

Aerie Pharmaceuticals Inc

COMPANY AND PIPELINE OVERVIEW REPORT

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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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

COMPANY OVERVIEW

| Company Name | Aerie Pharmaceuticals Inc |
|--|--|
| Parent Company Name | Aerie Pharmaceuticals Inc |
| Website | http://www.aeriepharma.com/ |
| Country | US |
| Number of Drugs in Active Development | 6 |
| Number of Inactive Drugs | 1 |
| Number of Patents as Owner | 12 |
| Number of Patents as Third Party | 1 |
| Number of Deals | 0 |
| Key Indications | Glaucoma,Ocular hypertension,Ocular disease,Open angle glaucoma,Dermatological disease,Gastrointestinal disease,Bone disease,Cancer,Obesity,Renal disease |
| Key Target-based Actions | Rho associated protein kinase inhibitor,Prostanoid receptor agonist,Noradrenaline transporter inhibitor,Rhodopsin kinase inhibitor,Beta-adrenoceptor related kinase-1 inhibitor,Beta-adrenoceptor related kinase-2 inhibitor,CAM kinase inhibitor,GRK5 protein kinase inhibitor,GRK6 protein kinase inhibitor,Protein kinase A inhibitor,Protein kinase C inhibitor,Protein kinase modulator,Protein tyrosine kinase inhibitor |
| Key Technologies | Small molecule therapeutic,Ophthalmic formulation,Ophthalmic liquid formulation,Ophthalmic drug implant,Solution,Sustained release formulation,Drug combination,Crystalline form,Salt synthesis,Dermatological |

COMPANY PROFILE

SUMMARY

Aerie Pharmaceuticals Inc, a spin-out of Duke University Medical Center, is a biotechnology company developing therapies for sight-threatening diseases of the eye such as glaucoma. Its discovery platform includes a prodrug technology that increases drug delivery through the cornea.

EARLY R&D

By November 2007, the company was investigating protein kinase inhibitors and ethacrynic acid derivatives, to lower intraocular pressure in glaucoma patients. At that time, preclinical candidates from the series were anticipated later in that year.

FINANCIAL

In March 2011, Aerie raised \$30 million through a series B financing.

In October 2005, Aerie raised \$21 million through a series A financing.

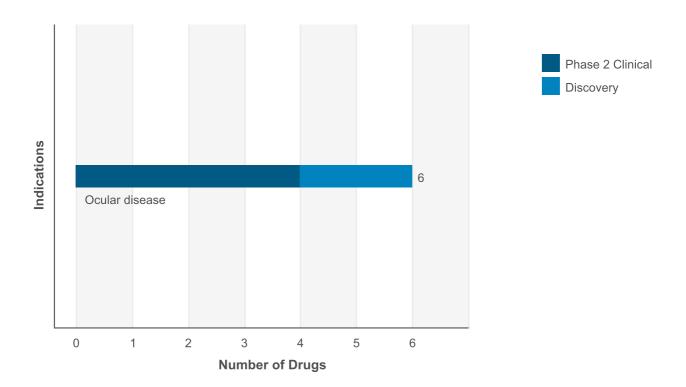


PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart

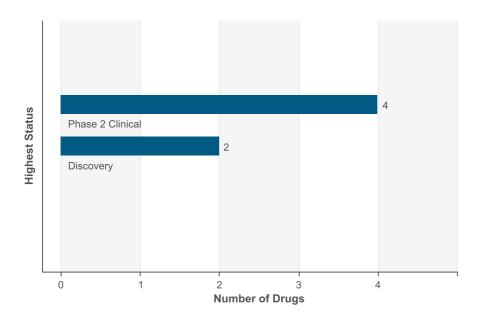


Drugs by Indication Table

| Indication | Active | Inactive | Total |
|----------------|--------|----------|-------|
| Ocular disease | 6 | 1 | 7 |

Drugs by Highest Status

Active Drugs by Highest Status Chart



Drugs by Highest Status Table

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

CLINICAL TRIALS

Trials by Condition Studied

| Condition Studied | Ongoing | All |
|-------------------|---------|-----|
| Ocular disease | 3 | 11 |

Trials by Phase

| Phase | Ongoing | All |
|---------|---------|-----|
| Phase 2 | 3 | 10 |
| Phase 1 | 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 1, 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 | 7 | 0 | 7 |
| Endocrine disease | 2 | 0 | 2 |
| Gastrointestinal disease | 8 | 0 | 8 |
| Genitourinary disease | 8 | 1 | 9 |
| Degeneration | 2 | 0 | 2 |
| Immune disorder | 1 | 0 | 1 |
| Musculoskeletal disease | 8 | 0 | 8 |
| Neoplasm | 6 | 0 | 6 |
| Ocular disease | 10 | 0 | 10 |
| Neurological disease | 1 | 0 | 1 |
| Nutritional disorder | 4 | 0 | 4 |
| Respiratory disease | 6 | 1 | 7 |
| Inflammatory disease | 7 | 0 | 7 |
| Gynecology and obstetrics | 1 | 0 | 1 |
| Dermatological disease | 8 | 0 | 8 |

