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September 14, 2022

H.C. WAINWRIGHT GLOBAL INVESTMENT CONFERENCE

Innovative Therapeutics to Treat Immune-Mediated Diseases

Nasdaq: ALDX

Disclaimers and Forward-Looking Statements

This presentation and various remarks which may be made during this presentation contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding Aldeyra's possible or assumed future results of operations, expenses and financing needs, business strategies and plans, statements regarding Aldeyra's future expectations, plans and prospects, including without limitation statements regarding: plans for an NDA filing for reproxalap for the treatment of dry eye disease, and the potential timing of such submission; Aldeyra's belief in the adequacy of the data it plans to submit in the NDA; the potential for FDA acceptance of an NDA for reproxalap; the potential for regulatory approval and commencement of commercialization of reproxalap and Aldeyra's goals as to timing; the potential profile and benefit of reproxalap in dry eye disease; and other statements regarding the goals, opportunity and potential for reproxalap, anticipated clinical or regulatory milestones for ADX-2191 and ADX-629, including expectations regarding the results of scheduled pre-NDA meetings and clinical trials; and other statements regarding the goals, opportunity and potential for reproxalap, ADX-2191 and ADX-629, and for Aldeyra's business, research, development and regulatory plans or expectations, political, economic, legal, social and health risks, including the COVID-19 pandemic and related public health measures and other responses to it, that may affect Aldeyra's business or the global economy, the structure, timing and success of Aldeyra's planned or pending clinical trials, expected milestones, market sizing, pricing and reimbursement, competitive position, regulatory matters, industry environment and potential growth opportunities, among other things. The results of earlier preclinical or clinical trials may not be predictive of future results. As a result of the COVID-19 pandemic, clinical site availability, staffing, and patient recruitment have been negatively affected and the timelines to complete Aldeyra's clinical trials may be delayed. Forward-looking statements include all statements that are not historical facts and, in some cases, can be identified by terms such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "plan" or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Aldeyra's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These statements reflect Aldeyra's current views with respect to future events and are based on assumptions and subject to risks and uncertainties, including the development, clinical and regulatory plans or expectations for Aldeyra's investigational new drugs (including reproxalap), and systems-based approaches, later developments with the FDA that may be inconsistent with Aldeyra's expectations and beliefs, including the risk that the results from earlier clinical trials, portions of clinical trials, or pooled clinical data may not accurately predict results of subsequent trials or the remainder of a clinical trial for the same or different indications, inconsistent expectations regarding FDA acceptance and review of the company's filings and submitted data sets, and Aldeyra's continuing or post-hoc review and quality control analysis of clinical data. Important factors that could cause actual results to differ materially from those reflected in Aldeyra's forward-looking statements are described in Aldeyra's most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q, as well as Aldeyra's subsequent filings with the Securities and Exchange Commission. All of Aldeyra's development plans and timelines may be subject to adjustment depending on funding, recruitment rate, regulatory review, preclinical and clinical results, and other factors any of which could result in changes to Aldeyra's development plans and programs or delay the initiation, enrolment, completion, or reporting of clinical trials.

In addition to the risks described above and in Aldeyra's other filings with the SEC, other unknown or unpredictable factors also could affect Aldeyra's results. No forward-looking statements can be guaranteed, and actual results may differ materially from such statements. The information in this presentation is provided only as **of September 14, 2022**, and Aldeyra undertakes no obligation to update any forward-looking statements contained in this presentation on account of new information, future events, or otherwise, except as required by law.

ALDEYRA'S MISSION is to discover and develop innovative medicines that improve the lives of patients who suffer from immune-mediated diseases.

OUR APPROACH is to create therapies that modulate immunological systems, instead of directly inhibiting or activating single protein targets, with the goal of optimizing multiple pathways at once while minimizing toxicity.

Aldeyra is a Well-Capitalized Biotechnology Company with a Broad Immunology Pipeline and Near-Term Catalysts

PRODUCT CANDIDATES	DISEASE TARGETS	DEVELOPMENT STAGE	NEXT EXPECTED MILESTONE
RASP PLATFORM FOR OCULAR AND SYSTEMIC IMMUNE-MEDIATED DISEASES			
Reproxalap (ophthalmic solution)	Dry Eye Disease	Pre-NDA	Q4 2022: NDA Submission
	Allergic Conjunctivitis	Phase 3	2023: Final Pivotal Trial Results
ADX-629 (oral administration)	Acute Alcoholic Hepatitis, Chronic Cough, Sjögren-Larsson Syndrome, Minimal Change Disease	Phase 2	Q4 2022 and 2023: Trial Completions
RASP-Modulator Discovery Platform	Multiple Immune-Mediated Retinal and Systemic Indications	Preclinical	2023: IND Submissions
VITREOUS METHOTREXATE PLATFORM FOR RARE RETINAL INFLAMMATORY DISEASES			
ADX-2191 (intravitreal injection)	Primary Vitreoretinal Lymphoma (U.S. FDA Orphan Drug Designation)	Pre-NDA	Q4 2022: Pre-NDA Meeting
	Proliferative Vitreoretinopathy (U.S. FDA Orphan Drug and Fast Track Designation)	Phase 3	Q3/Q4 2022: Part 1 GUARD Trial Results
	Retinitis Pigmentosa (U.S. FDA Orphan Drug Designation)	Phase 2	H1 2023: Trial Results

As of 6/30/2022, cash and cash equivalents were $196.7M, which is expected to be sufficient to fund operations through the end of 2023, based on projected operating expenses.[†]

[†]Company guidance as of August 5, 2022. **IND** = Investigational New Drug. **NDA** = New Drug Application.

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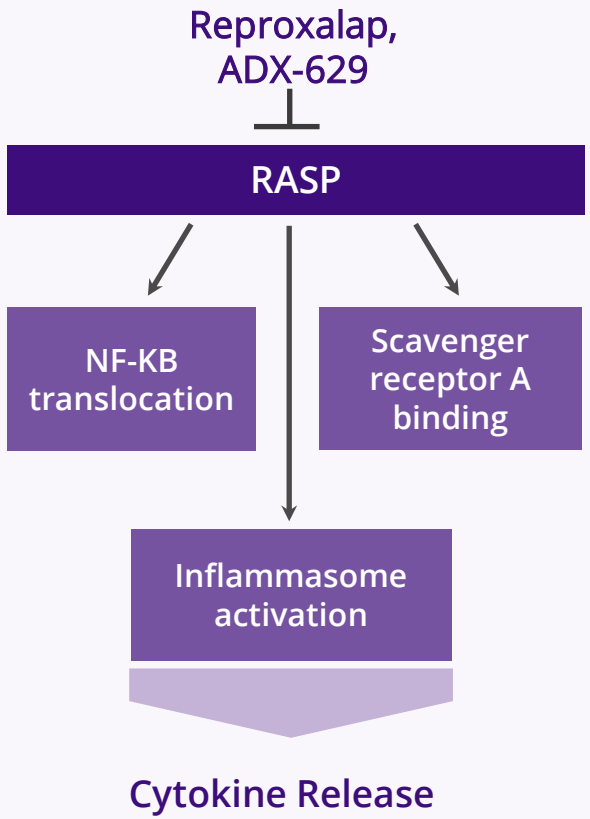
REPROXALAP, ADX-629, AND NOVEL RASP MODULATORS

Modulating RASP – A First-in-Class, Systems-Based Therapeutic Approach

Nasdaq: ALDX

Aldeyra is the Leading Developer of RASP Modulators: A Novel Approach Supported by Late-Stage Trials



Preclinical Broad-Based Cytokine Reduction

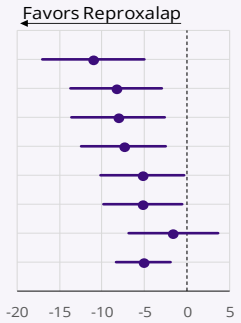
LPS Animal Model of Cytokine Storm

Broad-Based Symptom Reduction

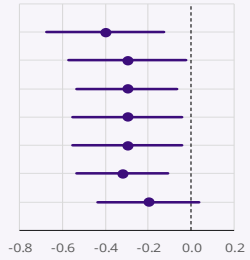
RENEW-Part 1 Phase 3 Dry Eye Disease Trial

Symptom Treatment Difference† (Reproxalap-Vehicle) Weeks 2 -12

0-100 Ocular Symptom Scales	**P-value**
VAS: Ocular Dryness (Co-Primary)	0.0004
VAS: Eye Discomfort	0.0025
VAS: Photophobia	0.0041
VAS: Foreign Body Sensation	0.0035
VAS: Itching	0.0346
VAS: Pain	0.0268
VAS: Burning/Stinging	NS
OSDI (Total)	0.0020

