

Zafgen Inc

COMPANY AND PIPELINE OVERVIEW REPORT

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

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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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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.

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

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Zafgen Inc

COMPANY OVERVIEW

| | |
|---------------------------------------|---|
| Company Name | Zafgen Inc |
| Parent Company Name | Zafgen Inc |
| Website | http://www.zafgen.com/ |
| Country | US |
| Number of Drugs in Active Development | 3 |
| Number of Inactive Drugs | 3 |
| Number of Patents as Owner | 32 |
| Number of Patents as Third Party | 0 |
| Number of Deals | 3 |
| Key Indications | Obesity,Non-insulin dependent diabetes,Non-alcoholic steatohepatitis,Brain tumor,Non alcoholic fatty liver disease,Prader-Willi syndrome,Weight gain,Weight loss,Angiogenesis disorder,Cardiovascular disease,Metabolic disorder,Stroke |
| Key Target-based Actions | Methionine aminopeptidase-2 inhibitor,C-reactive protein inhibitor,Thioredoxin stimulator,Methionine aminopeptidase-2 modulator |
| Key Technologies | Small molecule therapeutic,Oral formulation,Subcutaneous formulation,Natural product,Crystalline form,Formulation preservation,Intravenous formulation,Oligonucleotide antisense |

COMPANY PROFILE

SUMMARY

Zafgen, founded in 2005, is a private venture-backed biopharmaceutical company that develops obesity therapeutics based on vascular targeting in adipose tissue.

COMPANY LOCATION

The company is based in Cambridge, MA.

LICENSING AGREEMENTS

In January 2009, Argenta Discovery and Zafgen signed an agreement to research and discover therapeutics for the treatment of obesity.

In August 2008, Anthill and Zafgen entered into an agreement where Anthill was to use its ACOS high-speed synthesis and purification capabilities to assist Zafgen in lead compounds identification for its obesity programs.

FINANCIAL

In June 2014, Zafgen announced an IPO of 6,000,000 shares of its common stock priced at \$16 per share. At that time, underwriters were granted a 30-day option to purchase up to an additional 900,000 shares of common stock to cover any over-allotments. The shares were traded on the NASDAQ Global Market under the ticker symbol "ZFGN". Later that month, the offering was closed and at that time, the over-allotment option was fully exercised.

In April 2014, the company closed \$20 million term loan with Oxford Finance LLC and MidCap Financial.

In December 2013, Zafgen raised \$45 million in a series E equity financing round.

In December 2012, Zafgen raised \$21 million in a series D equity financing.

In July 2011, Zafgen raised \$33 million in a series C financing.

