

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i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.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

COMPANY OVERVIEW

| | |
|--|---|
| Company Name | Avalanche Biotechnologies Inc |
| Parent Company Name | Avalanche Biotechnologies Inc |
| Website | http://www.avalanchebiotech.com/ |
| Country | US |
| Number of Drugs in Active Development | 6 |
| Number of Inactive Drugs | 0 |
| Number of Patents as Owner | 3 |
| Number of Patents as Third Party | 0 |
| Number of Deals | 7 |
| Key Indications | Wet age related macular degeneration,Color vision defect,Diabetic macular edema,Glaucoma,Retinal venous occlusion,Retinoschisis,Unidentified indication,Diabetic retinopathy,Retinitis pigmentosa,Stargardt disease |
| Key Target-based Actions | RS1 gene modulator,VEGF-1 receptor antagonist,Angiostatin gene modulator,CNTF gene modulator,FLT1 gene modulator,GDNF gene modulator,RPE65 gene modulator,TIMP3 gene modulator,VEGF receptor |
| Key Technologies | Virus recombinant,Biological therapeutic,Parenteral formulation unspecified,Injectable formulation,Ophthalmic formulation,Small molecule therapeutic,Gene transfer system viral,Gene expression regulation,Monoclonal |

COMPANY PROFILE

SUMMARY

Avalanche Biotechnologies is developing technologies and products for the sustained delivery of therapeutic proteins in patients with ocular diseases, with a focus on wet AMD.

COMPANY LOCATION

In September 2011, the company opened new office and research facilities in San Francisco, CA.

FINANCIAL

In January 2015, the company filed a registration statement on Form S-1/A with the Securities and Exchange Commission relating to a proposed public offering of 2,000,000 common stock shares. The offering was expected to consist of 1,762,500 shares by Avalanche and 237,500 shares to be offered by existing stockholders. At that time, the underwriters were granted a 30-day option to purchase up to an additional 300,000 shares from the selling shareholders and Avalanche, and agreed for lock-up agreements for a period of 90 days following the follow-on offering; Later that month, the company priced the public offering of 2,399,457 shares of \$141.6 million of common stock, each at a price of \$59.00 per share. At that time, the underwriters were granted a 30-day option to purchase up to an additional 359,918 shares of common stock. The follow-on offering was expected to close on January 13, 2015, which was subjected to customary closing conditions.

By September 2014, the company had completed a \$10 million private placement of common stock to Regeneron Pharmaceuticals Inc.

In July 2014, the company priced its initial public offering of 6 million shares of its common stock, at \$17 each and planned to raise \$102 million. The underwriters were granted a 30-day option to purchase up to 0.9 million additional shares of common stock. The offering was expected to close on August 05, 2014. At that time, the company's common stock began trading on the NASDAQ Global Market under the ticker symbol "AAVL". By September 2014, the company had raised net proceeds of approximately \$106.5 million from the placement of 6.9 million shares of its common stock, which included the full exercise of the underwriters' over-allotment option.

In April 2014, the company raised \$55 million in a series B financing round.

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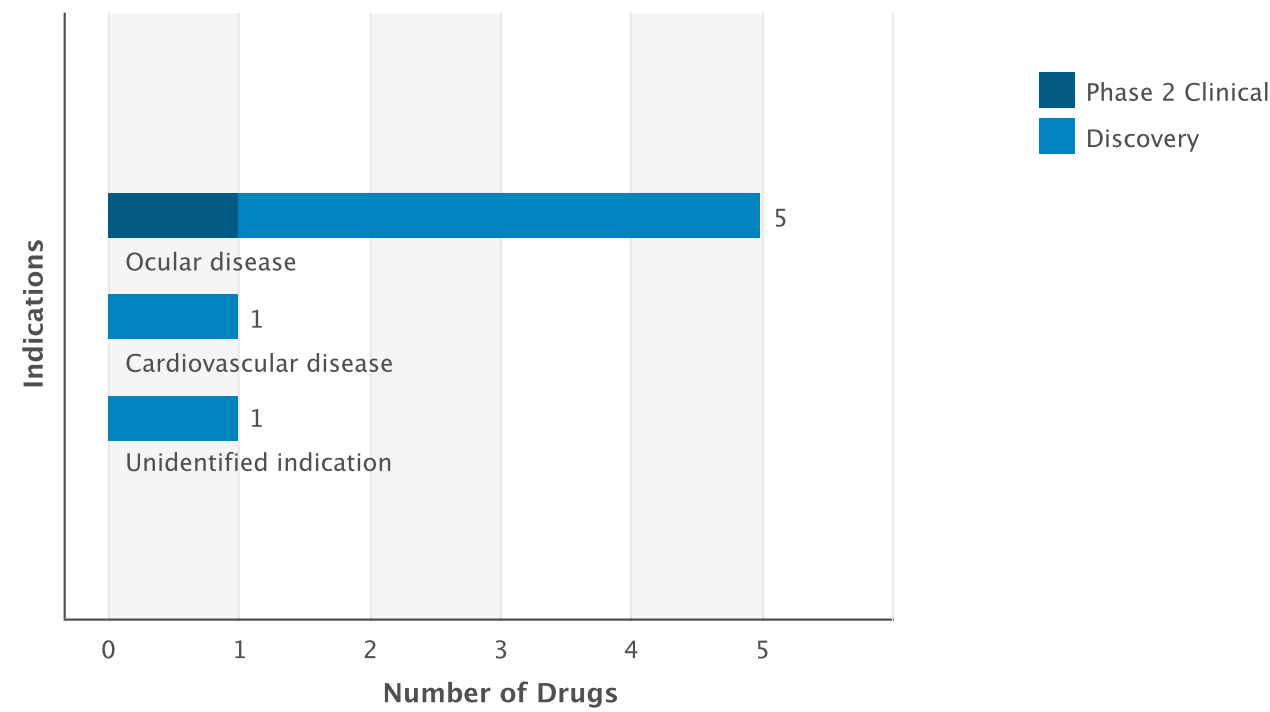
In September 2012, the company completed a series A financing. In November 2013, Avalanche raised additional financing in a follow-on round consisting of both new and existing investors. The financing included both preferred stock and convertible debt.

PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



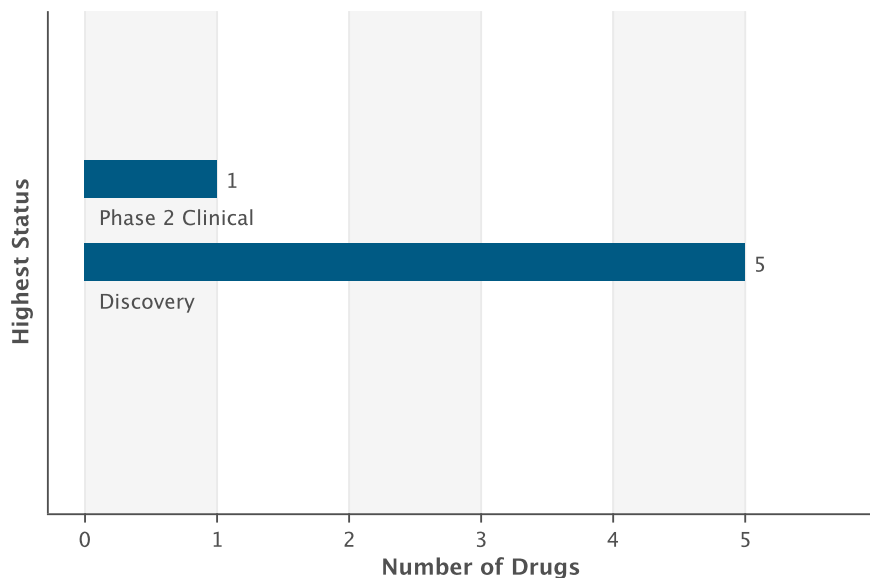
Drugs by Indication Table

| Indication | Active | Inactive | Total |
|-------------------------|--------|----------|-------|
| Ocular disease | 5 | 0 | 5 |
| Unidentified indication | 1 | 0 | 1 |
| Cardiovascular disease | 1 | 0 | 1 |

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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 2 Clinical | 1 |
| Discovery | 5 |

DEALS

| Deal Type | Principal | | Partner | | Total |
|--|-----------|----------|---------|----------|-------|
| | Active | Inactive | Active | Inactive | |
| Patent - Exclusive Rights | 0 | 0 | 1 | 0 | 1 |
| Drug - Funding | 2 | 0 | 0 | 0 | 2 |
| Drug - Early Research/Development | 0 | 0 | 1 | 0 | 1 |
| Drug - Development/Commercialization License | 1 | 0 | 1 | 0 | 2 |
| Technology - Delivery/Formulation | 1 | 0 | 0 | 0 | 1 |

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CLINICAL TRIALS

Trials by Condition Studied

| Condition Studied | Ongoing | All |
|-------------------|---------|-----|
| Ocular disease | 1 | 1 |

Trials by Phase

| Phase | Ongoing | All |
|---------|---------|-----|
| Phase 1 | 1 | 1 |

Phase Definitions

Phase 3 Clinical

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

Phase 2 Clinical

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

Phase 1 Clinical

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

PATENTS *

| Indication | As Owner | As Third Party | Total |
|--------------------------------|----------|----------------|-------|
| Cardiovascular disease | 2 | 0 | 2 |
| Ocular disease | 3 | 0 | 3 |
| Otorhinolaryngological disease | 1 | 0 | 1 |

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

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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

VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia

VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia SNAPSHOT

| | |
|-----------------------------|---|
| Drug Name | VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia |
| Key Synonyms | |
| Originator Company | University of Western Australia |
| Active Companies | Avalanche Biotechnologies Inc;Lions Eye Institute of Western Australia Inc;University of Western Australia |
| Inactive Companies | Merck Sharp & Dohme Corp |
| Highest Status | Phase 2 Clinical |
| Active Indications | Diabetic macular edema;Wet age related macular degeneration;Retinal venous occlusion |
| Target-based Actions | VEGF-1 receptor antagonist;VEGF receptor antagonist |
| Other Actions | Ophthalmological agent;Ocular antineovascularisation agent;Adeno-associated virus based gene therapy |
| Technologies | Injectable formulation;Ophthalmic formulation;Biological therapeutic;Parenteral formulation unspecified;Virus recombinant;Sustained release formulation |
| Last Change Date | 29-May-2015 |

VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia DEVELOPMENT PROFILE

SUMMARY

Avalanche Biotechnologies, in collaboration with Lions Eye Institute of the University of Western Australia, is developing a sustained-release, subretinal formulation of AVA-101 (rAAV.sFLT-1), a recombinant adeno-associated virus (AAV)-based therapy delivering Flt-1 (VEGF-1 receptor antagonist), for the potential treatment of wet age-related macular degeneration (AMD) . Avalanche is also investigating the program for diabetic macular edema (DME) and retinal vein occlusion (RVO). In December 2011, a phase I/II trial began ; in May 2012, preliminary data were presented ; in May 2013, further data were presented. In July 2014, top-line phase IIa data was expected mid-2015, and an IND-filing was expected in the second half of 2015. In May 2014, it was stated that upon completion of the phase IIa trial, Regeneron would have a time-limited right of first negotiation for certain rights to AVA-101 .