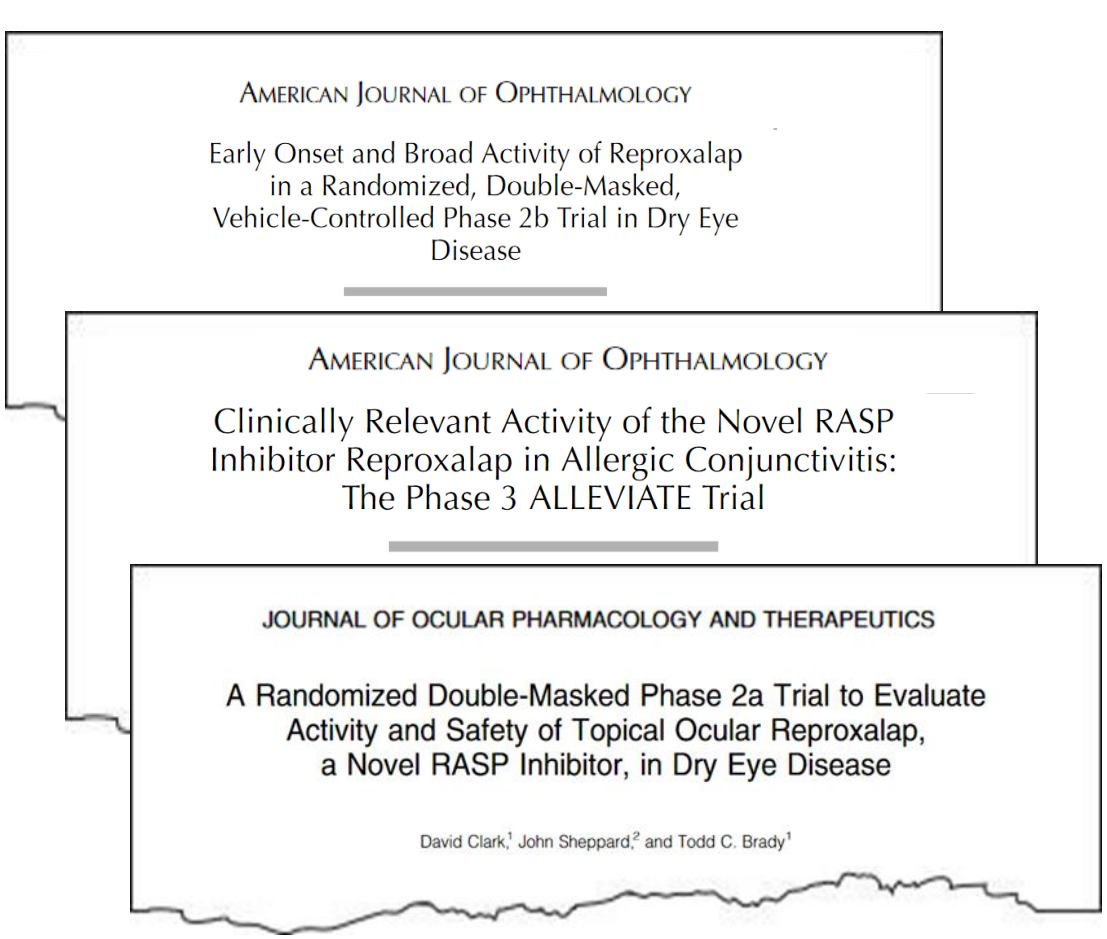


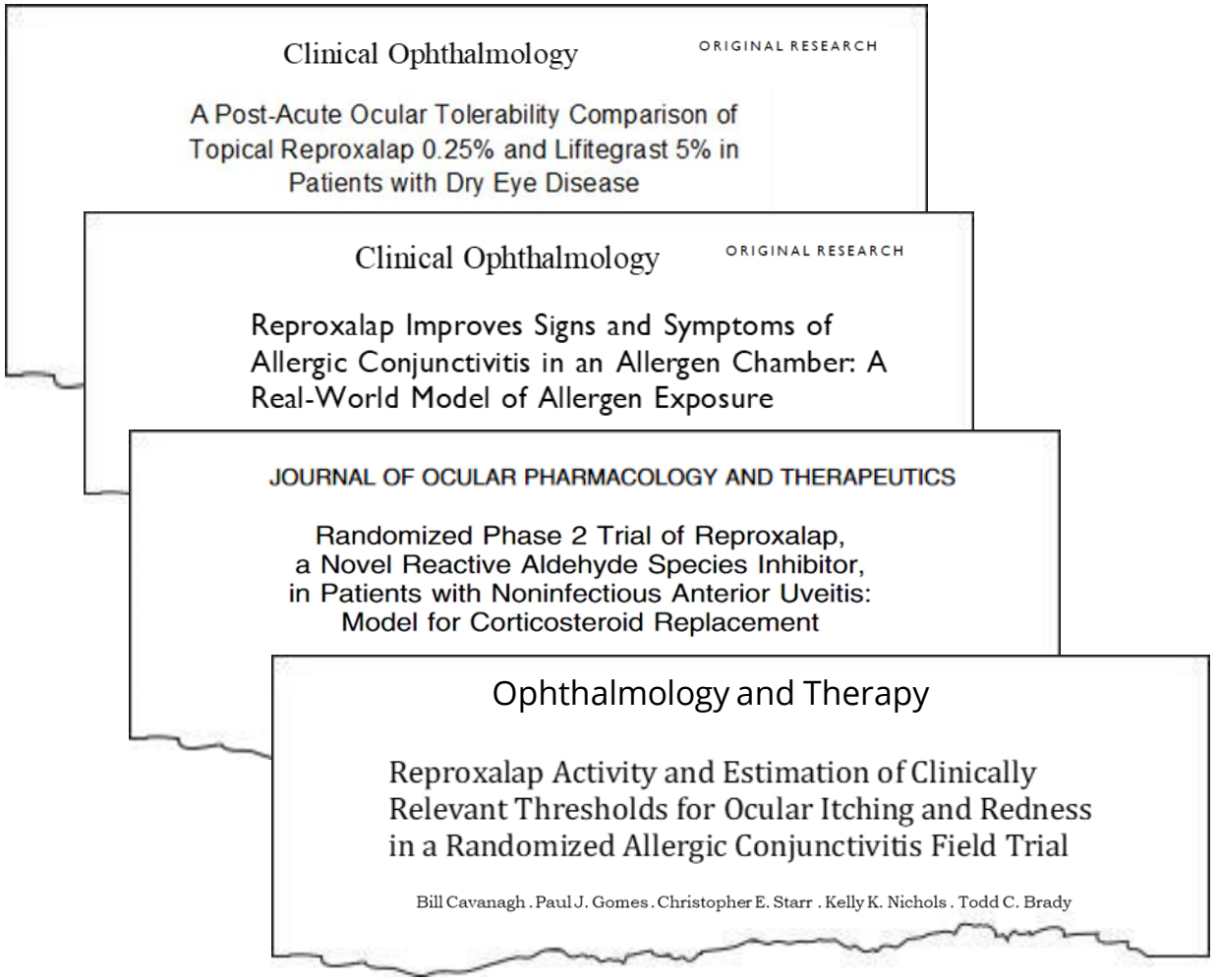
0-4 & 0-5 Ocular Symptom Scales	
OD4S: Grittiness	0.0025
OD4S: Dryness	0.0134
OD4S: Ocular Discomfort	0.0268
OD4S: Burning	0.0306
OD4S: Stinging	0.0239
CAC Ocular Itching Scale	0.0034
Ocular Discomfort Scale	NS



†Treatment difference of induction-maintenance dosing, defined as the difference between the changes from baseline for the evaluated drug minus vehicle (least squares mean difference ± 95% confidence interval). Ocular Dryness Score co-primary endpoint assessed in pre-specified patient population having an OD4S dryness baseline score of ≥ 3 (N=170). **Sources**: Cullen, et al. The Small Molecule Aldehyde Trap NS2 Exhibits Potent Anti-Inflammatory Activity in Three Murine Models of Inflammation [abstract]. In: The Journal of Allergy and Clinical Immunology. Volume 135, Issue 2, AB384, Feb 2015; Reproxalap RENEW-Part 1 clinical trial results. **RASP** = reactive aldehyde species. **LPS** = lipopolysaccharide. **VAS** = visual analog scale. **OSDI** = Ocular Surface Disease Index. **NS** = not significant. **OD4SQ** = Ocular Discomfort & 4-Symptom Questionnaire. **CAC** = conjunctival allergen challenge.

The Activity of Lead RASP Modulator Reproxalap is Supported by Marquee Peer-Reviewed Publications





Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

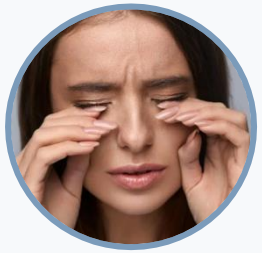
Reproxalap is in Late-Stage Development for Ocular Inflammation, with New Drug Applications Expected Beginning in Q4 2022

DRY EYE DISEASE

39 million or more adults in the U.S.[1]

Currently available topical therapy often requires months to demonstrate even modest efficacy.

ALLERGIC CONJUNCTIVITIS



66 million or more adults in the U.S.[2]

For patients that do not respond to over-the-counter antihistamine eyedrops, therapeutic options are limited.

Reproxalap is poised to potentially be the next novel entrant in the dry eye disease and allergic conjunctivitis markets.

Sources: [1]Company estimates and Paulsen AJ, Cruickshanks KJ, Fischer ME, et al. Dry eye in the beaver dam offspring study: prevalence, risk factors, and health-related quality of life. Am J Ophthalmol. 2014;157(4):799-806; [2]Company estimates and Singh K, Axelrod S, Bielory L. The epidemiology of ocular and nasal allergy in the United States, 1988-1994. J Allergy Clin Immunol. 2010;126(4):778-783. Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

Reproxalap Represents a Novel, Rapid-Onset Potential Therapeutic Approach in Dry Eye Disease

Potential advantages for patients and healthcare providers could effect a paradigm shift relative to standard of care.

Rapid symptom improvement

Broad symptomatic activity

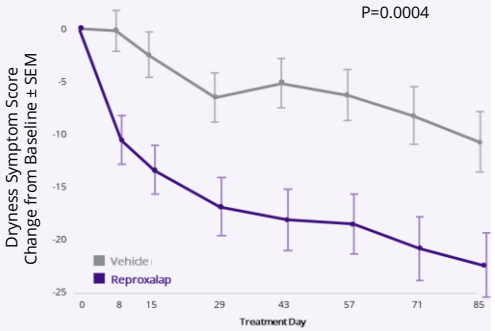
Acute increase in tear production and reduction of ocular redness

Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

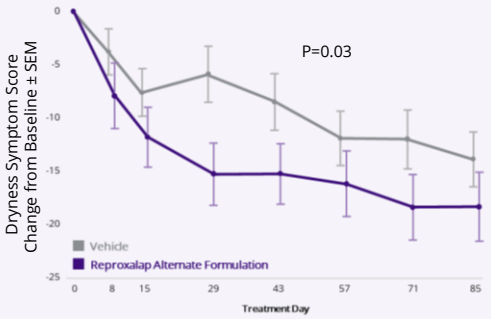
Aldeyra Intends to Submit Symptom and Three Sign Endpoints for Satisfaction of Dry Eye Disease NDA Efficacy Requirements†