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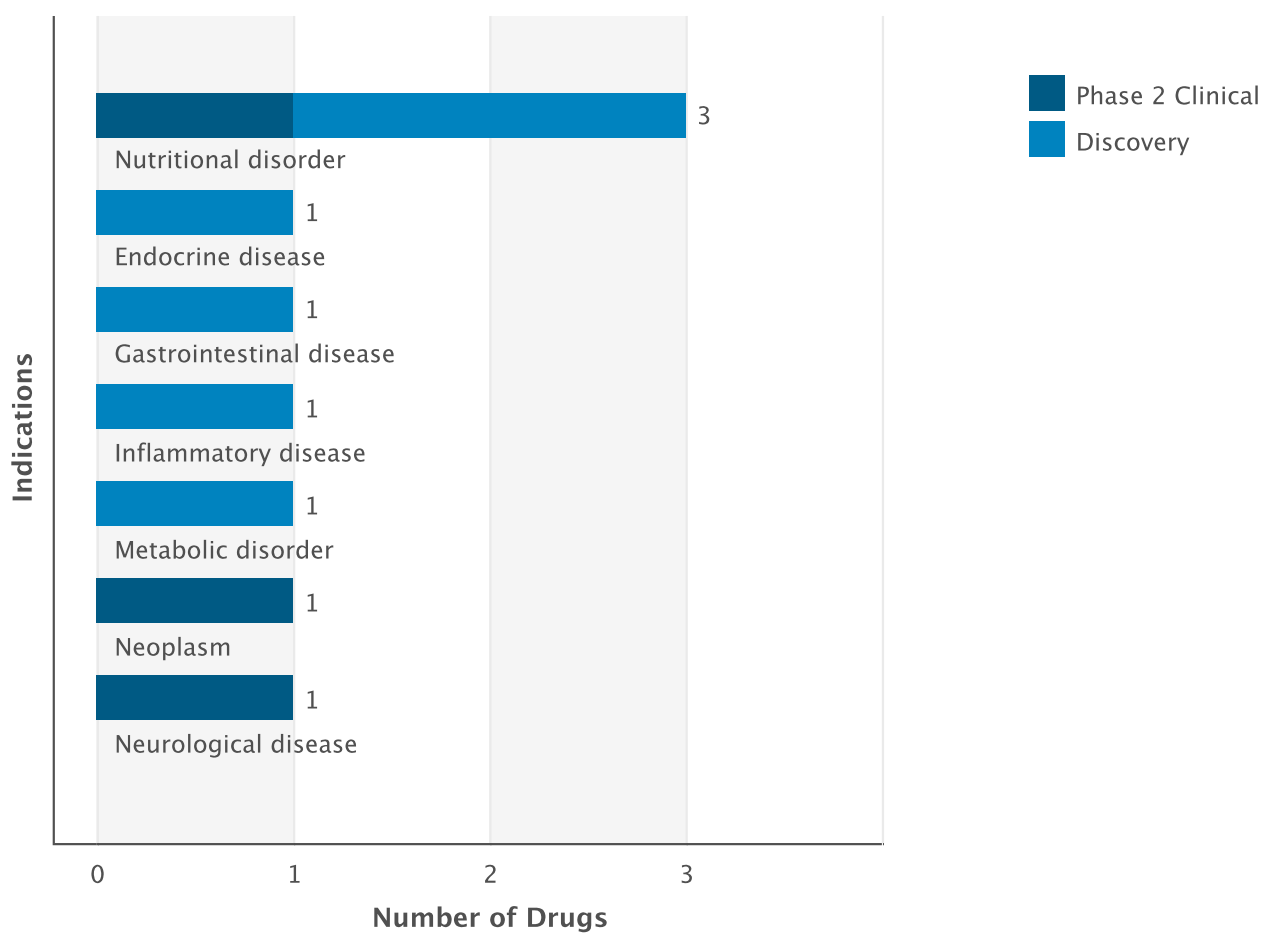


PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



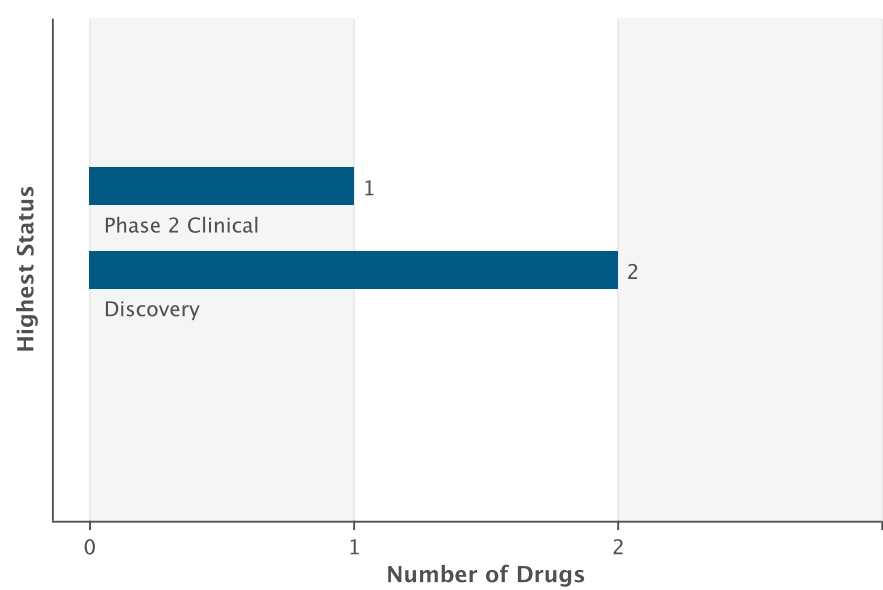
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Drugs by Indication Table

| Indication | Active | Inactive | Total |
|--------------------------|--------|----------|-------|
| Nutritional disorder | 3 | 3 | 6 |
| Gastrointestinal disease | 1 | 1 | 2 |
| Metabolic disorder | 1 | 1 | 2 |
| Endocrine disease | 1 | 1 | 2 |
| Neurological disease | 1 | 0 | 1 |
| Inflammatory disease | 1 | 0 | 1 |
| Neoplasm | 1 | 0 | 1 |

