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# MacroGenics Inc

## CORTELLIS COMPANY DETAILED PIPELINE REPORT

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

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Return to Table of Contents

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# ABOUT CORTELLIS COMPANY DETAILED PIPELINE REPORT

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Return to Table of Contents

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# GLOSSARY

**Number of Drugs in Active Development**

Number of drugs associated with the company or subsidiary that are currently in active development, i.e. the development status for the drug(s) is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

**Number of Inactive Drugs**

Number of drugs associated with the company or subsidiary that are currently classified as inactive, i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.

**Number of Patents as Owner**

Number of patents associated with the company where the company is listed as owner; i.e. the relationship type (or way the patent refers to the company) is: Patent Assignee/Owner, Patent owner (not assignee), Licensee for development and marketing, Licensee – marketing only (Distributor), Patent assignee of family member, Inferred assignee.

**Number of Patents as Third Party**

Number of patents associated with the company where the company is listed as third party; i.e. the relationship type (or way the patent refers to the company) is: Patent assignee (not owner), Ex-Licensee for development and marketing, Ex-Licensee marketing only (Distributor), Customer of technology, Ex-Customer of technology, Patent opponent or infringer, Affiliate organization of inventor, Owner of underlying technology.

**Patents summary table**

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

**Number of Deals**

A count of deals where the company or one of its subsidiaries is the primary company.

**Key Indications**

Displays top ten key indications for the company and its subsidiaries based on frequency (indications occurring with high and identical frequency are always included, and this may result in more than ten Key Indications being listed). Includes both indications associated with patents where the company is patent owner and indications associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

**Key Target-based Actions**

Displays top ten key target-based actions for the company and its subsidiaries based on frequency (actions occurring with high and identical frequency are always included, and this may result in more than ten Key Target-based Actions being listed). Includes both target-based actions associated with patents where the company patent owner and target-based actions associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended. A target-based action is one that is associated with a target.

**Key Technologies**

Displays top ten key technologies for the company and its subsidiaries based on frequency (technologies occurring with high and identical frequency are always included, and this may result in more than ten Key Technologies being listed). Includes both key technologies associated with patents where the company relationship is patent owner and key technologies associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

Return to Table of Contents

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## TABLE OF CONTENTS



Return to Table of Contents

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# MacroGenics Inc

## COMPANY OVERVIEW

| | |
|---|---|
| **Company Name** | MacroGenics Inc |
| **Parent Company Name** | MacroGenics Inc |
| **Website** | http://www.macrogenics.com/ |
| **Country** | US |
| **Number of Drugs in Active Development** | 13 |
| **Number of Inactive Drugs** | 14 |
| **Number of Patents as Owner** | 56 |
| **Number of Patents as Third Party** | 0 |
| **Number of Deals** | 32 |
| **Key Indications** | Cancer,Autoimmune disease,Solid tumor,Insulin dependent diabetes,Breast tumor,Inflammatory disease,Variola virus infection,Acute myelogenous leukemia,Chikungunya virus infection,Dengue virus infection,Influenza virus infection,Transplant rejection |
| **Key Target-based Actions** | Immunoglobulin gamma Fc receptor III antagonist,CD3 modulator,CD276 antigen inhibitor,Erbb2 tyrosine kinase receptor inhibitor,Immunoglobulin gamma Fc receptor II antagonist,Immunoglobulin gamma Fc receptor II modulator,B-lymphocyte antigen CD20 inhibitor,Insulin-like growth factor 1 antagonist,ADAM-9 modulator,B-lymphocyte antigen CD19 modulator,CD79b agonist,CD79b modulator,CDw123 modulator,Carboxypeptidase inhibitor,Cell surface A33 antigen modulator,Epidermal growth factor antagonist,Immunoglobulin gamma Fc receptor II agonist,Oncostatin M receptor modulator,Transferrin modulator |
| **Key Technologies** | Biological therapeutic,Parenteral formulation unspecified,Monoclonal antibody humanized,Antibody,Multivalent antibody,Monoclonal antibody,Intravenous formulation,Injectable formulation,Humanized antibody,Chimeric antibody |

## COMPANY PROFILE

### SUMMARY

MacroGenics Inc, incorporated in August 2000 and based in Rockville, Maryland, is focused on the development of novel immunotherapeutics. Product candidates include monoclonal antibodies and vaccines for the treatment and prevention of cancer, autoimmune and infectious disease. Programs are derived from both in-house discoveries and in-licensed candidates.

### COMPANY LOCATION

MacroGenics is headquartered in Rockville, Maryland. The company has developed platform technology at three sites. These include protein engineering and animal modeling in Rockville, proteomics and target discovery in Seattle, Washington and genetic immunization and vaccine development in Dallas, Texas. In October 2005, MacroGenics opened a cGMP manufacturing facility in Rockville, MD. In February 2014, MacroGenics planned to expand its manufacturing facility, to increase its production capacity, using approximately US $5 to 10 million.

### ACQUISITIONS AND SPIN-OFFS

In July 2008, MacroGenics acquired Raven Biotechnologies. The company would issue shares of its common stock in the transaction but further financial details were not disclosed.

In June 2002, MacroGenics acquired Eliance Biotechnology Inc, a private vaccine discovery company located in Dallas,TX, which was founded to exploit technology developed at The University of Texas Southwestern Medical Center at Dallas Center for Biomedical Inventions. The company and university also formed an alliance to discover and develop immunotherapeutics to prevent and treat cancer, autoimmune and infectious diseases. In the same month, MacroGenics raised $12.6 million in financing.

Return to Table of Contents

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## LICENSING AGREEMENTS

In October 2004, MacroGenics acquired exclusive rights to develop compounds against a cancer target identified using OriGene Technologies Inc's Rapid-Scan technology. MacroGenics was to focus on the development of therapeutic monoclonal antibody candidates against this molecule. OriGene would receive option fees, milestones and royalty payments.

In April 2004, Neose Technologies Inc and MacroGenics entered into a monoclonal antibodies research collaboration and license agreement. Neose was to apply its GlycoAdvance and GlycoPEGylation technologies to improve the therapeutic properties of MacroGenics compounds. MacroGenics had the right to take remodeled compounds into development. Following the initial research phase, MacroGenics was to be responsible for funding the further development of these licensed compounds. In exchange, Neose was to be entitled to receive option fee, milestone, and royalty payments as products were developed and commercialized.

In May 2002, MacroGenics licensed a therapeutic target induced by Epstein-Barr virus from EBVax Inc and Tufts University. MacroGenics was to launch a research program to identify treatments to reduce morbidity in patients suffering from the acute and chronic consequences of EBV infection. For a worldwide, exclusive license to the technology, MacroGenics agreed to certain upfront fees, milestone and royalty payments contingent on achieving specific preclinical and clinical objectives in different clinical indications.

In September 2001, MacroGenics reported the completion of several key license agreements relating to its core intellectual property.

## EARLY R&D

**IN OCTOBER 2010, BOEHRINGER INGELHEIM AND MACROGENICS ENTERED A GLOBAL ALLIANCE TO DISCOVER, DEVELOP AND COMMERCIALIZE ANTIBODY THERAPEUTICS, BASED ON MACROGENICS' DUAL-AFFINITY RE-TARGETING (DART) PLATFORM, WHICH WOULD BE DIRECTED AGAINST UP TO TEN COMBINATIONS OF MOLECULAR TARGETS. THERAPEUTIC AREAS FOR THE DRUG CANDIDATES COULD INCLUDE IMMUNOLOGY, ONCOLOGY, RESPIRATORY, CARDIOMETABOLIC AND INFECTIOUS DISEASES. THE COMPANIES WOULD SHARE DISCOVERY AND CERTAIN PRECLINICAL ACTIVITY RESPONSIBILITY. AFTERWHICH, BOEHRINGER INGELHEIM WOULD BE SOLELY RESPONSIBLE FOR FURTHER PRECLINICAL, CLINICAL, REGULATORY, COMMERCIAL AND MANUFACTURING ACTIVITIES OF ANY RESULTING PRODUCTS. MACROGENICS WAS EXPECTED TO RECEIVE $60 MILLION, COMPRISED OF AN UPFRONT CASH PAYMENT, ANNUAL MAINTENANCE FEES, R&D FUNDING, AND NEAR-TERM RESEARCH-BASED MILESTONES, DURING THE FIRST THREE YEARS OF THE ALLIANCE. BOEHRINGER INGELHEIM ALSO EXPECTED TO MAKE A FUTURE EQUITY INVESTMENT IN MACROGENICS. FURTHERMORE, MACROGENICS COULD RECEIVE DEVELOPMENT, REGULATORY AND COMMERCIAL MILESTONE PAYMENTS OF UP TO $210 MILLION FOR EACH OF THE TEN DART PROGRAMS, PLUS TIERED ROYALTIES. MACROGENICS WOULD HAVE AN OPTION TO COPROMOTE CERTAIN DART PRODUCTS IN THE US.**

## FINANCIAL

In February 2014, MacroGenics commenced an underwritten public offering of 2.5 million shares of its common stock, consisting of 1.5 million shares to be offered by MacroGenics and 1 million shares to be offered by existing stockholders. The underwriters were to be granted a 30-day option to purchase up to 375,000 shares of common stock; later that month, the company priced the offering of 3 million shares of its common stock, consisting of 1.8 million shares to be offered by MacroGenics and 1.2 million shares to be offered by existing stockholders at a price of $36.50 per share. The underwriters were granted a 30-day option to purchase up to 450,000 shares of common stock. The offering was expected to close on February 18, 2014.

In October 2013, MacroGenics offered an initial public offering of 5 million shares of its common stock, priced at $16 per share. Underwriters were granted a 30-day option to purchase up to an additional 750,000 shares of common stock to cover any over-allotments. The shares were to be traded on the NASDAQ Global Select Market under the ticker symbol "MGNX". The offering was expected to close on October 16, 2013. Later that month, shares of MacroGenics began trading on the NASDAQ Global Select Market. Later that month, the offering was closed and the company raised $83.8 million from the offering. The company offered 5,750,000 million shares of its common stock, at a price of $16 per share. Underwriters were granted a 30-day option to purchase up to an additional 750,000 shares of common stock to cover any over-allotments.

In September 2008, MacroGenics raised $25 million from a series D-2 financing round.

In May 2006, MacroGenics raised $45 million from a series C financing round. The proceeds were to be used to fund development of the company's anti-CD3 antibody; in phase II trials for type 1 diabetes and to advance drug programs in autoimmune diseases and cancer.

Return to Table of Contents

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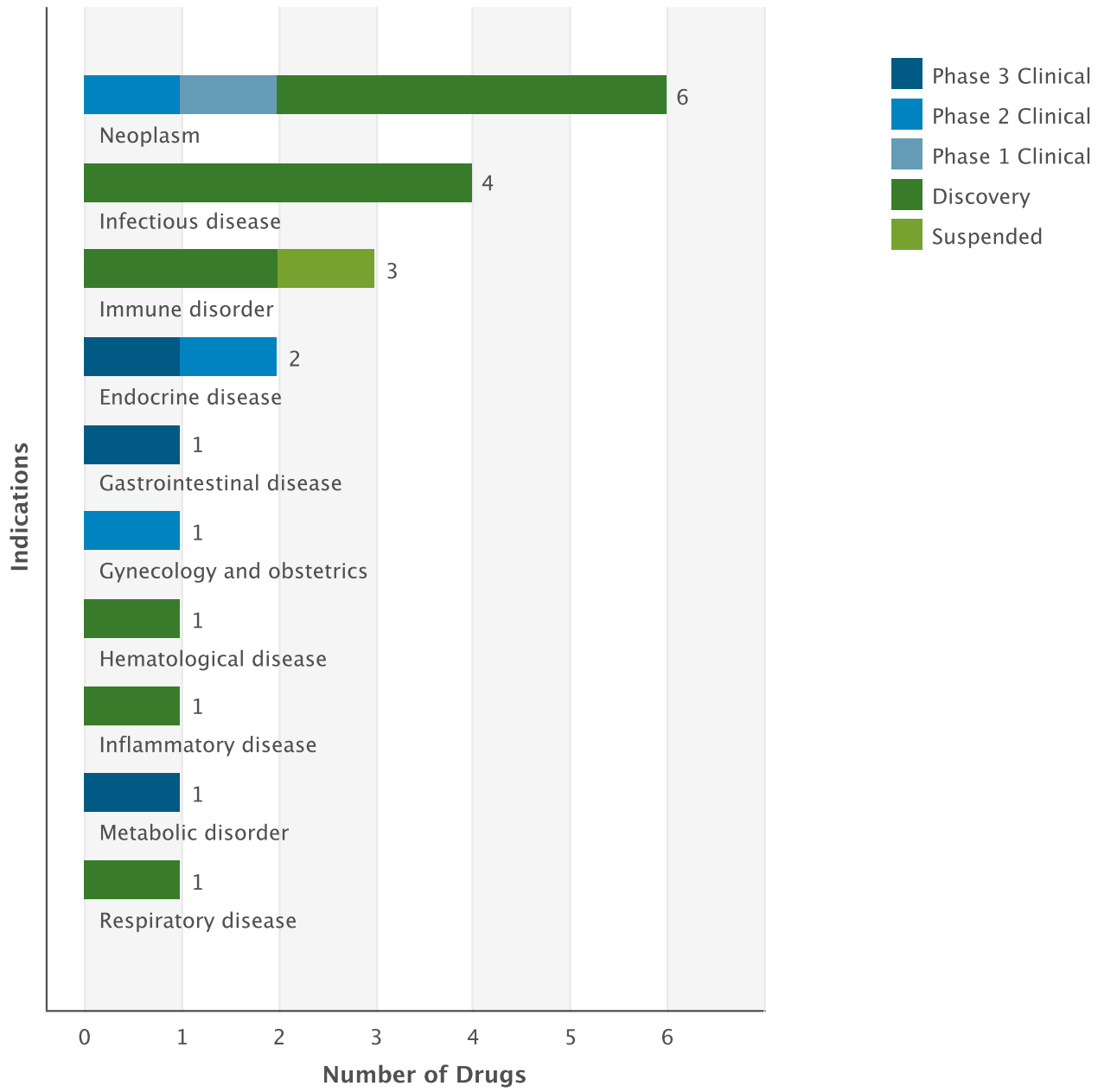
# PRODUCT PORTFOLIO SUMMARY