Merck Sharpe & Dohme was originally developing the drug; however, by November 2011, rights were licensed to Avalanche.

VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

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

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| Company | Indication | Country | Development Status | Date |
|--|--------------------------------------|-----------|--------------------|-------------|
| Avalanche Biotechnologies Inc | Wet age related macular degeneration | Australia | Phase 2 Clinical | 14-Dec-2011 |
| Lions Eye Institute of Western Australia Inc | Wet age related macular degeneration | Australia | Phase 2 Clinical | 14-Dec-2011 |
| University of Western Australia | Wet age related macular degeneration | Australia | Phase 2 Clinical | 14-Dec-2011 |
| Avalanche Biotechnologies Inc | Diabetic macular edema | US | Discovery | 10-Sep-2012 |
| Avalanche Biotechnologies Inc | Retinal venous occlusion | US | Discovery | 08-Jul-2014 |
| Merck Sharp & Dohme Corp | Wet age related macular degeneration | US | Discontinued | 01-Nov-2011 |

VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia DRUG NAMES

| Names | Type |
|---|---------------|
| AVA-101 | Research Code |
| rAAV.sFLT-1 | Research Code |
| adenovirus-based therapy (wet AMD), Avalanche Biotechnologies/Lions Eye Institute | |
| VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia | |

VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia 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 |
| Wet age related macular degeneration | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |

Total Trials by Phase and Status

| Phase 4 Clinical | | Phase 3 Clinical | | Phase 2 Clinical | | Phase 1 Clinical | | Phase Unspecified | | Total | |
|---------------------------|-----|------------------|-----|------------------|-----|------------------|-----|-------------------|-----|----------|-----|
| On-going | All | On-going | All | On-going | All | On-going | All | On-going | All | On-going | All |
| Total by Phase and Status | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |

Phase Definitions

Phase 3 Clinical

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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)

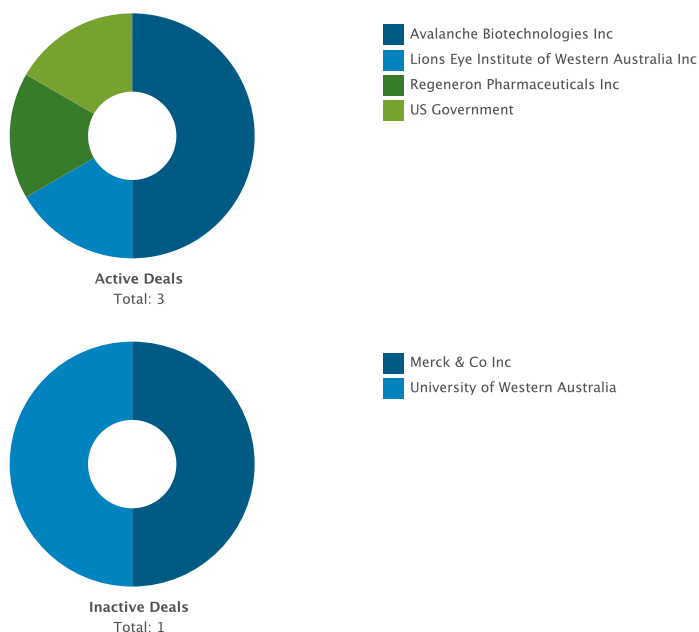
Phase 1 Clinical

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

VEGF-1 (Flt-1) receptor antagonist (adenovirus vector, wet AMD), Avalanche Biotechnologies/Lions Eye Institute/ University of Western Australia DEALS AND PATENTS

