



CORPORATE

2024 Research & Development Day

April 25, 2024

Nasdaq: ALDX

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Todd C. Brady, M.D., Ph.D., Chief Executive Officer, Aldeyra Therapeutics

Welcome and Opening Remarks

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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 future expectations, plans and prospects, including, without limitation, statements regarding: the goals, opportunity, and potential for reproxalap, ADX-2191, ADX-246, ADX-248, and ADX-629; anticipated clinical or regulatory milestones for reproxalap, ADX-2191, ADX-246, ADX-248, and ADX-629; FDA agreement with the clinical development plan for reproxalap; expectations regarding the results of scheduled FDA meetings and discussions, clinical trial initiations and completions, and the timing and nature of NDA or other submissions to the FDA; Aldeyra's business, research, development and regulatory plans or expectations; and the structure, timing and success of Aldeyra's planned or pending clinical trials. The results of earlier preclinical or clinical trials may not be predictive of future results. 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," "on track," "scheduled," "target," "design," "estimate," "predict," "contemplates," "likely," "potential," "continue," "ongoing," "aim," "plan," or the negative of these terms, and similar expressions intended to identify forward-looking statements.

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Agenda

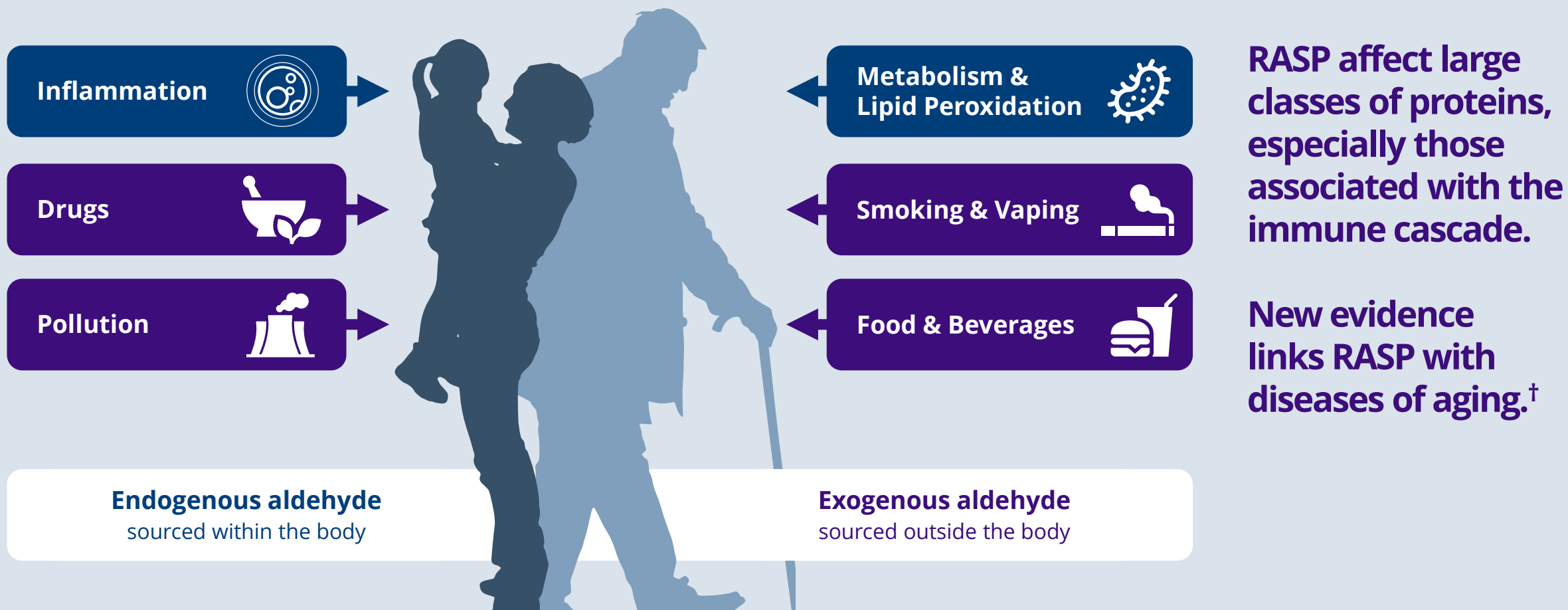
	TOPIC	PRESENTER
9:00 – 9:45 a.m.	Opening Remarks, RASP Overview, and Reproxalap Dry Eye Disease Development Plan	Todd C. Brady, M.D., Ph.D. Chief Executive Officer, Aldeyra Therapeutics
9:45 – 10:30 a.m.	Next-Generation RASP Modulators	Adam Brockman, Ph.D. Senior Director Translational Science, Aldeyra Therapeutics
10:30 – 10:45 a.m.	Break	
10:45 – 11:30 a.m.	Retinitis Pigmentosa Overview	Ramiro S. Maldonado MD Ophthalmologist, Duke Center for Ophthalmic Genetics
11:30 a.m. – 12:00 p.m.	ADX-2191 for the Treatment of Retinitis Pigmentosa	Todd C. Brady, M.D., Ph.D.
12:00 – 12:30 p.m.	Lunch	
12:30 – 1:00 p.m.	Pipeline, Milestones, and Concluding Remarks	Todd C. Brady, M.D., Ph.D.



Todd C. Brady, M.D., Ph.D., Chief Executive Officer, Aldeyra Therapeutics

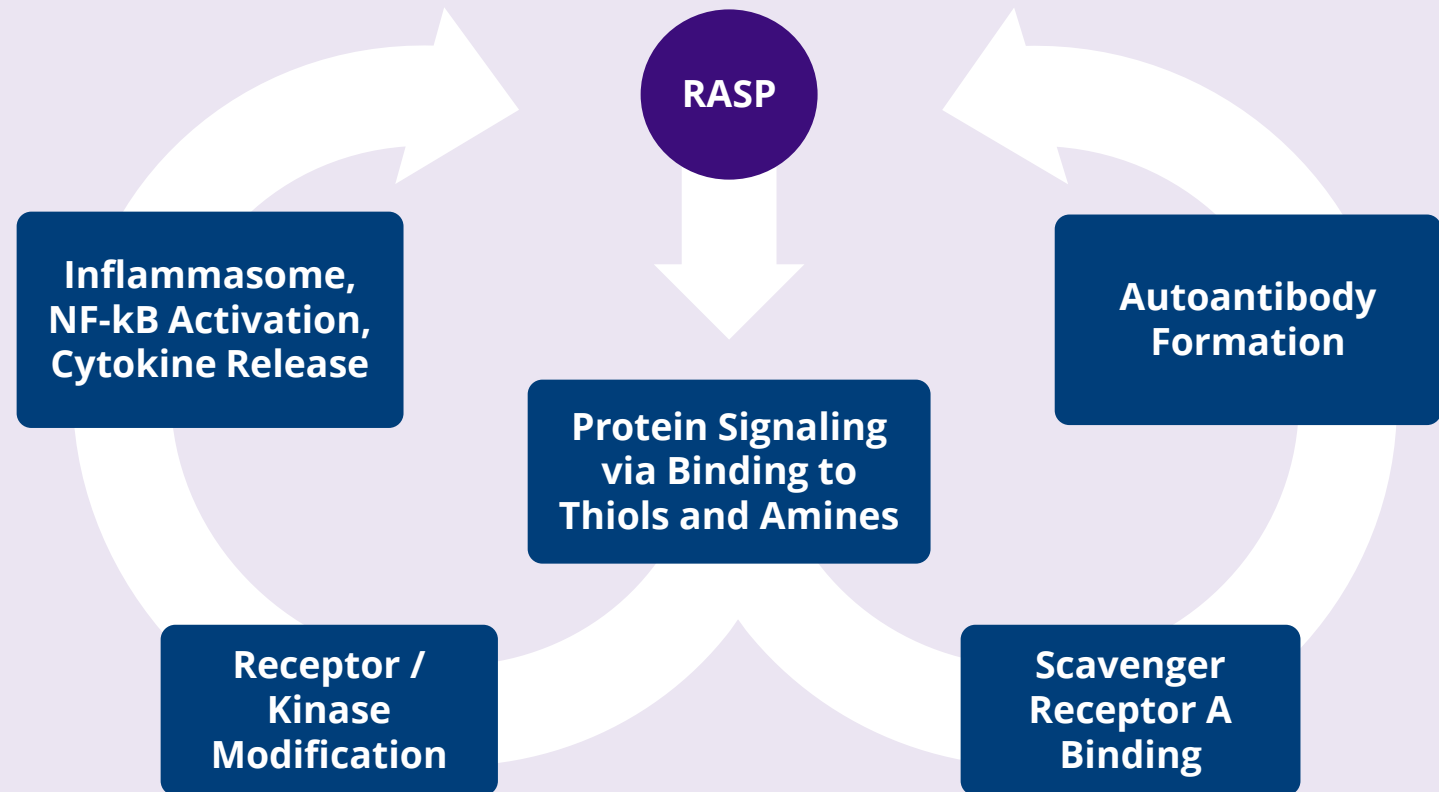
RASP Overview

RASP Are Toxic, and Represent a Novel, Potentially Broadly Applicable Pharmaceutical Target



RASP Induce Inflammation via Multiple Mechanisms

- Aldehydes **covalently bind** thiol (Michael addition) and amine (Schiff base) residues on proteins.
- Direct protein binding leads to **conformational and functional** changes in proteins, which in turn initiate a pro-inflammatory signaling cascade.
- Aldehyde-protein adducts are ligands for **Scavenger Receptor A**, subsequently leading to autoantibody formation against the adducted protein.



RASP Modulation Represents a Novel Pharmacology

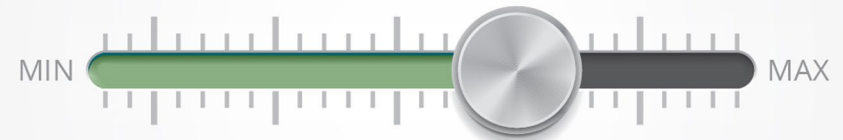
Traditional pharmacology targets specific proteins and is generally limited to two actions: on or off.



Activating or inhibiting specific proteins on a sustained basis, which rarely occurs in nature, may lead to toxicity and could limit activity.

vs.

RASP modulation may allow for control of protein *systems*, without turning any single protein on or off.



Systems-based pharmacology could potentially lead to broader-based activity with less toxicity associated with activation or inhibition of specific proteins.



Todd C. Brady, M.D., Ph.D., Chief Executive Officer, Aldeyra Therapeutics

Reproxalap Dry Eye Disease Development Plan

Phase 3 Clinical Trial of Reproxalap in a Dry Eye Chamber[†]

Design

- Randomized, double-masked, vehicle-controlled dry eye chamber challenge

Dosing

- Visit 1: Medical screening
- Visit 2: Vehicle dry eye chamber (dosing just before and 50 minutes after entry)
- Visit 3: Four doses of randomized treatment (reproxalap or vehicle)
- Visit 4: Randomized dry eye chamber (dosing just before and 50 minutes after entry)

Size

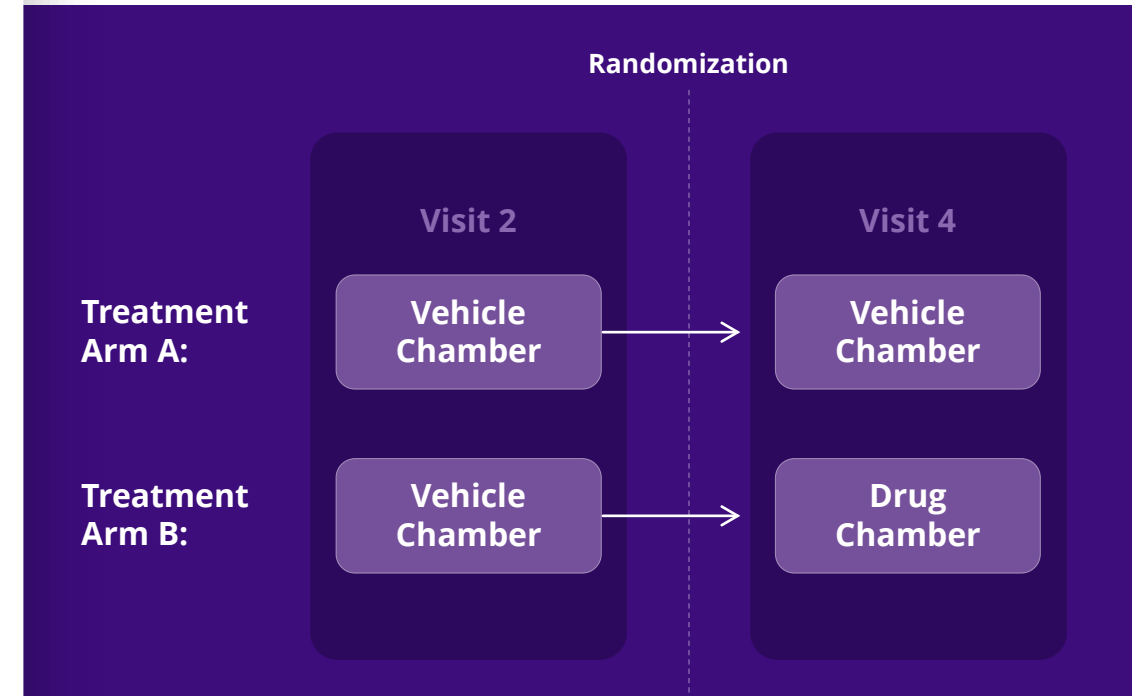
~100 dry eye disease patients

Primary Endpoint

Ocular discomfort score

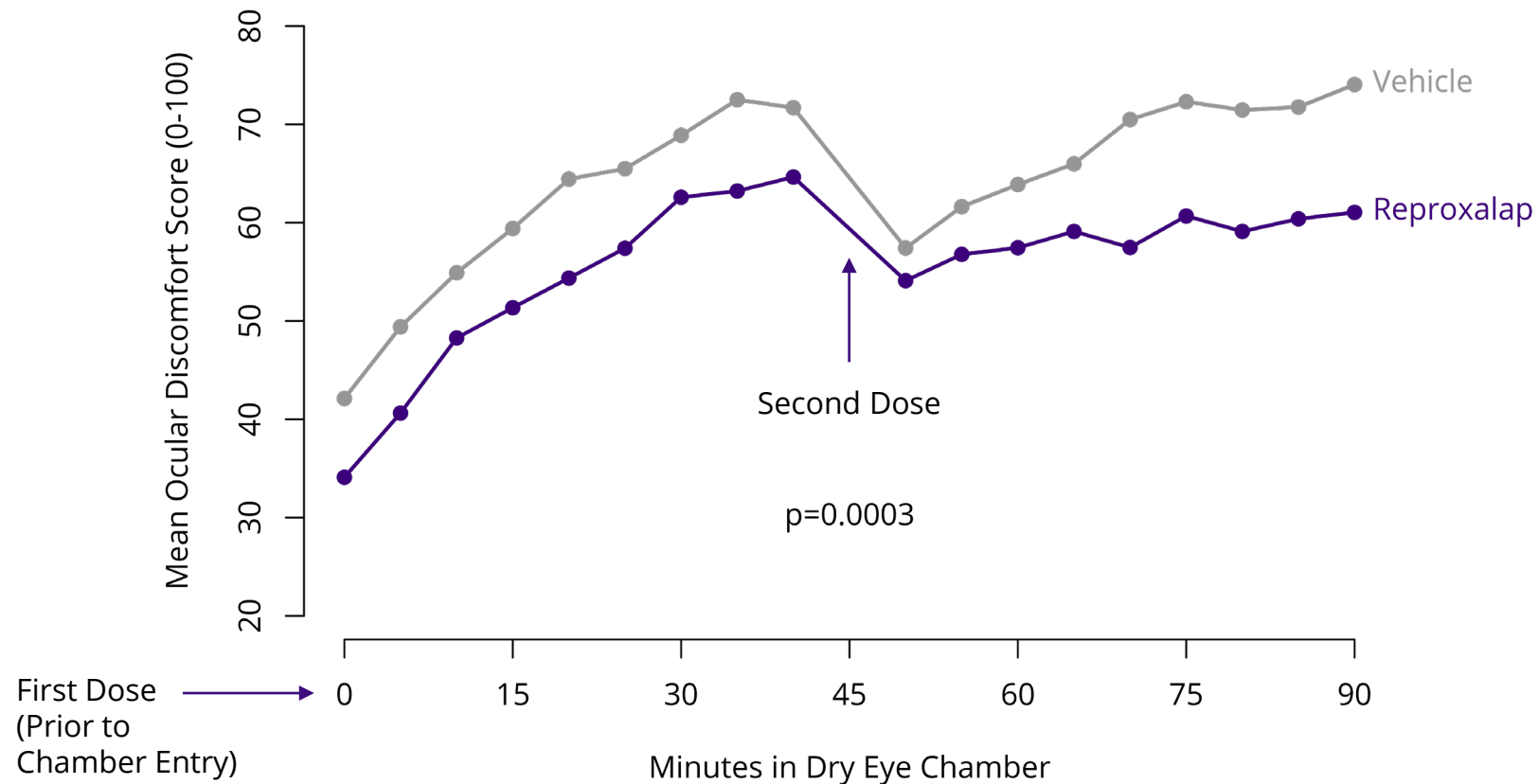
Other Endpoints

Safety



Pending clinical trial results, feedback from ongoing FDA discussions, and other factors, NDA resubmission expected in H2 2024^{†‡}

Based on Pooled Data from Four Dry Eye Chamber Trials, Ocular Discomfort Score was Lower with Reproxalap than with Vehicle

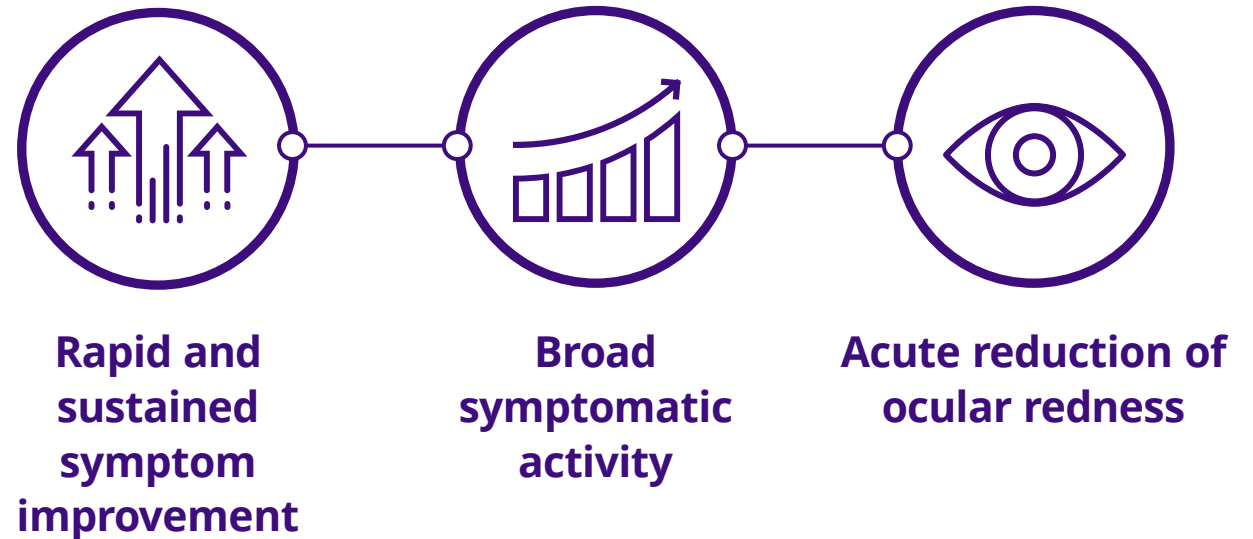


Ocular discomfort data are derived from four previously completed dry eye chamber clinical trials of reproxalap vs. vehicle, encompassing approximately 110 patients and incorporating trial conduct and statistical analysis amendments.