## DRUGS

### Drugs by Indication

Active Drugs by Indication Chart




Return to Table of Contents

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Drugs by Indication Table

| Indication | Active | Inactive | Total |
|---|---|---|---|
| Neoplasm | 6 | 10 | 16 |
| Immune disorder | 3 | 4 | 7 |
| Infectious disease | 4 | 2 | 6 |
| Gastrointestinal disease | 1 | 3 | 4 |
| Respiratory disease | 1 | 3 | 4 |
| Endocrine disease | 2 | 1 | 3 |
| Genitourinary disease | 0 | 3 | 3 |
| Hematological disease | 1 | 2 | 3 |
| Inflammatory disease | 1 | 1 | 2 |
| Gynecology and obstetrics | 1 | 1 | 2 |
| Neurological disease | 0 | 2 | 2 |
| Dermatological disease | 0 | 1 | 1 |
| Andrology | 0 | 1 | 1 |
| Musculoskeletal disease | 0 | 1 | 1 |
| Metabolic disorder | 1 | 0 | 1 |

Return to Table of Contents

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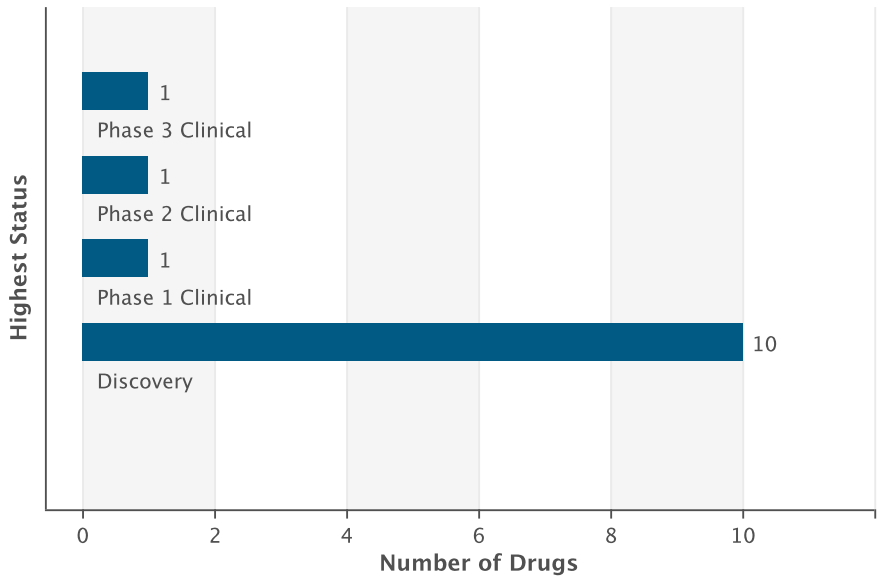
## Drugs by Highest Status

Active Drugs by Highest Status Chart




Drugs by Highest Status Table

| Development Status | Number of Drugs |
|---|---|
| Phase 3 Clinical | 1 |
| Phase 2 Clinical | 1 |
| Phase 1 Clinical | 1 |
| Discovery | 10 |
| Discontinued | 3 |
| No Development Reported | 11 |

Return to Table of Contents

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## DEALS

| Deal Type | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| Technology - Other Proprietary | 3 | 0 | 1 | 0 | 4 |
| Drug - Funding | 6 | 0 | 0 | 0 | 6 |
| Drug - Screening/Evaluation | 2 | 0 | 0 | 0 | 2 |
| Drug - Early Research/Development | 0 | 0 | 3 | 0 | 3 |
| Drug - Development/Commercialization License | 9 | 0 | 4 | 0 | 14 |
| Drug - Manufacturing/Supply | 0 | 0 | 1 | 0 | 1 |
| Drug - Development Services | 0 | 0 | 1 | 0 | 1 |
| Technology - Delivery/Formulation | 0 | 0 | 1 | 0 | 1 |

## CLINICAL TRIALS

### Trials by Condition Studied

| Condition Studied | Ongoing | All |
|---|---|---|
| Endocrine disease | 1 | 9 |
| Gastrointestinal disease | 0 | 8 |
| Neoplasm | 2 | 6 |
| Metabolic disorder | 0 | 6 |
| Immune disorder | 0 | 3 |
| Neurological disease | 0 | 3 |
| Inflammatory disease | 0 | 3 |
| Infectious disease | 0 | 3 |
| Gynecology and obstetrics | 1 | 2 |
| Dermatological disease | 1 | 2 |
| Musculoskeletal disease | 0 | 2 |
| Genitourinary disease | 0 | 1 |
| Respiratory disease | 0 | 1 |

Return to Table of Contents

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Trials by Phase

| Phase | Ongoing | All |
|---|---|---|
| Phase 3 | 0 | 2 |
| Phase 2 | 1 | 5 |
| Phase 1 | 1 | 10 |
| 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 |
|---|---|---|---|
| Cardiovascular disease | 2 | 0 | 2 |
| Endocrine disease | 19 | 0 | 19 |
| Gastrointestinal disease | 19 | 0 | 19 |
| Genitourinary disease | 12 | 0 | 12 |
| Hematological disease | 9 | 0 | 9 |
| Andrology | 8 | 0 | 8 |
| Immune disorder | 31 | 0 | 31 |
| Musculoskeletal disease | 13 | 0 | 13 |
| Neoplasm | 43 | 0 | 43 |
| Ocular disease | 3 | 0 | 3 |
| Metabolic disorder | 10 | 0 | 10 |
| Mouth disease | 1 | 0 | 1 |
| Neurological disease | 10 | 0 | 10 |
| Respiratory disease | 10 | 0 | 10 |
| Infectious disease | 18 | 0 | 18 |

Return to Table of Contents

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| | | | |
|---|---|---|---|
| Injury | 1 | 0 | 1 |
| Toxicity and intoxication | 1 | 0 | 1 |
| Inflammatory disease | 23 | 0 | 23 |
| Otorhinolaryngological disease | 1 | 0 | 1 |
| Gynecology and obstetrics | 13 | 0 | 13 |
| Dermatological disease | 13 | 0 | 13 |
| Surgical procedure | 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

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# PRODUCT PORTFOLIO DRUG PIPELINE DETAIL

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

## teplizumab

### teplizumab SNAPSHOT

| | |
|---|---|
| **Drug Name** | teplizumab |
| **Key Synonyms** | teplizumab |
| **Originator Company** | Tolera Therapeutics Inc |
| **Active Companies** | MacroGenics Inc |
| **Inactive Companies** | Tolera Therapeutics Inc;Eli Lilly & Co |
| **Highest Status** | Phase 3 Clinical |
| **Active Indications** | Transplant rejection;Insulin dependent diabetes |
| **Target-based Actions** | |
| **Other Actions** | CD3 antagonist;Immunosuppressant;Anti-inflammatory;Hypoglycemic agent |
| **Technologies** | Monoclonal antibody;Subcutaneous formulation;Intravenous formulation;Infusion;Biological therapeutic |
| **Last Change Date** | 04-Dec-2013 |

### teplizumab DEVELOPMENT PROFILE

#### SUMMARY

MacroGenics (following an acquisition from Tolera Therapeutics) is developing teplizumab (hOKT3gamma1(Ala-Ala); MGA-031), an injectable non-FcR binding anti-CD3 monoclonal antibody, for the potential prevention and treatment of type 1 diabetes in relatives 'at risk' and 'early onset',. MacroGenics, in partnership with Lilly, had been developing teplizumab for the treatment of type 1 diabetes. A phase III trial in patients with recent-onset type 1 diabetes began in June 2009. However, in October 2010, an analysis by a Data Monitoring Committee found that the PROTEGE trial would not meet its primary endpoint and dosing in all trials was suspended. By January 2011, Lilly had terminated its development of the drugand by June 2011, MacroGenics only listed type 1 diabetes in relatives 'at risk' on its pipeline ; in October 2011, the drug was listed as being in phase III, presumed to be for both 'early onset' and 'at risk' ; however, in December 2013, the drug was in phase II development.

MacroGenics was also developing teplizumab for the treatment of islet transplantation; however, development is assumed to have been suspended following the suspension of trials in type 1 diabetes . The drug was also being developed for the treatment of psoriatic arthritis ; however, no development has been reported for this indication.

### teplizumab DEVELOPMENT STATUS

#### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|

Return to Table of Contents

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| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Insulin dependent diabetes | Europe | Phase 3 Clinical | 02-Aug-2007 |
| MacroGenics Inc | Insulin dependent diabetes | North America | Phase 3 Clinical | 02-Aug-2007 |
| MacroGenics Inc | Transplant rejection | US | Suspended | 20-Oct-2010 |
| Eli Lilly & Co | Insulin dependent diabetes | Europe | Discontinued | 27-Jan-2011 |
| Eli Lilly & Co | Insulin dependent diabetes | North America | Discontinued | 27-Jan-2011 |
| Tolera Therapeutics Inc | Insulin dependent diabetes | US | Discontinued | 18-Jul-2005 |
| Eli Lilly & Co | Psoriatic arthritis | US | No Development Reported | 18-Apr-2009 |
| MacroGenics Inc | Psoriatic arthritis | US | No Development Reported | 28-Apr-2007 |

## teplizumab DRUG NAMES

| Names | Type |
|---|---|
| teplizumab | INN, USAN |
| anti-CD3 antibody (diabetes, psoriatic arthritis), MacroGenics | |
| anti-CD3 antibody (diabetes, psoriatic arthritis), Tolerance Therapeutics | |
| hOKT3gamma-1 (Ala-Ala), MacroGenics | |
| hOKT3gl (Ala-Ala), Tolerance Therapeutics | |
| MGA-031 | Research Code |
| hOKT3gl (Ala-Ala), MacroGenics | |
| hOKT3gamma-1 (Ala-Ala), Tolerance Therapeutics | |

## teplizumab 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 |
| Insulin dependent diabetes | | | | | | | | | | | |
| 0 | 0 | 0 | 2 | 1 | 4 | 0 | 7 | 0 | 1 | 1 | 14 |
| Hypoglycemia | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |

Return to Table of Contents

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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arthritis | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Hematological neoplasm | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Rheumatoid arthritis | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Osteopetrosis | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Psoriasis | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Renal tumor | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Psoriatic arthritis | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Colorectal tumor | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Ovary tumor | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Kidney transplant rejection | | | | | | | | | | | |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 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 | 3 | 1 | 11 | 0 | 8 | 0 | 2 | 1 | 24 |

**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**

Return to Table of Contents

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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)

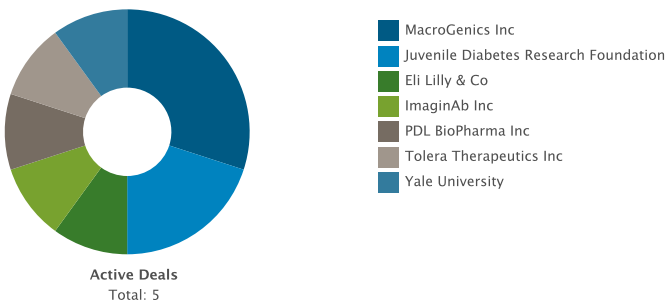
**Phase 1 Clinical**

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

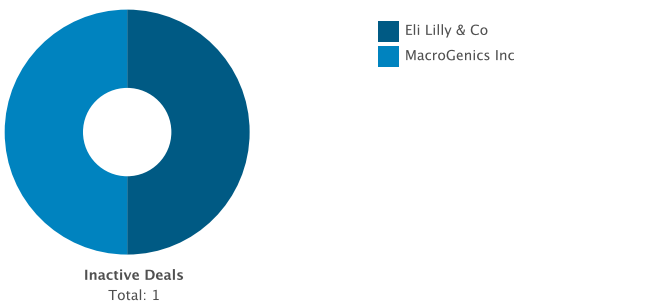
## teplizumab DEALS AND PATENTS

## DEALS

### Deals by Parent Company Chart




Active Deals
Total: 5




Inactive Deals
Total: 1

### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 2 | 1 | 1 | 0 | 4 |
| Juvenile Diabetes Research Foundation | 0 | 0 | 2 | 0 | 2 |
| Eli Lilly & Co | 0 | 0 | 1 | 1 | 2 |
| PDL BioPharma Inc | 1 | 0 | 0 | 0 | 1 |
| Yale University | 1 | 0 | 0 | 0 | 1 |
| ImaginAb Inc | 0 | 0 | 1 | 0 | 1 |
| Tolera Therapeutics Inc | 1 | 0 | 0 | 0 | 1 |