DEALS

Deals by Parent Company Chart

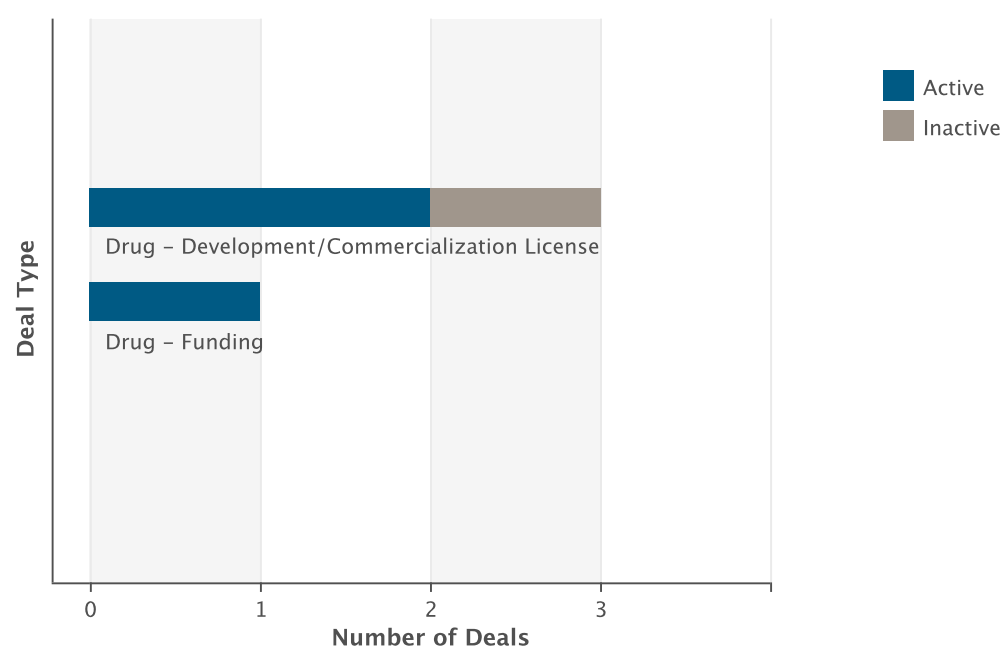


Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|--|-----------|----------|---------|----------|-------|
| | Active | Inactive | Active | Inactive | |
| Avalanche Biotechnologies Inc | 2 | 0 | 1 | 0 | 3 |
| US Government | 0 | 0 | 1 | 0 | 1 |
| Merck & Co Inc | 0 | 0 | 0 | 1 | 1 |
| University of Western Australia | 0 | 1 | 0 | 0 | 1 |
| Regeneron Pharmaceuticals Inc | 0 | 0 | 1 | 0 | 1 |
| Lions Eye Institute of Western Australia Inc | 1 | 0 | 0 | 0 | 1 |

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Deals by Type Chart



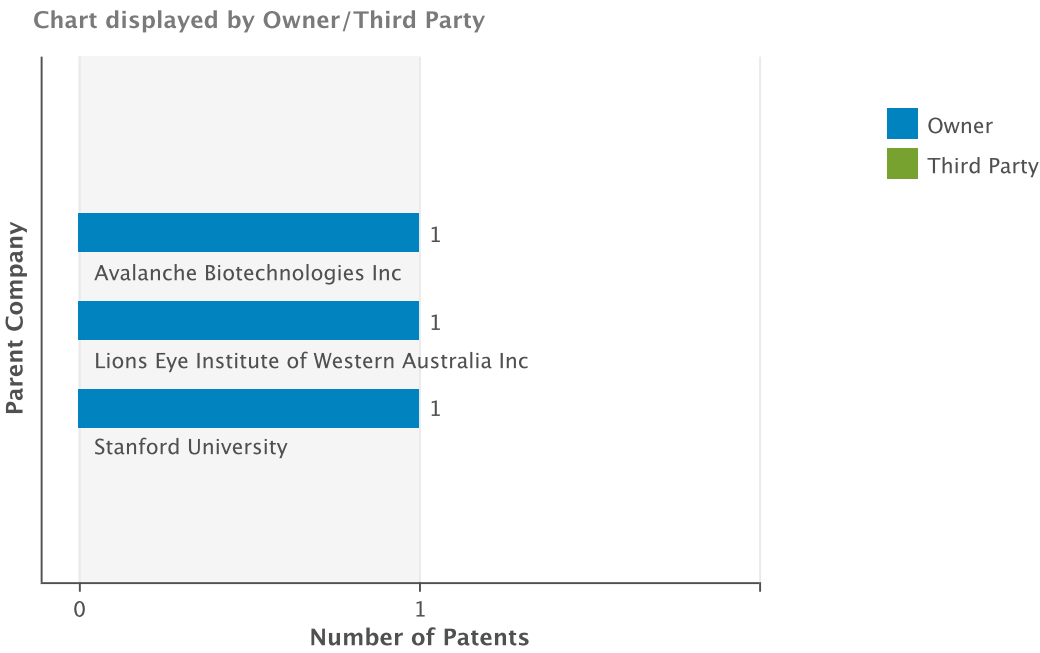
Deals by Type Table

| Deal Type | Active | Inactive | Total |
|--|--------|----------|-------|
| Drug - Development/Commercialization License | 2 | 1 | 3 |
| Drug - Funding | 1 | 0 | 1 |