Reproxalap Represents a Novel Potential Therapeutic Approach in Dry Eye Disease with Rapid Activity in Clinical Trials

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



Dry eye disease afflicts 39 million or more adults in the United States.[†]



Questions

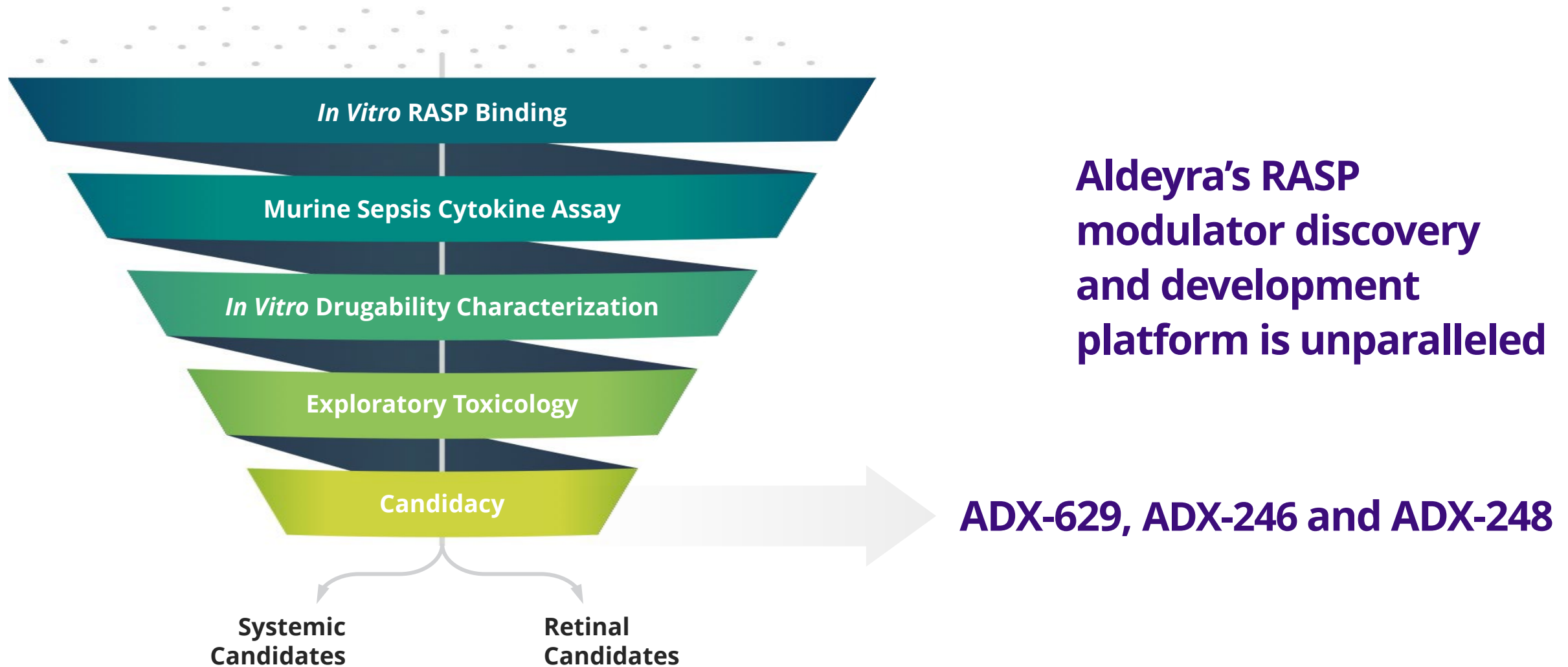




Adam Brockman, Ph.D., DABT, Senior Director of Translational Science, Aldeyra Therapeutics

Next-Generation RASP Modulators

Aldeyra Has Developed the Leading RASP Modulator Discovery Platform



Development Indications for New RASP Modulators Are Supported by Mechanistic Rationale

INDICATION	RASP RATIONALE	MODEL
Atopic Dermatitis	Upregulation of pro-inflammatory cytokines	Oxazolone atopic dermatitis
Alcoholic Hepatitis	Association with hepatotoxicity	Ethanol toxicity
Non-Opiate Analgesia	Activation of TRPV1 and TRPA1 pain receptors	Carrageenan inflammatory pain
Lipogenesis Modulation	Potentiation of lipid synthesis	Diet-induced obesity

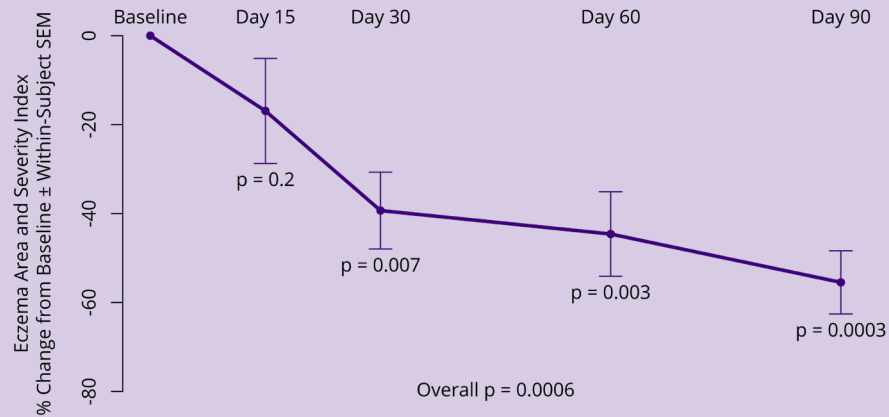


Atopic Dermatitis

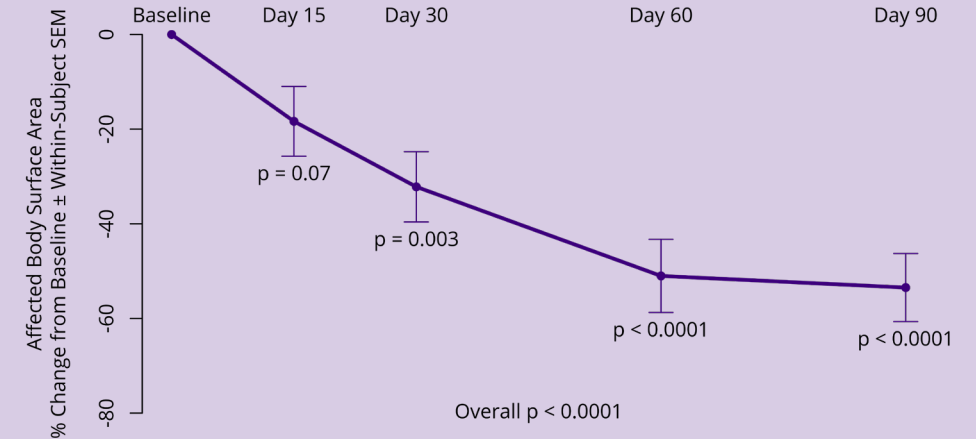


Statistical and Clinically Significant Improvement was Observed in Phase 2 Clinical Trial of RASP Modulator ADX-629 in Atopic Dermatitis

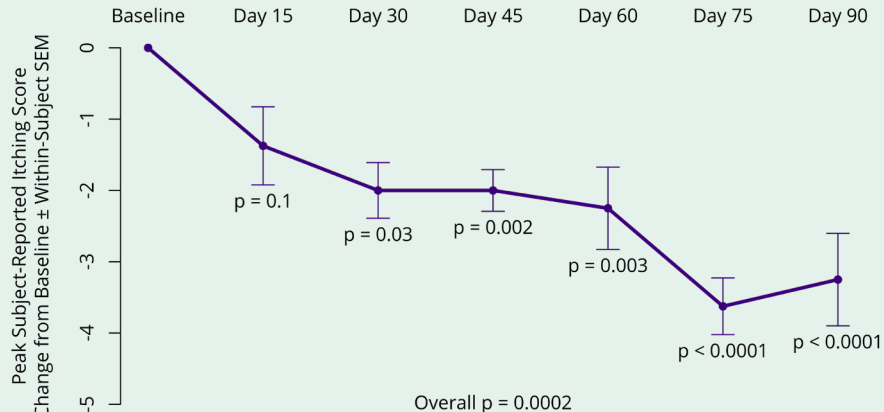
Eczema Area and Severity Index (EASI)



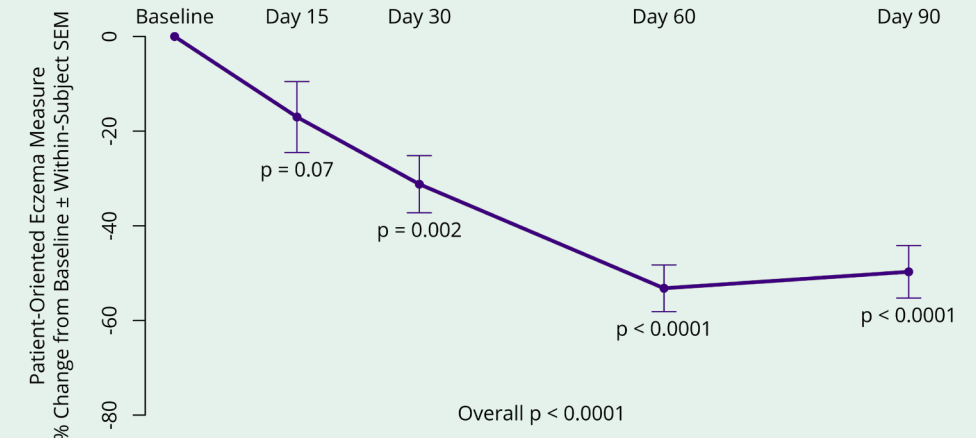
Investigator Global Assessment



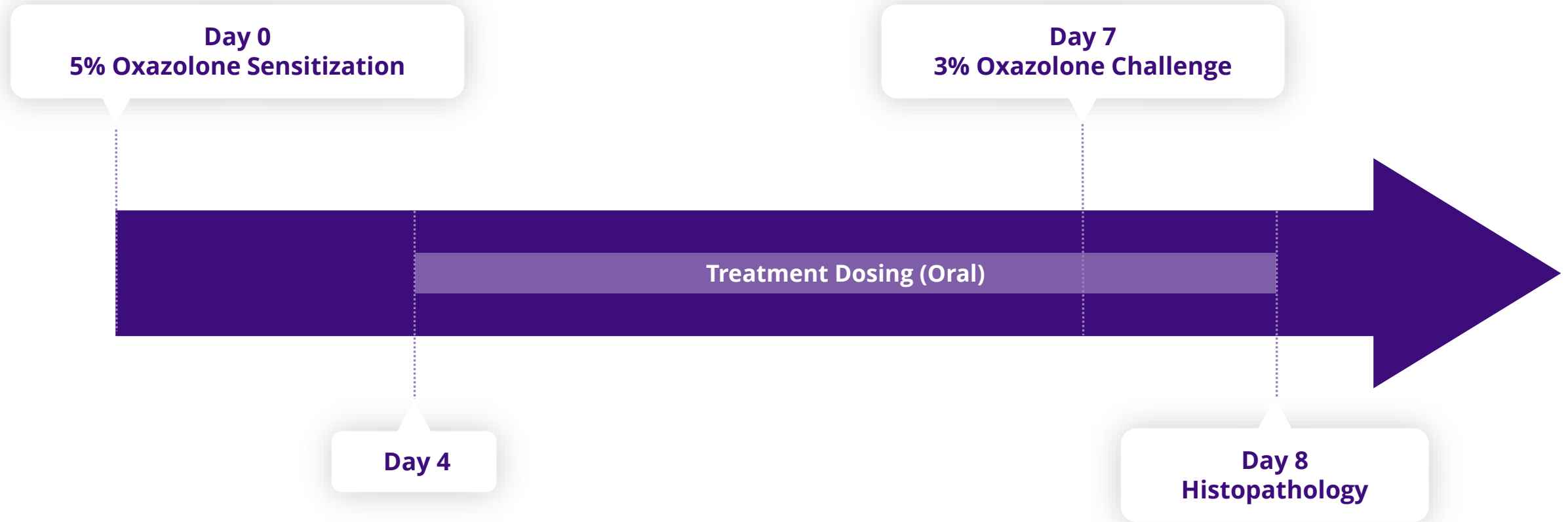
Patient-Reported Itching Score



Patient-Oriented Eczema Measure

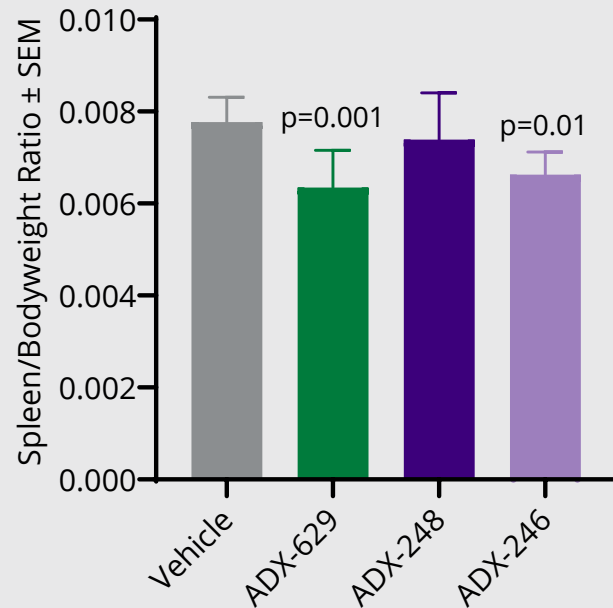


Oxazolone Sensitization is a Well-Characterized Preclinical Model of Atopic Dermatitis

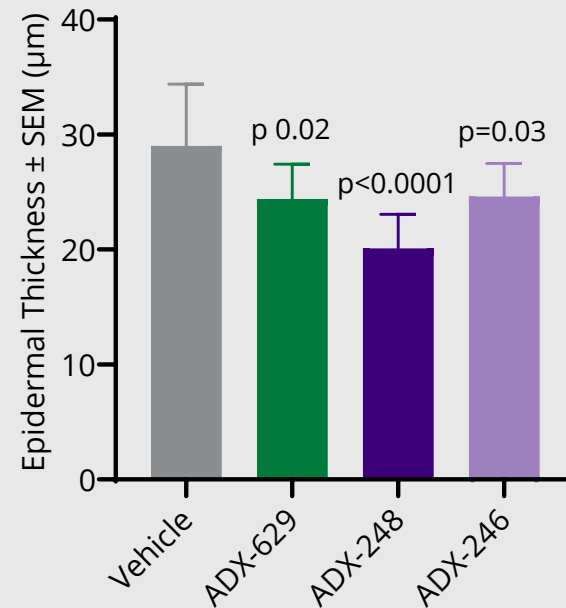


RASP Modulators ADX-629, ADX-248, and ADX-246 Reduced Histopathology and Spleen Weight in a Preclinical Model of Atopic Dermatitis

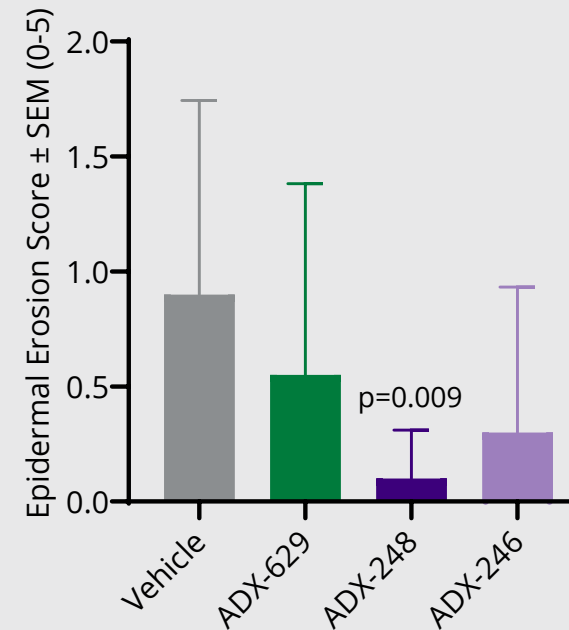
Weight



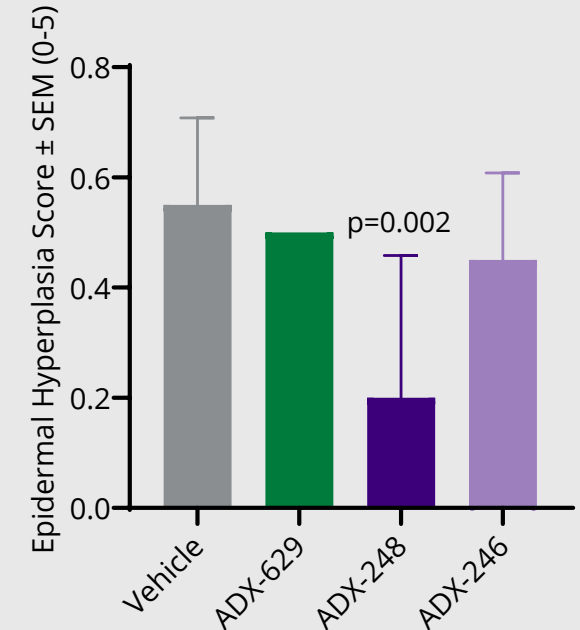
Thickness



Erosion



Proliferation

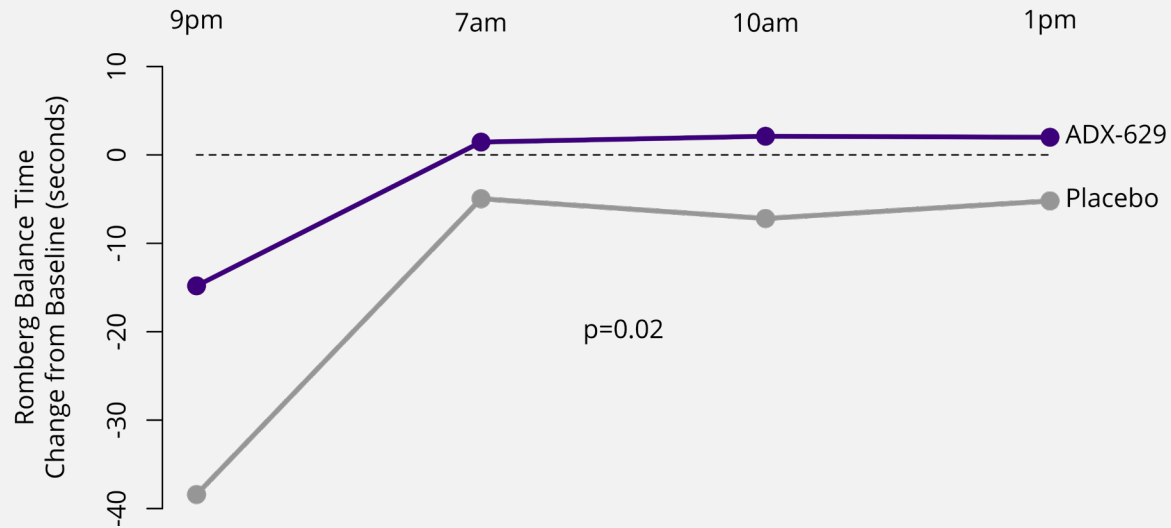




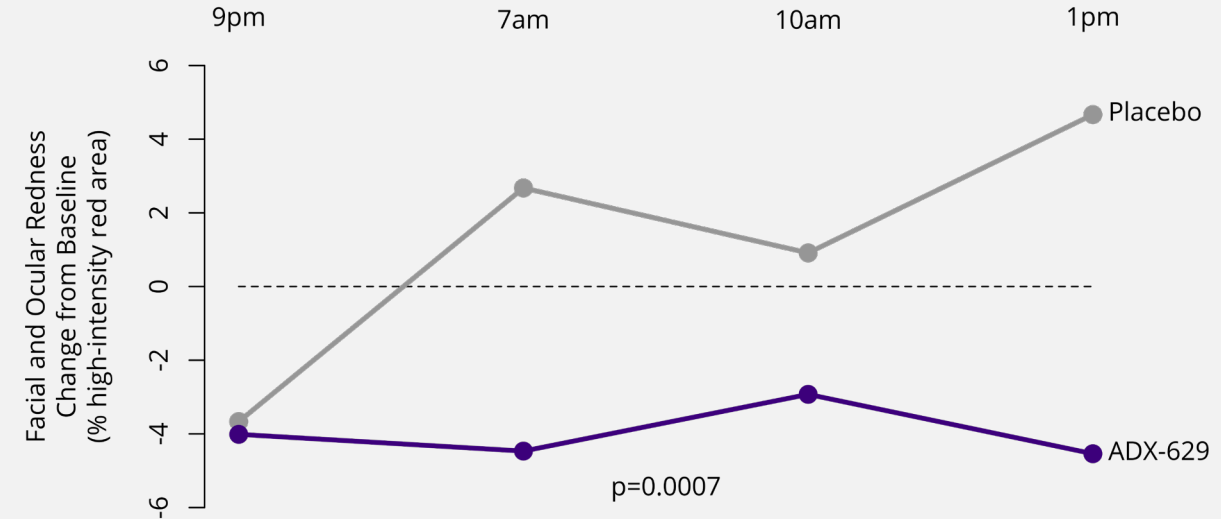
Alcoholic Hepatitis

ADX-629 Improved Balance and Reduced Dermal Flushing and Acetaldehyde Levels in Phase 1/2 Ethanol Toxicity Clinical Trial

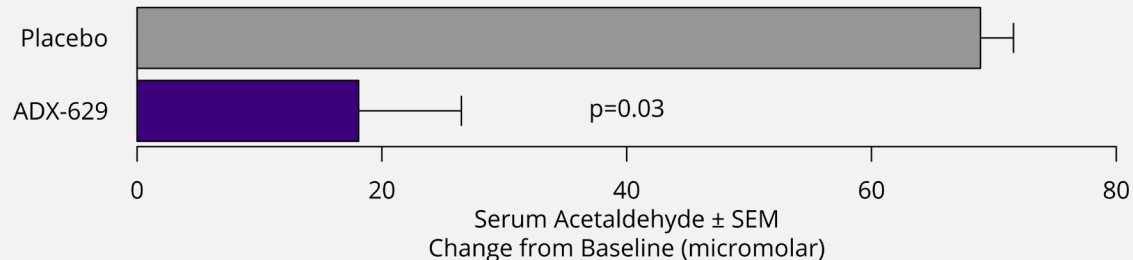
Balance



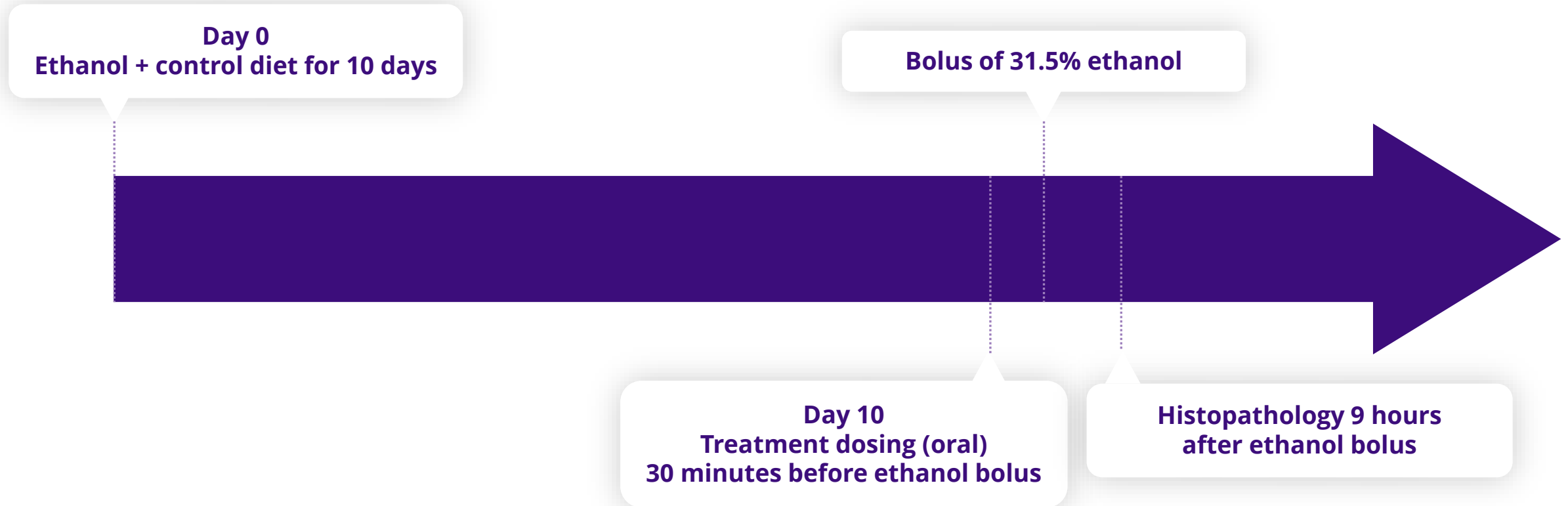
Flushing



Acetaldehyde

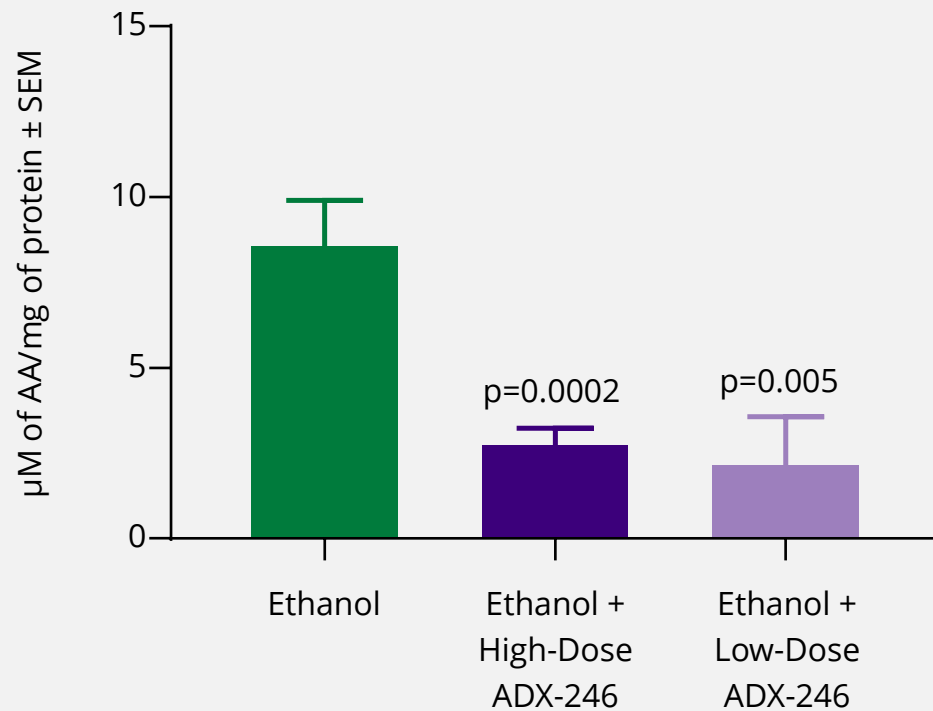


Preclinical Model of Ethanol-Induced Hepatitis Enables Detailed Assessment of the Pharmacodynamic Activity of RASP Modulation