Ocular Dryness Symptom Score

Phase 3 RENEW–Part 1

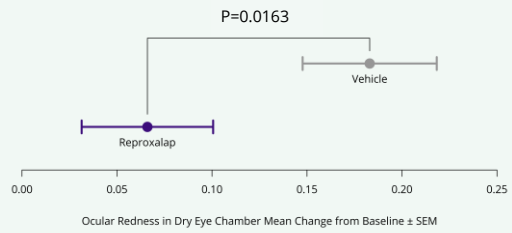


Formulation Phase 2‡

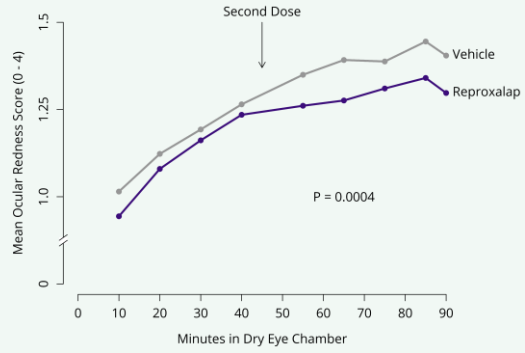


Ocular Redness

Phase 2 Dry Eye Chamber Trial‡

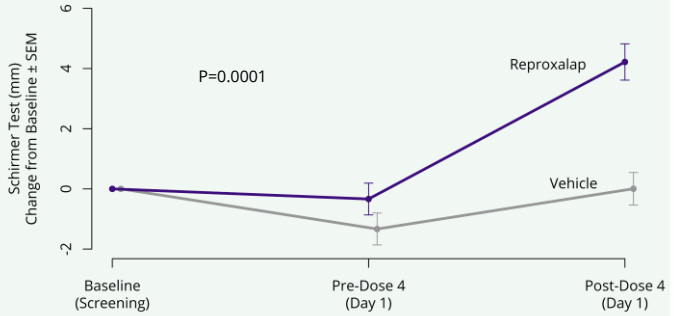


Crossover Trial

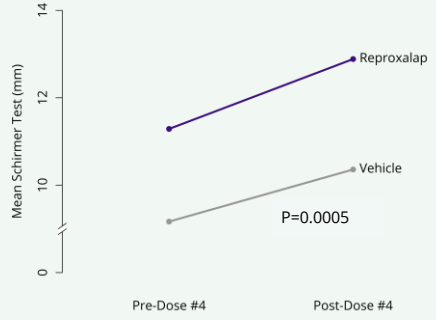


Schirmer Test

Phase 3 TRANQUILITY-2 Trial



Crossover Trial



≥10 mm Schirmer Test Responder Analysis

Phase 3 TRANQUILITY-2 Trial

Change from Baseline

Odds ratio	2.625
P value versus vehicle	<0.0001

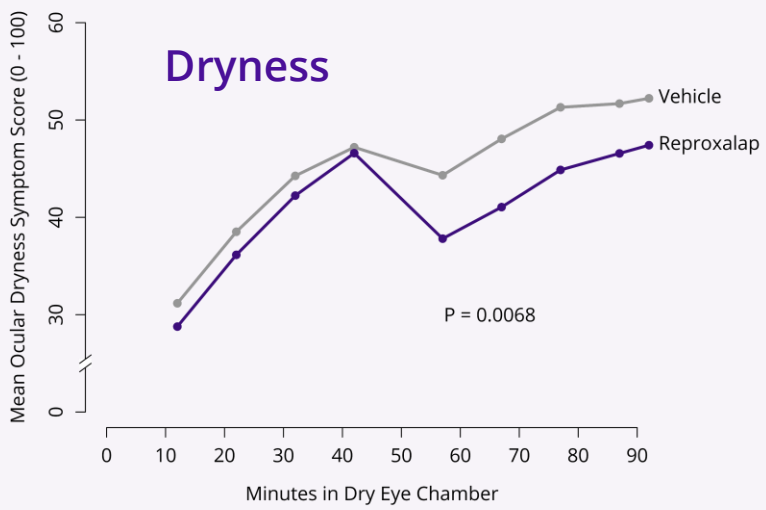
Crossover Trial

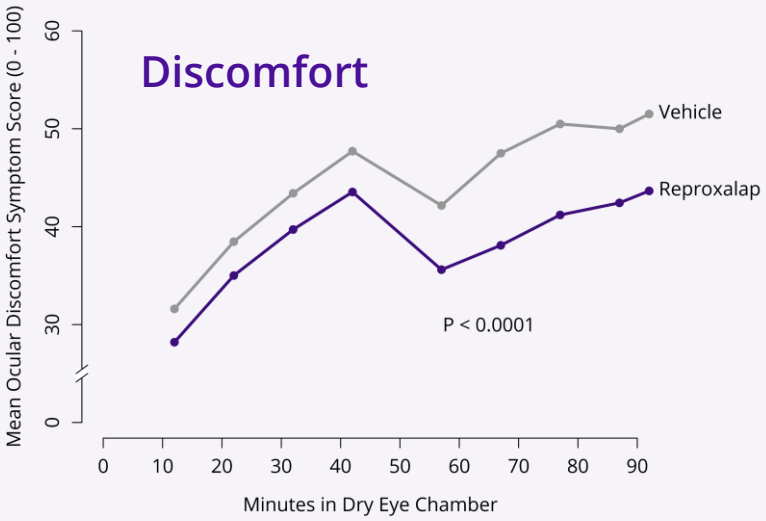
Raw Score

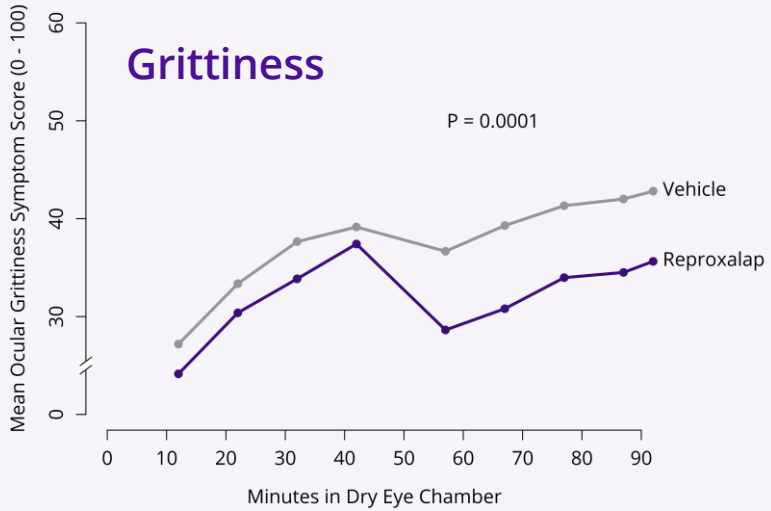
Odds ratio	1.551
P value versus vehicle	0.0361

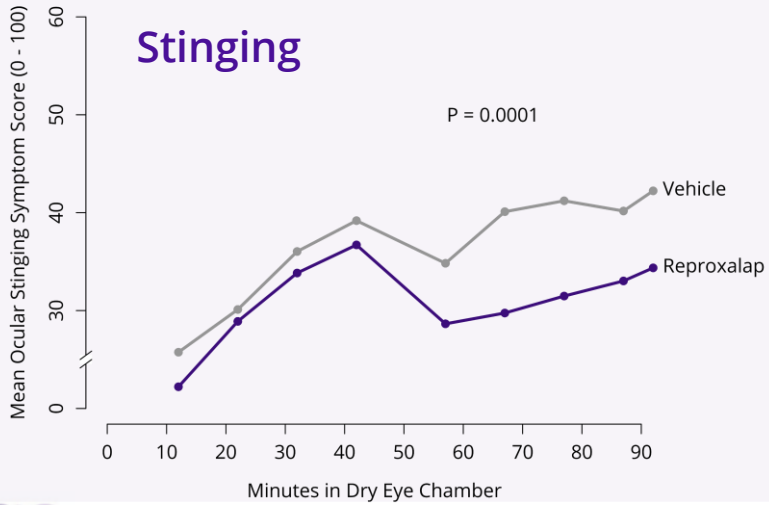
†NDA submission requirements depend, in part, on clinical results, enrollment, and regulatory feedback. The NDA submission is expected to include a combination of primary, secondary, multiplicity-adjusted, and nominal P-value endpoints. ‡Adequate and well-controlled Phase 2 or Phase 3 clinical trials can be submitted as pivotal. **Sources**: Clinical trial results on file. **SEM** = standard error of the mean. Topical ocular reproxalap is an investigational drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

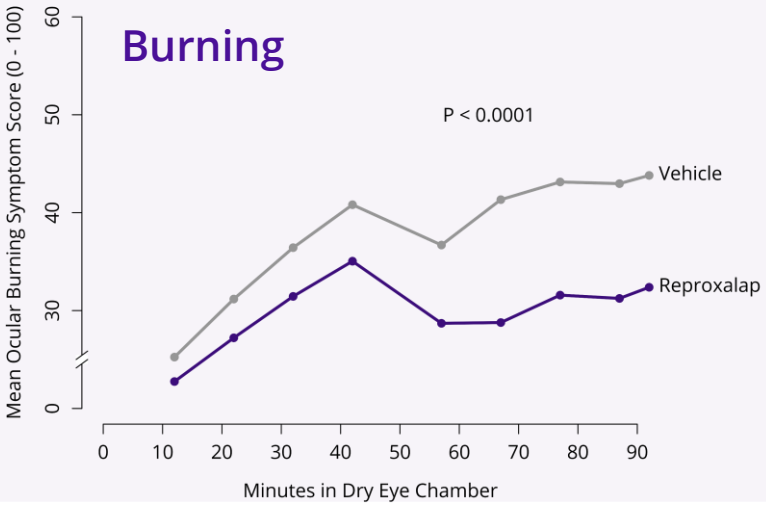
In the Dry Eye Disease Crossover Trial, All Assessed Symptom Endpoints Were Achieved