Return to Table of Contents

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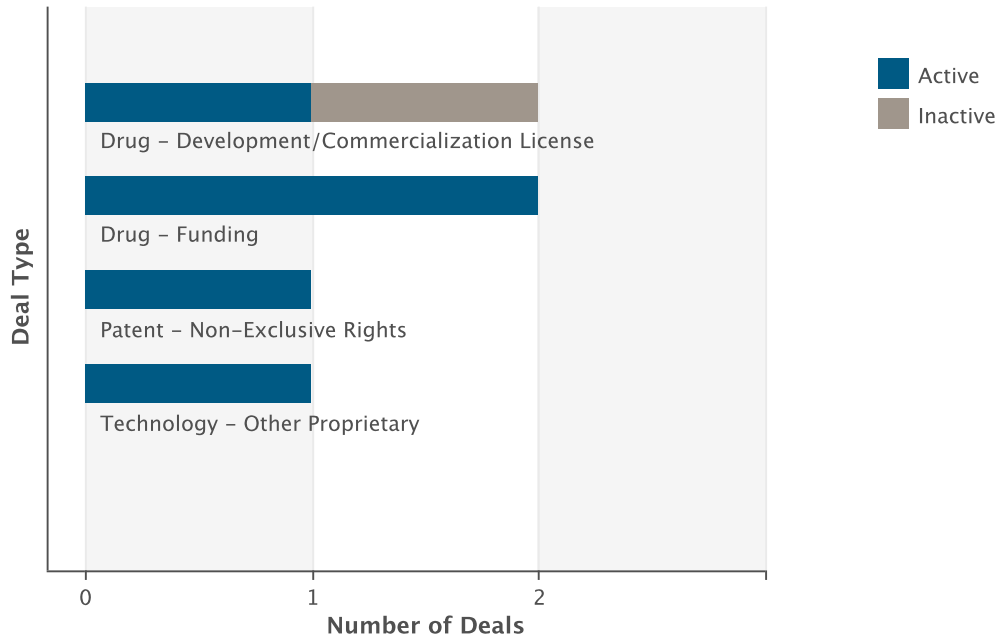
## Deals by Type Chart




## Deals by Type Table

| Deal Type | Active | Inactive | Total |
|---|---|---|---|
| Drug - Funding | 2 | 0 | 2 |
| Drug - Development/Commercialization License | 1 | 1 | 2 |
| Technology - Other Proprietary | 1 | 0 | 1 |
| Patent - Non-Exclusive Rights | 1 | 0 | 1 |

Return to Table of Contents

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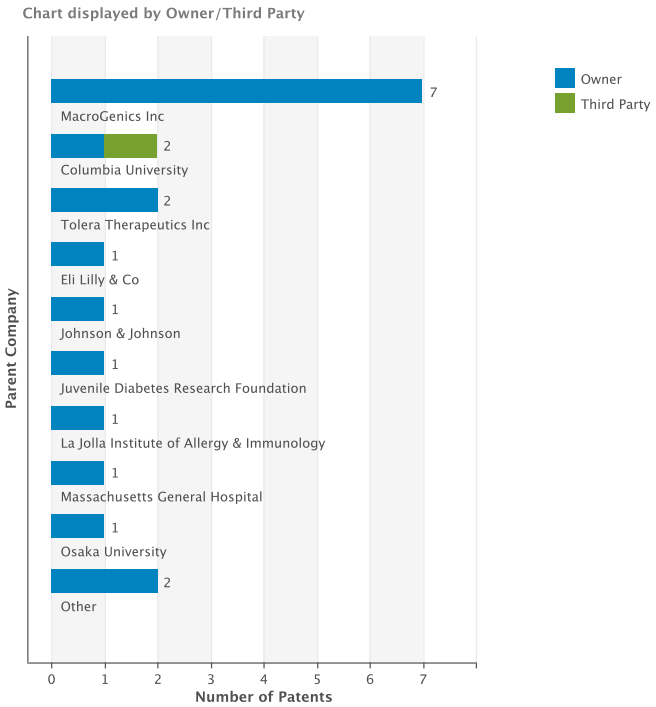
## PATENTS

### Patents by Parent Company Chart




### Patents by Parent Company Table

| Company Name | As Owner | As Third Party | Total |
|---|---|---|---|
| MacroGenics Inc | 7 | 0 | 7 |
| Columbia University | 1 | 1 | 2 |
| Tolera Therapeutics Inc | 2 | 0 | 2 |
| University of California | 1 | 0 | 1 |
| Osaka University | 1 | 0 | 1 |
| University of Chicago | 1 | 0 | 1 |
| Juvenile Diabetes Research Foundation | 1 | 0 | 1 |
| Eli Lilly & Co | 1 | 0 | 1 |
| La Jolla Institute of Allergy & Immunology | 1 | 0 | 1 |
| Johnson & Johnson | 1 | 0 | 1 |
| Massachusetts General Hospital | 1 | 0 | 1 |

Return to Table of Contents

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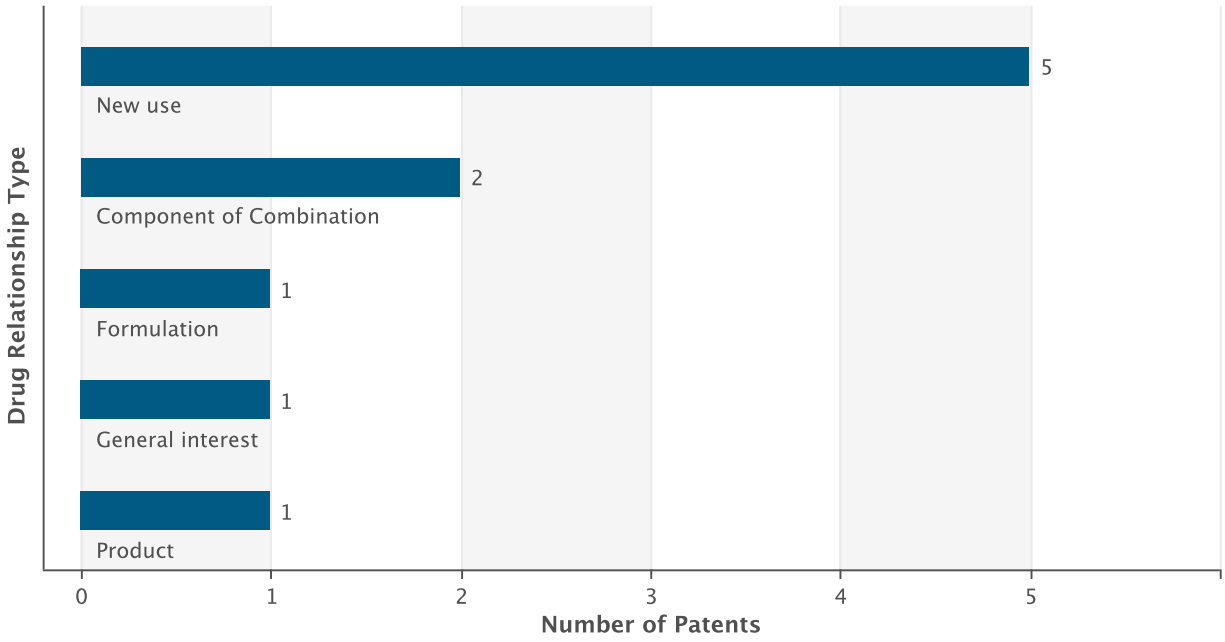
## Patents by Drug Relationship Type Chart




## Patents by Drug Relationship Type Table

| Drug Relationship | Total |
|---|---|
| New use | 5 |
| Component of Combination | 2 |
| Product | 1 |
| General interest | 1 |
| Formulation | 1 |

Return to Table of Contents

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# margetuximab

## margetuximab SNAPSHOT

| | |
|---|---|
| **Drug Name** | margetuximab |
| **Key Synonyms** | margetuximab |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc;Green Cross Corp |
| **Inactive Companies** | |
| **Highest Status** | Phase 2 Clinical |
| **Active Indications** | Solid tumor;Breast tumor |
| **Target-based Actions** | Erbb2 tyrosine kinase receptor inhibitor |
| **Other Actions** | Anticancer monoclonal antibody;Anticancer protein kinase inhibitor |
| **Technologies** | Biological therapeutic;Intravenous formulation;Infusion;Monoclonal antibody |
| **Last Change Date** | 13-Nov-2013 |

## margetuximab DEVELOPMENT PROFILE

### SUMMARY

MacroGenics, in collaboration with Green Cross, is developing margetuximab (MGAH-22), the lead in a series of next-generation Fc optimized anti-HER2/neu mAb that is an "improved"/biobetter version of trastuzumab, for the potential iv treatment of solid tumors, including breast cancer ,. In April 2013, a phase II trial in relapsed or refractory advanced breast cancer was initiated. In November 2013, a phase III study for advanced gastroesophageal cancer was expected to begin in the second half of 2014. By August 2008, MacroGenics was seeking to outlicense the program to partners; in November 2012, this was still the case.

## margetuximab DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Breast tumor | US | Phase 2 Clinical | 01-Jan-2001 |
| Green Cross Corp | Solid tumor | South Korea | Phase 1 Clinical | 06-Jan-2011 |
| MacroGenics Inc | Solid tumor | South Korea | Phase 1 Clinical | 06-Jan-2011 |

Return to Table of Contents

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## margetuximab DRUG NAMES

| Names | Type |
|---|---|
| margetuximab | PINN, USAN |
| trastuzumab biobetter (cancer), Korea Green Cross/ MacroGenics | |
| next-generation anti-Her2/neu mAbs (cancer), MacroGenics | |
| MGAH-22 | Research Code |

## margetuximab 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 |
| Breast tumor | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Metastatic breast cancer | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| Ovary tumor | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Bladder cancer | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Stomach tumor | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Cancer | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Non-small-cell lung cancer | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |

Return to Table of Contents

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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 | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 3 |

**Phase Definitions**

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

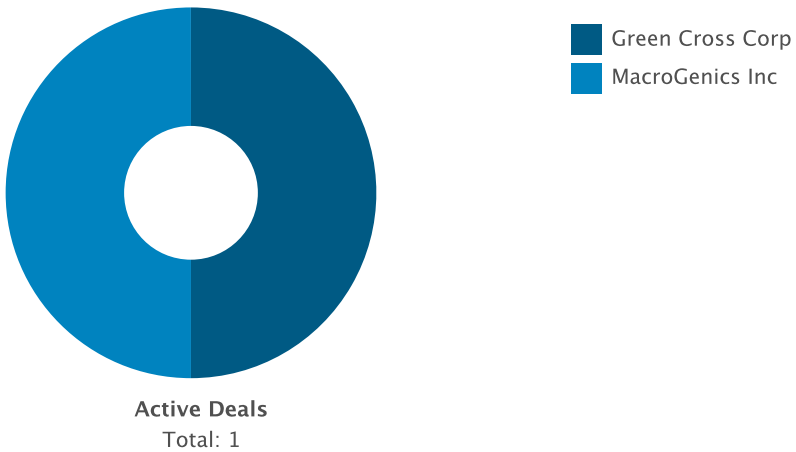
**Phase 2 Clinical**
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

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

## margetuximab DEALS AND PATENTS

## DEALS

### Deals by Parent Company Chart




Return to Table of Contents

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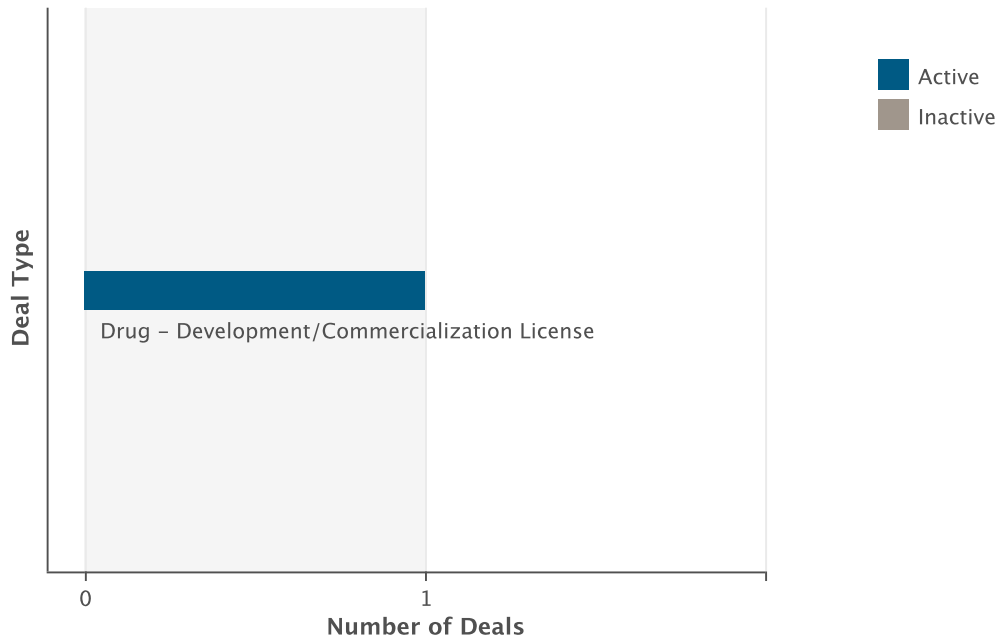
## Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| Green Cross Corp | 0 | 0 | 1 | 0 | 1 |
| MacroGenics Inc | 1 | 0 | 0 | 0 | 1 |