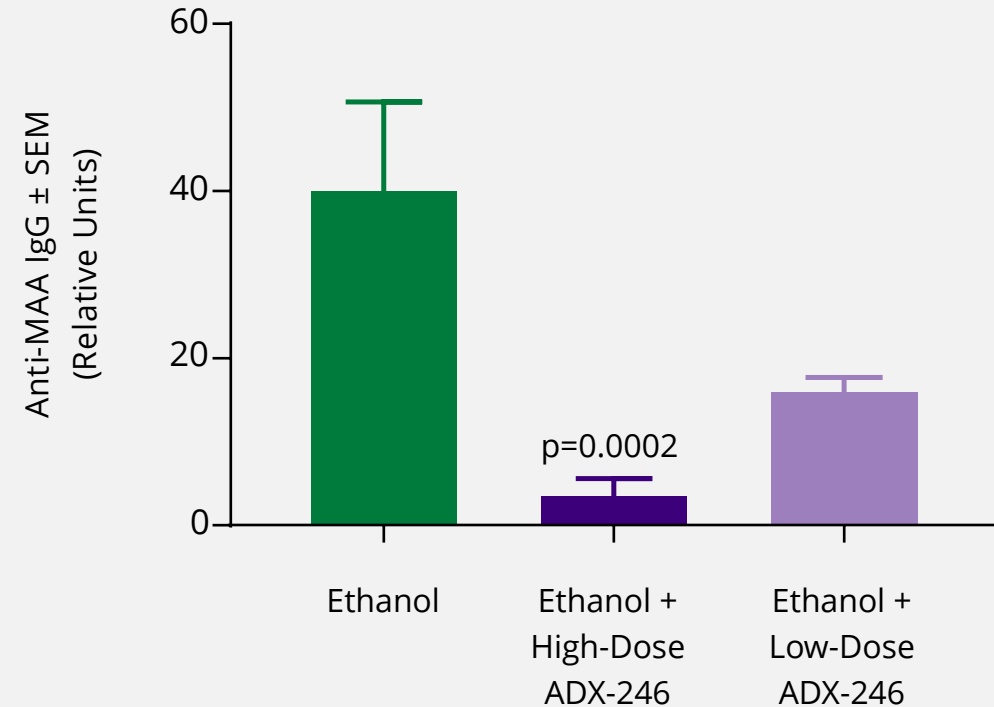


ADX-246 Decreased RASP Levels in Preclinical Model of Ethanol-Induced Hepatitis

Liver Acetaldehyde



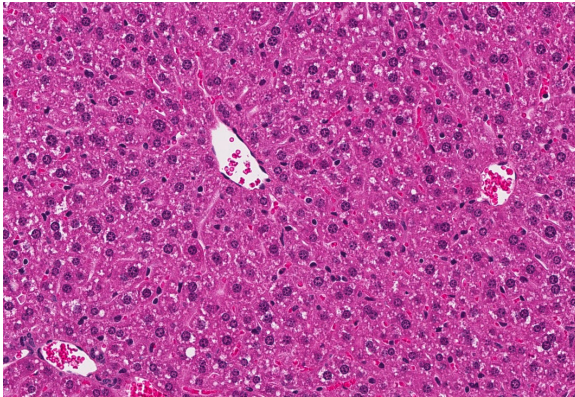
Serum Anti-Malondialdehyde Acetaldehyde Adduct



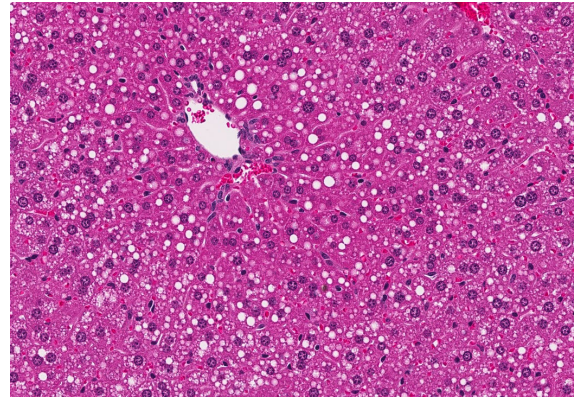
ADX-246 Diminished Histopathological Changes in Preclinical Model of Ethanol-Induced Hepatitis

**Hematoxylin
and Eosin
Staining**

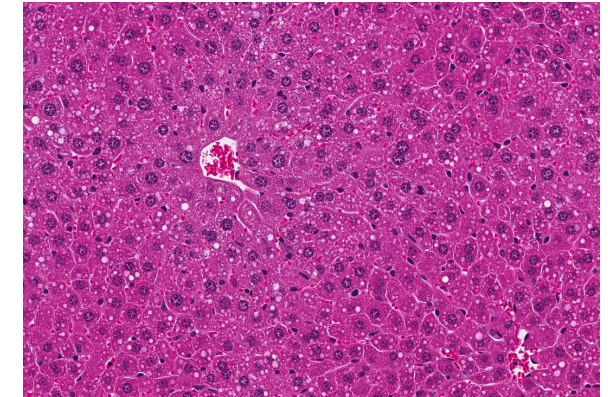
Control



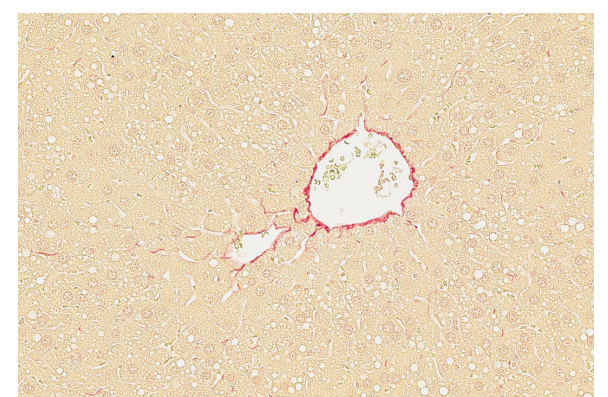
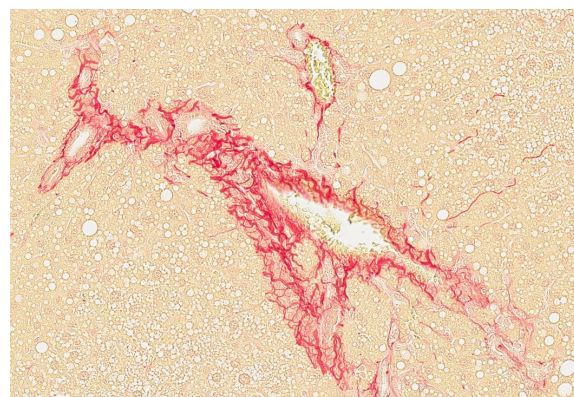
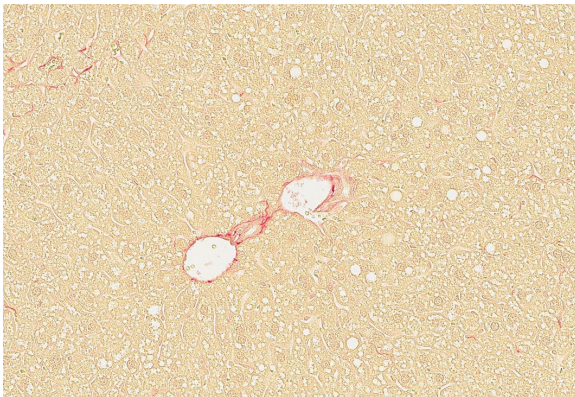
Ethanol



Ethanol + ADX-246



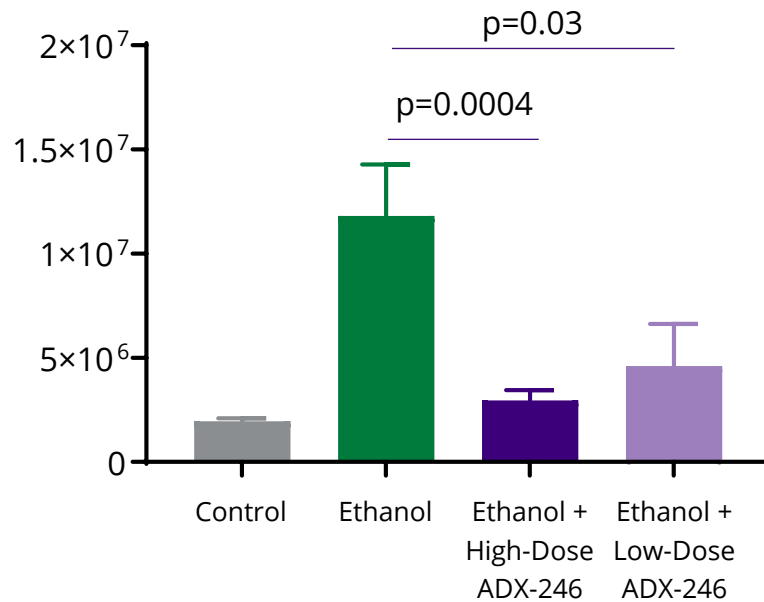
**Sirus Red
Staining**



ADX-246 Reduced Hepatic Levels of Lipids and Collagen in Preclinical Model of Ethanol-Induced Hepatitis

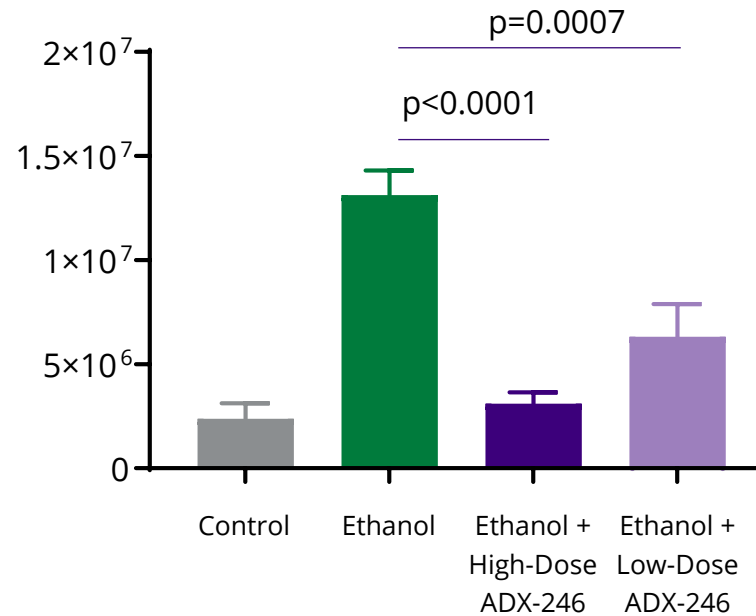
Collagen

Integrated Density \pm SEM
(pixels)



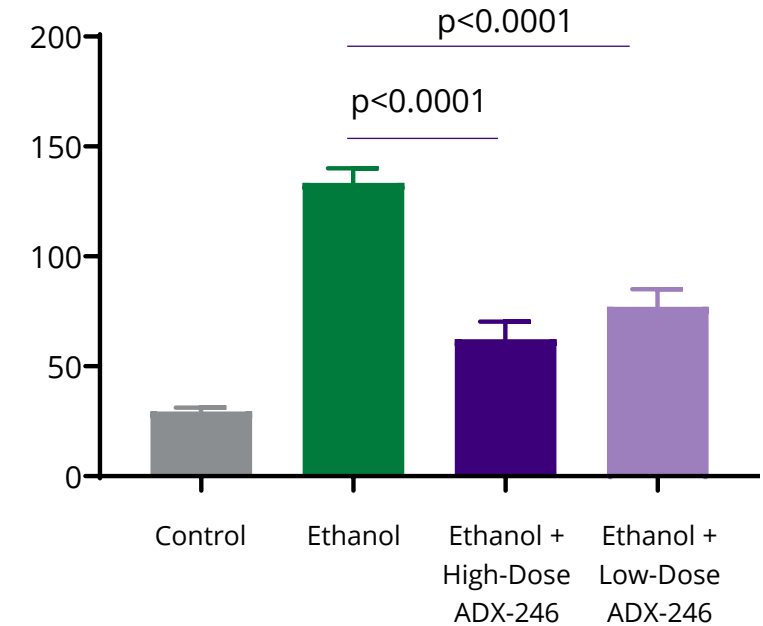
Total Lipids

Integrated Density \pm SEM
(pixels)



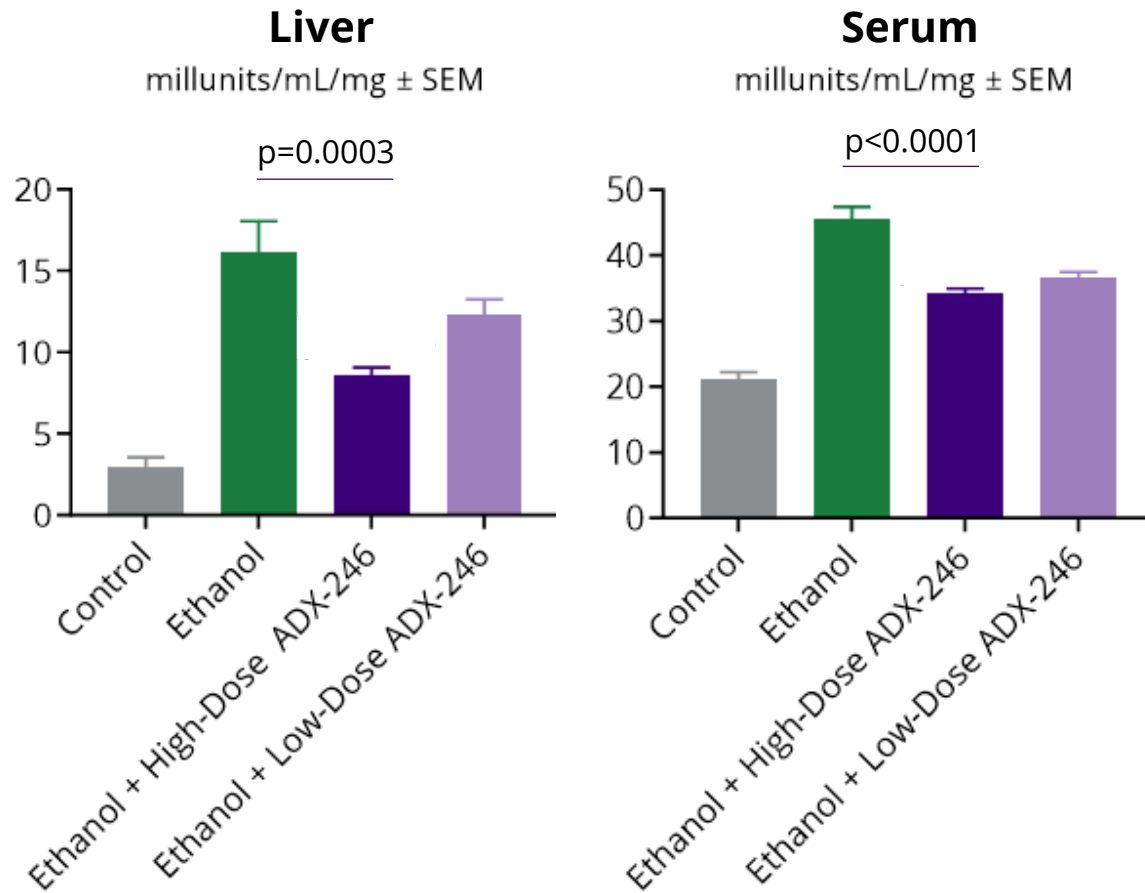
Triglycerides

mg/dL Triglycerides per
mg Protein \pm SEM

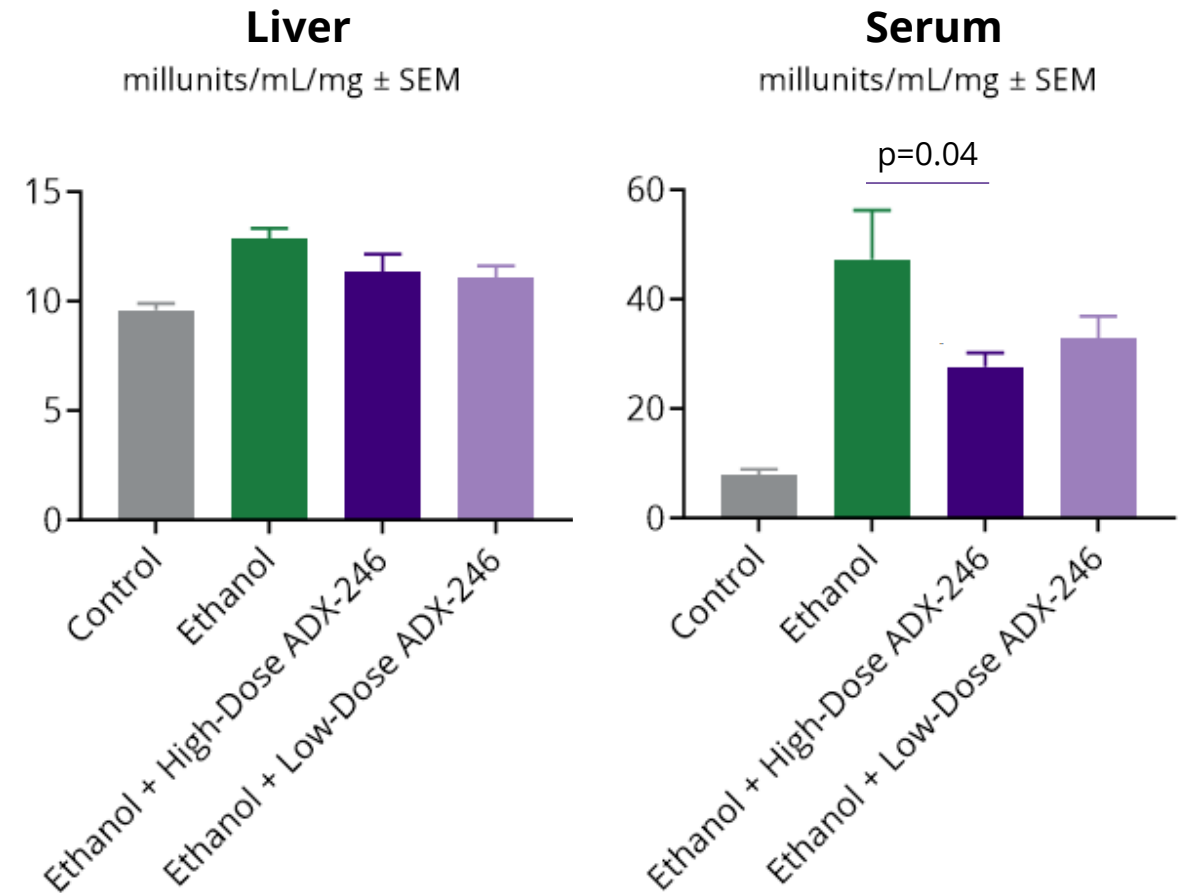


ADX-246 Improved Liver Function Tests in Preclinical Model of Ethanol-Induced Hepatitis

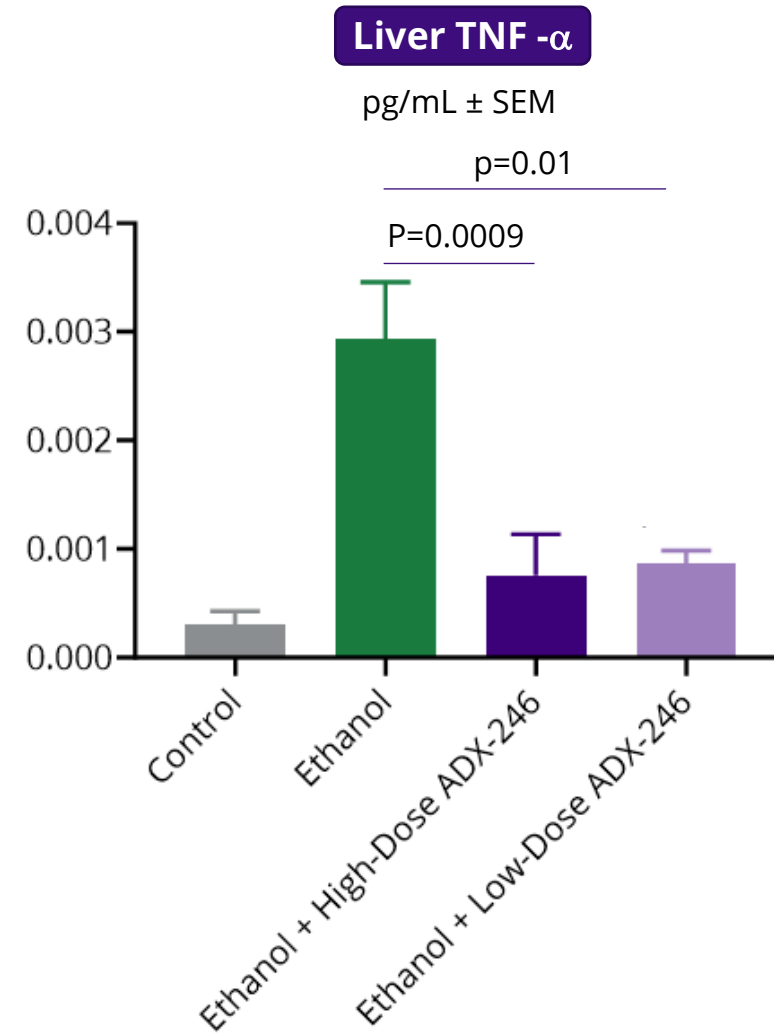
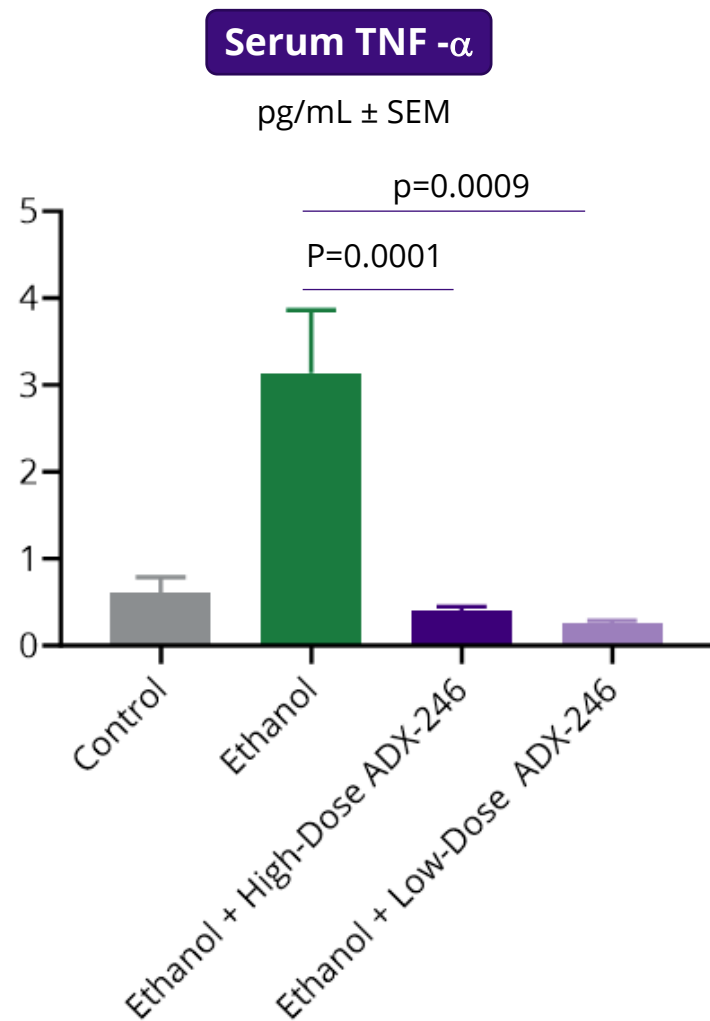
Aspartate Aminotransferase (AST)