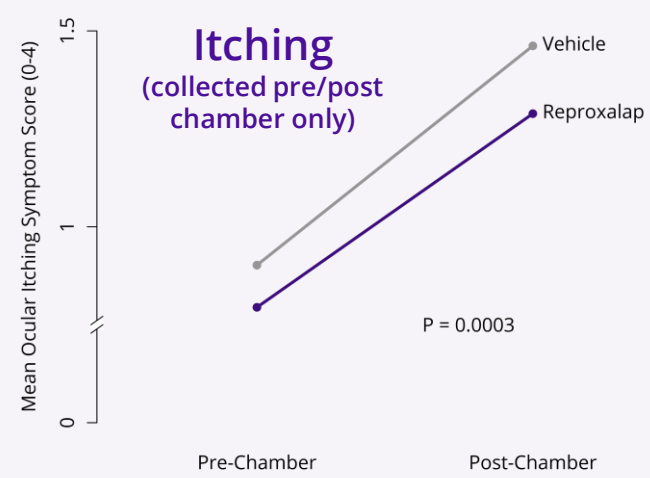








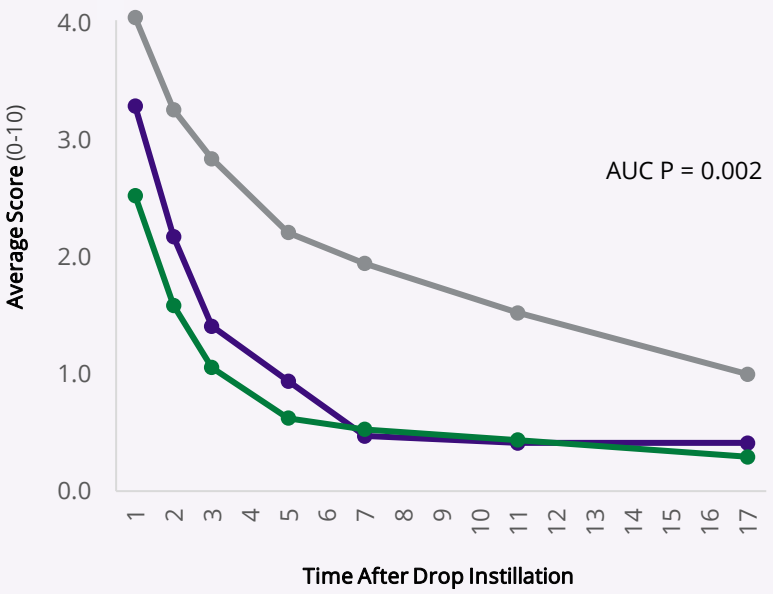




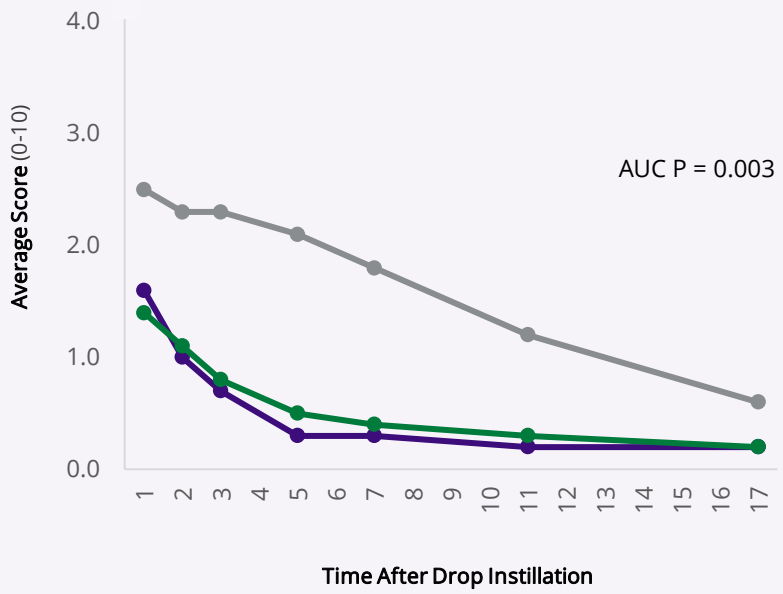
P values derived from mixed effect model of repeated measures of change from baseline. **Source**: Dry eye disease crossover clinical trial results on file. Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

Ocular Discomfort Score, Blurry Vision, and Dysgeusia were Statistically Lower with Reproxalap than with Xiidra® in a Post-Acute Ocular Tolerability Clinical Trial

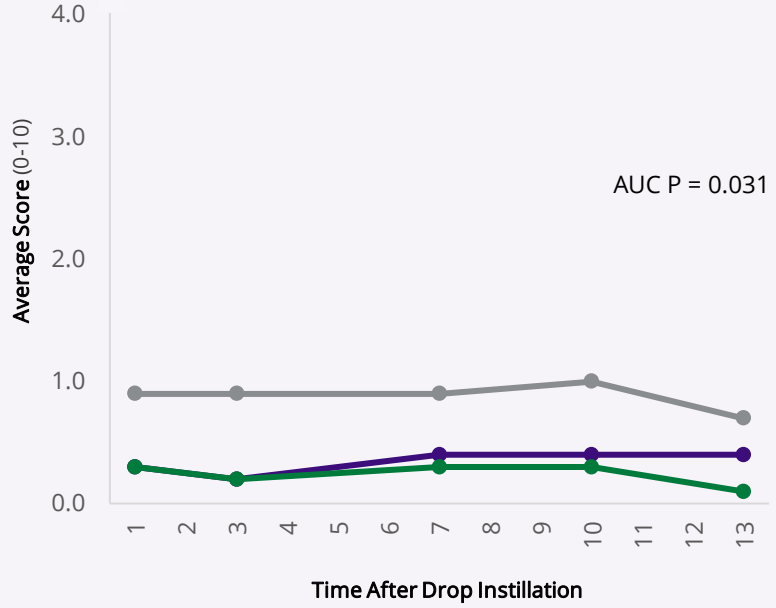
Ocular Discomfort



Blurry Vision



Dysgeusia (Taste Disturbance)

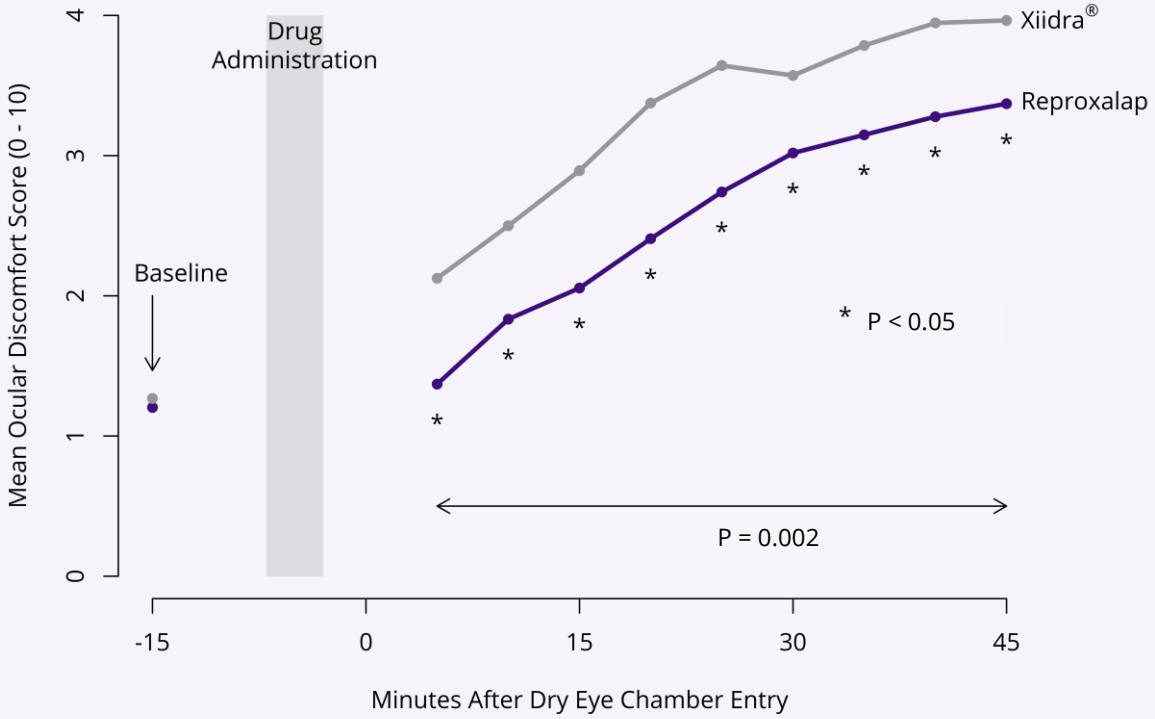


Xiidra® Reproxalap Reproxalap Alternate Formulation

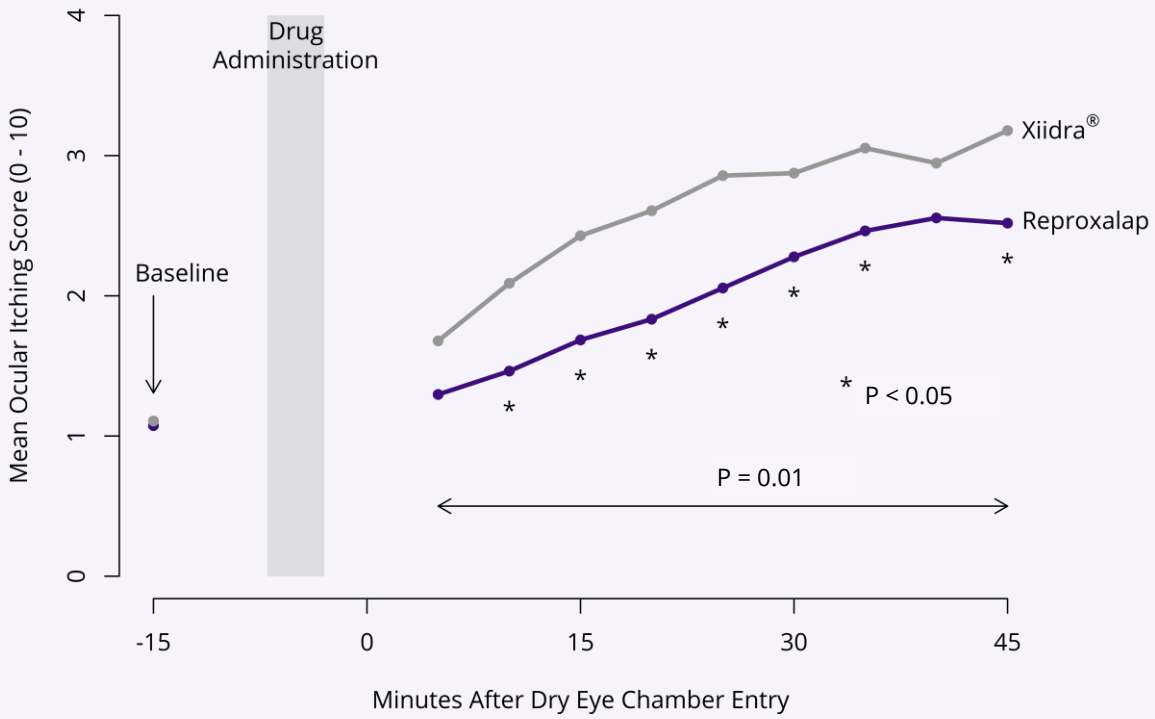
Source: McMullin D, Clark D, Cavanagh B, Karpecki P, Brady TC. A Post-Acute Ocular Tolerability Comparison of Topical Reproxalap 0.25% and Lifitegrast 5% in Patients with Dry Eye Disease. Clin Ophthalmol. 2021 Sep 22;15:3889-3900. **AUC** = area under the curve. P-values represent comparison of vehicle area under the curve vs. pooled reproxalap AUC. Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