## Deals by Type Chart




## Deals by Type Table

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

Return to Table of Contents

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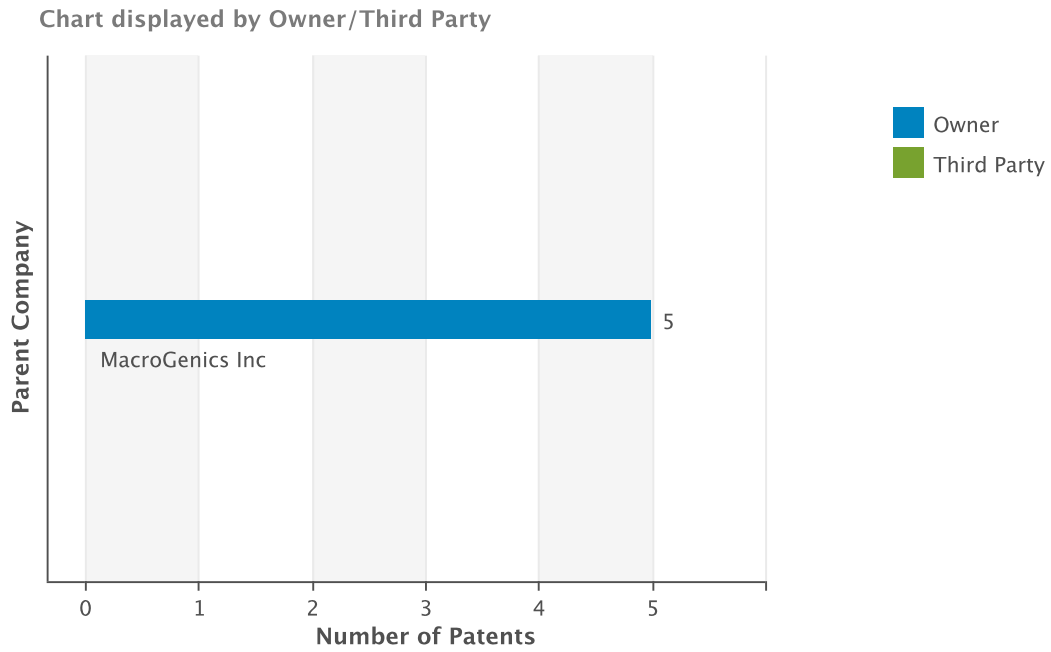
## PATENTS

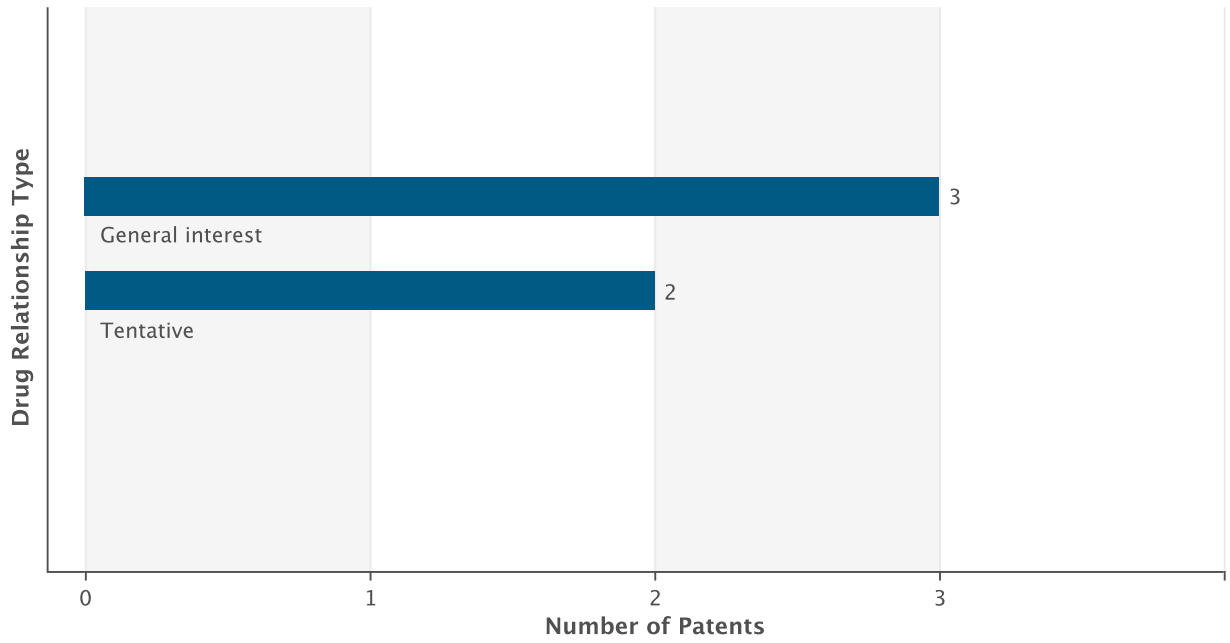
### Patents by Parent Company Chart




### Patents by Parent Company Table

| Company Name | As Owner | As Third Party | Total |
|---|---|---|---|
| MacroGenics Inc | 5 | 0 | 5 |

### Patents by Drug Relationship Type Chart




Return to Table of Contents

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### Patents by Drug Relationship Type Table

| Drug Relationship | Total |
|---|---|
| General interest | 3 |
| Tentative | 2 |

Return to Table of Contents

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# MGA-271

## MGA-271 SNAPSHOT

| | |
|---|---|
| **Drug Name** | MGA-271 |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | Servier;MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Phase 1 Clinical |
| **Active Indications** | Solid tumor |
| **Target-based Actions** | CD276 antigen inhibitor |
| **Other Actions** | Anticancer monoclonal antibody;Immunostimulant |
| **Technologies** | Monoclonal antibody humanized;Immunoglobulin-G;Intravenous formulation;Biological therapeutic;Protein recombinant |
| **Last Change Date** | 11-Feb-2014 |

## MGA-271 DEVELOPMENT PROFILE

## SUMMARY

MacroGenics and licensee Servier are developing MGA-271 (Anti-B7-H3), a humanized IgG1/kappa, Fc-optimized mAb that binds B7-H3 (CD276) found on differentiated cancer cells and cancer stem cells, for the potential iv treatment of various solid tumors, including prostate, renal and pancreatic cancers as well as melanomas,. In July 2011, a phase I trial was initiated . By April 2012, recruitment for a phase I/IIa trial in B7-H3-positive metastatic/recurrent adenocarcinoma was underway. In August 2013, the phase I dose-expansion trial had begun. In November 2013, Macrogenics was seeking to outlicense MGA-271.

## MGA-271 DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Solid tumor | US | Phase 1 Clinical | 07-Jul-2011 |
| Servier | Solid tumor | France | Phase 1 Clinical | 01-Dec-2011 |

## MGA-271 DRUG NAMES

| Names | Type |
|---|---|
| MGA-271 | Research Code |
| Anti-B7-H3 | |

Return to Table of Contents

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## MGA-271 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 |
| Cancer | | | | | | | | | | | |
| 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

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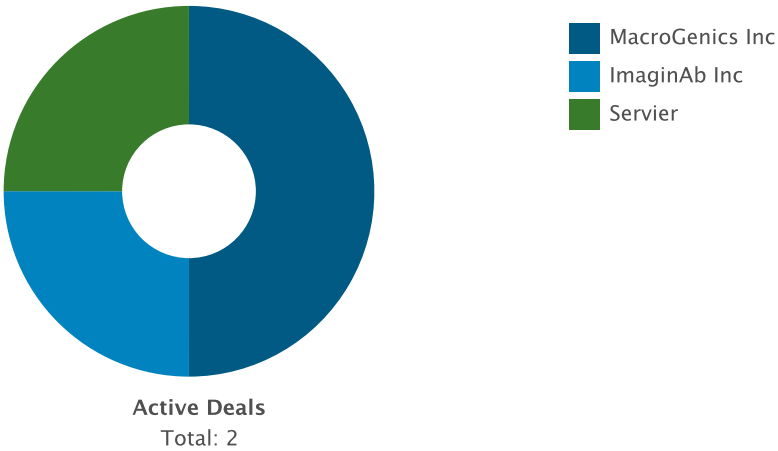
## MGA-271 DEALS AND PATENTS

### DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 2 | 0 | 0 | 0 | 2 |
| Servier | 0 | 0 | 1 | 0 | 1 |
| ImaginAb Inc | 0 | 0 | 1 | 0 | 1 |

Return to Table of Contents

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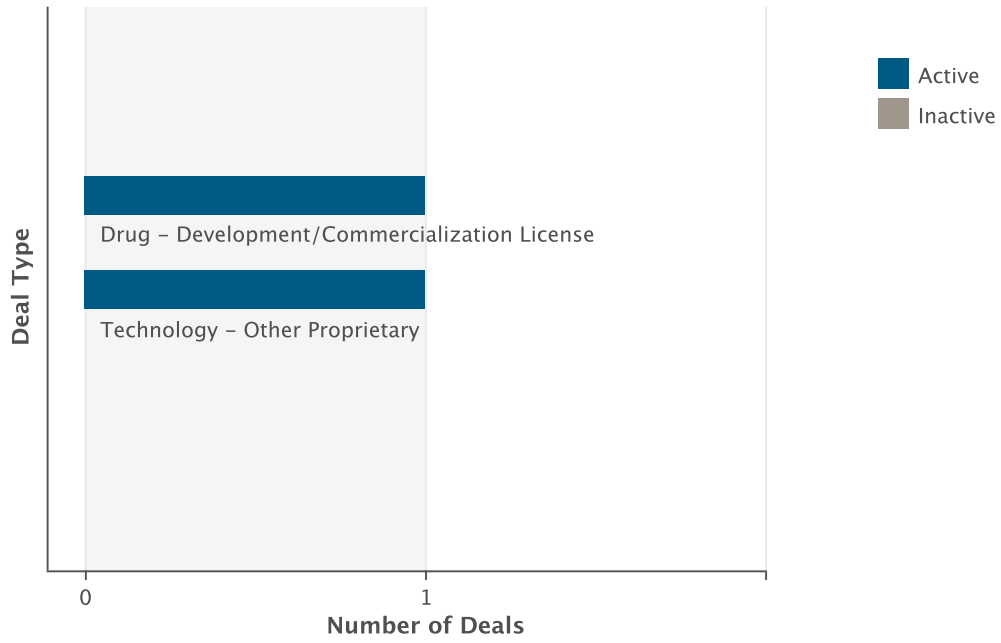
## Deals by Type Chart




## Deals by Type Table

| Deal Type | Active | Inactive | Total |
|---|---|---|---|
| Technology - Other Proprietary | 1 | 0 | 1 |
| Drug - Development/Commercialization License | 1 | 0 | 1 |

Return to Table of Contents

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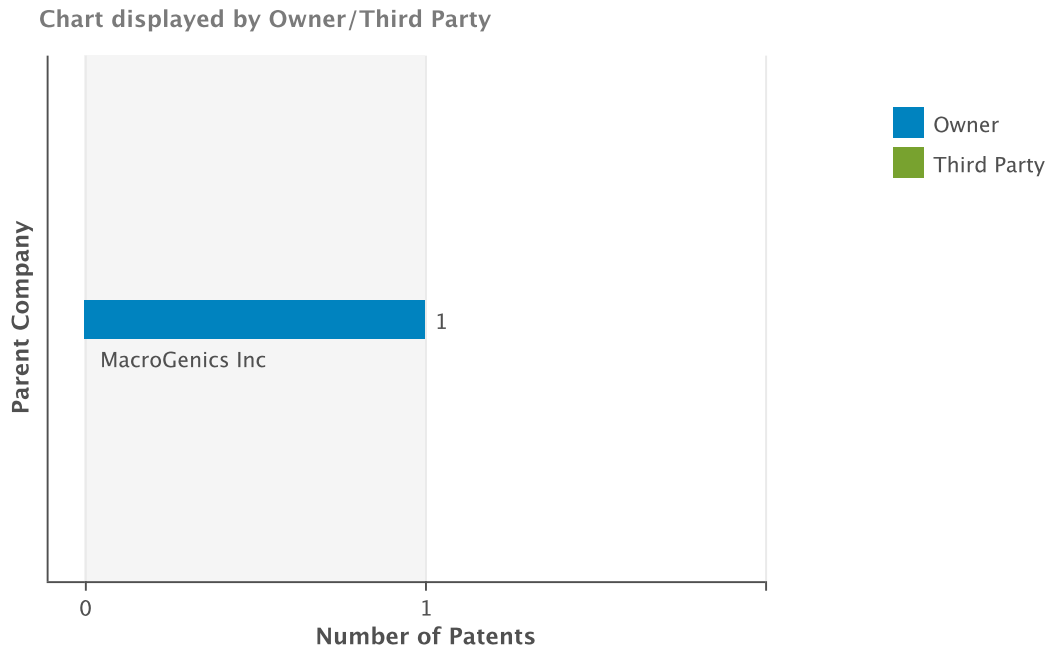
## PATENTS

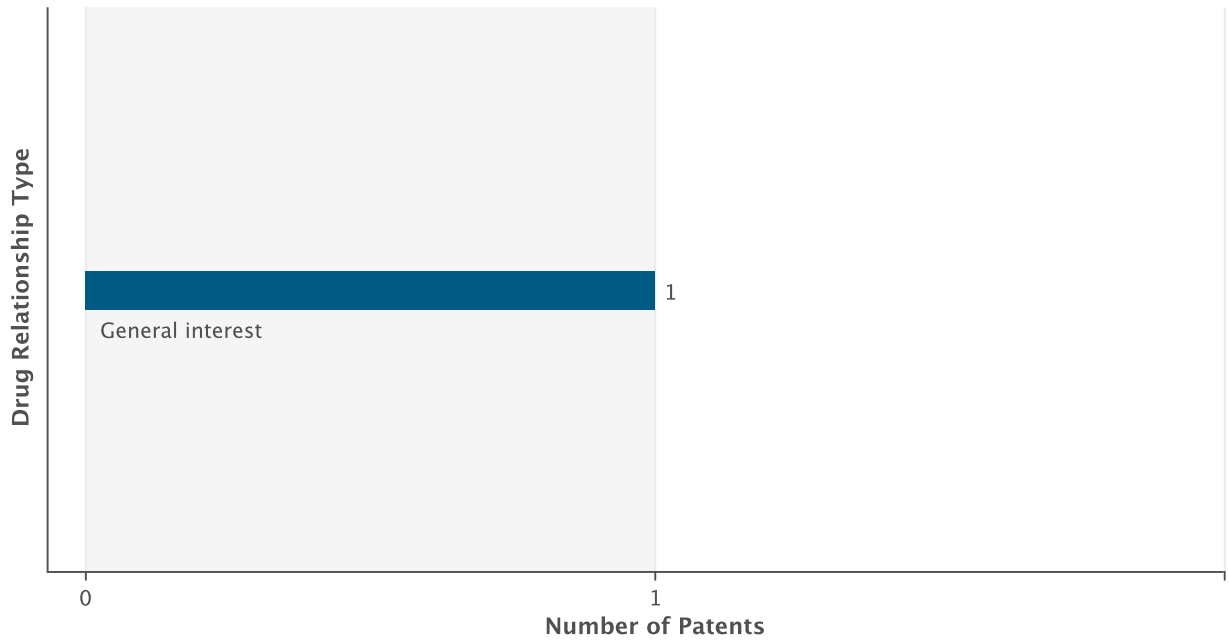
### Patents by Parent Company Chart




### Patents by Parent Company Table

| Company Name | As Owner | As Third Party | Total |
|---|---|---|---|
| MacroGenics Inc | 1 | 0 | 1 |

### Patents by Drug Relationship Type Chart




Return to Table of Contents

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### Patents by Drug Relationship Type Table

| Drug Relationship | Total |
|---|---|
| General interest | 1 |

Return to Table of Contents

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# H5N1 influenza mAb therapy, MacroGenics

## H5N1 influenza mAb therapy, MacroGenics SNAPSHOT

| | |
|---|---|
| **Drug Name** | H5N1 influenza mAb therapy, MacroGenics |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Influenza virus infection |
| **Target-based Actions** | |
| **Other Actions** | Antiviral;Unspecified drug target |
| **Technologies** | Monoclonal antibody humanized;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 15-Feb-2013 |

## H5N1 influenza mAb therapy, MacroGenics DEVELOPMENT PROFILE

### SUMMARY

MacroGenics is investigating cross-neutralizing humanized mAbs, for the potential post-exposure prophylaxis of H5N1 avian influenza virus infection. By August 2009, lead optimization studies were ongoing ; in February 2013, development was ongoing. In May 2011, the company's strategy involved seeking to outlicense its programs.