Alanine Aminotransferase (ALT)



ADX-246 Decreased Levels of the Inflammatory Cytokine TNF- α in Preclinical Model of Ethanol-Induced Hepatitis



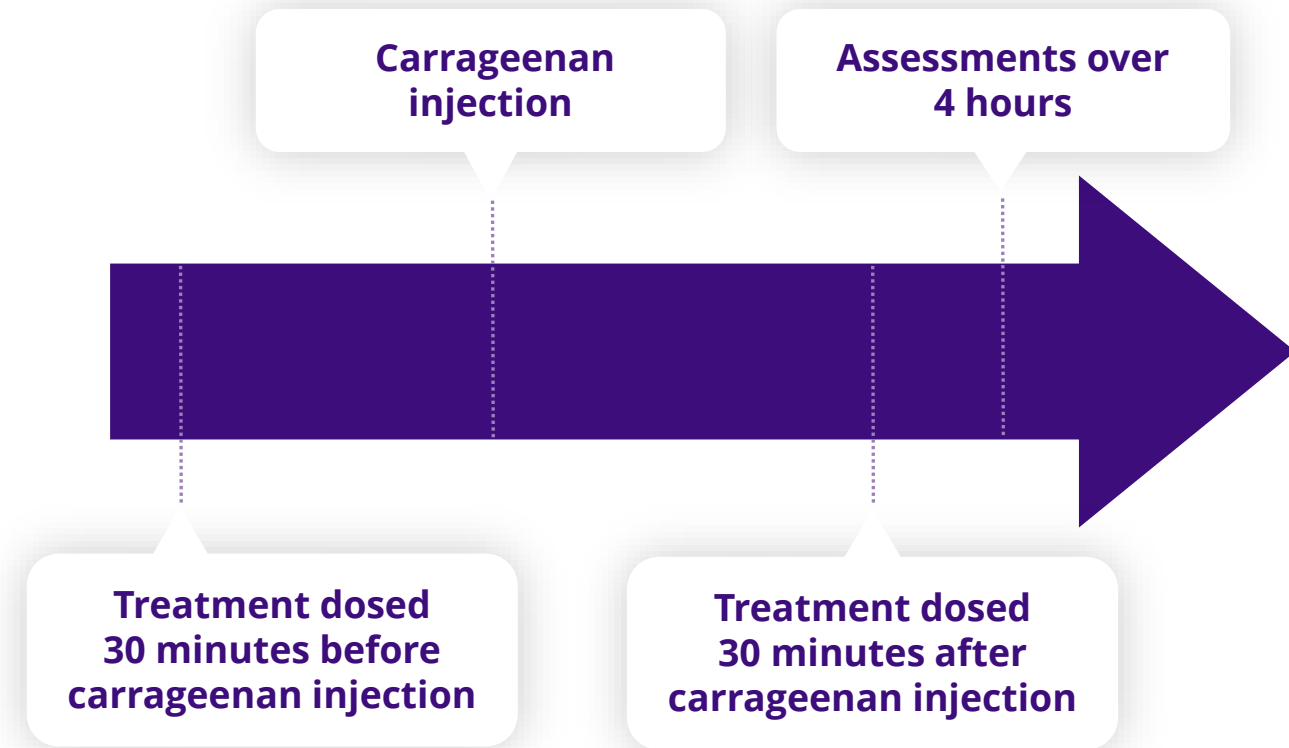


Non-Opiate Analgesia

The Carrageenan Inflammatory Pain Model Allows for Evaluation of Three Different Outcomes Associated with Inflammation

Test	Model	Assessment (units)
Von Frey	Mechanical Pain Tolerance	Force required for paw withdrawal (grams)
Hargreaves	Thermal Pain Tolerance	Time to withdrawal in response to heat (seconds)
Ankle Caliper	Swelling	Diameter of ankle (millimeters)

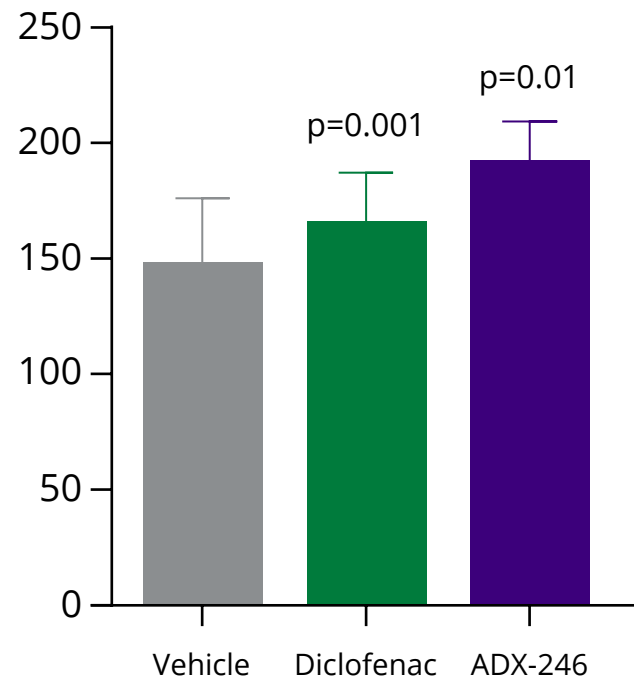
Orally Administered Diclofenac or ADX-246



ADX-246 Demonstrated Statistically Significant Activity in the Carrageenan Inflammatory Pain Model

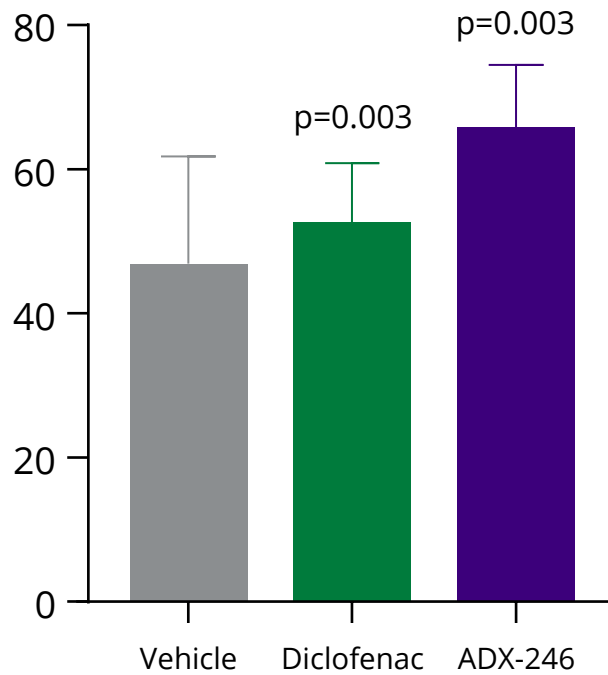
Mechanical Pain Tolerance

AUC (grams*hour)



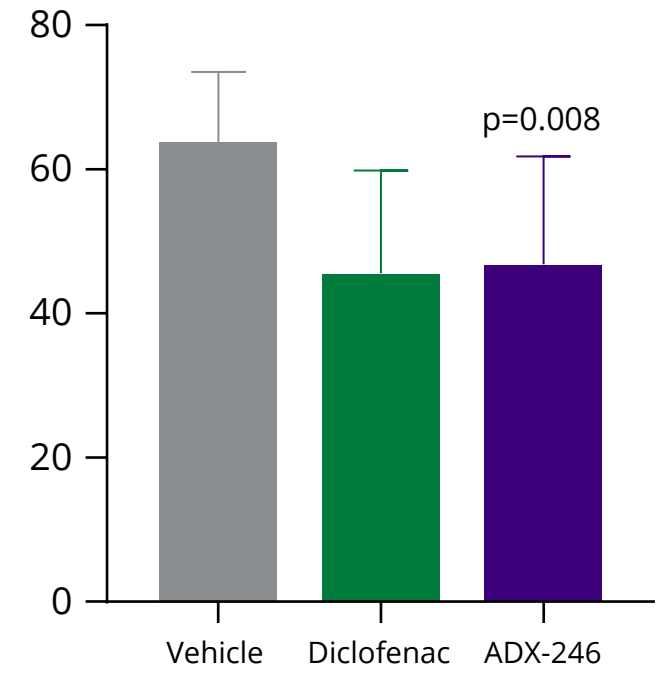
Thermal Pain Tolerance

AUC (seconds*hour)



Swelling

AUC (% increase*hour)

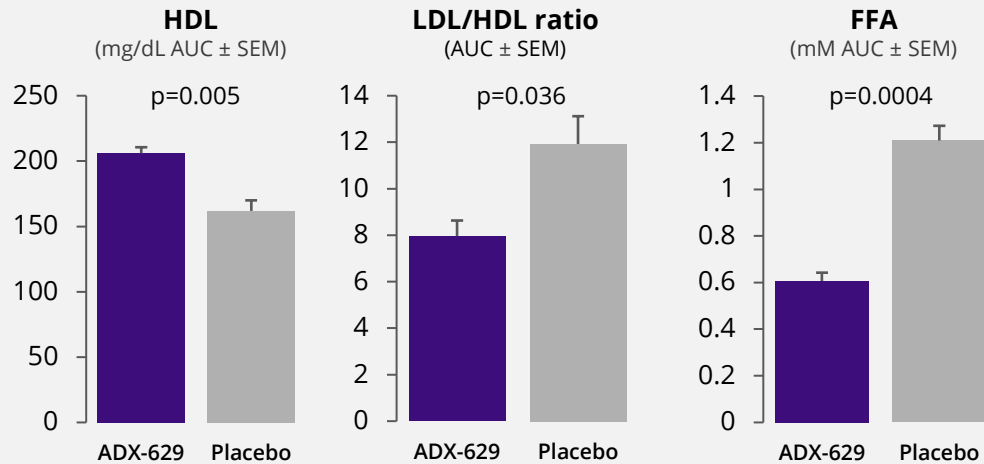




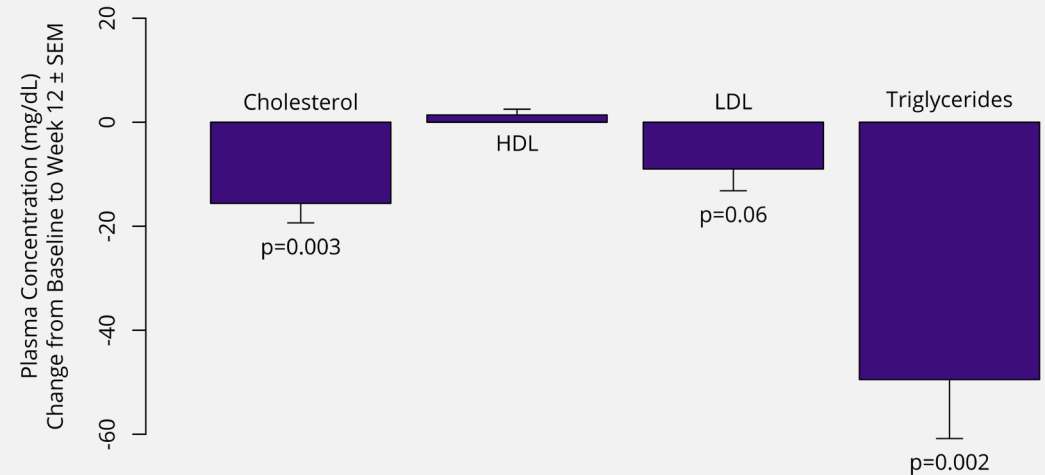
Lipogenesis Modulation

Statistically Significant Changes Observed in Lipid Profiles in Multiple Clinical Trials with RASP-Sequestering Molecule ADX-629

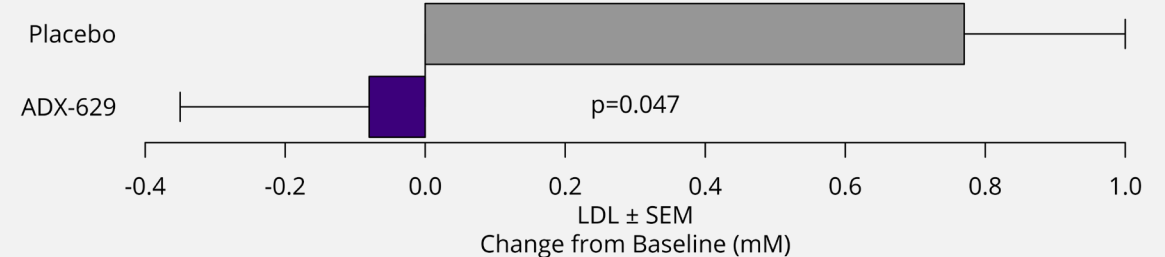
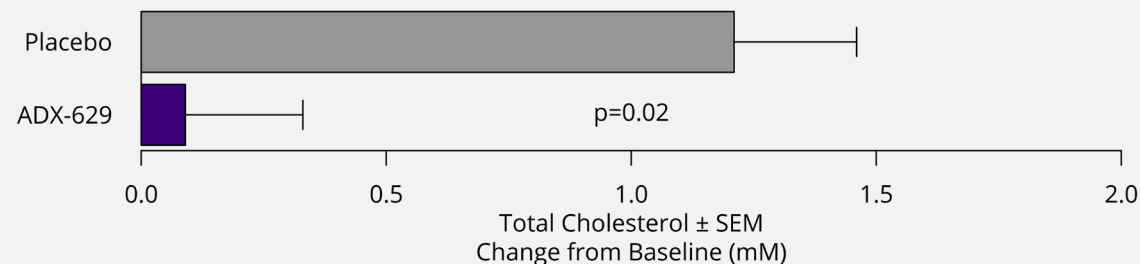
Phase 1 Clinical Trial



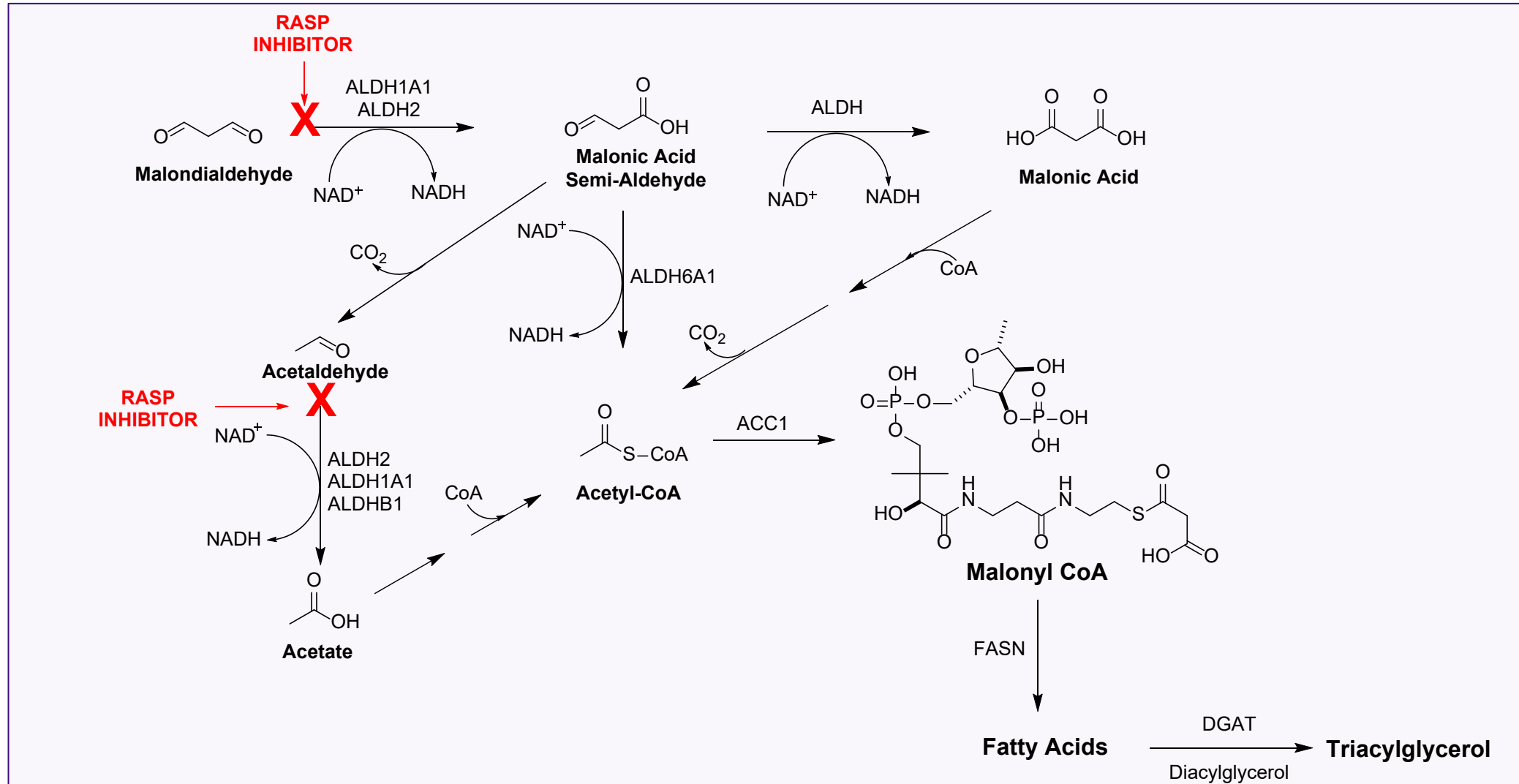
Phase 2 Psoriasis Clinical Trial



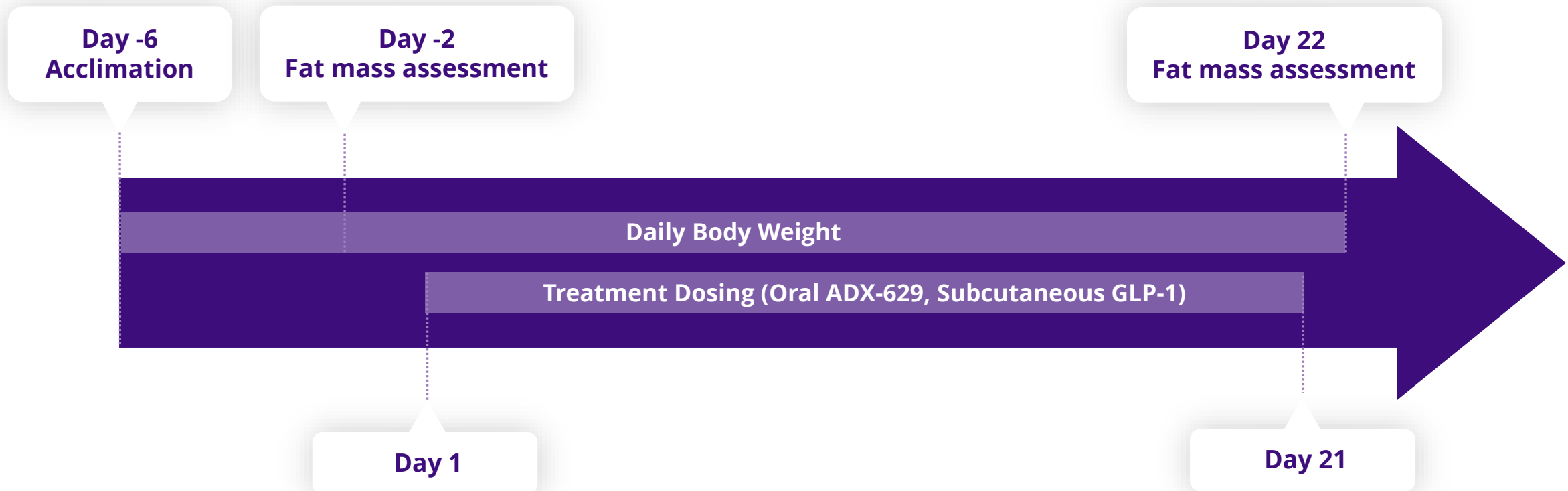
Phase 1/2 Ethanol Toxicity Clinical Trial