Patient-Reported Ocular Discomfort and Ocular Itching were Statistically Lower with Reproxalap than with Xiidra® in a Phase 2 Dry Eye Chamber Clinical Trial

Ocular Discomfort



Ocular Itching



Source: Clinical trial results on file. Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

The Reproxalap Clinical Package Could Represent the Most Comprehensive Dry Eye Disease NDA Submission to Date

- Based on pre-NDA meeting feedback from the FDA, Aldeyra believes that the clinical efficacy requirements for dry eye disease NDA submission have been met.†
- Aldeyra intends to submit an NDA in Q4 2022 covering symptoms (ocular dryness) and three sign endpoints (ocular redness, Schirmer test, and Schirmer test responder proportions) across five adequate and well-controlled clinical trials.
- Clinical data submitted to the NDA is expected to encompass acute (single-day dosing, dry eye chamber) and chronic (12-week) assessments, as well as parallel-group and crossover clinical designs, offering what is expected to be unparalleled analysis of rapid and sustained activity across a combination of challenge and field-based assessments.
- If approved, reproxalap has the potential to be the first dry eye disease drug with at least two labeled objective signs.

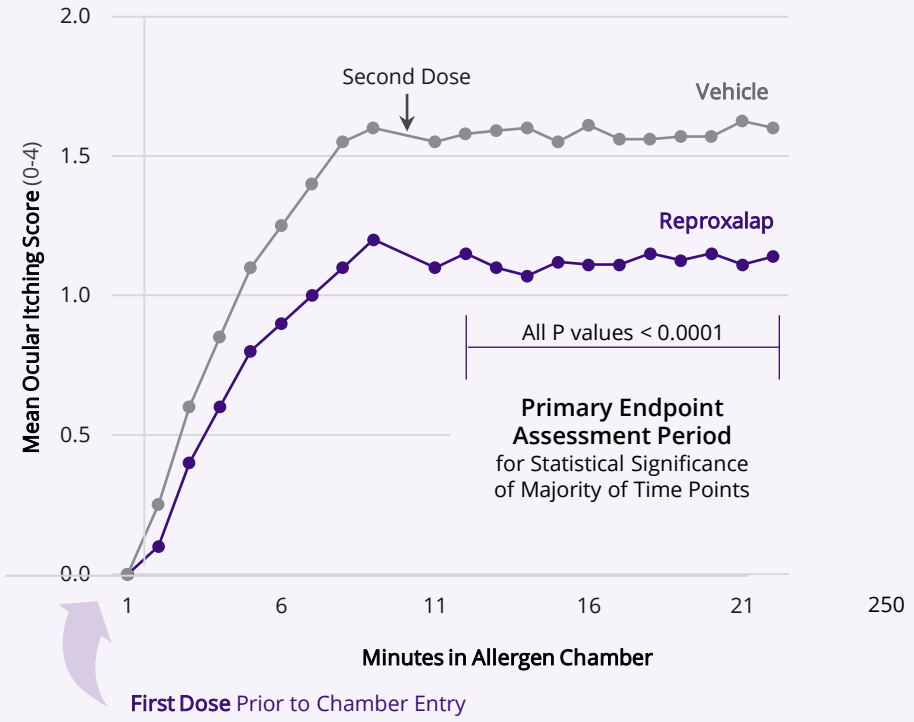
†NDA submission requirements depend, in part, on clinical results, enrollment, and regulatory feedback. **Source**: INVIGORATE clinical trial results. Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials. Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

Aldeyra is One Pivotal Trial Away from Potential NDA Submission of Reproxalap for Allergic Conjunctivitis†

The Phase 3 INVIGORATE Allergen Chamber Trial

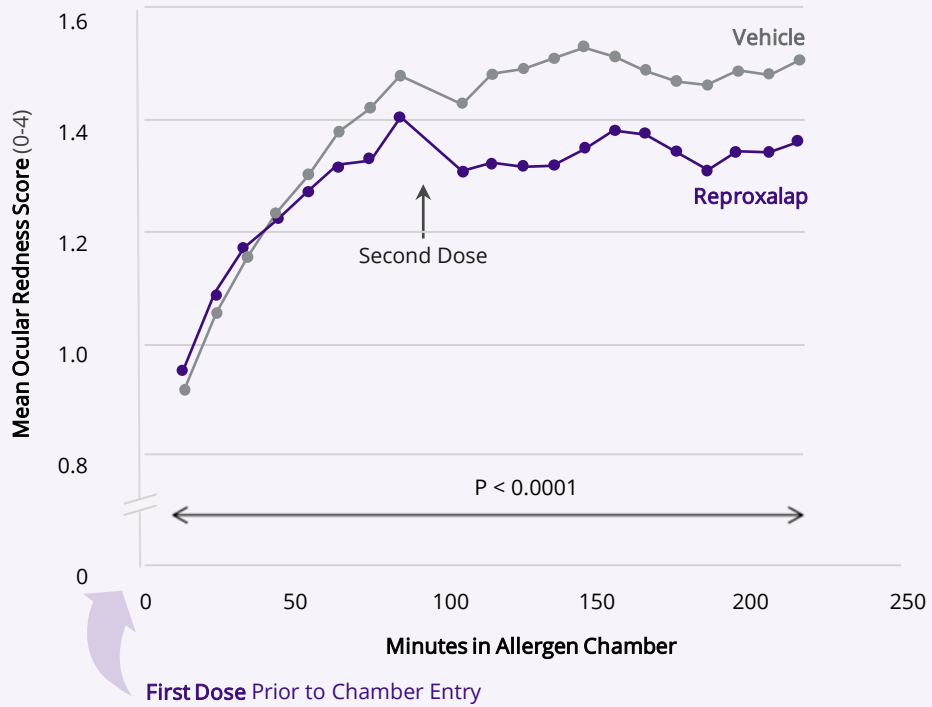
Primary Endpoint

Reduction in Ocular Itching Over Pre-Specified Time Frame



Key Secondary Endpoint

Reduction in Ocular Redness Over the Entire Chamber



†NDA submission requirements depend, in part, on clinical results, enrollment, and regulatory feedback. **Source**: INVIGORATE clinical trial results. Topical ocular reproxalap is an investigational new drug candidate that has been studied in more than 2,000 patients with no observed safety concerns; mild and transient instillation site irritation is the most commonly reported adverse event in clinical trials.

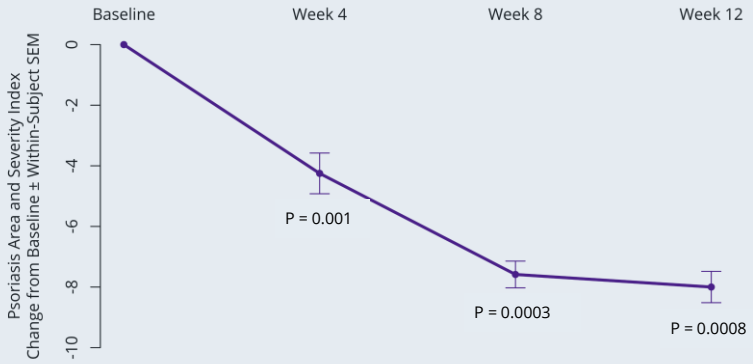
The Phase 3 INVIGORATE-2 Trial is Designed to be Substantially Identical to INVIGORATE

- Results are expected 2023.
- Enrollment criteria, endpoints, trial design, and study conduct are substantially identical to INVIGORATE.
- Based on data from INVIGORATE, simulation modeling indicates that more than 90% of outcomes achieved for the primary endpoint of patient-reported ocular itching.

Design	Randomized, double-masked, crossover, vehicle-controlled allergen chamber exposure to aerosolized pollen over 3.5 hours
Dosing	0.25% reproxalap or vehicle One dose just prior to chamber entry, one dose 90 minutes after chamber entry
Size	Approximately 50 patients
Primary Endpoint	Patient-reported ocular itching score
Key Secondary Endpoint	Investigator-assessed ocular redness score

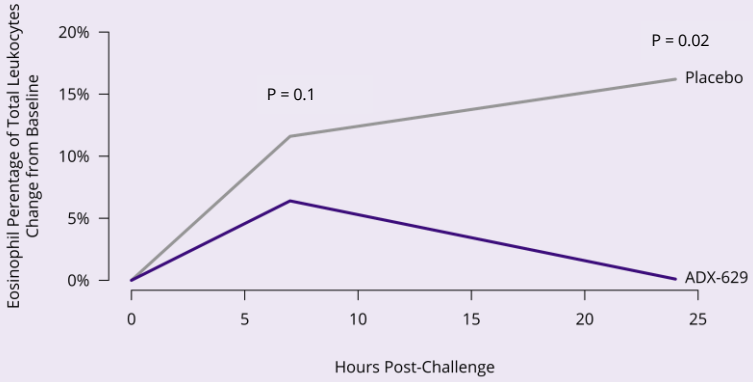
ADX-629, a RASP Modulator for Oral Administration, Is a First-in-Class Pharmacologic Approach With Activity in Phase 2 Clinical Trials

Autoimmune Disease: Psoriasis



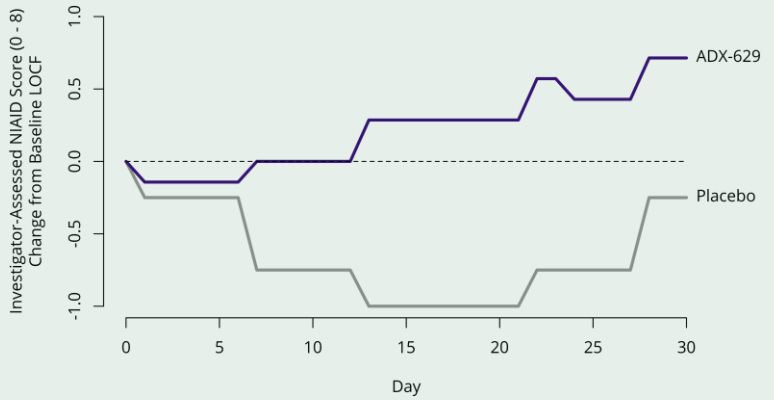
SEM = standard error of the mean. P values derived from mixed model for repeated measures analysis of comparison to 0 (no change).