## H5N1 influenza mAb therapy, MacroGenics DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Influenza virus infection | US | Discovery | 03-Oct-2006 |

## H5N1 influenza mAb therapy, MacroGenics DRUG NAMES

| Names | Type |
|---|---|
| H5N1 influenza mAb therapy, MacroGenics | |
| H5N1 avian influenza monoclonal antibody therapy, MacroGenics | |

Return to Table of Contents

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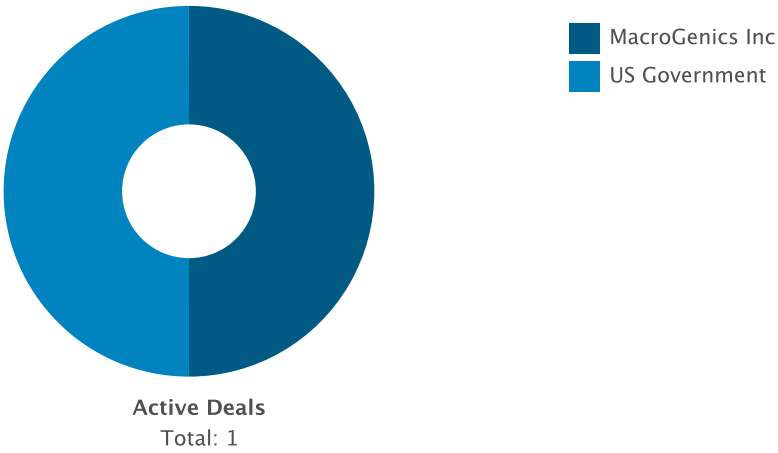
## DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| US Government | 0 | 0 | 1 | 0 | 1 |
| MacroGenics Inc | 1 | 0 | 0 | 0 | 1 |

Return to Table of Contents

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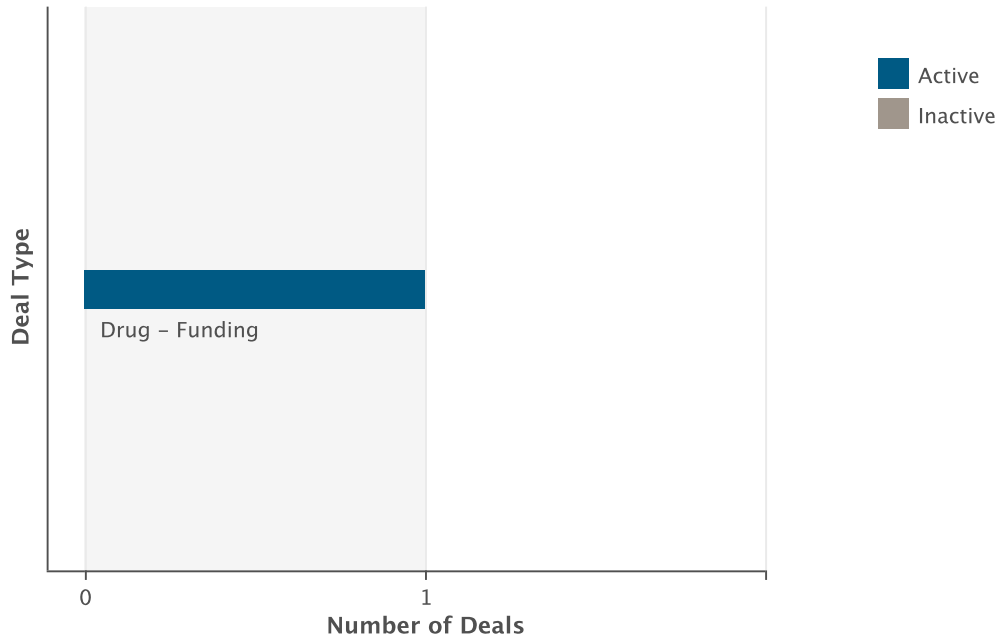
## Deals by Type Chart




## Deals by Type Table

| Deal Type | Active | Inactive | Total |
|---|---|---|---|
| Drug - Funding | 1 | 0 | 1 |

Return to Table of Contents

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# monoclonal antibody cocktail (DART, smallpox), MacroGenics

## monoclonal antibody cocktail (DART, smallpox), MacroGenics SNAPSHOT

| | |
|---|---|
| **Drug Name** | monoclonal antibody cocktail (DART, smallpox), MacroGenics |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Variola virus infection |
| **Target-based Actions** | |
| **Other Actions** | Unspecified drug target;Antiviral |
| **Technologies** | Monoclonal antibody humanized;Drug combination;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 14-Feb-2013 |

## monoclonal antibody cocktail (DART, smallpox), MacroGenics DEVELOPMENT PROFILE

### SUMMARY

MacroGenics is investigating a mAb cocktail, based on its Dual-Affinity Re-Targeting (DART) technology, targeting  B5R and A33R (extracellular enveloped virions-specific proteins), and A27L and L1R (intracellular mature virions-specific proteins), as a potential post-exposure prophylaxis for smallpox. By August 2008, preclinical studies were underway ; in February 2013, the program was listed as being in lead optmization. In August 2008, MacroGenics was seeking to outlicense the partnering rights to the product  ; in May 2011, this was still the case.

## monoclonal antibody cocktail (DART, smallpox), MacroGenics DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Variola virus infection | US | Discovery | 15-Jul-2006 |

Return to Table of Contents

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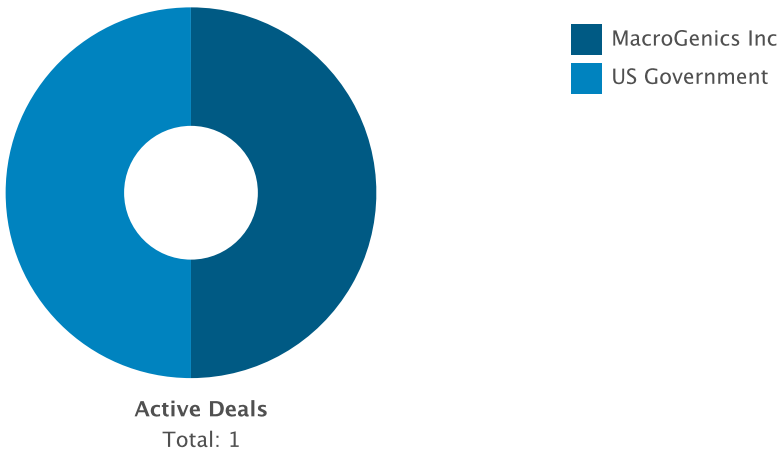
## monoclonal antibody cocktail (DART, smallpox), MacroGenics DRUG NAMES

| Names | Type |
|---|---|
| mAb cocktail (variola virus infection), MacroGenics | |
| extracellular enveloped/intracellular mature virions-specific protein inhibitor (smallpox), MacroGenics | |
| monoclonal antibody cocktail (DART, smallpox), MacroGenics | |
| B5R/A33R/A27L/L1R inhibitor (smallpox), MacroGenics | |

## monoclonal antibody cocktail (DART, smallpox), MacroGenics DEALS AND PATENTS

### DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 1 | 0 | 0 | 0 | 1 |
| US Government | 0 | 0 | 1 | 0 | 1 |

Return to Table of Contents

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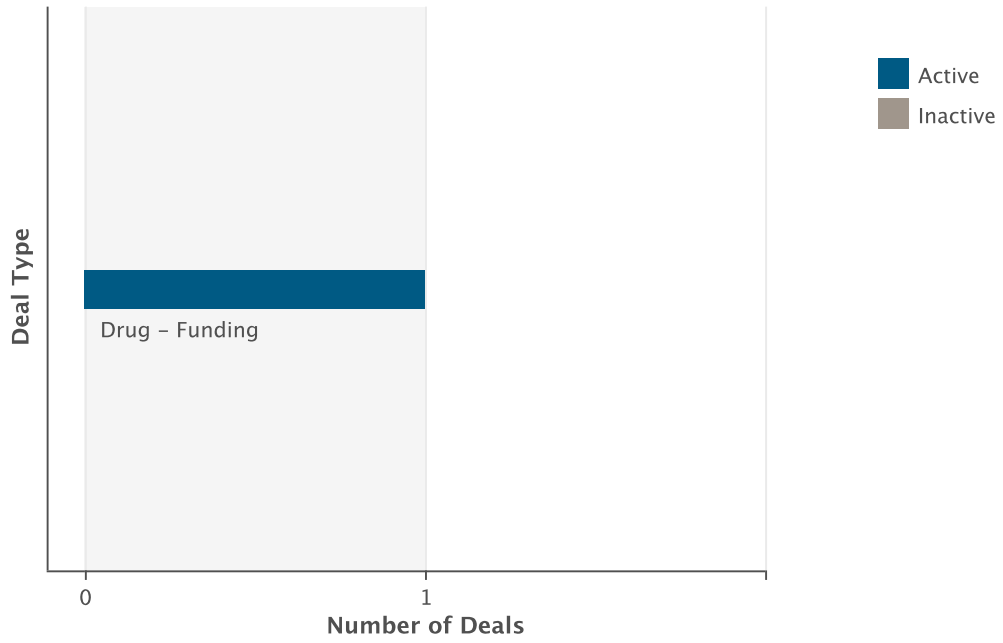
## Deals by Type Chart




## Deals by Type Table

| Deal Type | Active | Inactive | Total |
|---|---|---|---|
| Drug - Funding | 1 | 0 | 1 |

Return to Table of Contents

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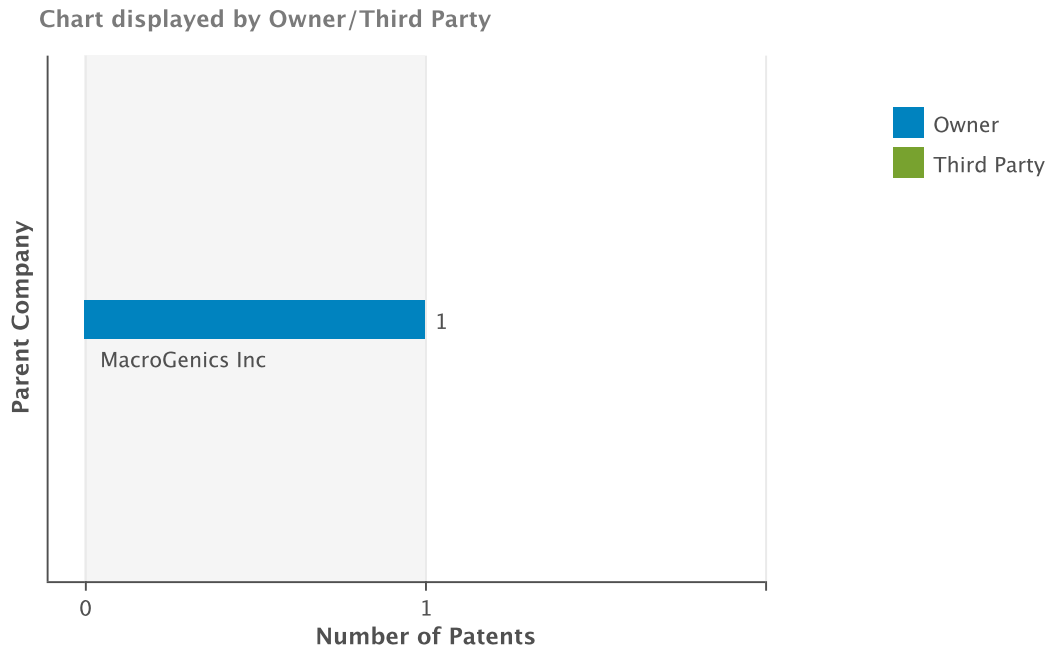
## PATENTS