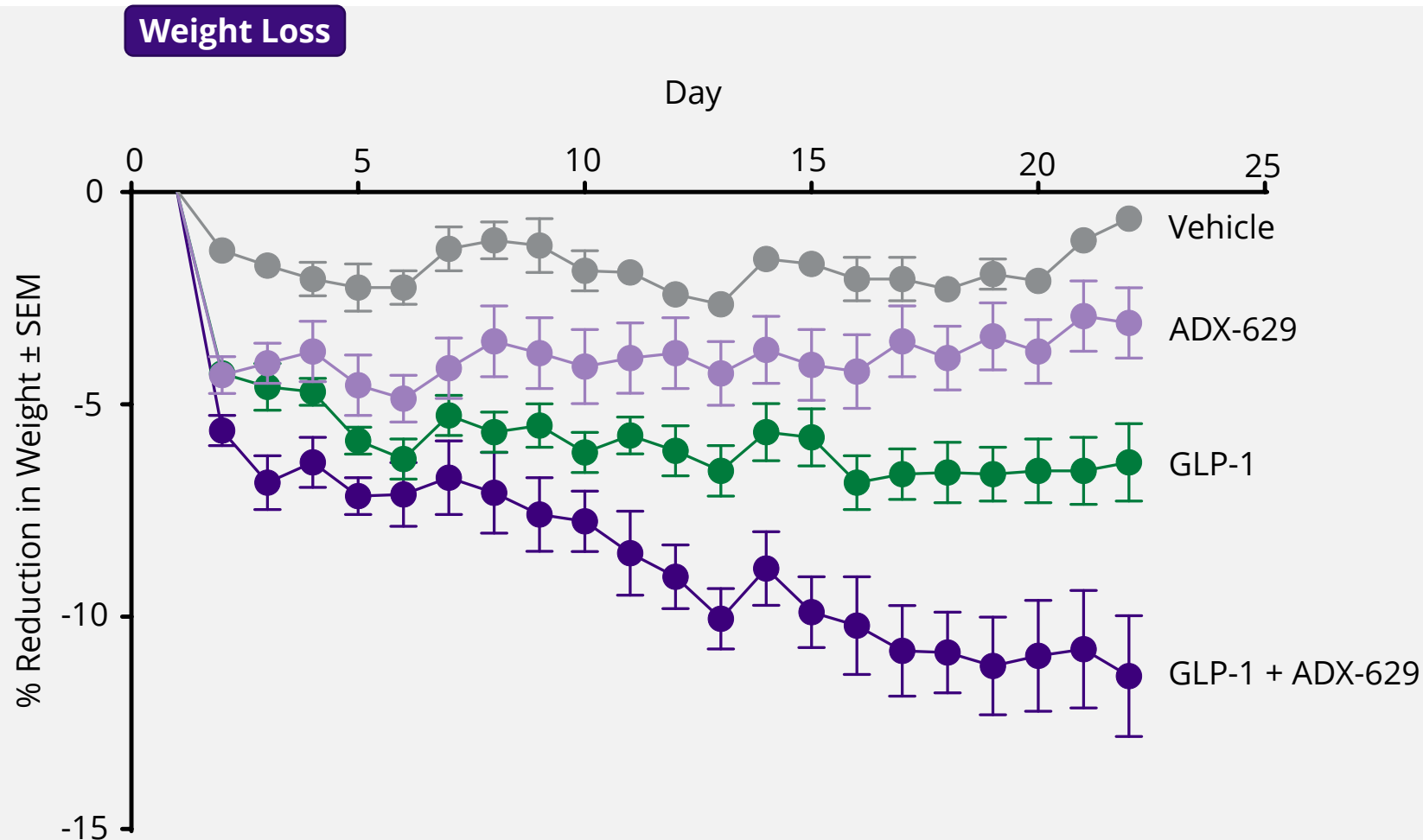
RASP May Potentiate Triglyceride Synthesis



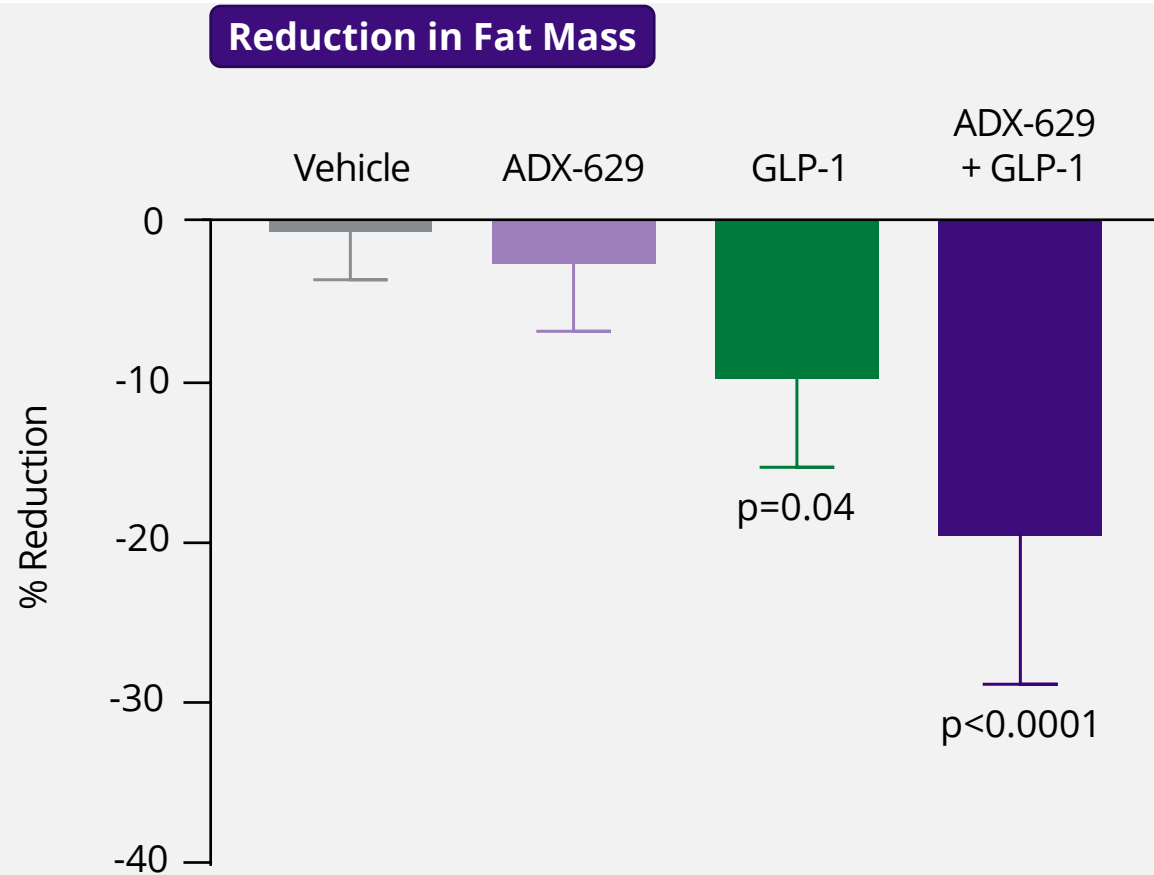
High-Fat Diet-Induced Obesity Model Allows for Assessment of Weight Loss and Body Composition



Treatment with Oral ADX-629 Enhanced GLP-1 Weight Loss in Preclinical Model of Obesity



Treatment with Oral ADX-629 Enhanced GLP-1 Fat Mass Loss in Preclinical Model of Obesity





Questions





Ramiro S. Maldonado, M.D., Assistant Professor of Ophthalmology, Duke University

Retinitis Pigmentosa: An Overview

Retinitis Pigmentosa: An Overview

Ramiro Maldonado, MD



Duke Ophthalmology

Duke University School of Medicine

**1st intra-op
OCT**



**1st Handheld
OCT**



Duke Ophthalmology
Duke University School of Medicine

DPROC

Duke Pediatric Retina & Optic Nerve

Duke Center for Ophthalmic Genetics
Duke University School of Medicine



Duke Eye Center

NIH National Eye Institute
Research Today...Vision Tomorrow

**University of
Kentucky**

HELLO!

Ramiro Maldonado, MD
Co-Director Pediatric Retina
Retina Specialist
Ophthalmic Geneticist



Financial disclosures:

- ProQR Therapeutics Consultant
- PYC Therapeutics Consultant
- Aldeyra Therapeutics Consultant
- Duke Eye Reading Center Consultant

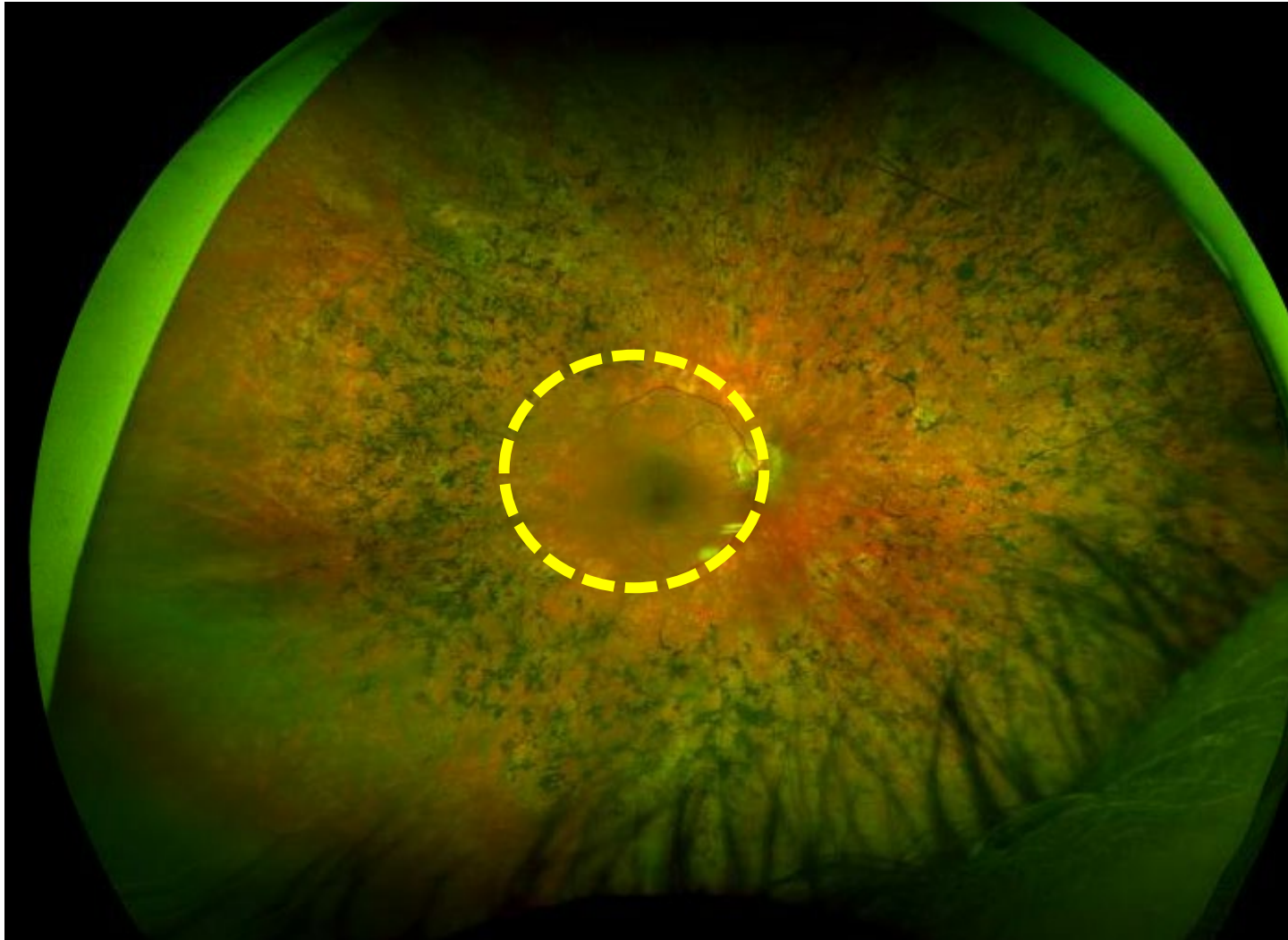


**Let me show you a
patient problem....**

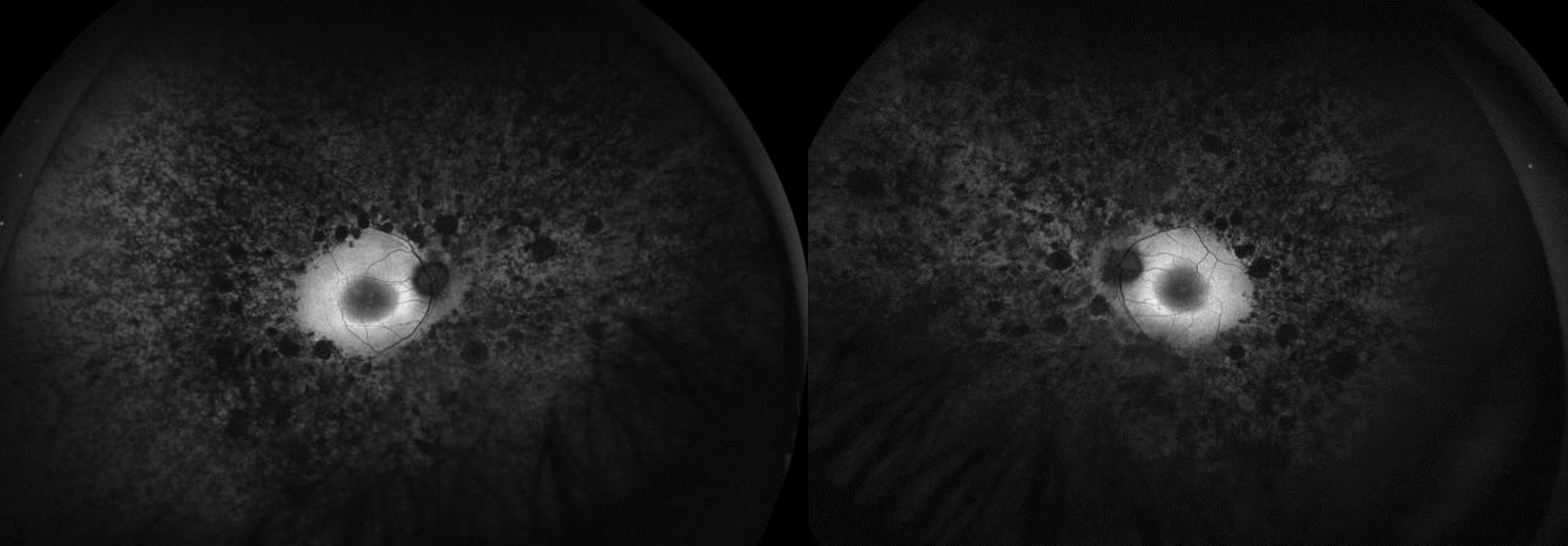


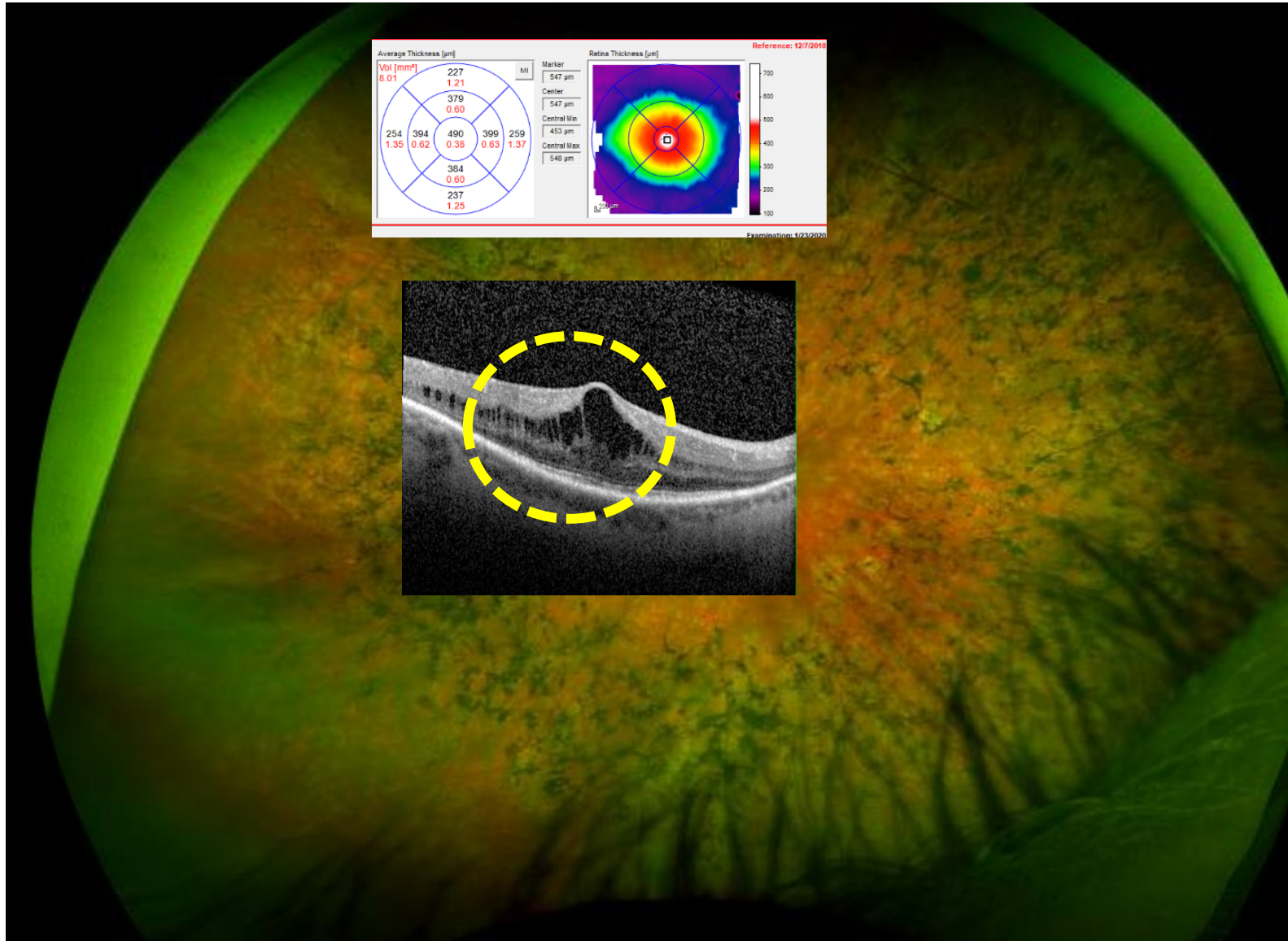
**42 y/o in the
prime of his life...**

**Diagnosed with
Retinitis
Pigmentosa...**

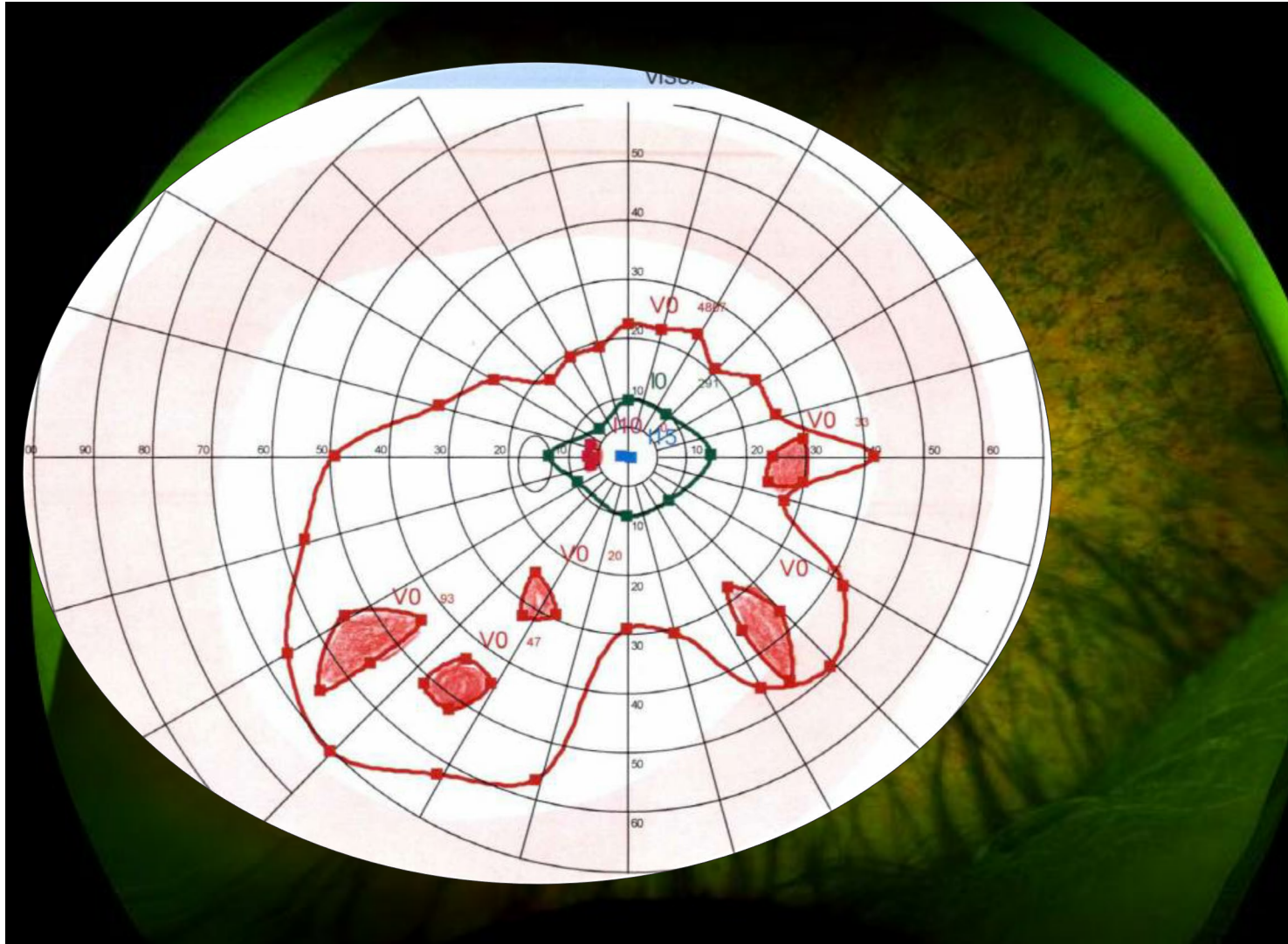


Significant extent of retinal degeneration





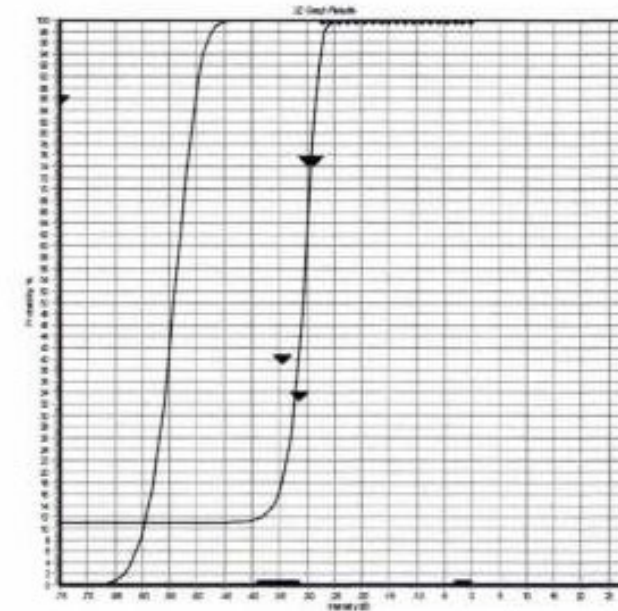
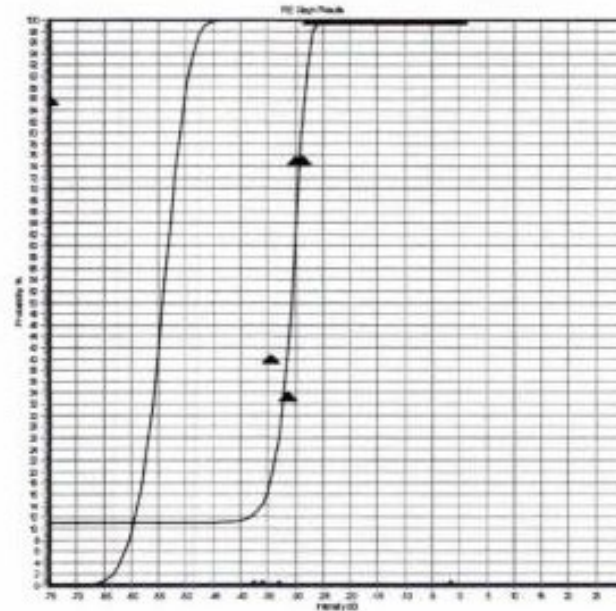
Constricted visual fields