Drugs by Highest Status

Active Drugs by Highest Status Chart



Drugs by Highest Status Table

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

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DEALS

| Deal Type | Principal | | Partner | | Total |
|--|-----------|----------|---------|----------|-------|
| | Active | Inactive | Active | Inactive | |
| Technology - Target Validation | 0 | 0 | 1 | 0 | 1 |
| Drug - Early Research/Development | 0 | 0 | 1 | 0 | 1 |
| Drug - Development/Commercialization License | 0 | 0 | 1 | 0 | 1 |

CLINICAL TRIALS

Trials by Condition Studied

| Condition Studied | Ongoing | All |
|----------------------|---------|-----|
| Nutritional disorder | 2 | 7 |

Trials by Phase

| Phase | Ongoing | All |
|---------|---------|-----|
| Phase 3 | 1 | 1 |
| Phase 2 | 1 | 3 |
| Phase 1 | 0 | 3 |

Phase Definitions

Phase 3 Clinical

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

Phase 2 Clinical

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

Phase 1 Clinical

Includes Phase 1, Phase 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 | 6 | 0 | 6 |
| Endocrine disease | 4 | 0 | 4 |
| Gastrointestinal disease | 5 | 0 | 5 |
| Genitourinary disease | 3 | 0 | 3 |
| Growth disorder | 1 | 0 | 1 |
| Degeneration | 2 | 0 | 2 |
| Andrology | 1 | 0 | 1 |

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| | | | |
|---------------------------|----|---|----|
| Psychiatric disorder | 2 | 0 | 2 |
| Musculoskeletal disease | 3 | 0 | 3 |
| Neoplasm | 2 | 0 | 2 |
| Genetic disorder | 1 | 0 | 1 |
| Metabolic disorder | 5 | 0 | 5 |
| Neurological disease | 3 | 0 | 3 |
| Nutritional disorder | 25 | 0 | 25 |
| Respiratory disease | 1 | 0 | 1 |
| Infectious disease | 2 | 0 | 2 |
| Injury | 1 | 0 | 1 |
| Inflammatory disease | 2 | 0 | 2 |
| Fatigue | 1 | 0 | 1 |
| Gynecology and obstetrics | 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.

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PRODUCT PORTFOLIO DRUGS

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

beloranib (sc, obesity/Prader-Willi syndrome/craniopharyngioma), Zafgen

| | |
|-----------------------------|--|
| Drug Name | beloranib (sc, obesity/Prader-Willi syndrome/craniopharyngioma), Zafgen |
| Key Synonyms | beloranib |
| Originator Company | Chong Kun Dang Pharmaceutical Corp |
| Active Companies | Zafgen Inc |
| Inactive Companies | Chong Kun Dang Pharmaceutical Corp |
| Highest Status | Phase 2 Clinical |
| Active Indications | Obesity, Brain tumor, Prader-Willi syndrome |
| Target-based Actions | Methionine aminopeptidase-2 inhibitor |
| Other Actions | Anticancer, Lipid metabolism modulator |
| Technologies | Subcutaneous formulation, Small molecule therapeutic |
| Last Change Date | 11-Jul-2014 |

ZGN-839

| | |
|-----------------------------|---|
| Drug Name | ZGN-839 |
| Key Synonyms | |
| Originator Company | Zafgen Inc |
| Active Companies | Zafgen Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Non-insulin dependent diabetes, Non alcoholic fatty liver disease, Non-alcoholic steatohepatitis, Obesity |
| Target-based Actions | Methionine aminopeptidase-2 inhibitor |
| Other Actions | Anti-inflammatory, Hypoglycemic agent |
| Technologies | Oral formulation, Small molecule therapeutic |
| Last Change Date | 21-May-2014 |

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second generation MetAP2 inhibitor (sc, obesity), Zafgen

| | |
|-----------------------------|--|
| Drug Name | second generation MetAP2 inhibitor (sc, obesity), Zafgen |
| Key Synonyms | |
| Originator Company | Zafgen Inc |
| Active Companies | Zafgen Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Obesity |
| Target-based Actions | Methionine aminopeptidase-2 inhibitor |
| Other Actions | |
| Technologies | Subcutaneous formulation, Small molecule therapeutic |
| Last Change Date | 09-Apr-2014 |

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