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PATENTS

Patents by Parent Company Chart

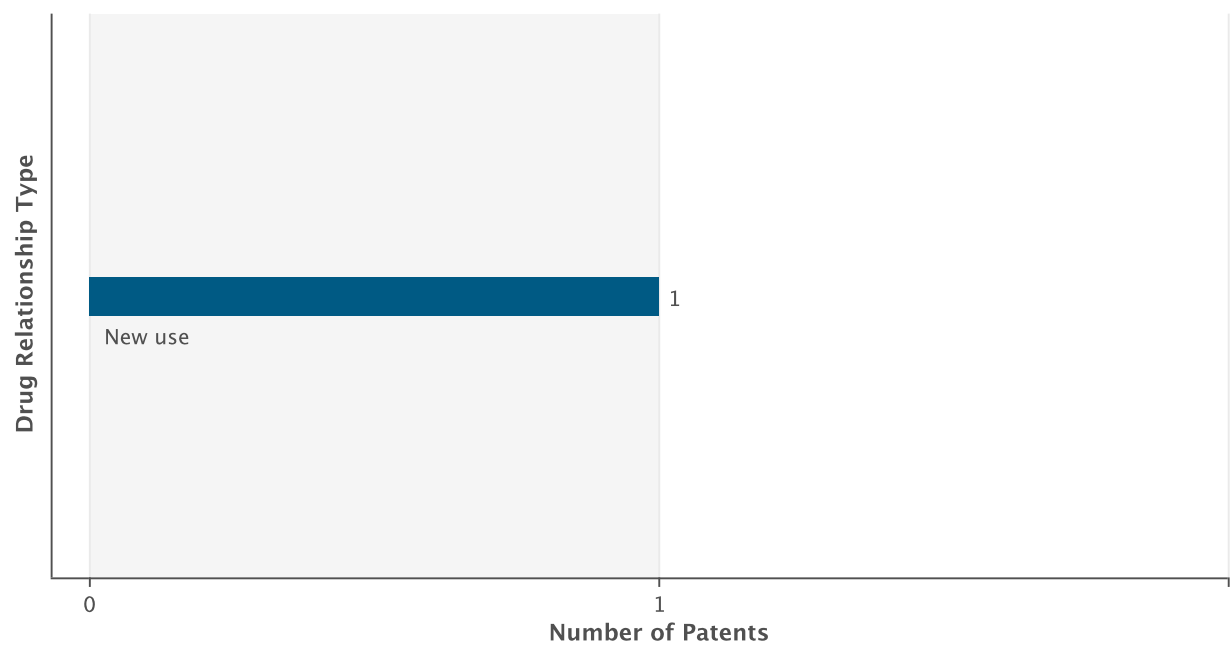


Patents by Parent Company Table

| Company Name | As Owner | As Third Party | Total |
|--|----------|----------------|-------|
| Stanford University | 1 | 0 | 1 |
| Lions Eye Institute of Western Australia Inc | 1 | 0 | 1 |
| Avalanche Biotechnologies Inc | 1 | 0 | 1 |

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Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

| Drug Relationship | Total |
|-------------------|-------|
| New use | 1 |

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AVA-322/AVA-323 (undisclosed indication), Avalanche

AVA-322/AVA-323 (undisclosed indication), Avalanche SNAPSHOT

| | |
|----------------------|---|
| Drug Name | AVA-322/AVA-323 (undisclosed indication), Avalanche |
| Key Synonyms | |
| Originator Company | Avalanche Biotechnologies Inc |
| Active Companies | Avalanche Biotechnologies Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Unidentified indication |
| Target-based Actions | |
| Other Actions | Unspecified drug target |
| Technologies | Small molecule therapeutic |
| Last Change Date | 09-Jul-2014 |

AVA-322/AVA-323 (undisclosed indication), Avalanche DEVELOPMENT PROFILE

SUMMARY

Avalanche Biotechnologies is investigating a program including AVA-322 and AVA-323, for the potential treatment of an undisclosed indication. In July 2014, the program was in research, and IND-enabling studies were planned for 2015.

AVA-322/AVA-323 (undisclosed indication), Avalanche DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|-------------------------------|-------------------------|---------|--------------------|-------------|
| Avalanche Biotechnologies Inc | Unidentified indication | US | Discovery | 08-Jul-2014 |

AVA-322/AVA-323 (undisclosed indication), Avalanche DRUG NAMES

| Names | Type |
|---|------|
| AVA-322/AVA-323 (undisclosed indication), Avalanche | |

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AVA-311

AVA-311 SNAPSHOT

| | |
|----------------------|---|
| Drug Name | AVA-311 |
| Key Synonyms | |
| Originator Company | Avalanche Biotechnologies Inc |
| Active Companies | Avalanche Biotechnologies Inc;Regeneron Pharmaceuticals Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Retinoschisis |
| Target-based Actions | RS1 gene modulator |
| Other Actions | Adeno-associated virus based gene therapy;Ophthalmological agent |
| Technologies | Injectable formulation;Ophthalmic formulation;Biological therapeutic;Parenteral formulation unspecified;Virus recombinant |
| Last Change Date | 08-Jul-2014 |

AVA-311 DEVELOPMENT PROFILE

SUMMARY

Avalanche Biotechnologies in collaboration with Regeneron, is investigating an intravitreal formulation of AVA-311, an adeno-associated virus (AAV)-based gene therapy delivering RS1 gene, using Avalanche's directed evolution technology, for the potential treatment of juvenile X-linked retinoschisis (XLRS). In July 2014, the drug was in preclinical development.

AVA-311 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|-------------------------------|---------------|---------|--------------------|-------------|
| Avalanche Biotechnologies Inc | Retinoschisis | US | Discovery | 05-May-2014 |
| Regeneron Pharmaceuticals Inc | Retinoschisis | US | Discovery | 05-May-2014 |

AVA-311 DRUG NAMES

| Names | Type |
|---------|---------------|
| AVA-311 | Research Code |

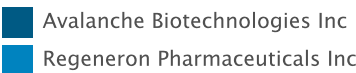
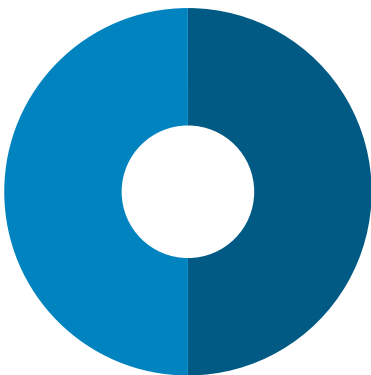
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AVA-311 DEALS AND PATENTS

DEALS

Deals by Parent Company Chart



Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|-------------------------------|-----------|----------|---------|----------|-------|
| | Active | Inactive | Active | Inactive | |
| Avalanche Biotechnologies Inc | 1 | 0 | 0 | 0 | 1 |
| Regeneron Pharmaceuticals Inc | 0 | 0 | 1 | 0 | 1 |

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Deals by Type Chart



Deals by Type Table

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

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Shh10.GDNF

Shh10.GDNF SNAPSHOT

| | |
|----------------------|---|
| Drug Name | Shh10.GDNF |
| Key Synonyms | |
| Originator Company | Avalanche Biotechnologies Inc |
| Active Companies | Avalanche Biotechnologies Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Glaucoma |
| Target-based Actions | |
| Other Actions | Ophthalmological agent;Neuroprotectant;Antiglaucoma agent |
| Technologies | Biological therapeutic;Parenteral formulation unspecified;Virus recombinant |
| Last Change Date | 04-Aug-2014 |

Shh10.GDNF DEVELOPMENT PROFILE

SUMMARY

Avalanche is investigating Shh-10.GDNF, a novel muLLer glia cell-specific adeno-associated viral vector expressing glial cell line-derived neurotrophic factor (GDNF), for the potential treatment of glaucoma. In May 2012, preclinical data were presented. In March 2013, development was ongoing.