Minimum light stimulus perceived (FST test)

Average Results Table												
#	Color	Eye	dB	EB%	EM%	TO	n	Qty	Date	P0	Y	K
3	White	LE	-31.0	0	0	0	2	1	1/23/2020	0	45.032	16.053
3	White	RE	-31.0	0	0	0	2	1	1/23/2020	0	45.032	16.053

Individual Results Table													
#	Color	Eye	dB	EB%	EM%	TO	n	Qty	Date	P0	Y	K	Time
1	White	LE	-54.2	0	0	0	3	1	1/23/2020	0	22.118	6.0509	00:00:15
2	White	LE	-30.4	14	45	0	56	2	1/23/2020	0.1107	45.385	21.676	00:04:37
1	White	RE	-54.2	0	0	0	3	1	1/23/2020	0	22.118	6.0509	00:00:15
2	White	RE	-30.4	14	45	0	56	2	1/23/2020	0.1107	45.385	21.676	00:04:37



IRDs

Inherited Retinal Diseases



The big picture



6,800,000

People in the world with IRDs



300,000

People in the USA with IRDs



6,800,000 people

WORLDWIDE

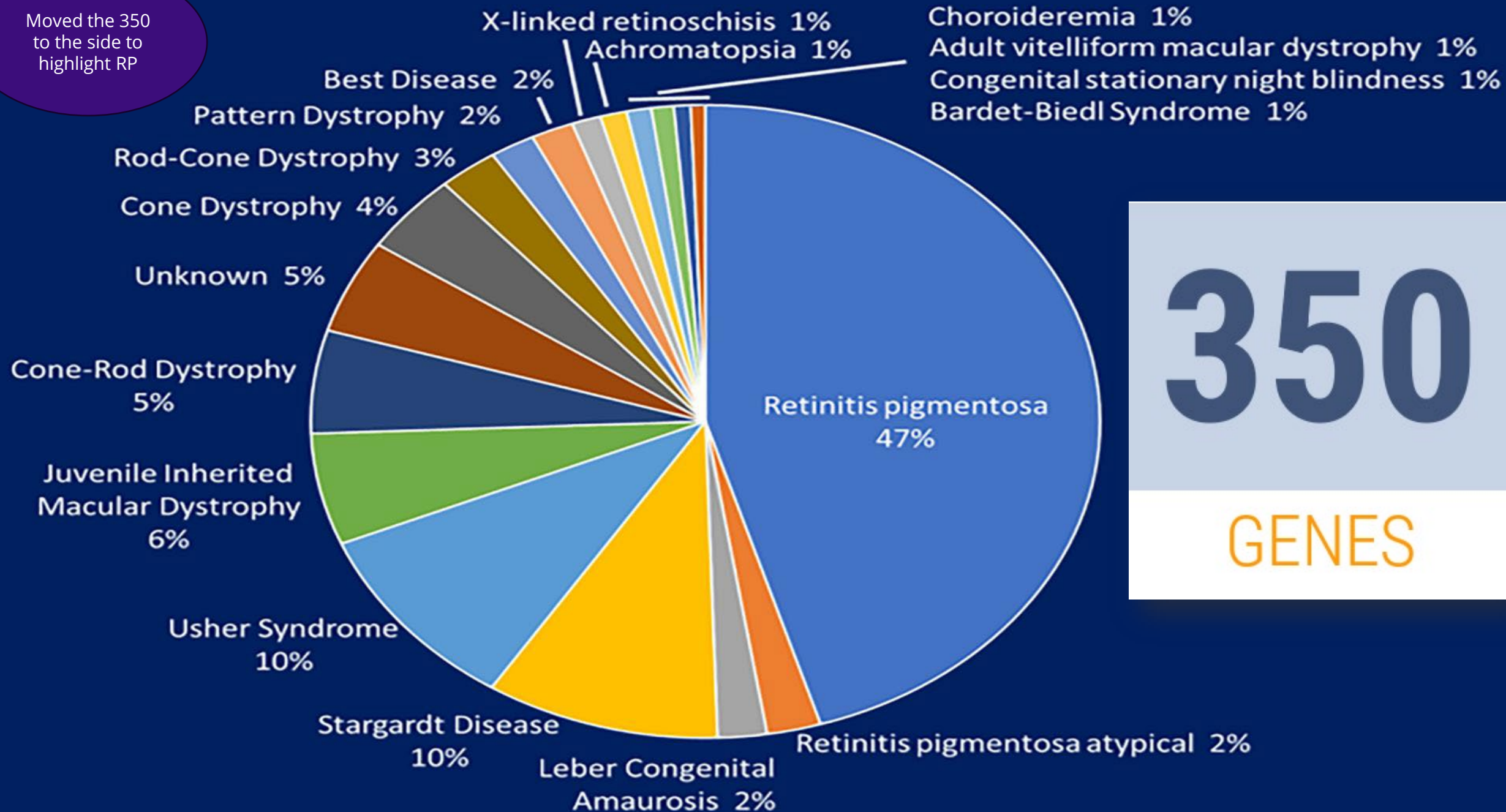
300,000 people

In the US

1

FDA approved therapy

Moved the 350
to the side to
highlight RP



350

GENES



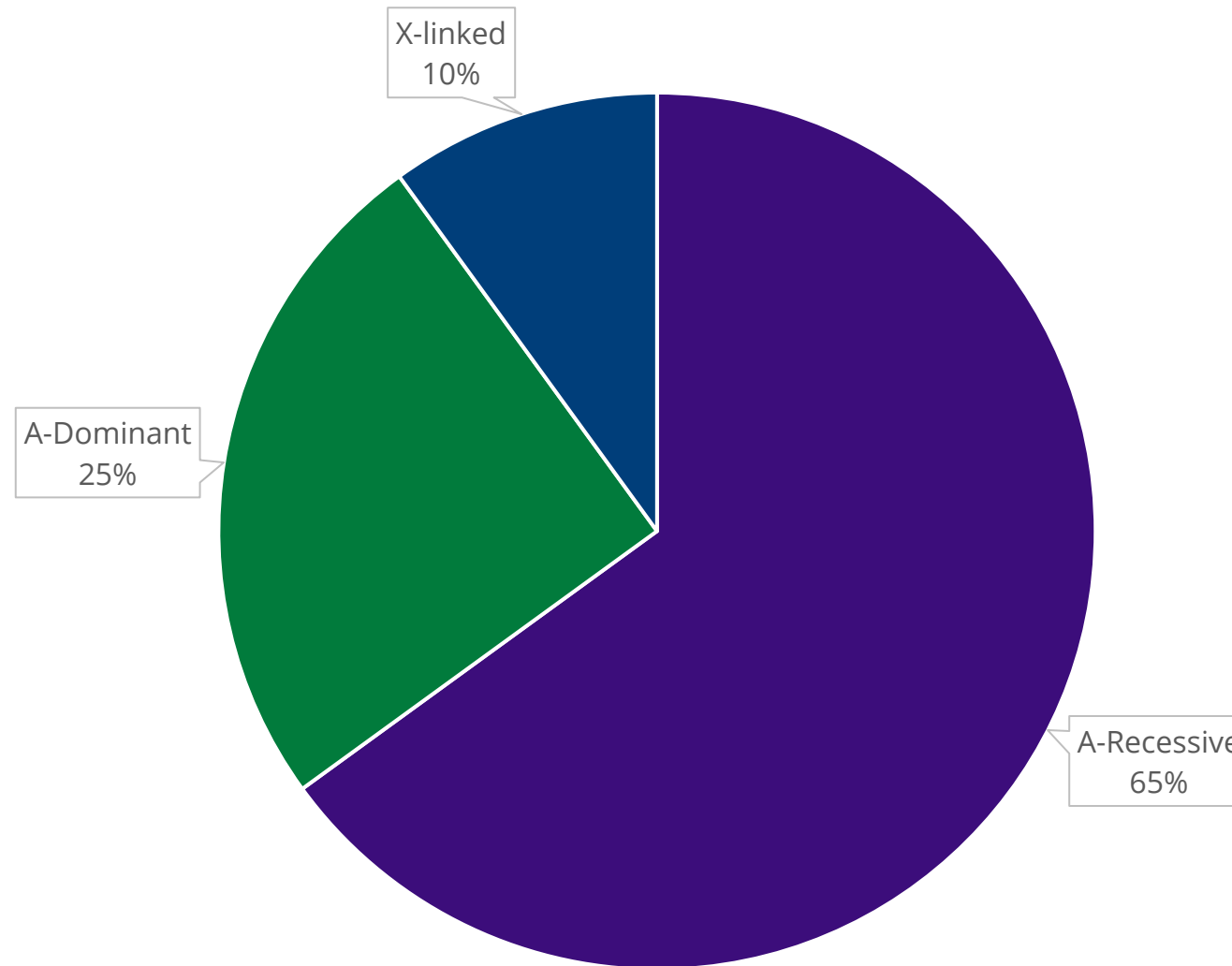
350

IRD-GENES

60

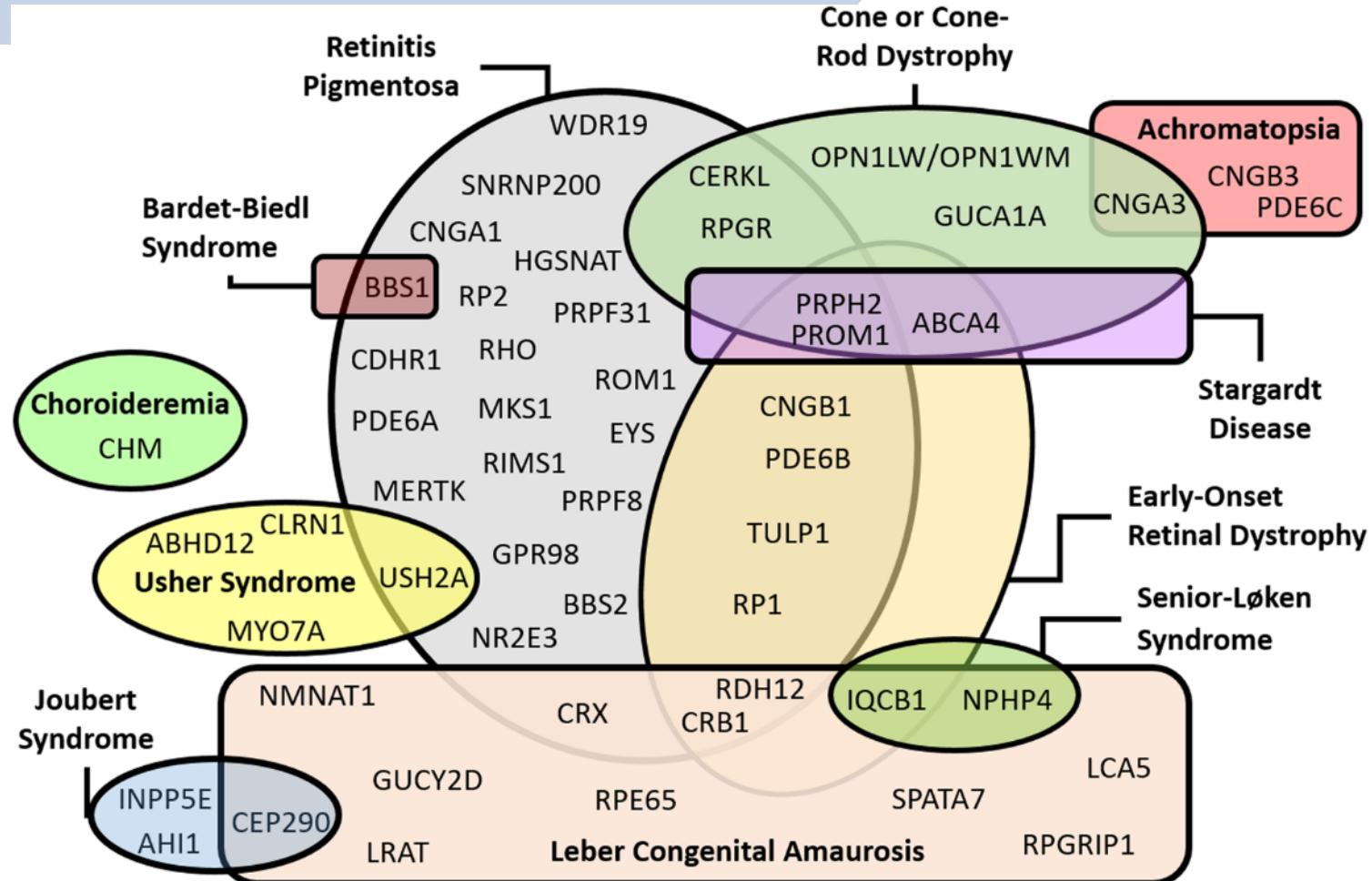
RP-GENES

60
RP-GENES



Genetic heterogeneity

One disease can be caused by multiple genes





Genetics is
changing the
naming of diseases



Research Building



Clinical Building



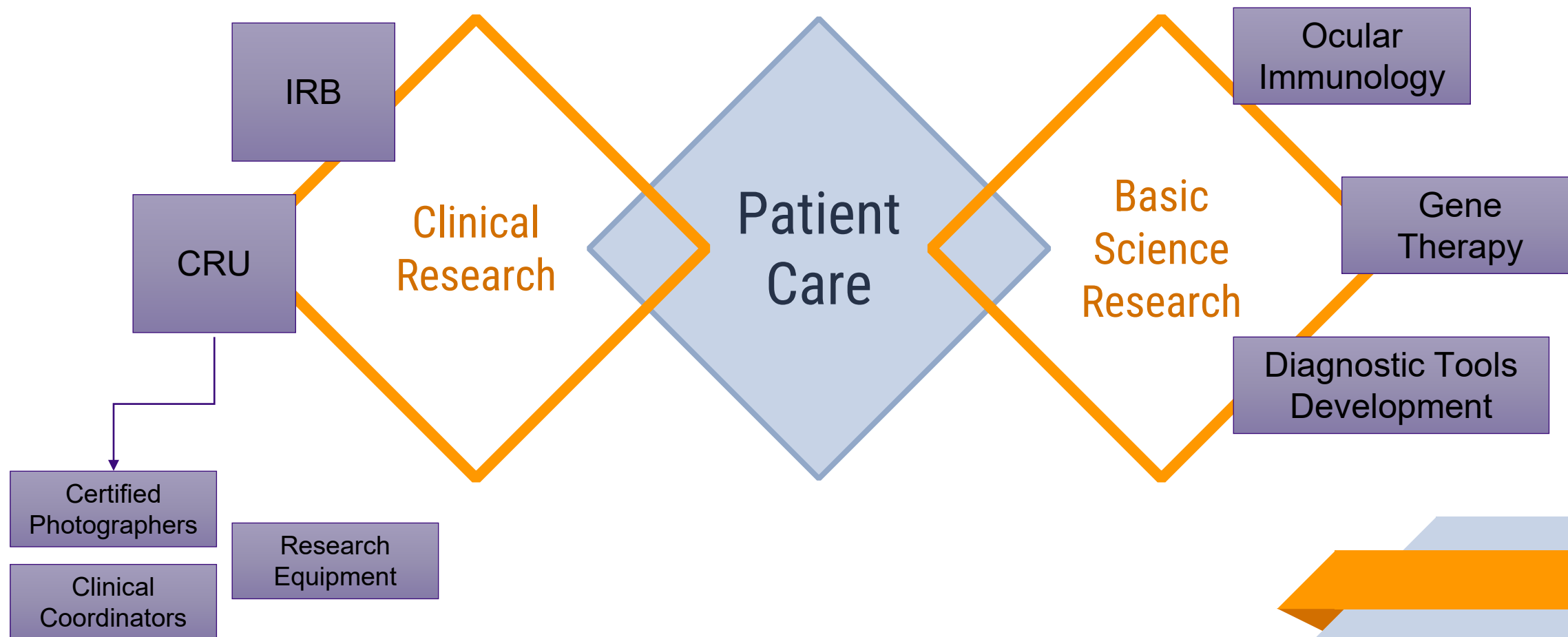


5,200 patients / year

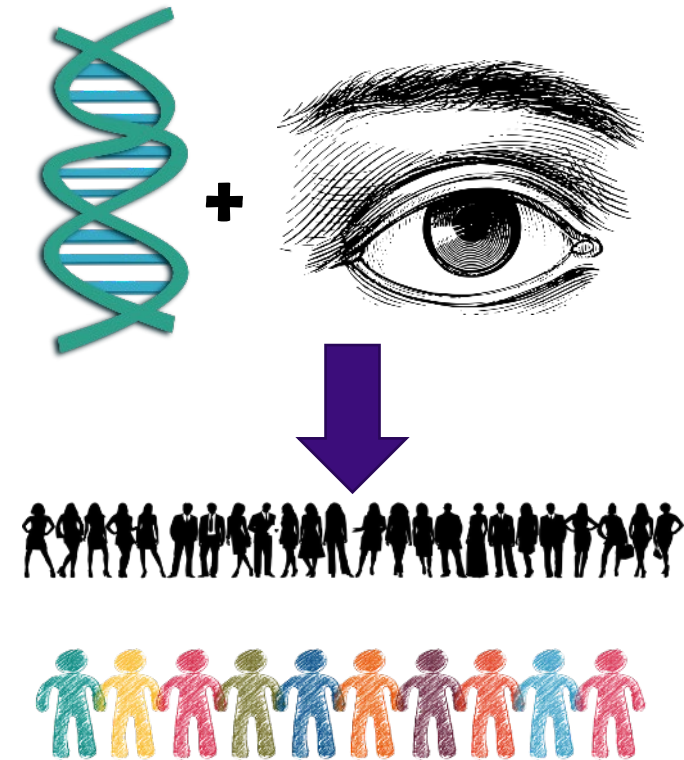
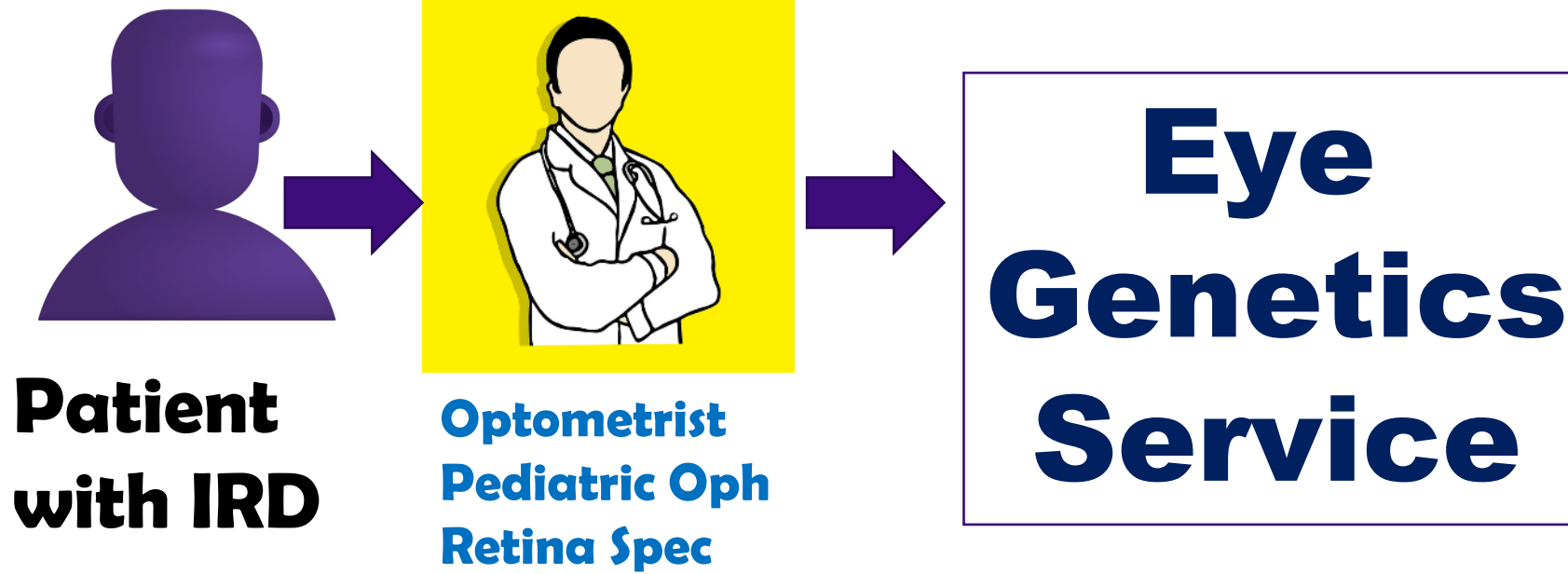
Ophthalmic Genetics Service

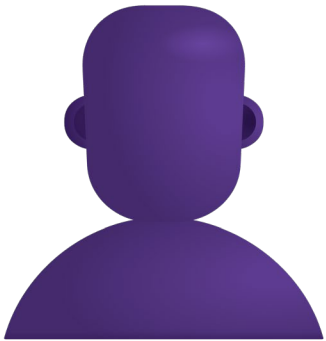
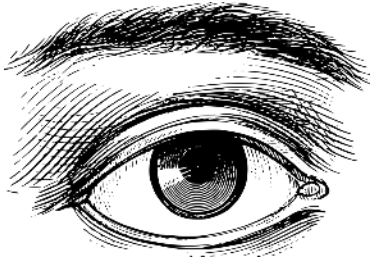