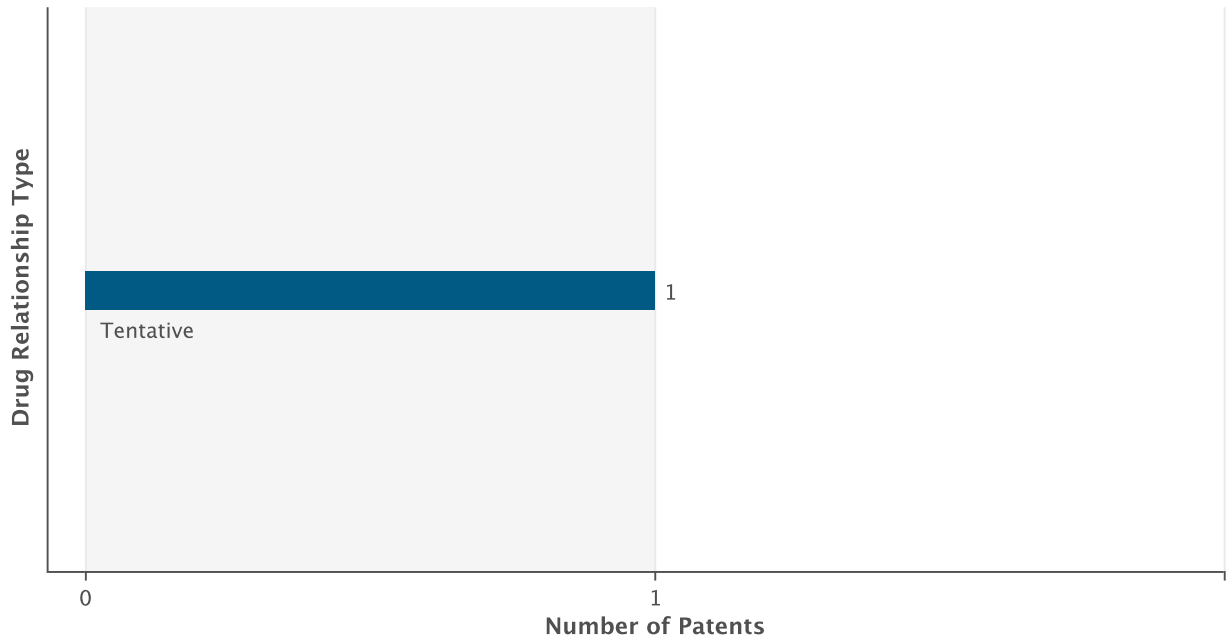
### Patents by Parent Company Chart




### Patents by Parent Company Table

| Company Name | As Owner | As Third Party | Total |
|---|---|---|---|
| MacroGenics Inc | 1 | 0 | 1 |

### Patents by Drug Relationship Type Chart




Return to Table of Contents

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### Patents by Drug Relationship Type Table

| Drug Relationship | Total |
|---|---|
| Tentative | 1 |

Return to Table of Contents

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# CD32BxCD79B DART antibody (autoimmune disease), MacroGenics

## CD32BxCD79B DART antibody (autoimmune disease), MacroGenics SNAPSHOT

| | |
|---|---|
| **Drug Name** | CD32BxCD79B DART antibody (autoimmune disease), MacroGenics |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Inflammatory disease;Autoimmune disease |
| **Target-based Actions** | CD79b agonist;Immunoglobulin gamma Fc receptor II agonist |
| **Other Actions** | Anti-inflammatory;Anticancer |
| **Technologies** | Antibody;Biological therapeutic |
| **Last Change Date** | 04-Dec-2013 |

## CD32BxCD79B DART antibody (autoimmune disease), MacroGenics DEVELOPMENT PROFILE

### SUMMARY

MacroGenics is investigating CD32BxCD79B dual affinity re-targeting (DART) antibody, comprised of dual specificity for B-cells by incorporating specificity for the B-cell receptor (Cluster of Differentiation 79B, CD79B) and an inhibitory receptor (Fc gamma receptor IIb, CD32B), that specifically target activated B-cells while sparing resting B-cells, the lead from the series of DARTs, for the potential treatment of inflammation and autoimmune diseases including lupus, rheumatoid arthritis, multiple sclerosis and other disorders ,. In May 2011, the program was listed as being in preclinical development ; in December 2013, this was still the case. In August 2008, MacroGenics was seeking to outlicense partnering rights; in December 2013, this was still the case.

The company was previously investigating the series for cancer and allergyhowever by November 2010, these indications were no longer listed on the company's development pipeline.

## CD32BxCD79B DART antibody (autoimmune disease), MacroGenics DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Autoimmune disease | US | Discovery | 05-Aug-2008 |
| MacroGenics Inc | Inflammatory disease | US | Discovery | 13-Aug-2009 |
| MacroGenics Inc | Allergy | US | No Development Reported | 15-Nov-2010 |
| MacroGenics Inc | Cancer | US | No Development Reported | 15-Nov-2010 |

Return to Table of Contents

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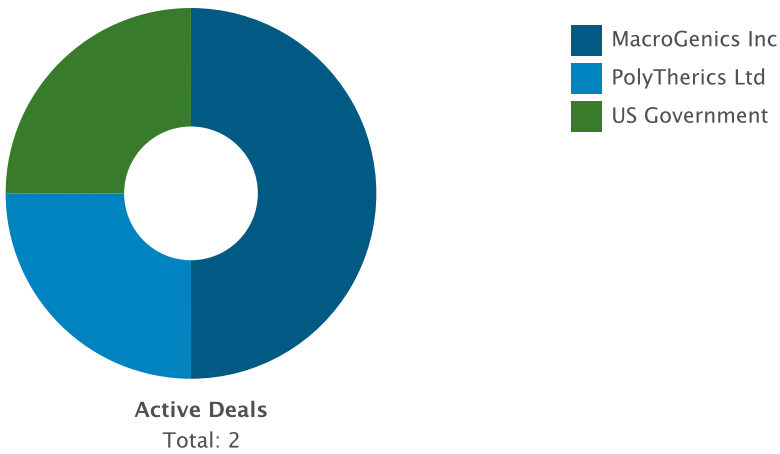
## CD32BxCD79B DART antibody (autoimmune disease), MacroGenics DRUG NAMES

| Names | Type |
|---|---|
| DART antibodies (autoimmune disease), MacroGenics | |
| dual affinity CD32-based proteins (cancer/allergy/autoimmune disease), MacroGenics | |
| CD32BxCD79B DART antibody (autoimmune disease), MacroGenics | |

## CD32BxCD79B DART antibody (autoimmune disease), MacroGenics DEALS AND PATENTS

### DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 1 | 0 | 1 | 0 | 2 |
| PolyTherics Ltd | 1 | 0 | 0 | 0 | 1 |
| US Government | 0 | 0 | 1 | 0 | 1 |

Return to Table of Contents

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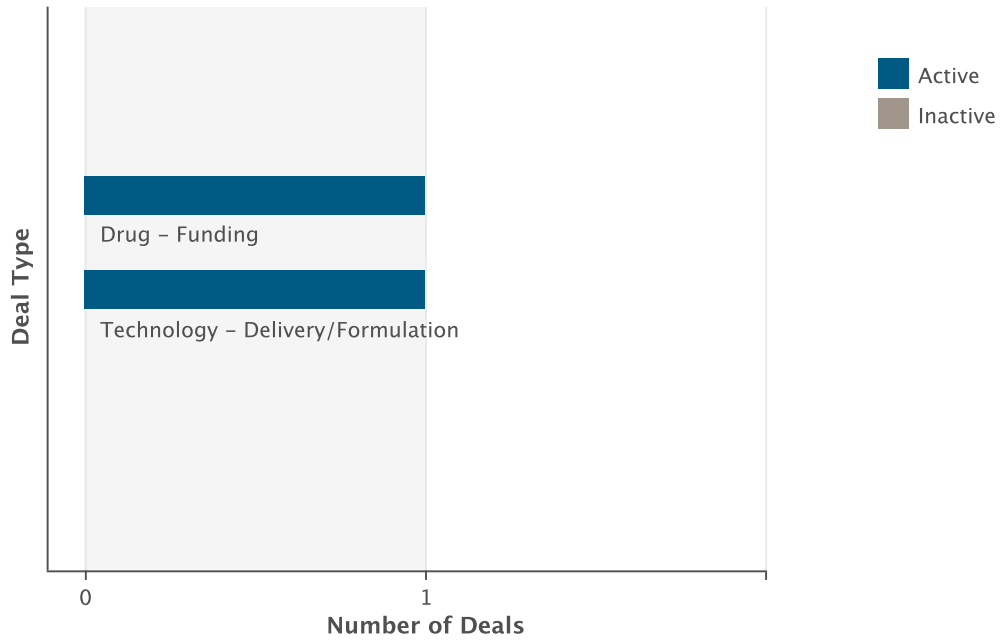
## Deals by Type Chart




## Deals by Type Table

| Deal Type | Active | Inactive | Total |
|---|---|---|---|
| Drug - Funding | 1 | 0 | 1 |
| Technology - Delivery/Formulation | 1 | 0 | 1 |

Return to Table of Contents

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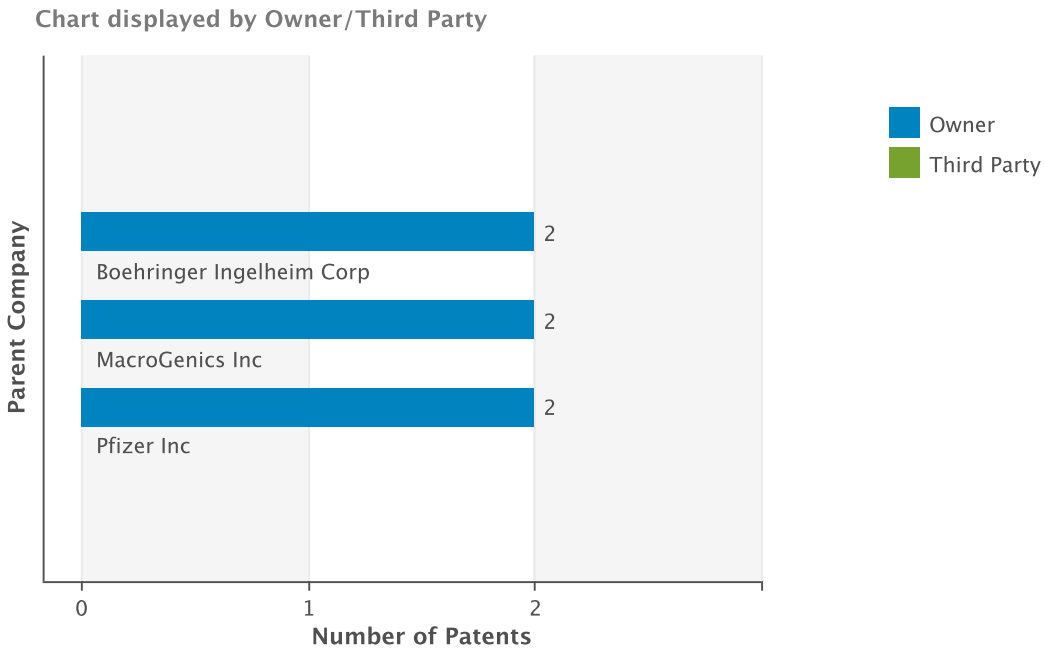
## PATENTS

### Patents by Parent Company Chart




### Patents by Parent Company Table

| Company Name | As Owner | As Third Party | Total |
|---|---|---|---|
| Boehringer Ingelheim Corp | 2 | 0 | 2 |
| MacroGenics Inc | 2 | 0 | 2 |
| Pfizer Inc | 2 | 0 | 2 |

Return to Table of Contents

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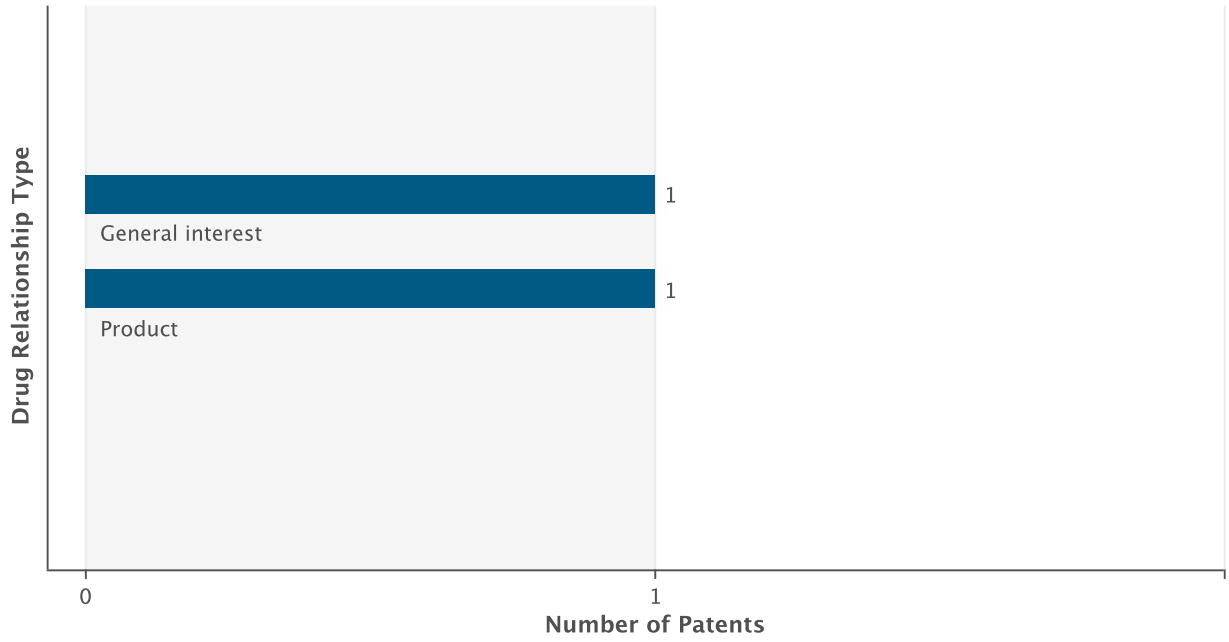
## Patents by Drug Relationship Type Chart




## Patents by Drug Relationship Type Table

| Drug Relationship | Total |
|---|---|
| General interest | 1 |
| Product | 1 |

Return to Table of Contents

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# monoclonal antibody (DART, dengue virus infection), MacroGenics

## monoclonal antibody (DART, dengue virus infection), MacroGenics SNAPSHOT

| | |
|---|---|
| **Drug Name** | monoclonal antibody (DART, dengue virus infection), MacroGenics |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Dengue virus infection |
| **Target-based Actions** | |
| **Other Actions** | Unspecified drug target;Antiviral |
| **Technologies** | Immunoglobulin;Monoclonal antibody;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 15-Feb-2013 |

## monoclonal antibody (DART, dengue virus infection), MacroGenics DEVELOPMENT PROFILE

### SUMMARY

MacroGenics is investigating an Ig-dual affinity re-targeting (Ig-DART) monoclonal antibody, which eliminates FcR binding, based on its DART platform, for the potential treatment and post-exposure prophylaxis of dengue virus infection. By September 2008, preclinical studies were underway ; in February 2013, the program was listed as being in lead optimization. In May 2011, the company was seeking to outlicense its products.