Shh10.GDNF DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|-------------------------------|------------|---------|--------------------|-------------|
| Avalanche Biotechnologies Inc | Glaucoma | US | Discovery | 08-May-2012 |

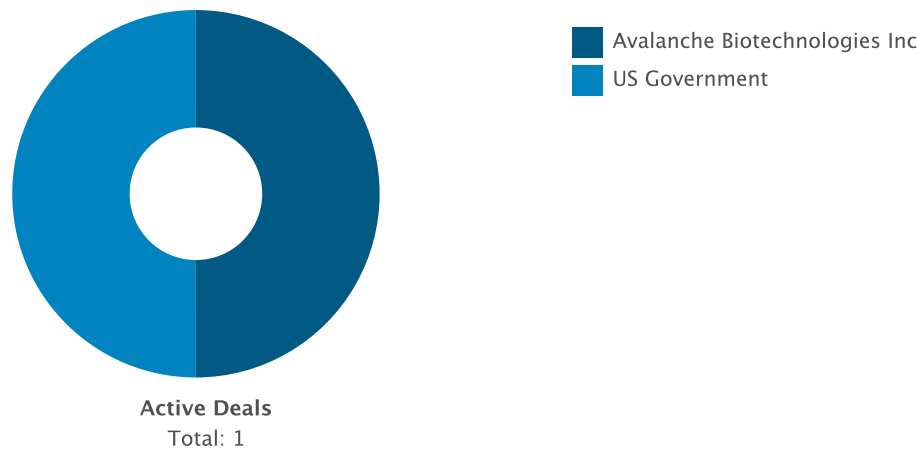
Shh10.GDNF DRUG NAMES

| Names | Type |
|---|---------------|
| Shh10.GDNF | Research Code |
| AAV-based therapy (glaucoma), Avalanche | |

