											
0	0	0	0	0	0	1	1	0	0	1	1
Metastasis											
0	0	0	0	0	0	1	1	0	0	1	1
Metastatic ovary cancer											
0	0	0	0	0	0	1	1	0	0	1	1
Metastatic non small cell lung cancer											
0	0	0	0	0	0	1	1	0	0	1	1
Stage IV melanoma											
0	0	0	0	0	0	1	1	0	0	1	1
Sarcoma											
0	0	0	0	0	0	1	1	0	0	1	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	1	1	0	0	1	1

Phase Definitions

Return to Table of Contents

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

Return to Table of Contents

G-305

G-305 SNAPSHOT

Drug Name	G-305
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Cancer
Target-based Actions	TLR-4 agonist
Other Actions	Therapeutic vaccine;Anticancer
Technologies	Biological therapeutic;Intramuscular formulation
Last Change Date	01-Apr-2015

G-305 DEVELOPMENT PROFILE

SUMMARY

Immune Design is developing G-305 (ID-G305; IDC-G305), a therapeutic vaccine comprising multiple melanoma antigens and glucopyranosyl lipid A adjuvant (GLA), a small molecule toll-like receptor 4 agonist, for the potential treatment of cancer including melanoma,. In November 2013, a phase I trial was initiated in the US ; in November 2014, data were expected to be available by the end of the first quarter of 2015.

The company is also investigating G-305, in combination with LV-305, for solid tumors.

G-305 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	Cancer	US	Phase 1 Clinical	30-Nov-2013

Return to Table of Contents

G-305 DRUG NAMES

Names	Type
G-305	Research Code
IDC-G305	Research Code
ID-G305	Research Code
GLA-SE + melanoma antigens (cancer), Immune Design	
therapeutic vaccine (GLA adjuvanted, cancer), Immune Design	

G-305 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
Melanoma											
0	0	0	0	0	0	1	1	0	0	1	1
Metastasis											
0	0	0	0	0	0	1	1	0	0	1	1
Sarcoma											
0	0	0	0	0	0	1	1	0	0	1	1
Ovary tumor											
0	0	0	0	0	0	1	1	0	0	1	1
Breast tumor											
0	0	0	0	0	0	1	1	0	0	1	1
Renal cell carcinoma											
0	0	0	0	0	0	1	1	0	0	1	1
Non-small-cell lung cancer											
0	0	0	0	0	0	1	1	0	0	1	1

Return to Table of Contents

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	1	1	0	0	1	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

Return to Table of Contents

IDC-G103

IDC-G103 SNAPSHOT

Drug Name	IDC-G103
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Discovery
Active Indications	HSV-2 infection
Target-based Actions	TLR-4 agonist
Other Actions	Therapeutic vaccine;Antiviral
Technologies	Biological therapeutic;Parenteral formulation unspecified
Last Change Date	22-Apr-2014

IDC-G103 DEVELOPMENT PROFILE

SUMMARY

Immune Design Corp is investigating IDC-G103, a vaccine comprised of three HSV-2 antigens and glucopyranosyl lipid A (GLA) adjuvant which is a human toll-like receptor-4 agonist, for the potential treatment of herpes simplex virus type 2 (HSV-2) infection. In May 2012, preclinical development was planned ; in November 2012, the vaccine was listed as being at the IND stage ; in April 2014, this was still the case.

IDC-G103 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	HSV-2 infection	US	Discovery	31-Dec-2009