## monoclonal antibody (DART, dengue virus infection), MacroGenics DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Dengue virus infection | US | Discovery | 05-Sep-2008 |

## monoclonal antibody (DART, dengue virus infection), MacroGenics DRUG NAMES

| Names | Type |
|---|---|
| monoclonal antibody (DART, dengue virus infection), MacroGenics | |
| Ig-DART mAb (dengue virus infection), MacroGenics | |

Return to Table of Contents

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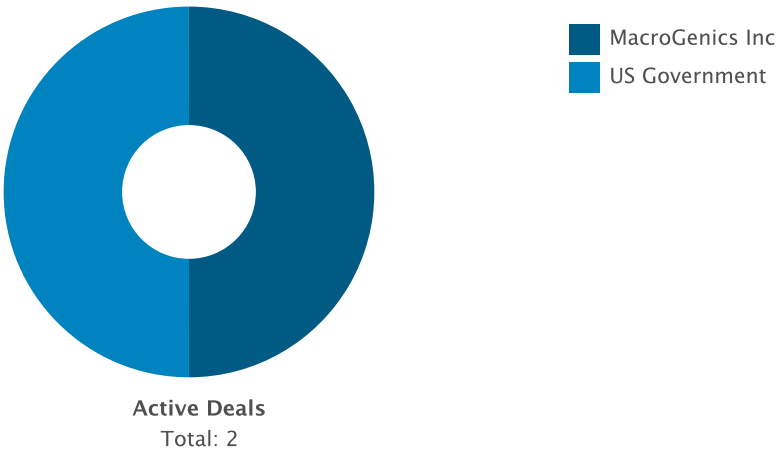
## DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 2 | 0 | 0 | 0 | 2 |
| US Government | 0 | 0 | 2 | 0 | 2 |

Return to Table of Contents

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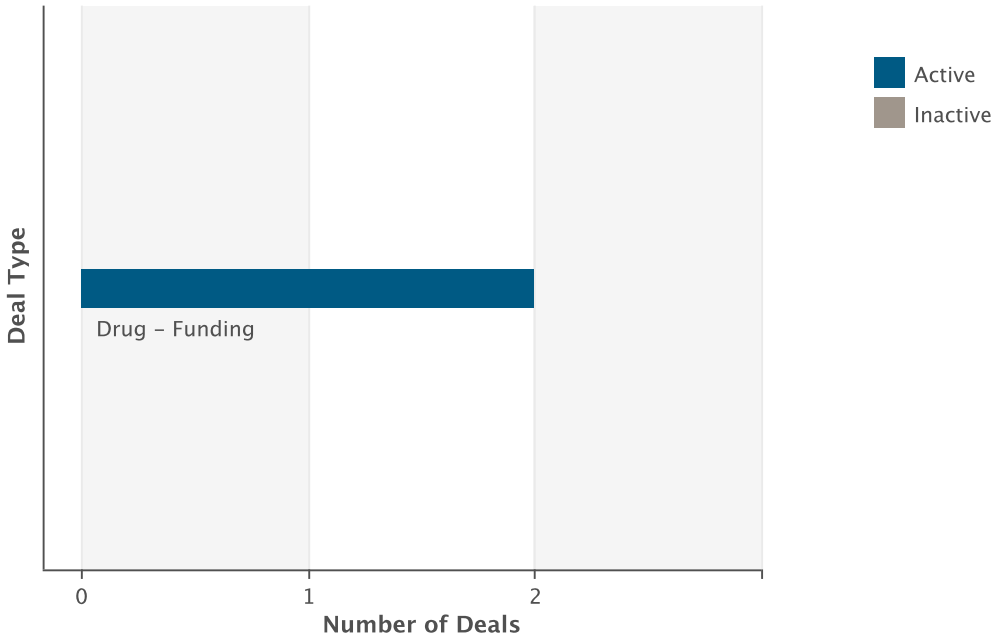
## Deals by Type Chart




## Deals by Type Table

| Deal Type | Active | Inactive | Total |
|---|---|---|---|
| Drug - Funding | 2 | 0 | 2 |

Return to Table of Contents

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# MGD-006

## MGD-006 SNAPSHOT

| | |
|---|---|
| **Drug Name** | MGD-006 |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | Servier;MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Acute myelogenous leukemia |
| **Target-based Actions** | CDw123 modulator;CD3 modulator |
| **Other Actions** | Anticancer protein kinase inhibitor |
| **Technologies** | Multivalent antibody;Humanized antibody;Injectable formulation;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 06-Feb-2014 |

## MGD-006 DEVELOPMENT PROFILE

## SUMMARY

MacroGenics, in collaboration with Servier, investigating MGD-006, a bispecific humanized antibody which acts on CD123 and CD3, based on MacroGenics' Dual-Affinity Re-Targeting (DART) technology, for the potential injectable treatment of acute myeloid leukemia,. By November 2013, IND-enabling studies had been initiated and clinical development was expected to begin in the first half of 2014. In December 2013, preclinical data were presented. In February 2014, the 30-day US FDA review period was cleared. In November 2013, the company was seeking to outlicense the drug.

## MGD-006 DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Acute myelogenous leukemia | US | Discovery | 06-Nov-2013 |
| Servier | Acute myelogenous leukemia | France | Discovery | 06-Nov-2013 |

## MGD-006 DRUG NAMES

| Names | Type |
|---|---|
| MGD-006 | Research Code |

Return to Table of Contents

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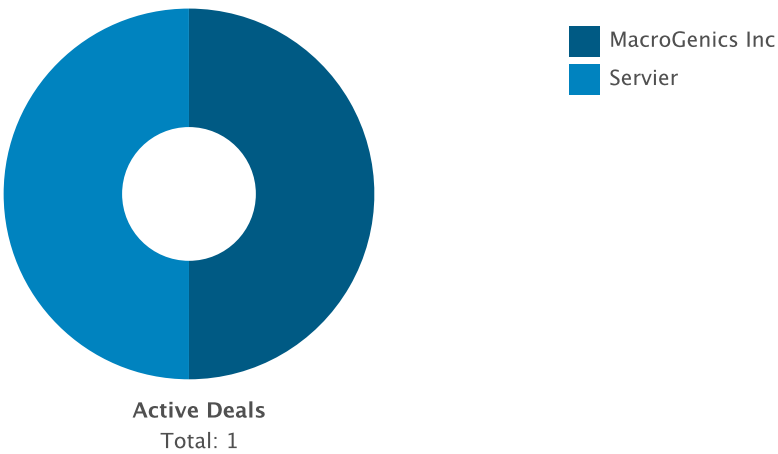
## MGD-006 DEALS AND PATENTS

### DEALS

#### Deals by Parent Company Chart




#### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 1 | 0 | 0 | 0 | 1 |
| Servier | 0 | 0 | 1 | 0 | 1 |

Return to Table of Contents

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## 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

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# humanized mAbs (Chikungunya virus infection), MacroGenics/Washington University

## humanized mAbs (Chikungunya virus infection), MacroGenics/Washington University SNAPSHOT

| | |
|---|---|
| **Drug Name** | humanized mAbs (Chikungunya virus infection), MacroGenics/Washington University |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | Washington University in St Louis;MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Chikungunya virus infection |
| **Target-based Actions** | |
| **Other Actions** | Unspecified drug target;Antiviral |
| **Technologies** | Monoclonal antibody humanized;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 14-Feb-2013 |

## humanized mAbs (Chikungunya virus infection), MacroGenics/Washington University DEVELOPMENT PROFILE

### SUMMARY

MacroGenics and Washington University are investigating humanized mAbs for the potential prevention of Chikungunya virus infection,. By May 2010, development had been ongoing ; in February 2013, this was still the case. In May 2011, the company's strategy involved seeking to outlicense its programs.

## humanized mAbs (Chikungunya virus infection), MacroGenics/Washington University DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Chikungunya virus infection | US | Discovery | 25-May-2010 |
| Washington University in St Louis | Chikungunya virus infection | US | Discovery | 25-May-2010 |

## humanized mAbs (Chikungunya virus infection), MacroGenics/Washington University DRUG NAMES

| Names | Type |
|---|---|
| humanized mAbs (Chikungunya virus infection), MacroGenics/Washington University | |

Return to Table of Contents

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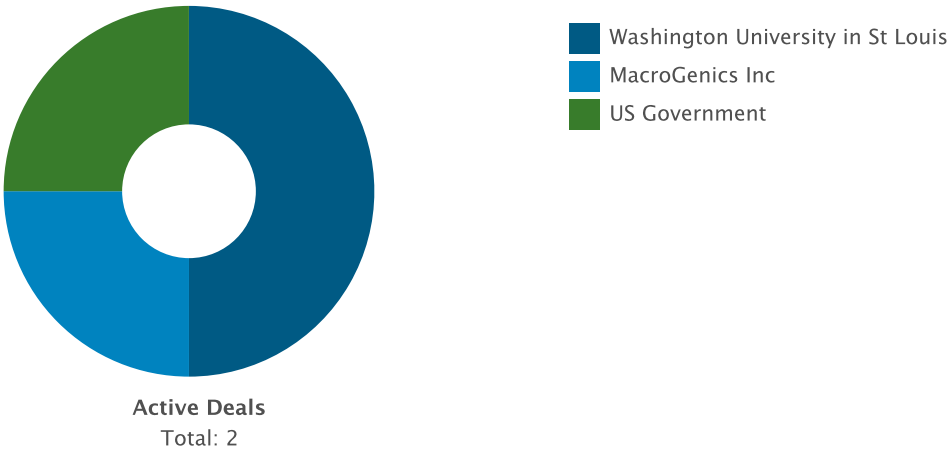
## DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| Washington University in St Louis | 2 | 0 | 0 | 0 | 2 |
| MacroGenics Inc | 0 | 0 | 1 | 0 | 1 |
| US Government | 0 | 0 | 1 | 0 | 1 |

Return to Table of Contents

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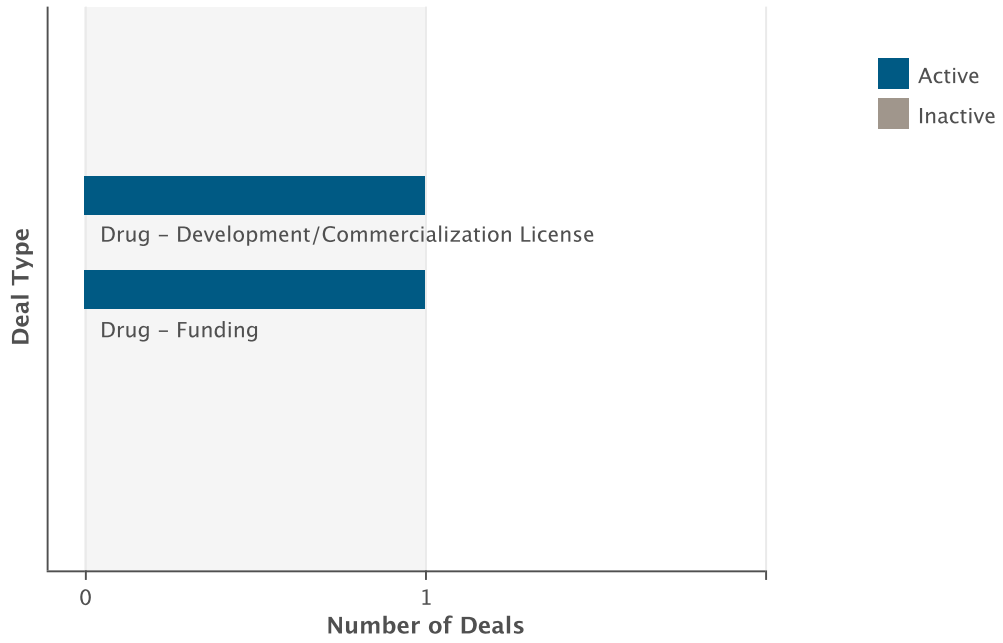
## Deals by Type Chart




## Deals by Type Table

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

Return to Table of Contents

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# bispecific antibodies (DART, cancer), MacroGenics/ Pfizer

## bispecific antibodies (DART, cancer), MacroGenics/ Pfizer SNAPSHOT

| | |
|---|---|
| **Drug Name** | bispecific antibodies (DART, cancer), MacroGenics/ Pfizer |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | Pfizer Inc;MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Cancer |
| **Target-based Actions** | Insulin-like growth factor 1 antagonist;B-lymphocyte antigen CD19 modulator;Epidermal growth factor antagonist |
| **Other Actions** | CD3 agonist;Anticancer antibody;Anticancer protein kinase inhibitor |
| **Technologies** | Biological therapeutic;Multivalent antibody |
| **Last Change Date** | 04-Dec-2013 |

## bispecific antibodies (DART, cancer), MacroGenics/ Pfizer DEVELOPMENT PROFILE

### SUMMARY

Pfizer and MacroGenics are investigating bispecific antibodies, based on MacroGenics' Dual-Affinity Re-Targeting (DART) technology, including bispecific antibodies that bind both the CD19 antigen and the T-cell receptor component CD3/TCR (CD19xCD3/TCR), and that bind EGFR and IGF1R (EGFRxIGF1R) for the potential treatment of cancer, including solid tumors like gastrointestinal tumors and liquid tumors like acute myeloid leukemia and other hematological cancers,. In June 2012, preclinical data were reported. In December 2013, the program was in preclinical development. In November 2012, the company was seeking to outlicense the program.