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DEALS

Deals by Parent Company Chart

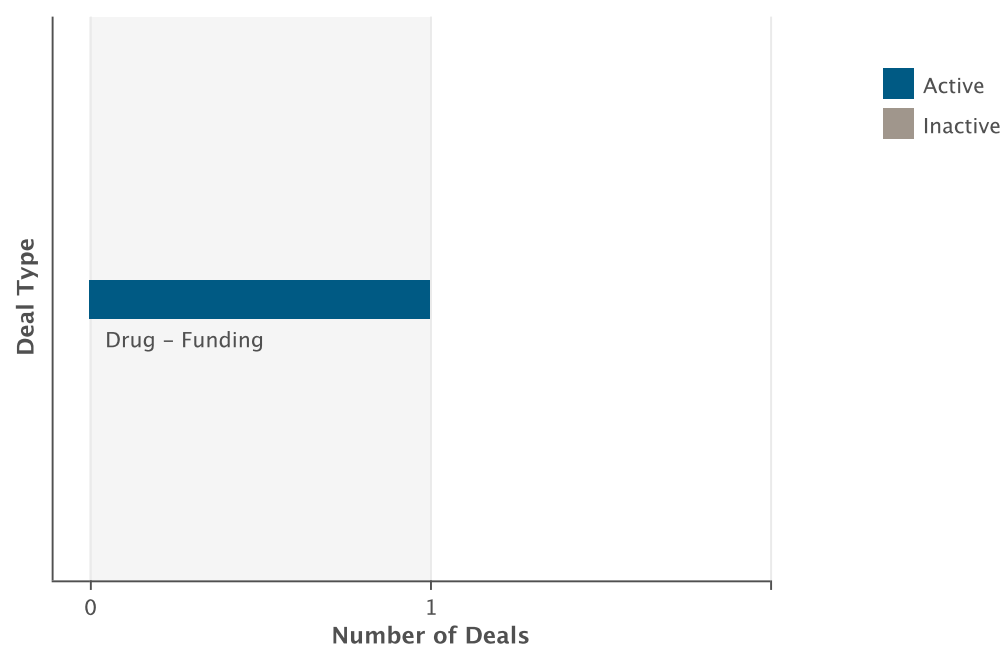


Deals by Parent Company Table

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

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Deals by Type Chart

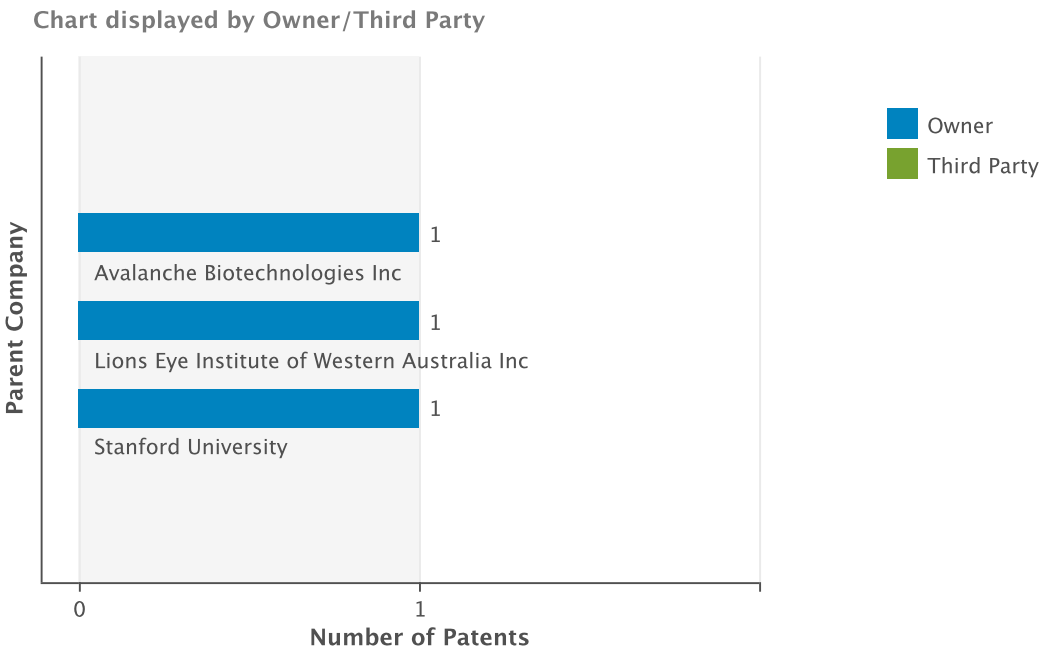


Deals by Type Table

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

PATENTS

Patents by Parent Company Chart

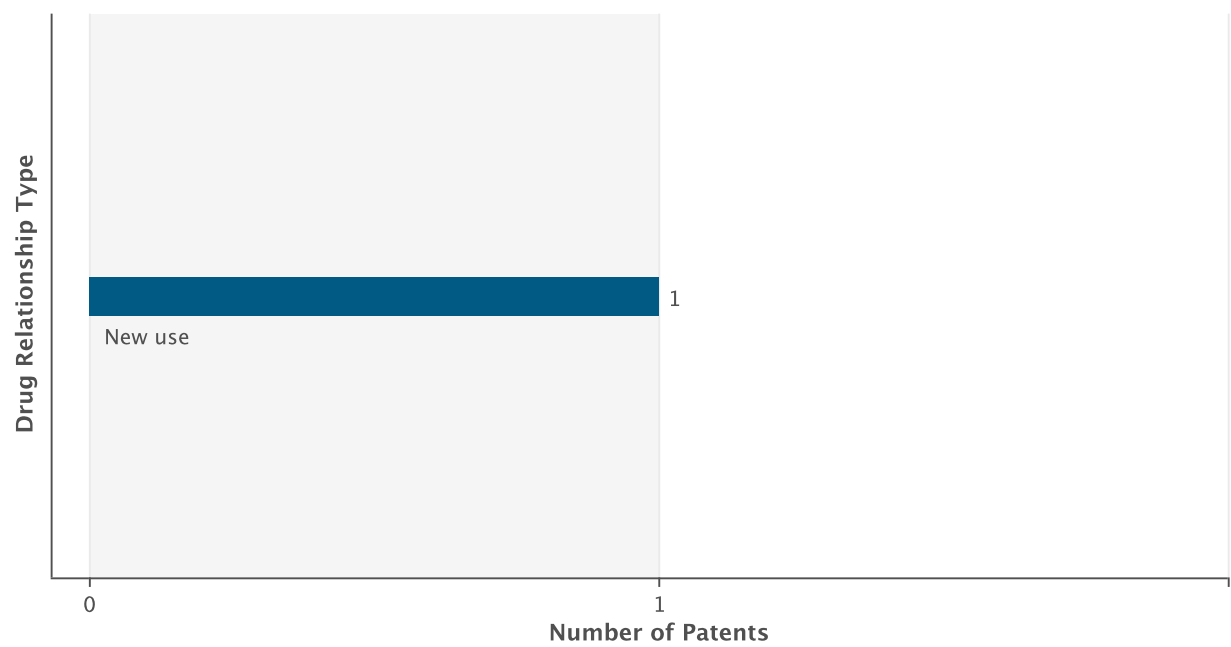


Patents by Parent Company Table

| Company Name | As Owner | As Third Party | Total |
|--|----------|----------------|-------|
| Avalanche Biotechnologies Inc | 1 | 0 | 1 |
| Stanford University | 1 | 0 | 1 |
| Lions Eye Institute of Western Australia Inc | 1 | 0 | 1 |

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Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

| Drug Relationship | Total |
|-------------------|-------|
| New use | 1 |

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AVA-201

AVA-201 SNAPSHOT

| | |
|----------------------|---|
| Drug Name | AVA-201 |
| Key Synonyms | |
| Originator Company | Avalanche Biotechnologies Inc |
| Active Companies | Avalanche Biotechnologies Inc |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Wet age related macular degeneration |
| Target-based Actions | VEGF-1 receptor antagonist |
| Other Actions | Adeno-associated virus based gene therapy;Ophthalmological agent;Ocular antineovascularisation agent |
| Technologies | Injectable formulation;Ophthalmic formulation;Biological therapeutic;Parenteral formulation unspecified;Virus recombinant |
| Last Change Date | 08-Jul-2014 |

AVA-201 DEVELOPMENT PROFILE

SUMMARY

Avalanche Biotechnologies is investigating an intravitreal formulation of AVA-201, a recombinant adeno-associated virus (AAV)-based gene therapy delivering sFlt-1 (VEGF-1 receptor antagonist) using the company's next-generation AAV vector delivery technology, for the potential prevention of wet age-related macular degeneration (AMD). In July 2014, the drug was in research, and IND-enabling studies were planned for 2015.