IDC-G103 DRUG NAMES

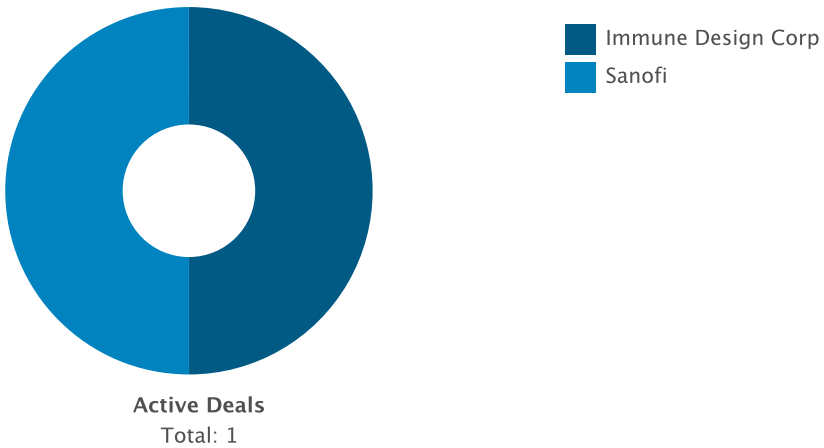
Names	Type
herpes simplex 2 virus vaccine (GLA adjuvanted), Immune Design Corp	
IDC-G103	Research Code

Return to Table of Contents

IDC-G103 DEALS AND PATENTS

DEALS

Deals by Parent Company Chart

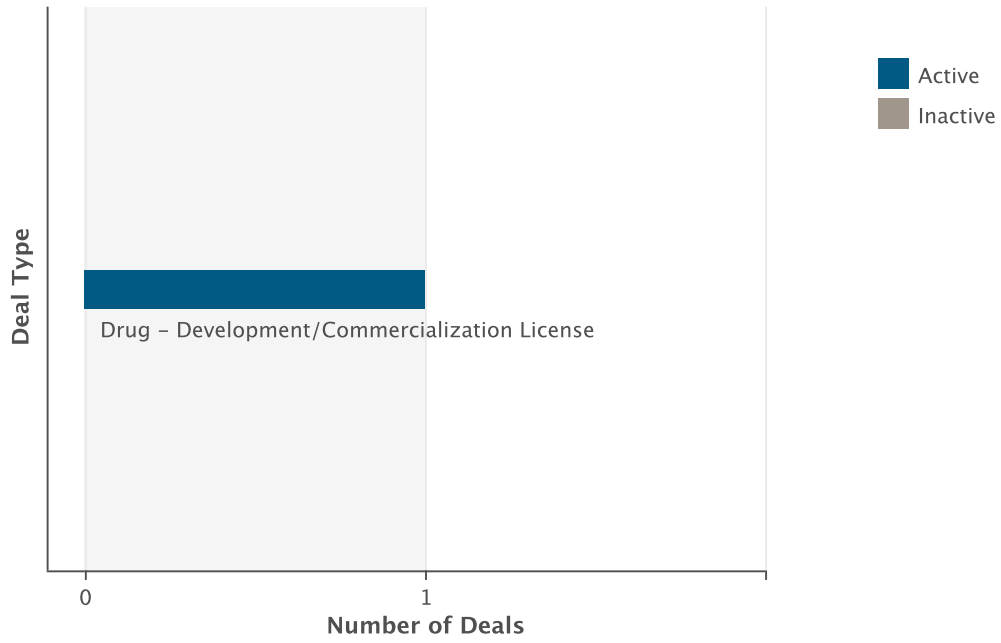


Deals by Parent Company Table

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Sanofi	0	0	1	0	1
Immune Design Corp	1	0	0	0	1

Return to Table of Contents

Deals by Type Chart



Deals by Type Table

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

Return to Table of Contents

RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research

RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research

RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research SNAPSHOT

Drug Name	RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research
Key Synonyms	
Originator Company	Baylor College of Medicine
Active Companies	Immune Design Corp;Sabin Vaccine Institute;Baylor College of Medicine;Walter Reed Army Institute of Research
Inactive Companies	
Highest Status	Discovery
Active Indications	SARS coronavirus infection
Target-based Actions	
Other Actions	Protein subunit vaccine;Prophylactic vaccine
Technologies	Biological therapeutic;Parenteral formulation unspecified;Protein recombinant
Last Change Date	15-Nov-2014

RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research DEVELOPMENT PROFILE

SUMMARY

Baylor College of Medicine, in collaboration with Sabin Vaccine Institute, Immune Design Corporation and Walter Reed Army Institute of Research, is investigating RBD-S, a vaccine comprised of a recombinant receptor-binding domain (RBD) of the SARS-CoV spike (S) protein, that acts by inducing neutralizing antibodies without causing Th2-type immunopathology, for the potential prevention of severe acute respiratory syndrome (SARS),. In November 2014, the vaccine was in early development phase and at that time, clinical development was expected to begin in 2017.

RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Baylor College of Medicine	SARS coronavirus infection	US	Discovery	22-May-2012
Immune Design Corp	SARS coronavirus infection	US	Discovery	31-Dec-2012
Sabin Vaccine Institute	SARS coronavirus infection	US	Discovery	22-May-2012
Walter Reed Army Institute of Research	SARS coronavirus infection	US	Discovery	31-Dec-2012

Return to Table of Contents

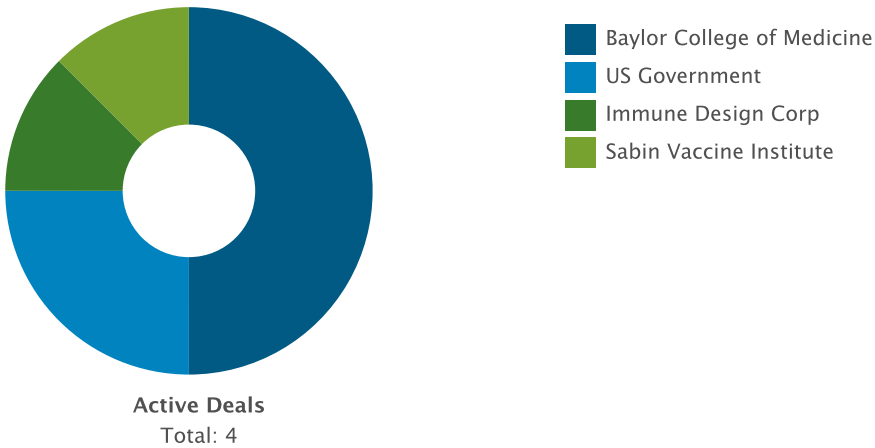
RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research DRUG NAMES

Names	Type
RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine	
RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research	

RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research DEALS AND PATENTS

DEALS

Deals by Parent Company Chart



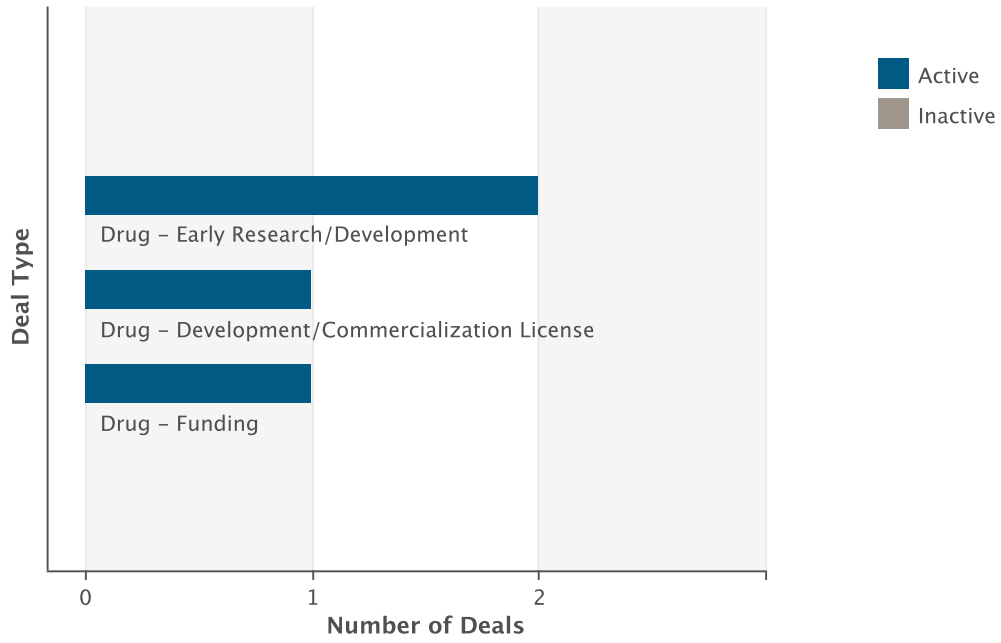
Active Deals
Total: 4

Deals by Parent Company Table

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Baylor College of Medicine	2	0	2	0	4
US Government	1	0	1	0	2
Sabin Vaccine Institute	1	0	0	0	1
Immune Design Corp	0	0	1	0	1

Return to Table of Contents

Deals by Type Chart



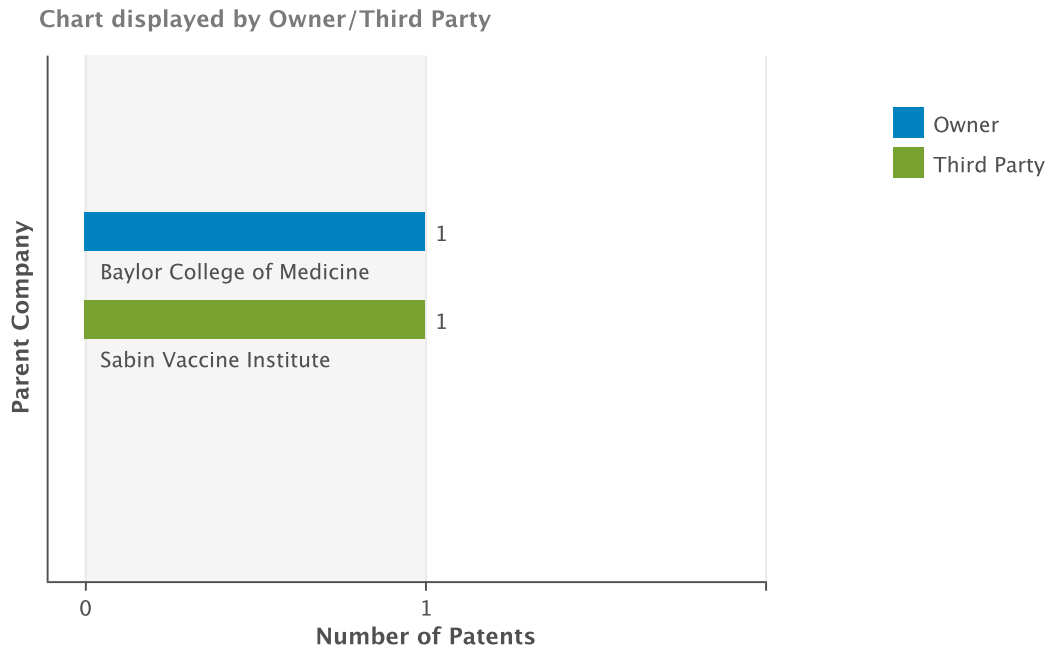
Deals by Type Table

Deal Type	Active	Inactive	Total
Drug - Early Research/Development	2	0	2
Drug - Funding	1	0	1
Drug - Development/Commercialization License	1	0	1