## bispecific antibodies (DART, cancer), MacroGenics/ Pfizer DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Cancer | US | Discovery | 26-Oct-2010 |
| Pfizer Inc | Cancer | US | Discovery | 26-Oct-2010 |

Return to Table of Contents

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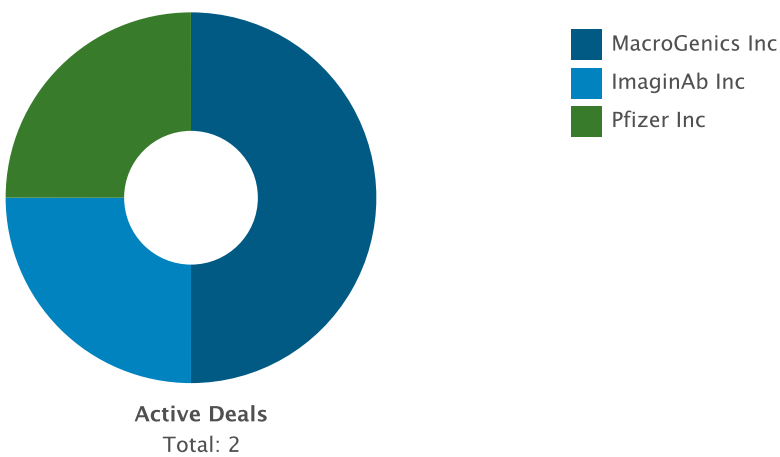
## bispecific antibodies (DART, cancer), MacroGenics/ Pfizer DRUG NAMES

| Names | Type |
|---|---|
| IgDART (EGFRxIGF1R) | |
| CD19xCD3 DART | |
| CD19xTCR DART | |
| bispecific antibodies (DART, cancer), MacroGenics/ Pfizer | |

## bispecific antibodies (DART, cancer), MacroGenics/ Pfizer DEALS AND PATENTS

### DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 2 | 0 | 0 | 0 | 2 |
| Pfizer Inc | 0 | 0 | 1 | 0 | 1 |
| ImaginAb Inc | 0 | 0 | 1 | 0 | 1 |

Return to Table of Contents

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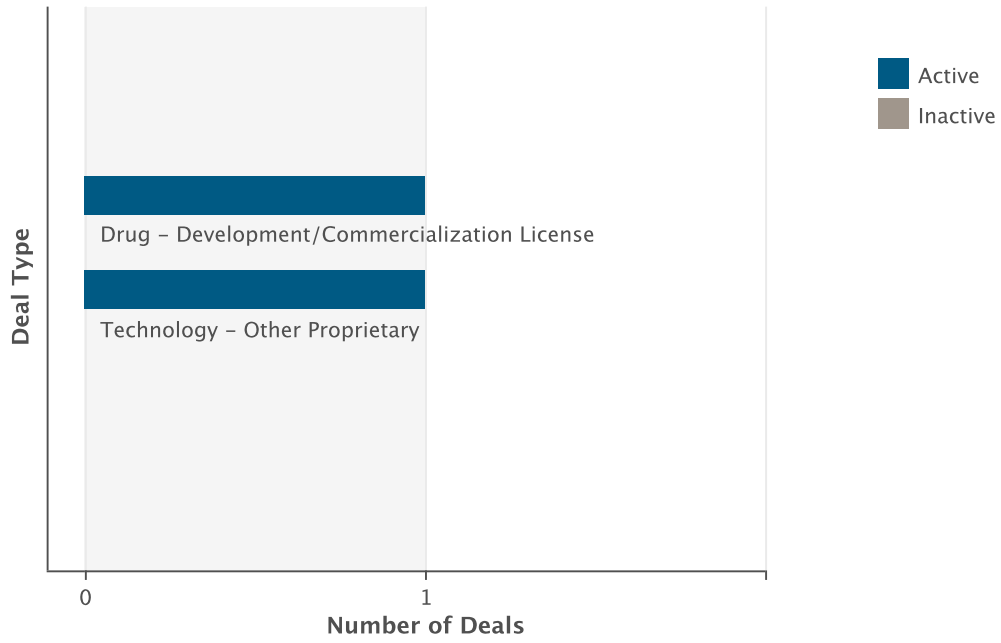
## Deals by Type Chart




## Deals by Type Table

| Deal Type | Active | Inactive | Total |
|---|---|---|---|
| Drug - Development/Commercialization License | 1 | 0 | 1 |
| Technology - Other Proprietary | 1 | 0 | 1 |

Return to Table of Contents

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# MGD-007

## MGD-007 SNAPSHOT

| | |
|---|---|
| **Drug Name** | MGD-007 |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc;Servier |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Cancer |
| **Target-based Actions** | Cell surface A33 antigen modulator;CD3 modulator |
| **Other Actions** | Anticancer antibody |
| **Technologies** | Multivalent antibody;Injectable formulation;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 06-Feb-2014 |

## MGD-007 DEVELOPMENT PROFILE

## SUMMARY

MacroGenics, in collaboration with Servier, investigating MGD-007, a bispecific antibody which acts on gpA33 and CD3, based on MacroGenics' Dual-Affinity Re-Targeting (DART) technology, for the potential injectable treatment of cancer. In November 2013, preclinical development was ongoing and clinical development was expected in the second half of 2014. At that time, the company was seeking to outlicense the drug .

## MGD-007 DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Cancer | US | Discovery | 06-Nov-2013 |
| Servier | Cancer | France | Discovery | 06-Nov-2013 |

## MGD-007 DRUG NAMES

| Names | Type |
|---|---|
| MGD-007 | Research Code |

Return to Table of Contents

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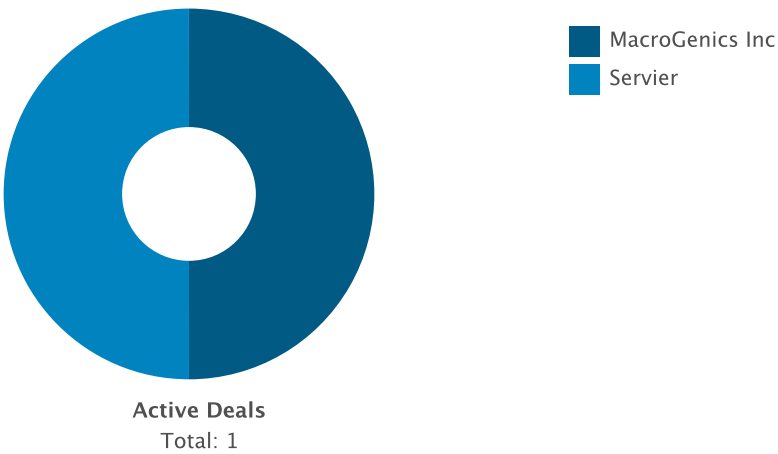
## MGD-007 DEALS AND PATENTS

### DEALS

#### Deals by Parent Company Chart




#### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| MacroGenics Inc | 1 | 0 | 0 | 0 | 1 |
| Servier | 0 | 0 | 1 | 0 | 1 |

Return to Table of Contents

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## 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

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# anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier

## anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier SNAPSHOT

| | |
|---|---|
| **Drug Name** | anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc;Servier |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Cancer |
| **Target-based Actions** | |
| **Other Actions** | Anticancer antibody;CD3 antagonist |
| **Technologies** | Multivalent antibody;Injectable formulation;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 06-Feb-2014 |

## anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier DEVELOPMENT PROFILE

### SUMMARY

MacroGenics, in collaboration with Servier, is investigating bispecific antibodies targeting CD3 and an undisclosed target, based on MacroGenics' Dual-Affinity Re-Targeting (DART) technology, for the potential treatment of cancer. In November 2013, the program was in preclinical development and IND-enabling studies were expected to be initiated later that year. At that time, the company was seeking to outlicense the program.

## anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Cancer | US | Discovery | 06-Nov-2013 |
| Servier | Cancer | France | Discovery | 06-Nov-2013 |

## anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier DRUG NAMES

| Names | Type |
|---|---|
| anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier | |

Return to Table of Contents

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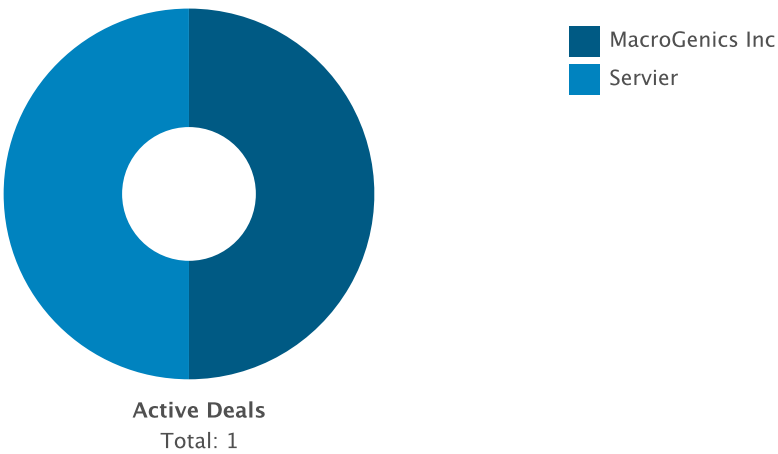
## anti-CD3/undisclosed antibodies (DART/injectable, cancer), Macrogenics/Servier DEALS AND PATENTS

### DEALS

### Deals by Parent Company Chart




### Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|---|---|---|---|---|---|
| | Active | Inactive | Active | Inactive | |
| Servier | 0 | 0 | 1 | 0 | 1 |
| MacroGenics Inc | 1 | 0 | 0 | 0 | 1 |

Return to Table of Contents

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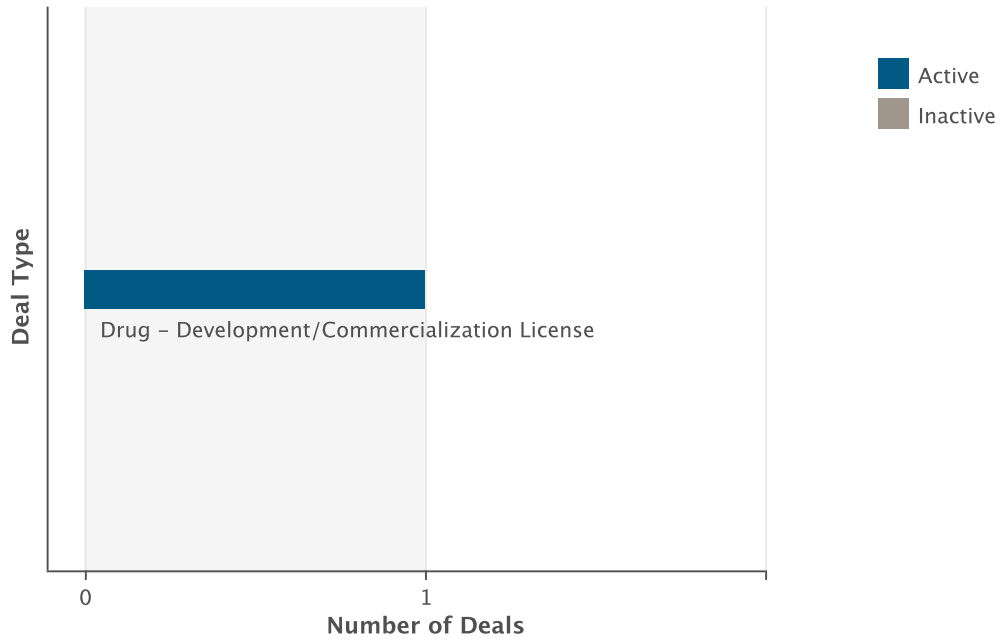
## Deals by Type Chart




## Deals by Type Table

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

Return to Table of Contents

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# MGD-010

## MGD-010 SNAPSHOT

| | |
|---|---|
| **Drug Name** | MGD-010 |
| **Key Synonyms** | |
| **Originator Company** | MacroGenics Inc |
| **Active Companies** | MacroGenics Inc |
| **Inactive Companies** | |
| **Highest Status** | Discovery |
| **Active Indications** | Autoimmune disease |
| **Target-based Actions** | Immunoglobulin gamma Fc receptor II modulator;CD79b modulator |
| **Other Actions** | Immunomodulator |
| **Technologies** | Multivalent antibody;Injectable formulation;Biological therapeutic;Parenteral formulation unspecified |
| **Last Change Date** | 04-Dec-2013 |

## MGD-010 DEVELOPMENT PROFILE

## SUMMARY

MacroGenics investigating MGD-010, a bispecific antibody which acts on CD32B and CD79B, based on MacroGenics' Dual-Affinity Re-Targeting (DART) technology, for the potential injectable treatment of autoimmune diseases. By November 2013, IND-enabling studies had been initiated. At that time, the company was seeking to outlicense the drug.

## MGD-010 DEVELOPMENT STATUS

### CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|---|---|---|---|---|
| MacroGenics Inc | Autoimmune disease | US | Discovery | 06-Nov-2013 |

## MGD-010 DRUG NAMES

| Names | Type |
|---|---|
| MGD-010 | Research Code |

Return to Table of Contents

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Return to Table of Contents