AVA-201 DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|-------------------------------|--------------------------------------|---------|--------------------|-------------|
| Avalanche Biotechnologies Inc | Wet age related macular degeneration | US | Discovery | 08-Jul-2014 |

AVA-201 DRUG NAMES

| Names | Type |
|---------|---------------|
| AVA-201 | Research Code |

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adeno-associated virus (AVV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies

adeno-associated virus (AVV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies SNAPSHOT

| | |
|-----------------------------|---|
| Drug Name | adeno-associated virus (AVV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies |
| Key Synonyms | |
| Originator Company | University of Washington |
| Active Companies | Avalanche Biotechnologies Inc;University of Washington |
| Inactive Companies | |
| Highest Status | Discovery |
| Active Indications | Color vision defect |
| Target-based Actions | |
| Other Actions | Adeno-associated virus based gene therapy;Unspecified drug target |
| Technologies | Biological therapeutic |
| Last Change Date | 26-Mar-2015 |

adeno-associated virus (AVV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies DEVELOPMENT PROFILE

SUMMARY

University of Washington and licensee Avalanche Biotechnologies are investigating adeno-associated virus (AAV) vector based gene therapies, applying Avalanche's Ocular BioFactory technology, for the potential treatment of color vision deficiency. By October 2009, preclinical studies had been conducted. In March 2015, development was ongoing.

adeno-associated virus (AVV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

| Company | Indication | Country | Development Status | Date |
|-------------------------------|---------------------|---------|--------------------|-------------|
| Avalanche Biotechnologies Inc | Color vision defect | US | Discovery | 25-Mar-2015 |
| University of Washington | Color vision defect | US | Discovery | 08-Oct-2009 |

adeno-associated virus (AVV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies DRUG NAMES

| Names | Type |
|---|------|
| adeno-associated virus (AVV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies | |

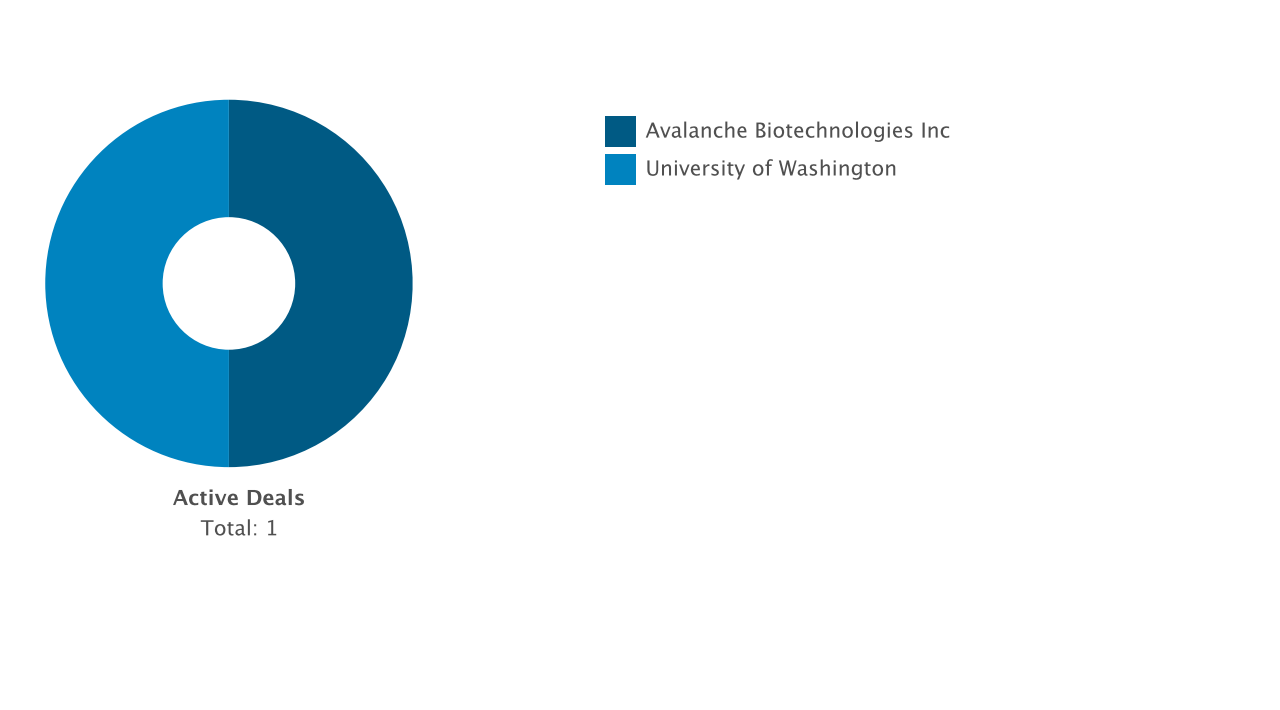
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adeno-associated virus (AAV) vector based gene therapy (color vision deficiency), University of Washington/ Avalanche Biotechnologies
 DEALS AND PATENTS

DEALS

Deals by Parent Company Chart



Deals by Parent Company Table

| Company Name | Principal | | Partner | | Total |
|-------------------------------|-----------|----------|---------|----------|-------|
| | Active | Inactive | Active | Inactive | |
| University of Washington | 1 | 0 | 0 | 0 | 1 |
| Avalanche Biotechnologies Inc | 0 | 0 | 1 | 0 | 1 |

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Deals by Type Chart



Deals by Type Table

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

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