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

PRODUCT PORTFOLIO DRUGS

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

AR-102 (prostaglandin analog, glaucoma), Aerie

| Drug Name | AR-102 (prostaglandin analog, glaucoma), Aerie |
|----------------------|---|
| Key Synonyms | |
| Originator Company | Aerie Pharmaceuticals Inc |
| Active Companies | Aerie Pharmaceuticals Inc |
| Inactive Companies | |
| Highest Status | Phase 2 Clinical |
| Active Indications | Glaucoma |
| Target-based Actions | Prostanoid receptor agonist |
| Other Actions | Ophthalmological agent |
| Technologies | Ophthalmic formulation, Ophthalmic liquid formulation, Small molecule therapeutic |
| Last Change Date | 19-Aug-2011 |

AR-12286

| Drug Name | AR-12286 |
|----------------------|---|
| Key Synonyms | |
| Originator Company | Aerie Pharmaceuticals Inc |
| Active Companies | Aerie Pharmaceuticals Inc |
| Inactive Companies | |
| Highest Status | Phase 2 Clinical |
| Active Indications | Ocular hypertension, Glaucoma |
| Target-based Actions | Rho associated protein kinase inhibitor |
| Other Actions | Antiglaucoma agent, Antihypertensive, Ophthalmological agent |
| Technologies | Ophthalmic formulation, Ophthalmic liquid formulation, Solution, Small molecule therapeutic |
| Last Change Date | 09-Mar-2012 |

AR-13324

| Drug Name | AR-13324 |
|----------------------|--|
| Key Synonyms | |
| Originator Company | Aerie Pharmaceuticals Inc |
| Active Companies | Aerie Pharmaceuticals Inc |
| Inactive Companies | |
| Highest Status | Phase 2 Clinical |
| Active Indications | Ocular hypertension, Glaucoma |
| Target-based Actions | Noradrenaline transporter inhibitor, Rho associated protein kinase inhibitor |
| Other Actions | Antihypertensive, Antiglaucoma agent |
| Technologies | Ophthalmic formulation, Solution, Small molecule therapeutic |
| Last Change Date | 05-Nov-2012 |

AR-12286 + travoprost (fixed dose combination, ocular hypertension/glaucoma), Aerie

| Drug Name | AR-12286 + travoprost (fixed dose combination, ocular hypertension/glaucoma), Aerie |
|----------------------|---|
| Key Synonyms | |
| Originator Company | Aerie Pharmaceuticals Inc |
| Active Companies | Aerie Pharmaceuticals Inc |
| Inactive Companies | |
| Highest Status | Phase 2 Clinical |
| Active Indications | Open angle glaucoma, Ocular hypertension |
| Target-based Actions | Rho associated protein kinase inhibitor, Prostanoid receptor agonist |
| Other Actions | Ophthalmological agent, PGF2 alpha agonist, Topical antiglaucoma agent |
| Technologies | Drug combination, Ophthalmic formulation, Ophthalmic liquid formulation, Small molecule therapeutic |
| Last Change Date | 15-Feb-2013 |



latanoprost (sustained release ocular implant), Aerie

| Drug Name | latanoprost (sustained release ocular implant), Aerie |
|----------------------|--|
| Key Synonyms | latanoprost |
| Originator Company | Aerie Pharmaceuticals Inc |
| Active Companies | Aerie Pharmaceuticals Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Ocular disease |
| Target-based Actions | |
| Other Actions | PGF2 alpha agonist, Ophthalmological agent |
| Technologies | Sustained release formulation, Ophthalmic formulation, Ophthalmic drug implant, Small molecule therapeutic |
| Last Change Date | 17-Oct-2011 |

AR-12286 (ophthalmic drug implant/sustained release formulation, ocular diseases), Aerie

| Drug Name | AR-12286 (ophthalmic drug implant/sustained release formulation, ocular diseases), Aerie |
|----------------------|--|
| Key Synonyms | |
| Originator Company | Aerie Pharmaceuticals Inc |
| Active Companies | Aerie Pharmaceuticals Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Ocular disease |
| Target-based Actions | Rho associated protein kinase inhibitor |
| Other Actions | Ophthalmological agent |
| Technologies | Sustained release formulation, Ophthalmic formulation, Ophthalmic drug implant, Small molecule therapeutic |
| Last Change Date | 14-Oct-2011 |



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