Allergic Inflammation: Asthma



P values are derived from mixed model for repeated measures analysis of placebo group comparison to 0 (no change).

Infectious Disease: COVID-19

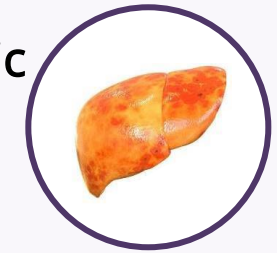


NIAID = National Institute of Allergy and Infectious Diseases.
LOCF = Last Observation Carried Forward.

Source: ADX-629 clinical trial results.

New Clinical Development Indications for ADX-629 Feature Multiple Systemic Diseases Associated With RASP

Acute Alcoholic Hepatitis



Up to 10% of adults in the U.S. abuse alcohol, which can lead to the development of hepatitis.

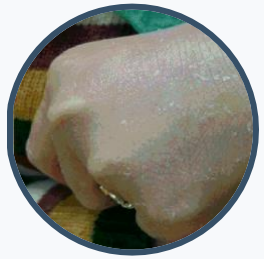
Approximately 12 million adults in the U.S. have alcoholic fatty liver disease (AFLD).

Chronic Cough

Approximately ~13M adults in the U.S., and up to 10% of people worldwide, have chronic cough.

RASP are increased in the lungs of patients with chronic cough.[†]

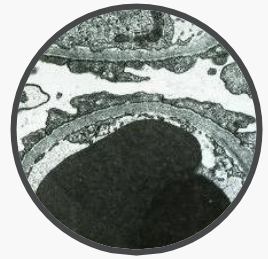
Sjögren-Larsson Syndrome



Sjögren-Larsson Syndrome is an autosomal recessive neurocutaneous **inborn error of metabolism** preventing degradation of fatty aldehydes.

Approximately 1,300 U.S. patients are impacted.

Minimal Change Disease



Minimal Change Disease is an **orphan kidney disease** that primarily afflicts children.

Treatment involves corticosteroids and other immunosuppressant alternatives that may lead to toxicity.

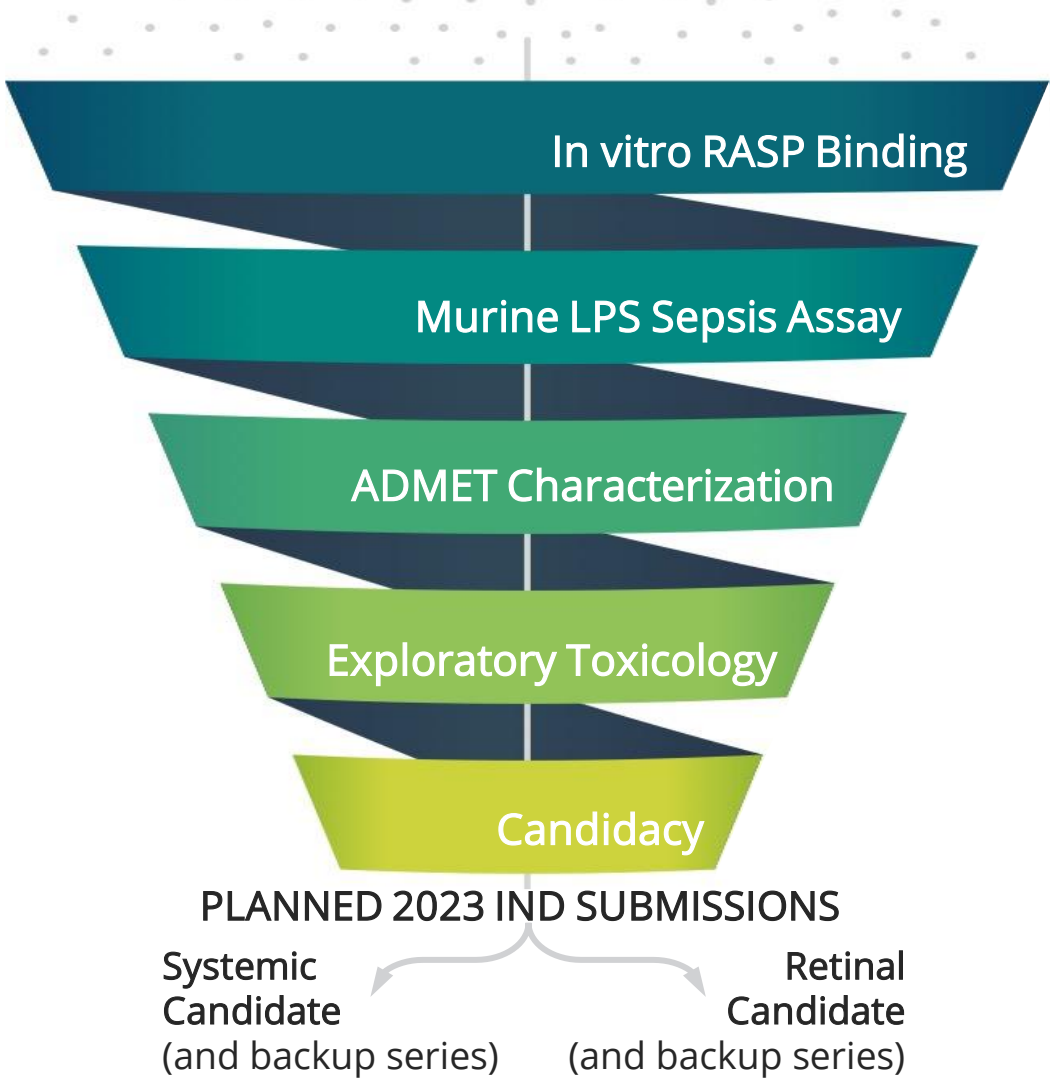
Sources: Company estimates; UpToDate (Alcoholic hepatitis in adults updated 03/19/20). . Wong et al. JAMA. 2019;321(17):1723-25. Neuman et al. Exp Mol Pathol. 2014;97(3):492-510; Singh et al. World J Gastroenterol. 2017;23:6549-6570; Meltzer et al. J Allergy Clin Immunol Pract. 2021;9:4037-4044. Arinze et al. ERJ Open Res. 2021;6:00300-2019; ; Vivarelli et al. Clin J Am Soc Nephrol. 2017;2:332-345. UpToDate (Minimal Change Disease updated 12/3/21). [†]Data on file.

ADX-629 Phase 2 Trials Initiating in 2022 Represent Varied Trial Designs and Are Expected to Complete in 2022 and 2023†

INDICATION	PLANNED DESIGN	PLANNED ENDPOINTS	EXPECTED COMPLETION
Acute Alcoholic Hepatitis	Crossover, alcohol challenge, acute dosing, ~20 subjects	Symptoms, plasma chemistry, flushing	Q4 2022
Chronic Cough	Crossover, 28-day dosing, ~50 subjects	Cough frequency, symptoms	H1 2023
Sjögren-Larsson Syndrome	Baseline-controlled, ~6 subjects	Plasma biomarkers, magnetic resonance imaging, quality of life	2023
Minimal Change Disease	Baseline-controlled, ~ 6 subjects	Relapse (corticosteroid dependency, proteinuria)	2023

†Timing depends, in part, on restrictions related to the COVID-19 pandemic, the availability of clinical research facilities and staffing, the ability to recruit patients, and regulatory feedback.

New Candidates for Systemic and Retinal Diseases Expected to be Advanced to Clinical Trials in 2023



Aldeyra has developed the leading RASP modulation discovery platform.

LPS = lipopolysaccharide
ADMET = absorption, distribution, metabolism, excretion, and toxicity
IND = Investigational New Drug

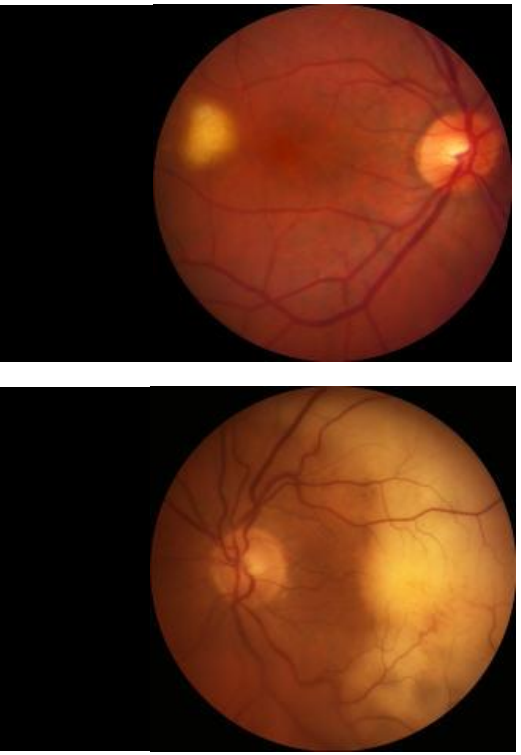
aldeyra

ADX-2191 (METHOTREXATE FOR INTRAVITREAL INJECTION)

A Platform Approach to Treat Rare Inflammatory Retinal Diseases

Nasdaq: ALDX

ADX-2191 Has the Potential to be the First Approved Drug for Primary Vitreoretinal Lymphoma (PVRL), a Rare but Serious Retinal Cancer



***Small** (top) and **large** (bottom) subretinal infiltrates in patients with primary vitreoretinal lymphoma*

A rare, aggressive, high-grade cancer, PVRL arises in the vitreous and retina.