Clinical and Research integration



The patient's journey





Comprehensive Hx

Non-Syndromic

Syndromic

Rod-specific

Cone-Specific

Optic Nerve

Pedigree

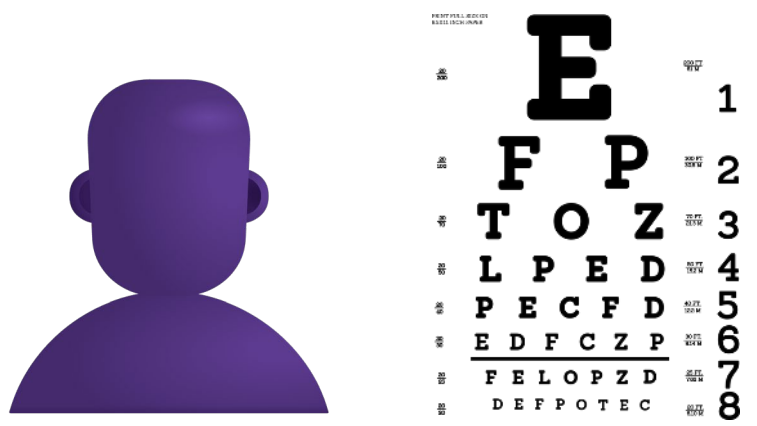
A Dominant

A Recessive

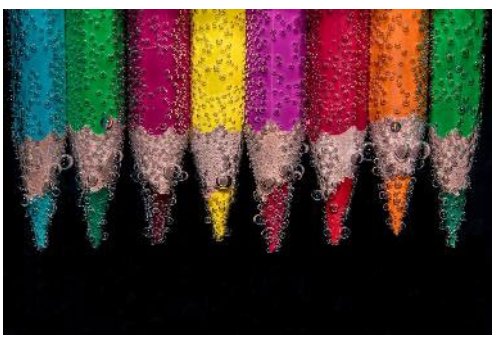
X-linked

Mitochondrial

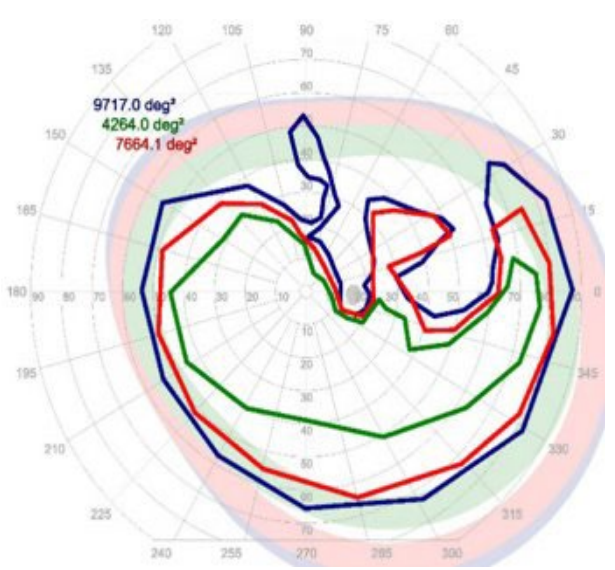
Visual Acuity



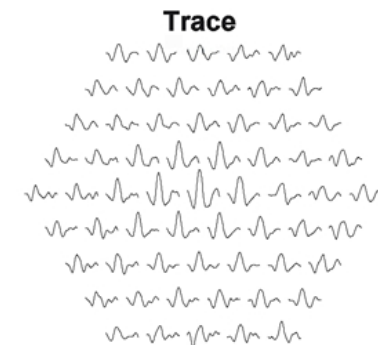
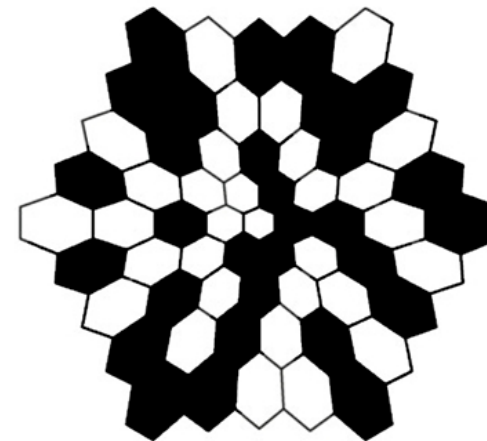
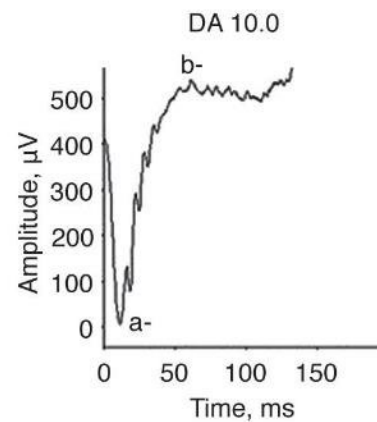
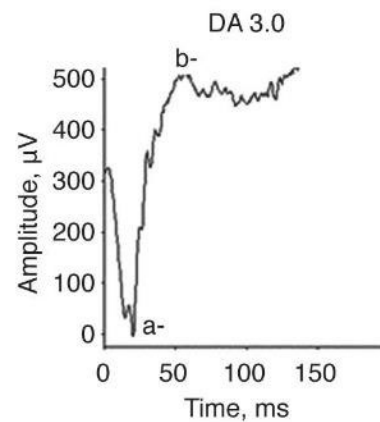
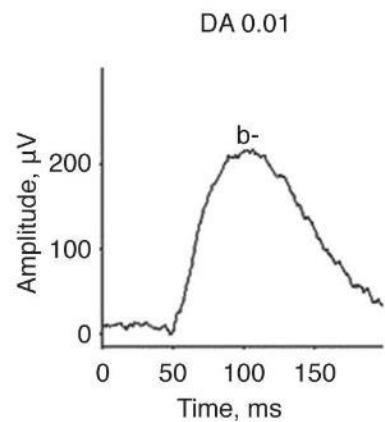
Color vision



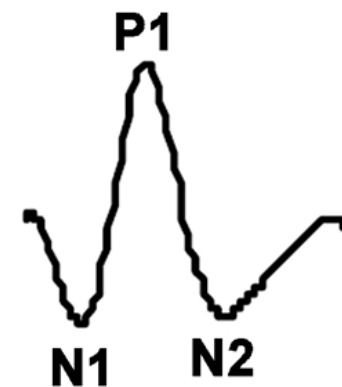
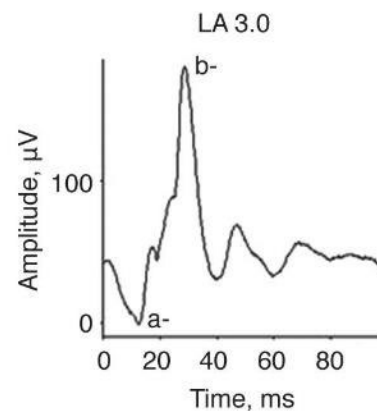
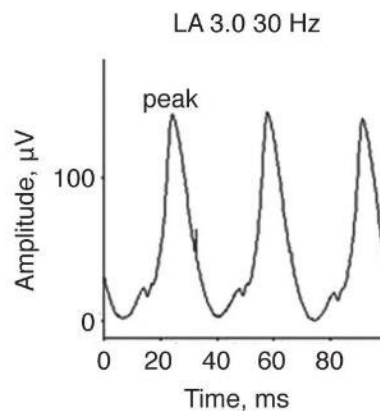
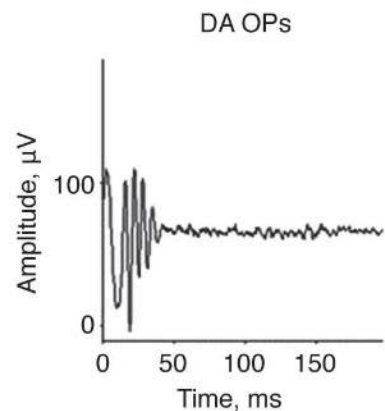
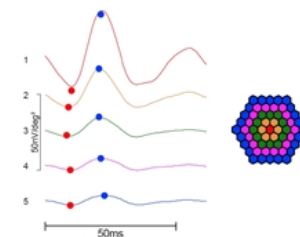
Visual Field



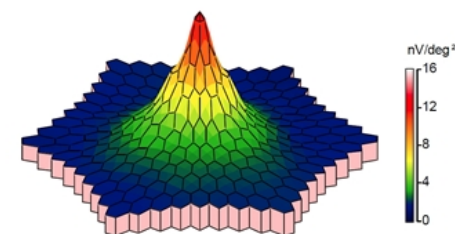
Objective functional outcomes



Group averages



3D Topography



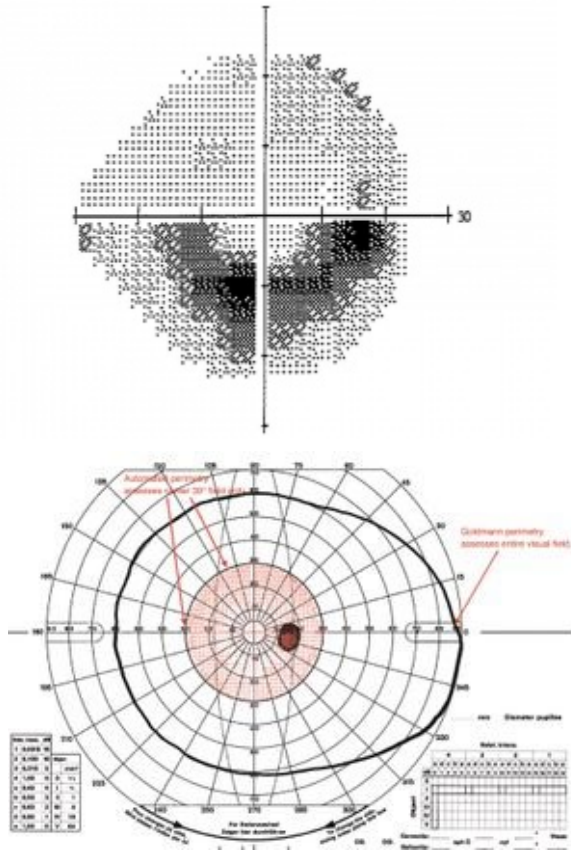


Pediatric Testing

Hand Held ERG and ERG under anesthesia



Perimetry

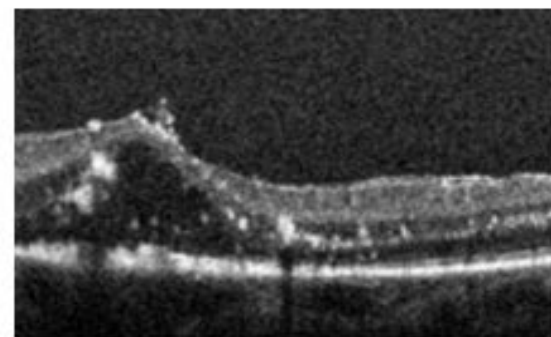
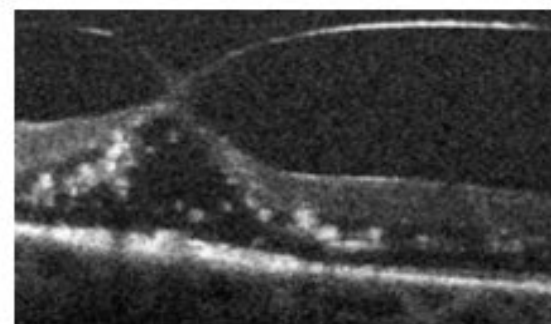


OCT imaging in Surgery

- Portable system
- Pause to image



Joseph
Izatt



- Dayani PN, Maldonado R, Farsiu S, Toth CA Retina, 2009
- Scott AW, Farsiu S, Enyedi LB, Wallace DK, Toth CA. AJO, 2009
- Ehlers JP, Kernstine K, Farsiu S, Sarin N, Maldonado R, Toth CA. Arch Ophthalmol. 2011

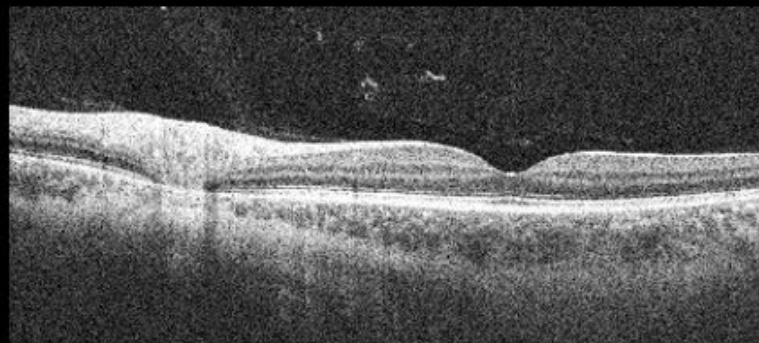
Faster OCT imaging in BabySTEPS2



**400 kHz
Swept Source
OCT**



OCT imaging
NOT a photo



Viehland et al BOE 2019

Mangalesh S Ophthalmology Retina 2020


VIRTUAL REALITY TEST

MOST^{VR}

**State-of-the-art Mobility Testing for
Inherited Retinal Diseases**

Genetic Testing is now Standard of Care





For a long time...

There was **NO HOPE**
for patients with IRDs



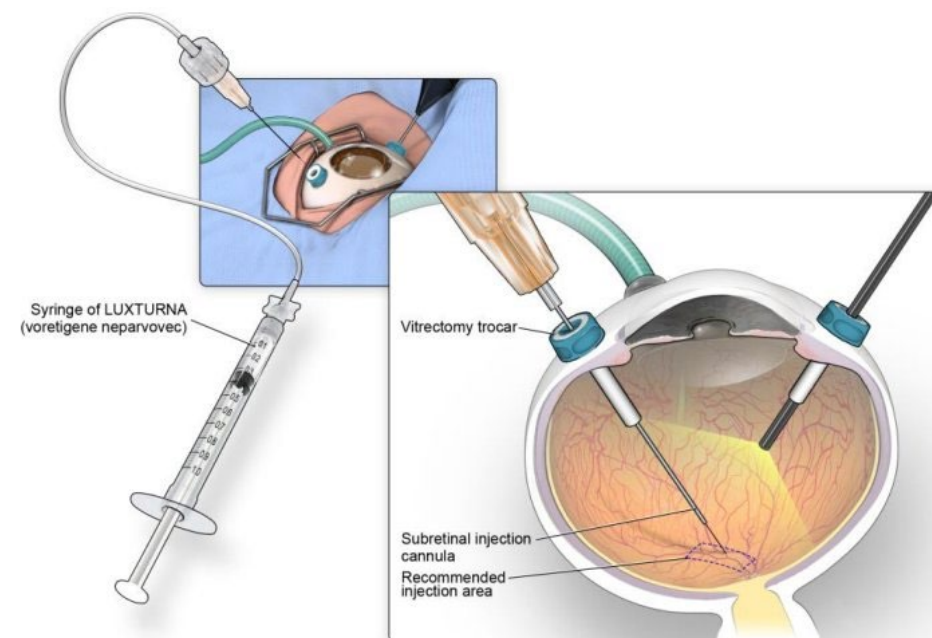
FIRST IN HUMAN

BEFORE THE BREAKTHROUGH
COMES THE TRIAL

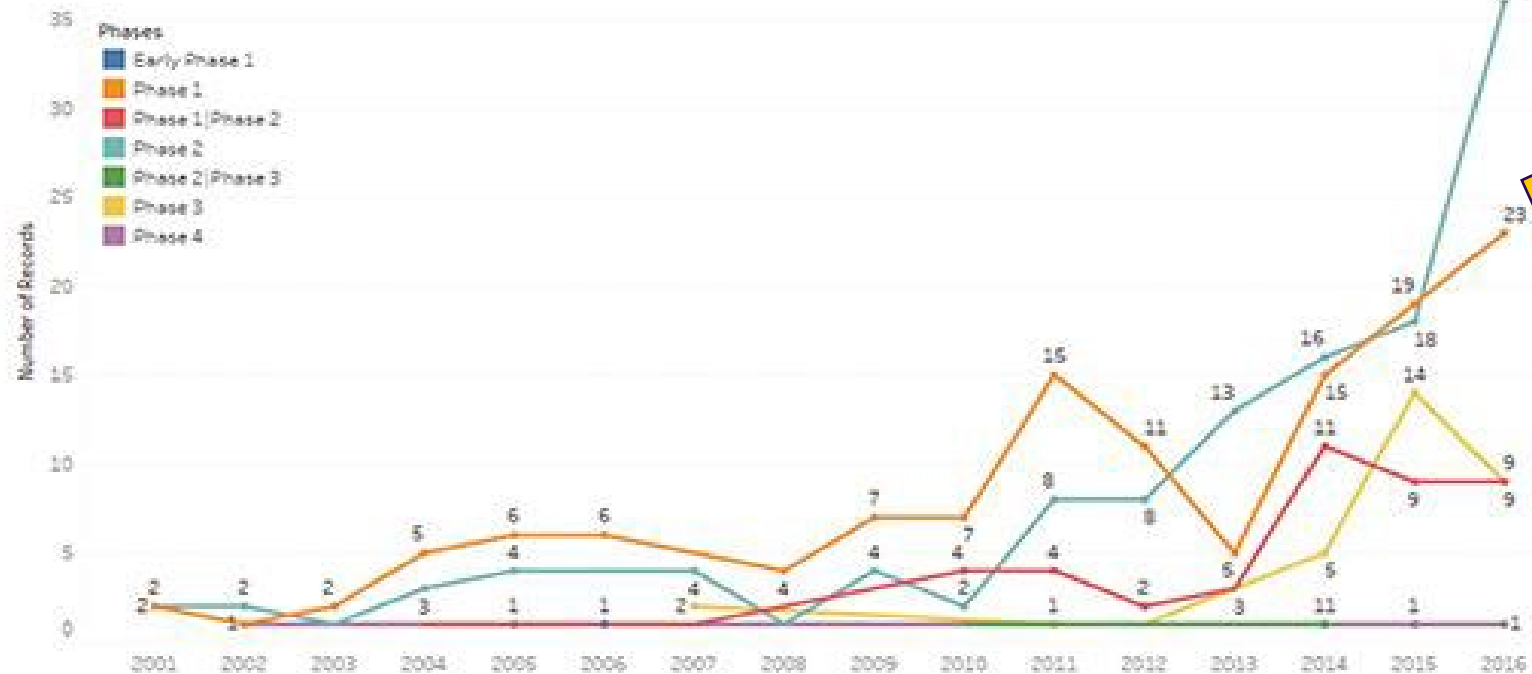


Gene Therapy

There is an FDA approved Gene therapy



Number of Gene Therapy Clinical Trial Initiations Per Year, by Phase



The industry-wide gene therapy pipeline shows exponential growth.

The background of the slide is a composite image. At the top is a blue header with a geometric triangle pattern. Below it is a landscape featuring a vibrant green rolling hill in the foreground. A single, full-canopied tree stands on the crest of the hill. The sky is filled with large, dark, grey clouds, with a bright patch of light breaking through behind the tree. A small flock of birds is visible in the sky above the tree. The overall mood is one of hope and renewal.

We do have treatments for
IRDs!

It's a new era

Gene therapy is a reality but...

Can we miss the boat?

How many studies are failing?

Is there a risk to lose momentum?

A low-angle, upward-looking perspective of several modern skyscrapers with glass facades, creating a sense of height and urban density. The buildings are dark, and the sky is a pale, hazy blue.

Early detection means

Treatment success

Do we intervene here...



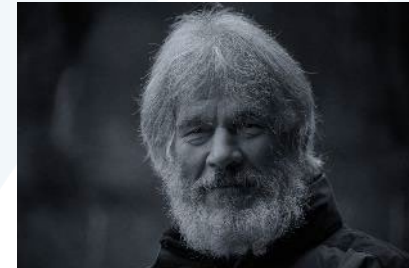
LCA



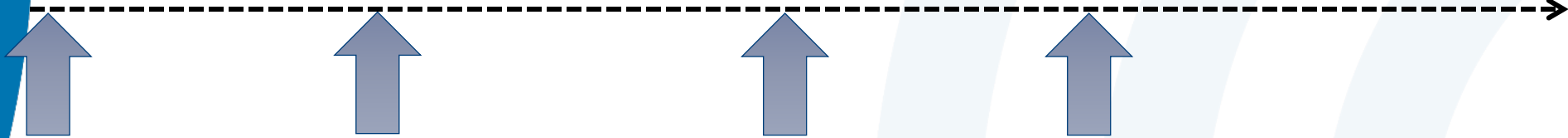
EO-RCD



RCD

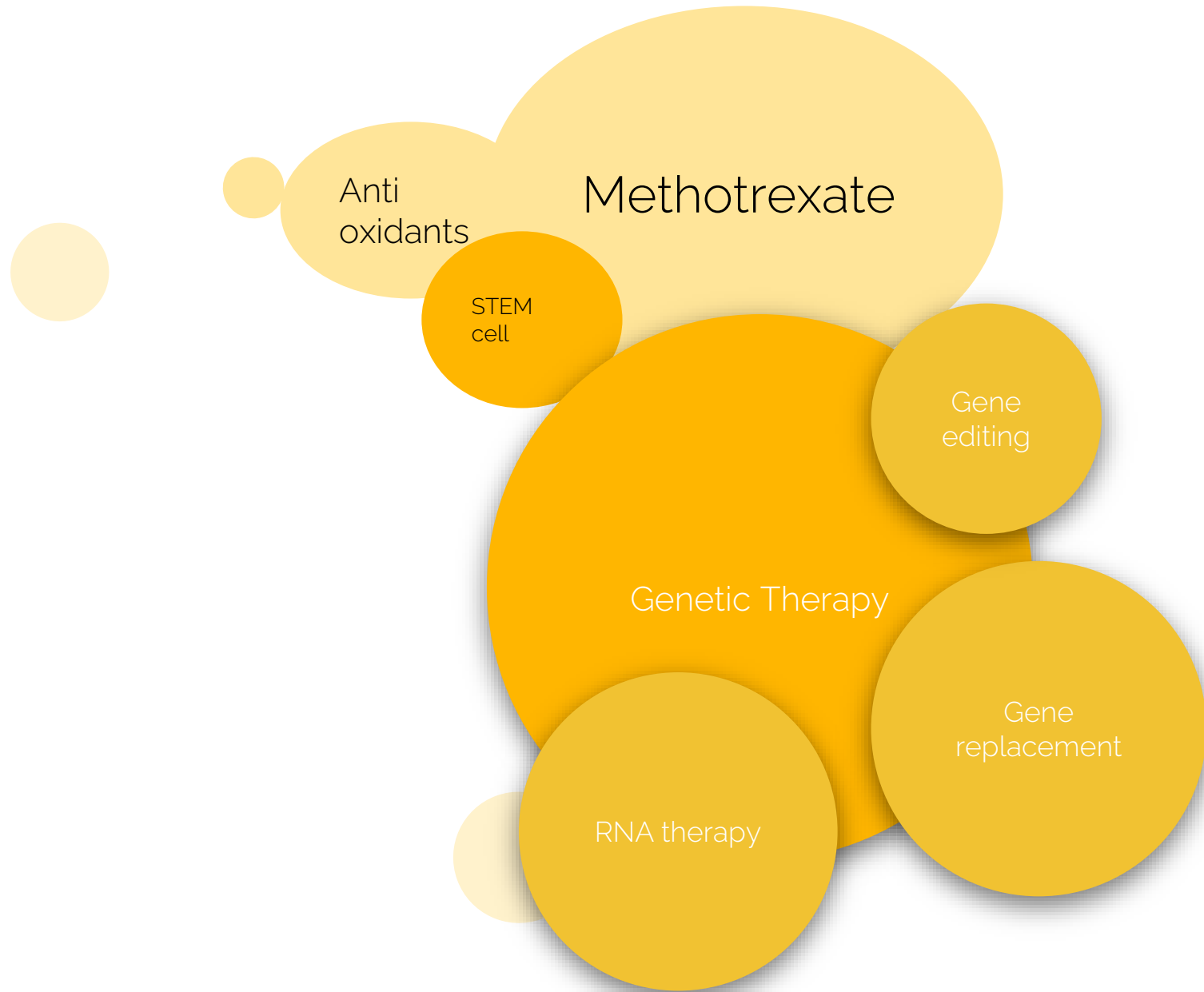


Late-RCD



Or here...