Return to Table of Contents

PATENTS

Patents by Parent Company Chart

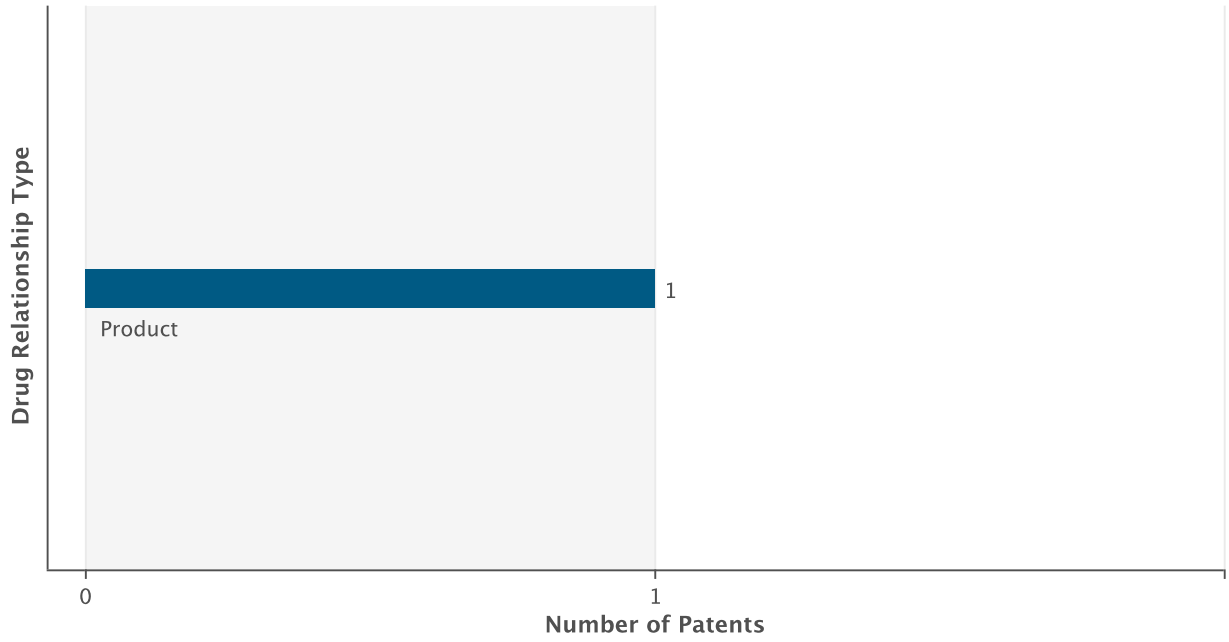


Patents by Parent Company Table

Company Name	As Owner	As Third Party	Total
Sabin Vaccine Institute	0	1	1
Baylor College of Medicine	1	0	1

Return to Table of Contents

Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

Drug Relationship	Total
Product	1

Return to Table of Contents

checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design

checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design SNAPSHOT

Drug Name	checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	TLR-4 agonist
Other Actions	Anticancer;Immunostimulant;Retrovirus based gene therapy;Therapeutic vaccine
Technologies	Biological therapeutic;Parenteral formulation unspecified;Virus recombinant
Last Change Date	05-Feb-2015

checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design DEVELOPMENT PROFILE

SUMMARY

Immune Design is investigating check-point inhibitors as therapeutic vaccines combining ID-LV, a lentiviral vector engineered to deliver antigen-encoding nucleic acids directly to dendritic cells, and glucopyranosyl lipid A (GLA) adjuvant, for the potential treatment of cancer. In November 2012, the vaccine was listed as being in IND stage. In September 2013, this was still the case.

checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	Cancer	US	Discovery	30-Nov-2012

checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design DRUG NAMES

Names	Type
therapeutic vaccines (ID-LV + GLA adjuvant, cancer), Immune Design	
checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design	

Return to Table of Contents

therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design

therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design SNAPSHOT

Drug Name	therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp;Sanofi
Inactive Companies	
Highest Status	Discovery
Active Indications	Food hypersensitivity
Target-based Actions	TLR-4 agonist
Other Actions	Therapeutic vaccine;Immunomodulator
Technologies	Biological therapeutic;Systemic formulation unspecified
Last Change Date	29-Aug-2014

therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design DEVELOPMENT PROFILE

SUMMARY

Immune Design, in collaboration with Sanofi, is investigating a therapeutic vaccine adjuvanted with glucopyranosyl lipid A (GLA), a small molecule toll-like receptor 4 (TLR-4) agonist, for the potential treatment of allergy, including food allergy ,.

therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Immune Design Corp	Food hypersensitivity	US	Discovery	07-Aug-2014
Sanofi	Food hypersensitivity	France	Discovery	07-Aug-2014

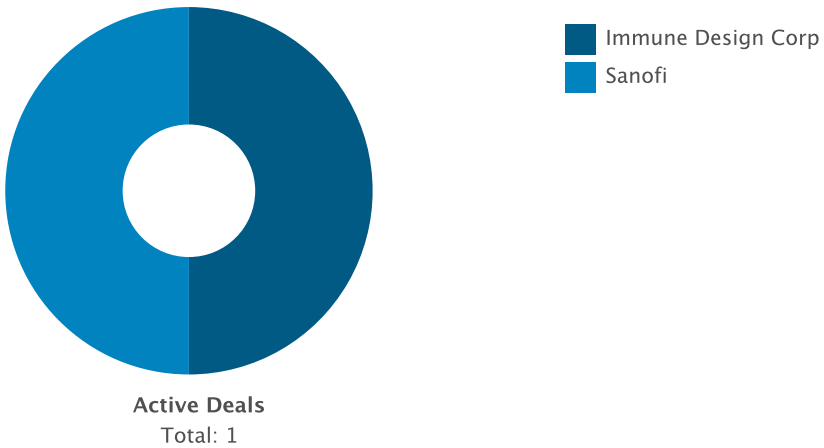
therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design DRUG NAMES

Names	Type
therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design	

Return to Table of Contents

DEALS

Deals by Parent Company Chart

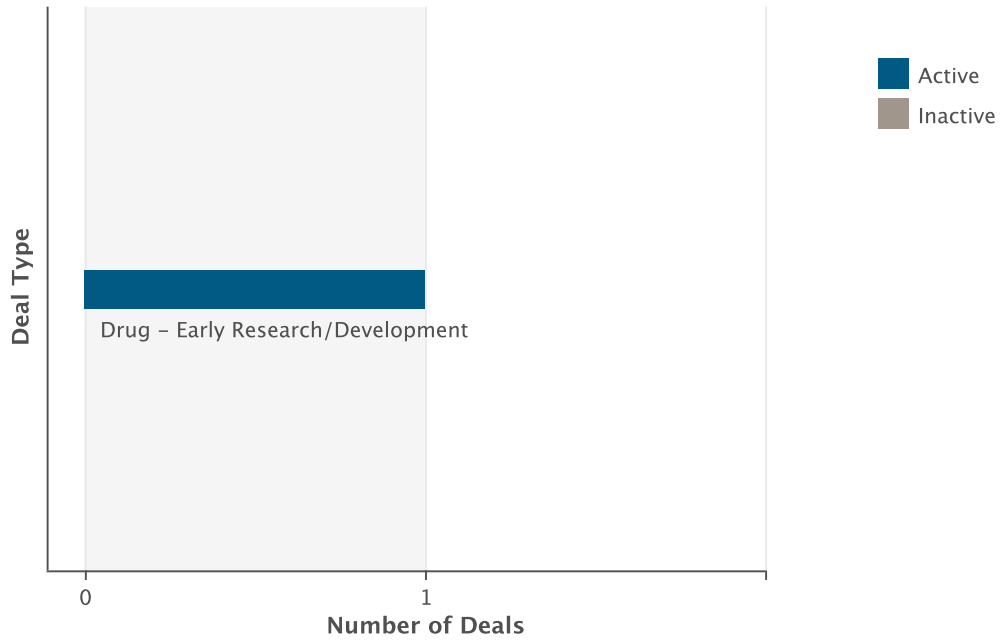


Deals by Parent Company Table

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Immune Design Corp	1	0	0	0	1
Sanofi	0	0	1	0	1

Return to Table of Contents

Deals by Type Chart



Deals by Type Table

Deal Type	Active	Inactive	Total
Drug - Early Research/Development	1	0	1

Return to Table of Contents

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.

Return to Table of Contents