Approximately **300-600 new cases** of PVRL are diagnosed in the United States per year.

4.83 years is the median survival for newly diagnosed patients.

The most common ocular complaints reported by patients include **blurred vision, painless loss of vision, floaters, red eye, and photophobia**.

No approved treatments are currently available, though methotrexate represents current standard of care.

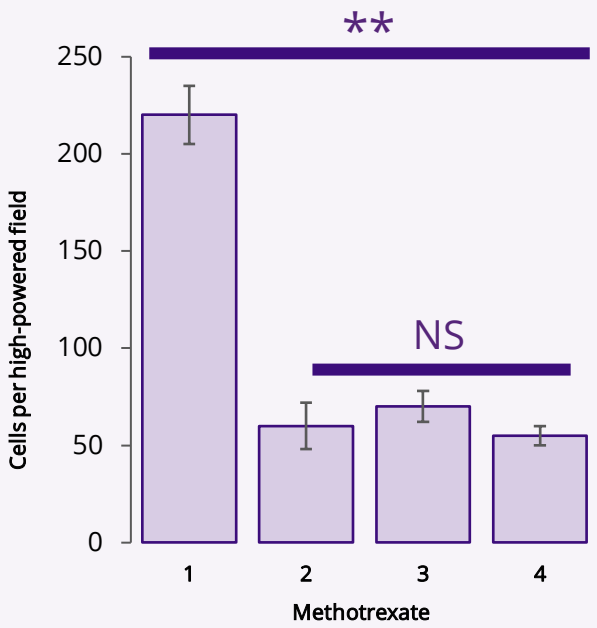
U.S. FDA Orphan Drug Designation received in July 2021.

Pre-NDA meeting with the FDA scheduled for Q4 2022

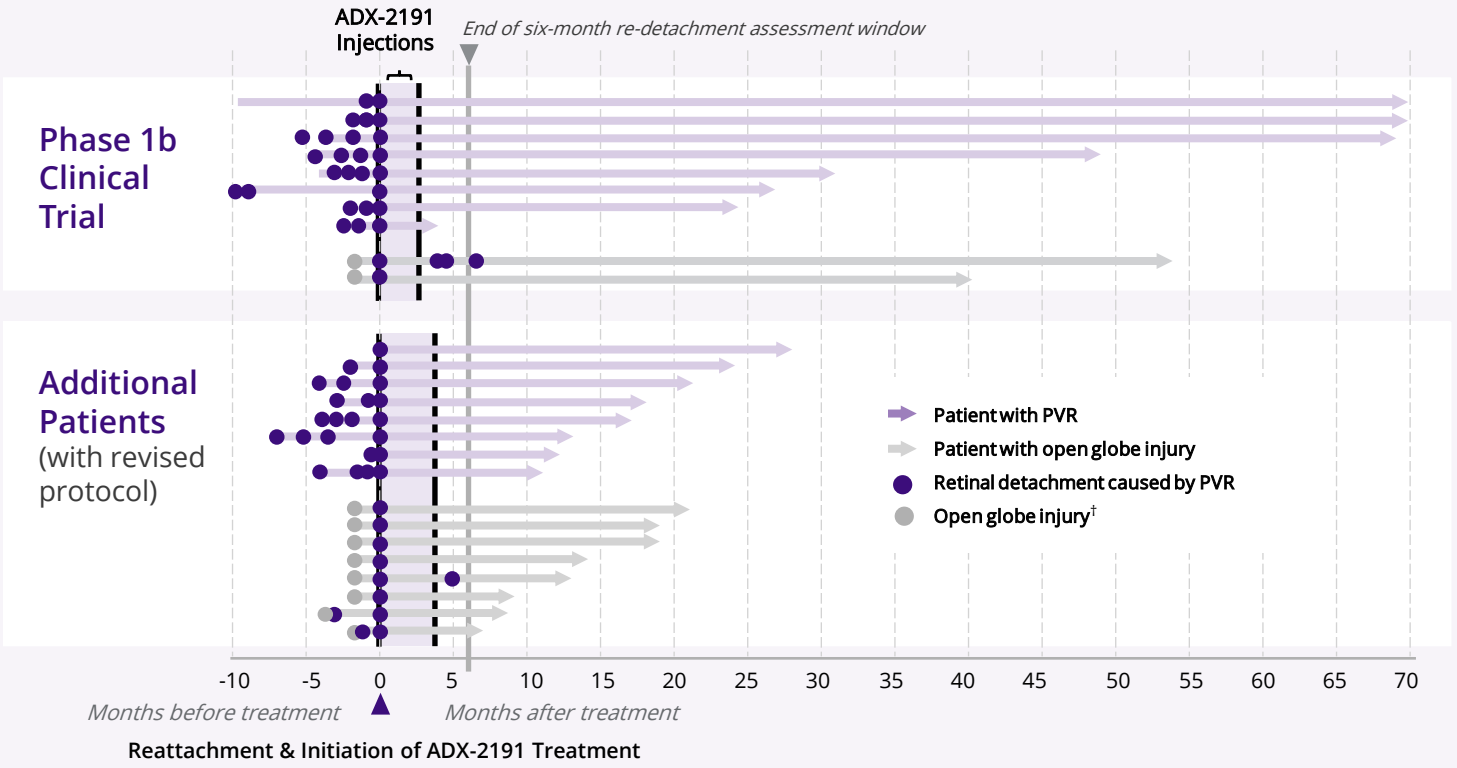
Sources: Aldeyra internal estimates. Data on file; Primary Vitreoretinal Lymphoma by D. J. Wilson on AAO EyeWiki; M. Sagoo, Survey of Ophthalmology (2014); Grimm et. al., Annals of Oncology (2007).

ADX-2191, a New Vitreous-Compatible Formulation of Methotrexate, Represents a Clinically Tested Systems Modulating Approach

Preclinical reduction in cellular proliferation



Clinical reduction in retinal detachment



Sources: ADX-2191 PVR Phase 1b investigator sponsored clinical trial (n=10) results and additional in-practice use (n=16); Invest Ophthalmol Vis. Sci. 2017; 58:3940–3949. †Timing of open globe injury as shown is estimated. There is no assurance that prior results, such as signals of safety, activity or durability of effect, observed from this open label investigator sponsored trial will be replicated in more rigorous clinical trials involving ADX-2191. ****** = $p \leq 0.01$. **NS** = not significant, **PVR** = proliferative vitreoretinopathy.

ADX-2191 Represents a Novel Potential Therapeutic Option For the Prevention of Proliferative Vitreoretinopathy

PROLIFERATIVE VITREORETINOPATHY (PVR)

PVR is a rare disease, with ~4,000 patients per year in the U.S. and nearly twice as many in Europe and Japan combined.

Left untreated, retinal detachment due to PVR **can progress to permanent blindness.**

There is currently **no FDA- or EMA-approved therapy**.

Repeat surgery, which can lead to vision loss, is currently one of the main courses of action.

ADX-2191

Granted U.S. FDA orphan drug designation, U.S. FDA fast track designation, and EU orphan drug designation for the prevention of PVR

Tolerability and reattachment success demonstrated in Phase 1b open-label investigator sponsored clinical trial

GUARD adaptive Phase 3 clinical trial for the prevention of recurrent retinal detachment due to PVR ongoing

Part 1 Phase 3 GUARD Trial Results Expected Q3 or Q4 2022

Source: Aldeyra internal estimates based on primary and secondary market research; published literature. **PVR** = proliferative vitreoretinopathy.

ADX-2191: Design of Part 1 of the Adaptive Phase 3 GUARD Trial in Proliferative Vitreoretinopathy

Primary Objective
Evaluate efficacy of intravitreal ADX-2191 injections for prevention of recurrent retinal detachment due to PVR

Design
Multi-center, two-part, adaptive Phase 3 clinical trial (N ≅ 100)

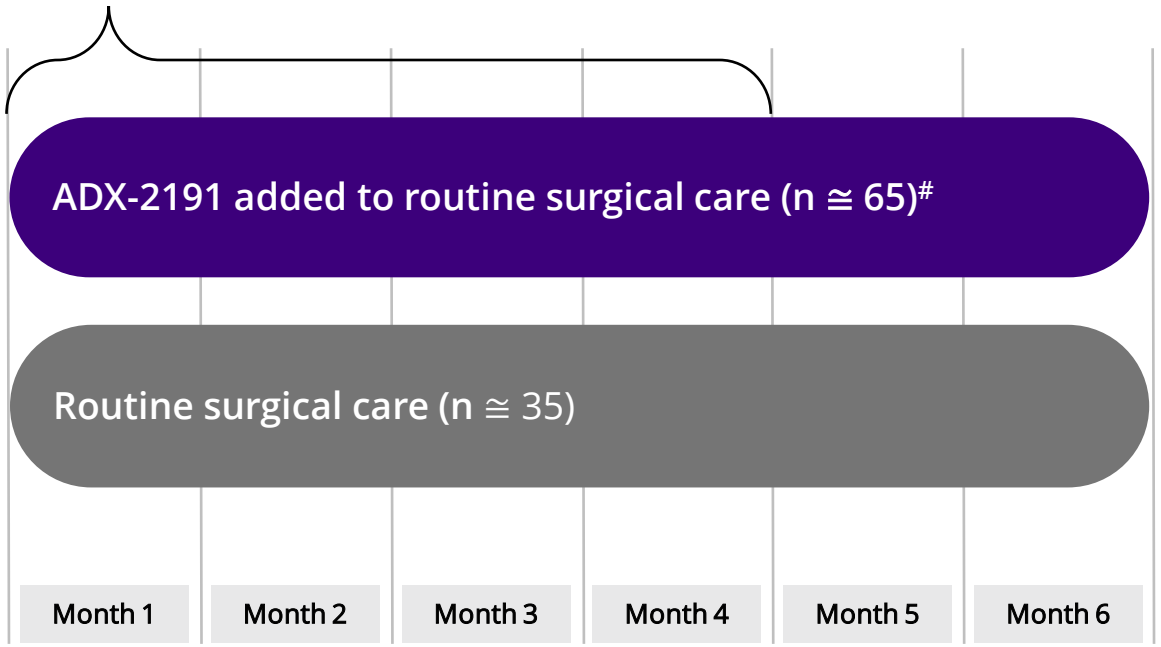
Inclusion Highlights
- Recurrent retinal detachment due to PVR, or
- Retinal detachment associated with open-globe injury

Dosing Regimen
At surgery, weekly (x8), and then every other week (x4) intravitreal ADX-2191 injections

Endpoint
Retinal re-detachments due to PVR requiring re-operation within 6 months:

1. OCT demonstrating fovea-off retinal detachment
2. Photographic documentation retinal detachment

ADAPTIVE PHASE 3 PVR CLINICAL TRIAL DESIGN: PART 1

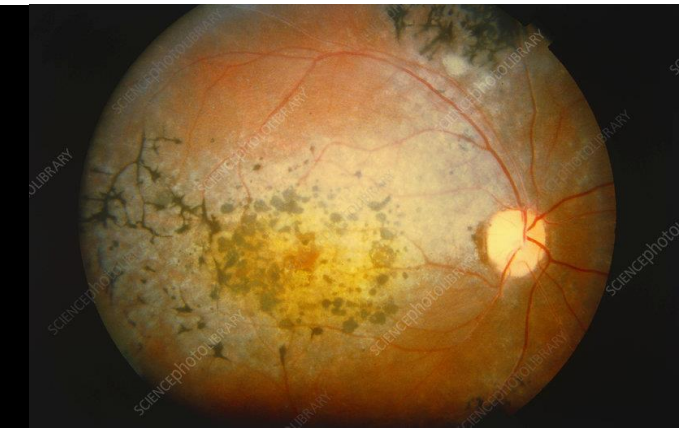


Subjects include n ≅ 30 subjects recruited under open label portion of protocol.

†The timing of ongoing clinical trials depends, in part, on restrictions related to the COVID-19 pandemic, the availability of clinical research facilities and staffing, and the ability to recruit patients.
PVR = proliferative vitreoretinopathy. **OCT** = optical coherence tomography.

ADX-2191 Has the Potential to be the First Approved Drug for Retinitis Pigmentosa (RP), a Clinical Group of Rare Genetic Eye Diseases

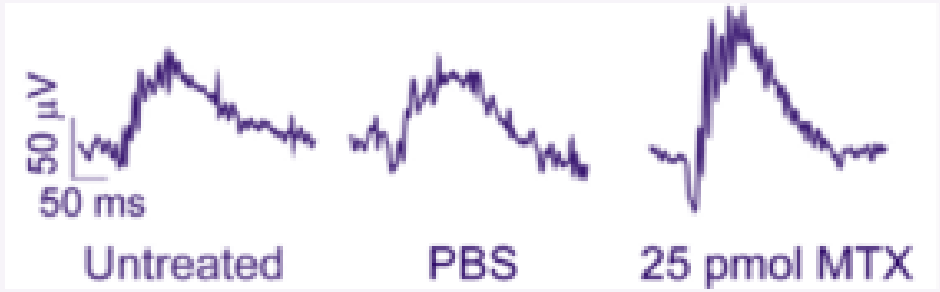
RP refers to a group of inherited retinal diseases characterized by cell death and loss of vision.



Affects an estimated 82,000 individuals in the United States, and approximately 1 in 4,000 people worldwide.

Forms of RP and related diseases include usher syndrome, Leber's congenital amaurosis, and Bardet-Biedl syndrome, among others.

U.S. FDA Orphan Drug Designation received in August 2021



Preclinical evidence in a P23H rhodopsin mutation mouse model of RP suggests that methotrexate improves retinal function.

Phase 2 Clinical Trial Results Expected H1 2023

Sources: Aldeyra internal estimates. Data on file; Liu et al. Pharmacological clearance of misfolded rhodopsin for the treatment of RHO-associated retinitis pigmentosa. FASEB J. 2020 Aug;34(8):10146-10167. **PBS** = phosphate-buffered saline. **MTX** = methotrexate.

ADX-2191: Phase 2 Clinical Trial Design in Retinitis Pigmentosa

Primary Objective
To evaluate the safety and efficacy of ADX-2191 in patients with RP

Design
Single-center, open label study (N = 8)

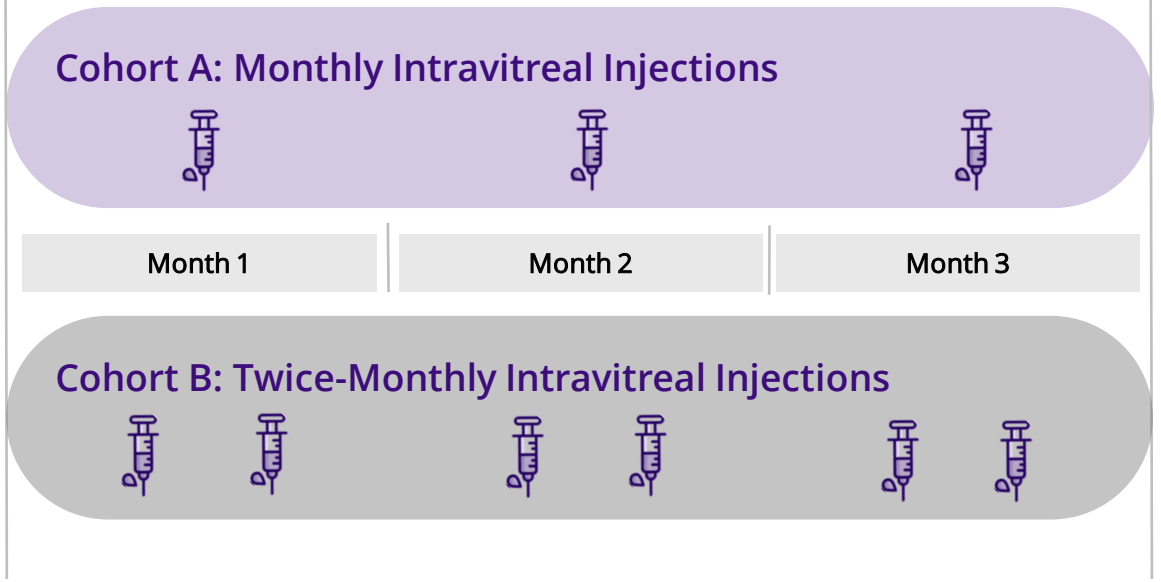
Inclusion Highlights
Diagnosis of RP due to rhodopsin gene mutations, including P23H

Dosing Regimen
Cohort A (n = 4): Monthly injections
Cohort B (n = 4): Twice-monthly injections

Primary Endpoint
Safety and tolerability of ADX-2191 in RP subjects

Secondary Endpoints
1. Change in visual acuity assessed by ETDRS
2. Central retinal sensitivity assessed by MAIA microperimetry
3. Change in dark-adapted flash analyzed by ffERG
4. Change in dark-adapted retinal sensitivity
5. OCT assessment for change in central subfield foveal thickness and ellipsoid zone area/width

RETINITIS PIGMENTOSA CLINICAL TRIAL DESIGN



†The timing of ongoing clinical trials depends, in part, on restrictions related to the COVID-19 pandemic, the availability of clinical research facilities and staffing, and the ability to recruit patients.
RP = retinitis pigmentosa. **OCT** = optical coherence tomography. **ETDRS** = Early Treatment Diabetic Retinopathy Study. **MAIA** = Macular Integrity Assessment. **ffERG** = full field electroretinography.

Experienced Management Team and Board of Directors

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Todd Brady, M.D., Ph.D.
President, CEO & Director

Bruce Greenberg, C.P.A.
VP of Finance, Interim Chief Financial Officer, and Treasurer

Stephen Machatha, Ph.D.
Chief Development Officer

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Todd Brady, M.D., Ph.D.	CEO Aldeyra Therapeutics

[1]Acquired by Xanthus/Antisoma. [2] Acquired by Schwarz/UCB. [3] Acquired by Ligand. [4] Acquired by Merck. [5] Acquired by Alexion. [6] Acquired by Genzyme.

Upcoming Planned Clinical Milestones*

NDA submission for reproxalap in dry eye disease

Expected Q4 2022

Phase 3 INVIGORATE 2 Trial of reproxalap in allergic conjunctivitis

Results expected 2023

Part 1 of Phase 3 GUARD Trial of ADX-2191 in proliferative vitreoretinopathy

Results expected Q3 or Q4 2022

Phase 2 clinical trial of ADX-2191 in retinitis pigmentosa

Results expected H1 2023

Pre-NDA meeting for ADX-2191 in primary vitreoretinal lymphoma

Scheduled for Q4 2022

Phase 2 clinical trials of ADX-629 in acute alcoholic hepatitis, chronic cough, Sjögren-Larsson Syndrome, and minimal change disease

Expected completions in Q4 2022 and 2023

*The timing of ongoing clinical trials depend, in part, on restrictions related to COVID-19, the availability of clinical research facilities and staffing, and the ability to recruit patients.

We Are Creating What We Believe Are Best-in-Class Therapeutic Platforms for Modulation of Inflammatory Disease

Unparalleled drug discovery and development engine targeting RASP, with multiple early and late-stage milestones expected over the next two years†

- NDA submission for reproxalap in dry eye disease is expected in Q4 2022.
- ADX-629 is advancing to Phase 2 trials in four new indications.
- New compounds for systemic and retinal disease are expected to begin clinical trials in 2023.

Novel intravitreal methotrexate formulation with orphan drug status in three rare retinal diseases

- ADX-2191 could be the first approved therapy for primary vitreoretinal lymphoma, proliferative vitreoretinopathy, and retinitis pigmentosa.

†Timing depends, in part, on restrictions related to the COVID-19 pandemic, the availability of clinical research facilities and staffing, the ability to recruit patients, and regulatory feedback.
‡NDA submission requirements depend, in part, on clinical results, enrollment, and regulatory feedback. **NDA** = New Drug Application.

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September 14, 2022

H.C. WAINWRIGHT GLOBAL INVESTMENT CONFERENCE

Innovative Therapeutics to Treat Immune-Mediated Diseases

Nasdaq: ALDX