There are multiple proposed Therapies



Gene-dependent ← → Gene-INDEPENDENT



RPE65

CEP290



RPGR

ABCA4

ProQR

CEP290

RHO

USH2A



Anti-oxidants



Methotrexate

SPARINGVISION
GENOMIC MEDICINES FOR OCULAR DISEASES

CVF

nanoscope
THERAPEUTICS

Opto-G

jCyte

SC

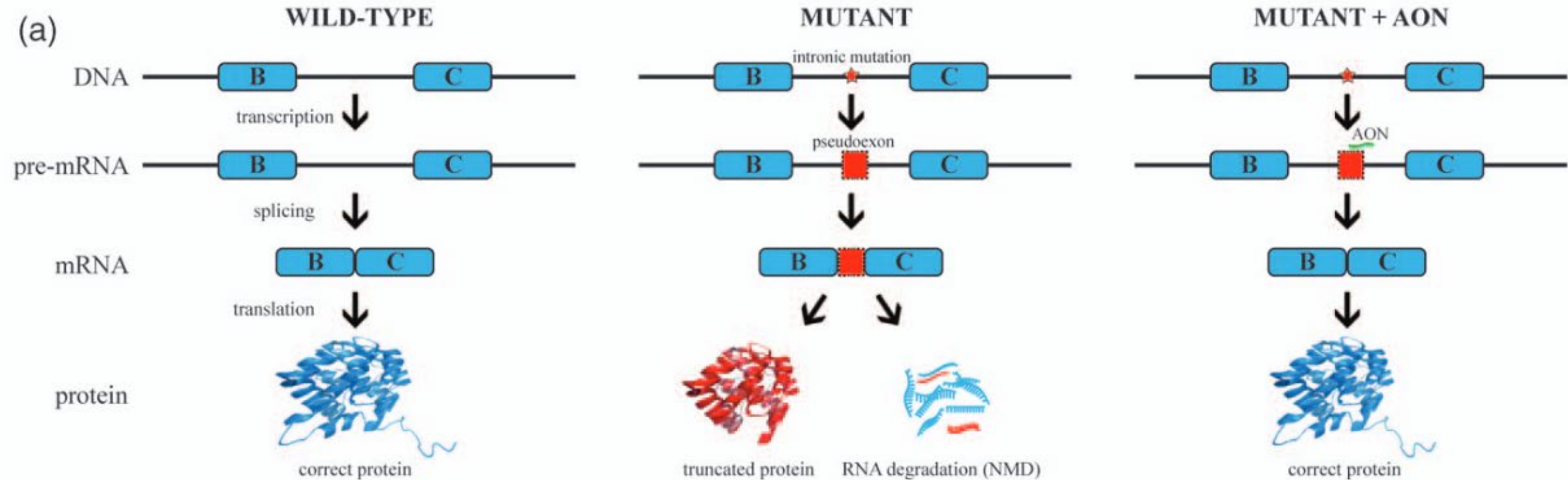


Beyond Luxturna

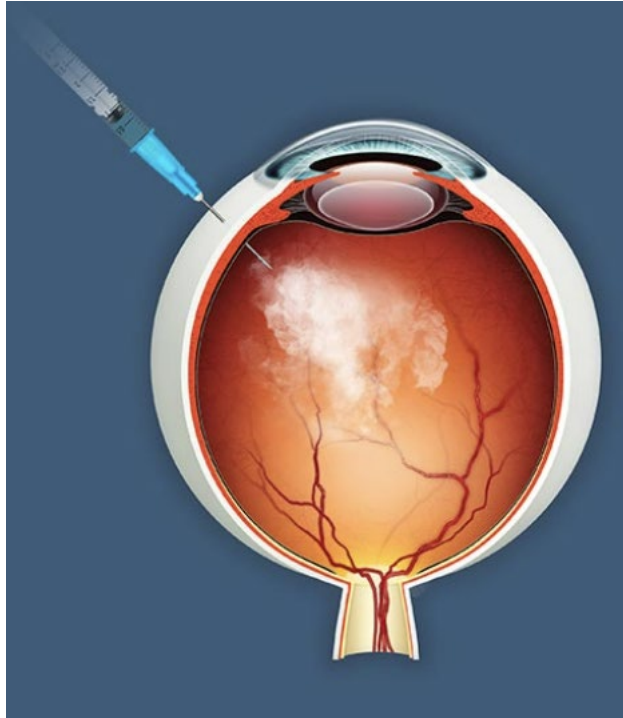
RPE65

- **RPGR**
- **ABCA4**
- **USH2A**
- **RHO**
- **CEP290**
- **BEST1**

RNA Therapy



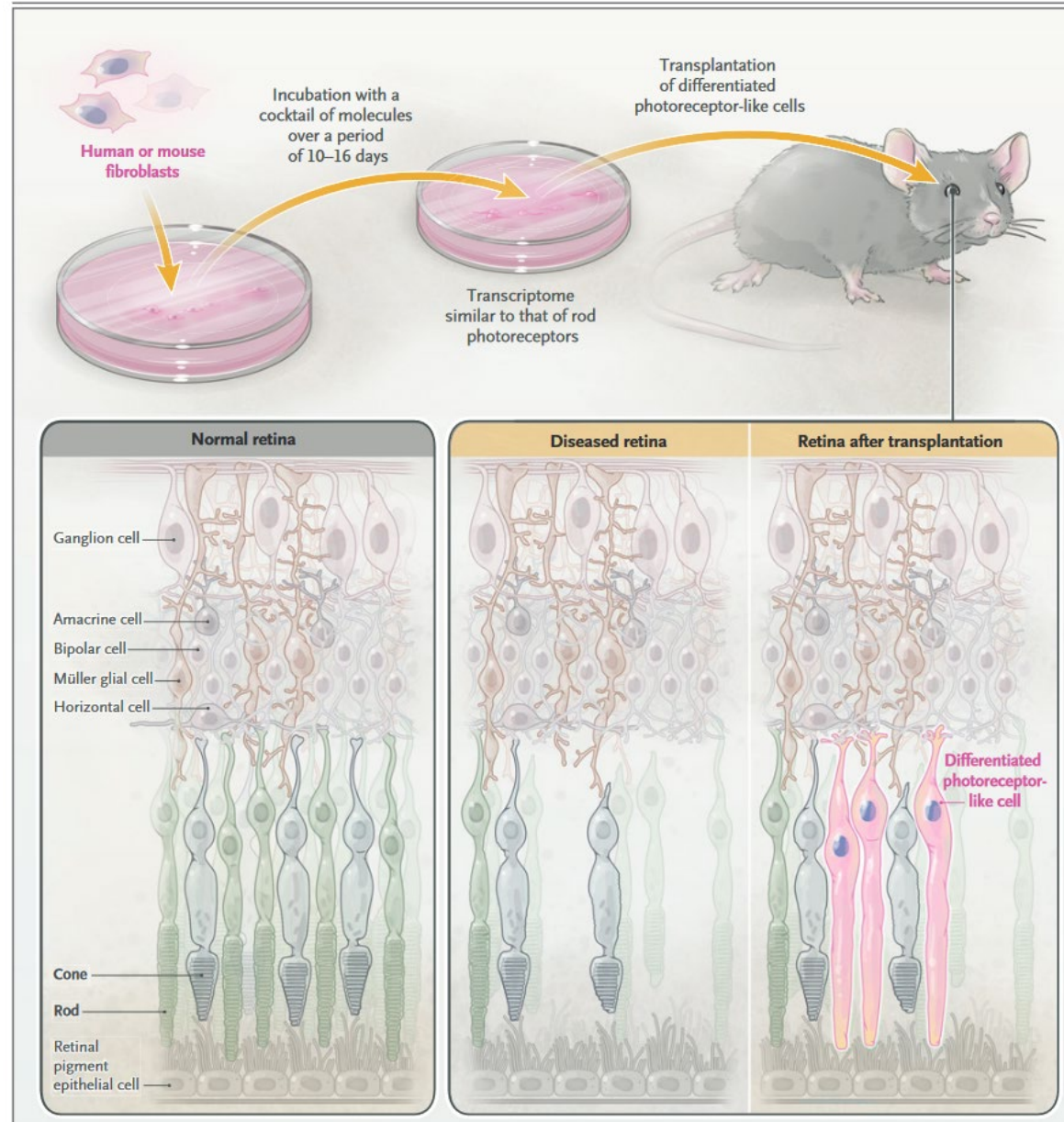
STEM Cells



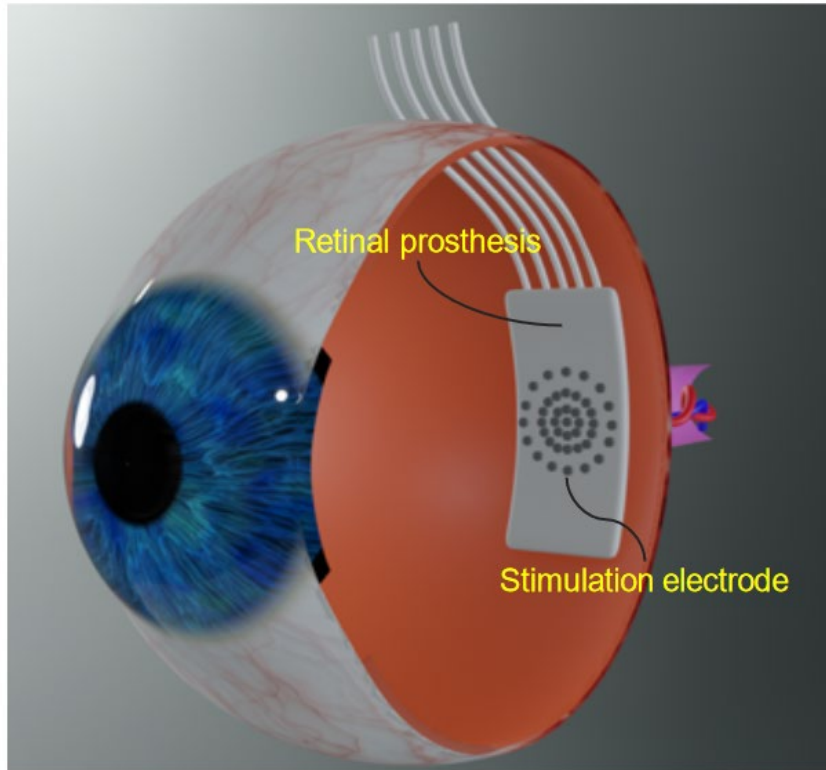
Intravitreal Injection of Allogeneic Human Retinal Progenitor Cells (hRPC) for Treatment of Retinitis Pigmentosa: A Prospective Randomized Controlled Phase 2b Trial

[David Liao](#); [David S Boyer](#); [Peter Kaiser](#); [Baruch D Kuppermann](#); [Jeffrey Heier](#); [Mitul Mehta](#); [Anthony Joseph](#); [Rebecca Kammer](#); [Bonnie Mills](#); [Jing Yang](#); [Henry Klassen](#)

Chemically-Induced Photoreceptors



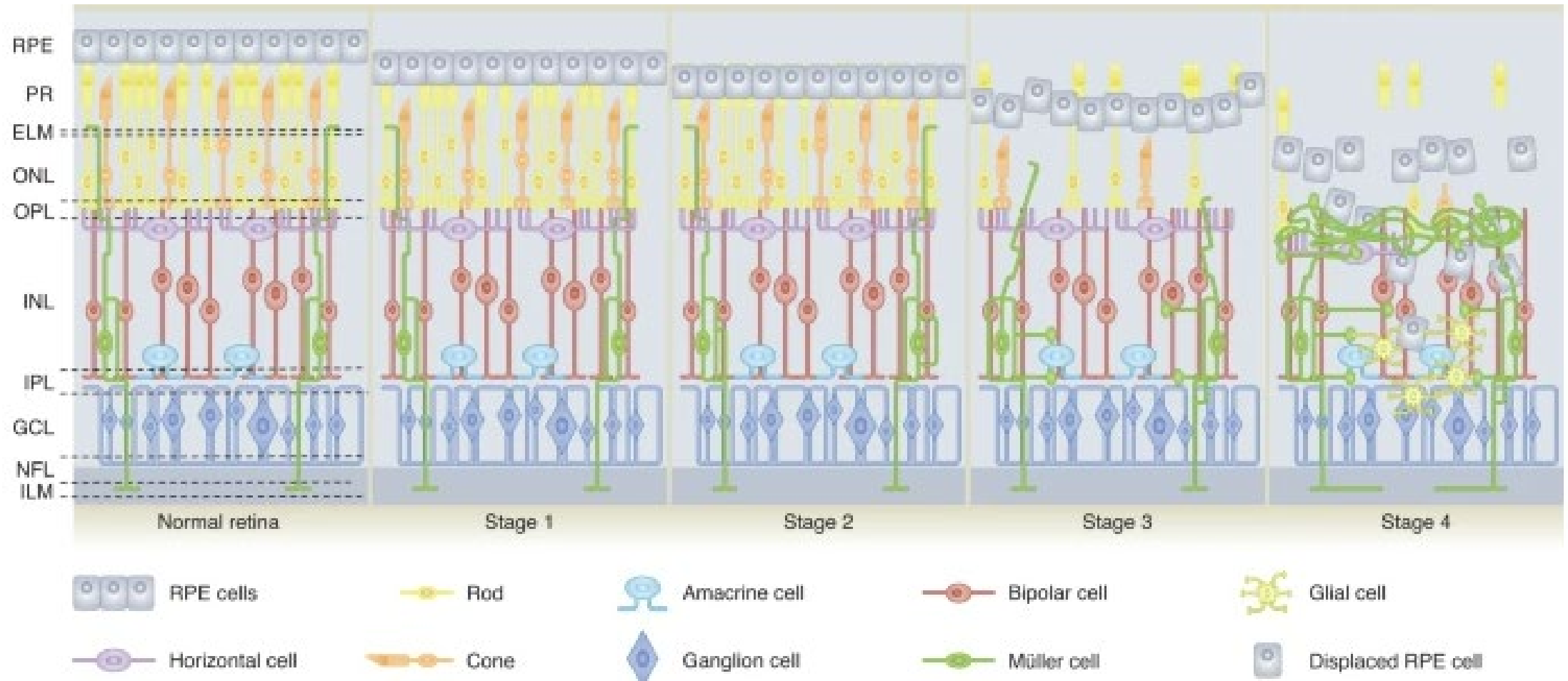
Retinal Prosthesis



Implantable metaverse with retinal prostheses and bionic vision processing

[Ning Xi](#), [Jiaxun Ye](#), [Chao Ping Chen](#), [Qiang Chu](#), [Haiyang Hu](#), [Seak Pang Zou](#)

A Therapy According to Stage



•Review Article Published: 31 January 2022 **Bioengineering strategies for restoring vision**

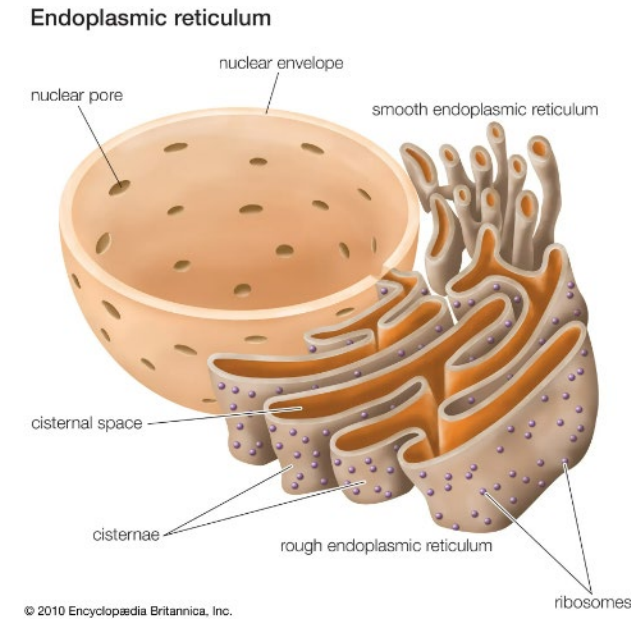
•[Jasmina Cehajic-Kapetanovic](#), [Mandeep S. Singh](#), [Eberhart Zrenner](#) &

•[Robert E. MacLaren](#) *Nature Biomedical Engineering* volume 7, pages387–404 (2023)

Misfolded Proteins and Retinal Dystrophies

Jonathan H. Lin and Matthew M. LaVail

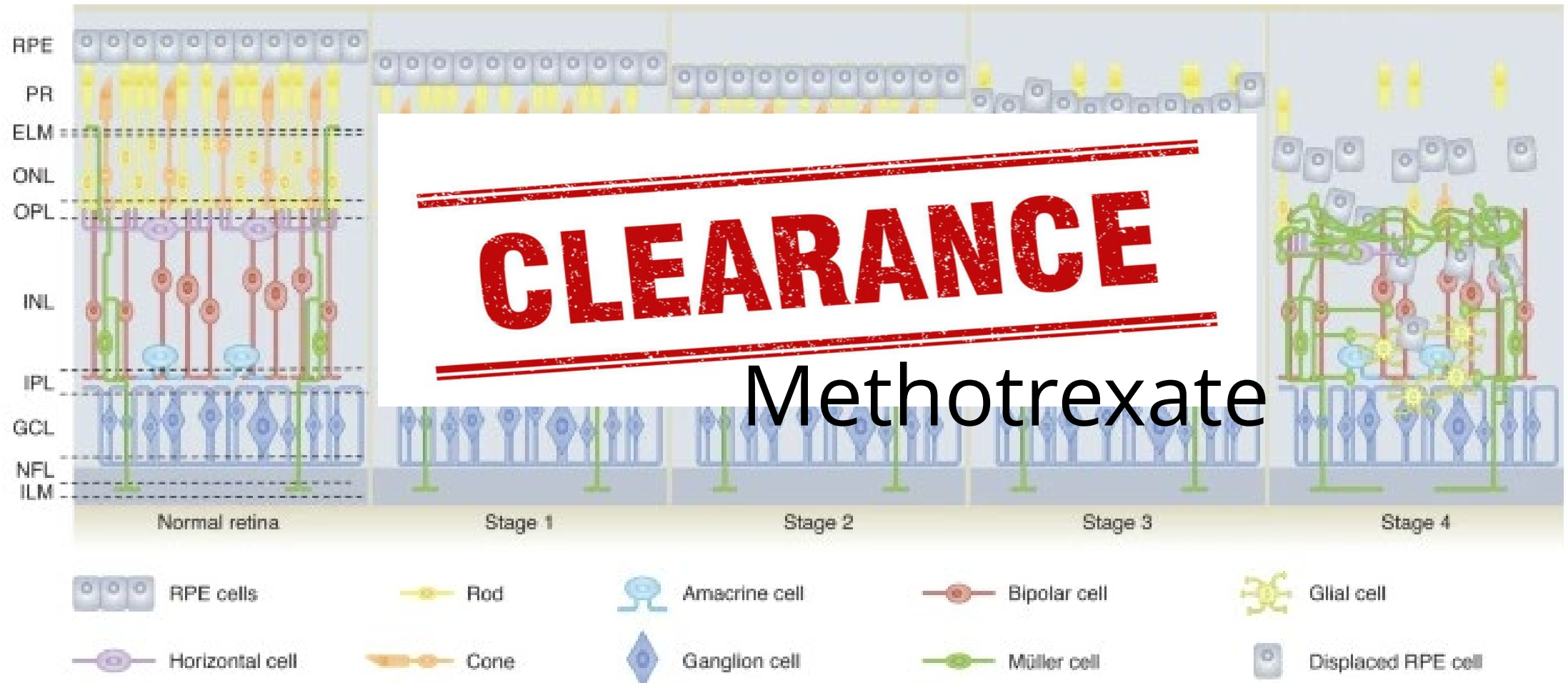
- **Many mutations** associated with retinal degeneration lead to the production of **misfolded proteins** by cells of the retina.
- These abnormal proteins **cause cell death** by activating the Unfolded Protein Response, a set of conserved intracellular signaling pathways that detect protein misfolding **within the endoplasmic reticulum** and control protective and proapoptotic signal transduction pathways.



CLEARANCE

Methotrexate

A therapy according to the stage



•Review Article Published: 31 January 2022 **Bioengineering strategies for restoring vision**

•[Jasmina Cehajic-Kapetanovic](#), [Mandeep S. Singh](#), [Eberhart Zrenner](#) &

•[Robert E. MacLaren](#) *Nature Biomedical Engineering* volume 7, pages387–404 (2023)

Vision Sciences Living in Momentum

Genetic testing interpretation can be complex



ARVO 2024 Seattle, WA

Register now



Ramiro
Maldonado
(Duke)

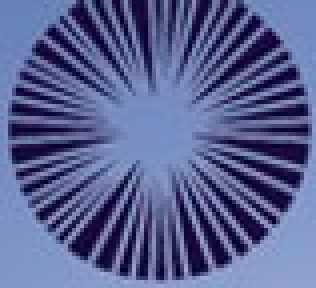


Robert
Hufnagel
(NIH)



Kristy
Lee
(UNC)

Interpreting genetic tests: The basics of molecular diagnosis through application of results



AMERICAN ACADEMY™
OF OPHTHALMOLOGY

AAO course 2024

Game of Genes



ERG in children Workshop



AAPOS 2024
AUSTIN ★ TEXAS



There is a bright future for patients with IRDs

There is progress... there is HOPE



Thank you!



Ramiro.Maldonado@duke.edu



@RamMaldonado32



ramiro-s-maldonado-md



ramiro.maldonado@duke.edu



Duke Center for Ophthalmic Genetics

Duke University School of Medicine





Todd C. Brady, M.D., Ph.D. Chief Executive Officer

Phase 2 Clinical Trial of ADX-2191 in Retinitis Pigmentosa

ADX-2191 has the potential to be the first approved drug for retinitis pigmentosa, a clinical group of rare genetic eye diseases.

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



- Retinitis pigmentosa **affects more than 1 million people** worldwide. Mutations leading to rhodopsin misfolding account for approximately one-third of cases.
- There is **no approved therapy** for retinitis pigmentosa.
- **U.S. FDA Orphan Drug Designation** for ADX-2191 for the treatment of retinitis pigmentosa was granted in August 2021.



Preclinical electroretinographic evidence in a P23H rhodopsin mutation mouse model of retinitis pigmentosa **suggests that methotrexate improves retinal function.**

ADX-2191 (methotrexate injection, USP) for intravitreal administration is an investigational drug candidate. Sources: Aldeyra internal estimates; FASEB J. 34(8): 10146-10167, 2020. PBS = phosphate-buffered saline. MTX = methotrexate.

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

Design

Single-center, dose-ranging, open-label clinical trial of ADX-2191 (400µg methotrexate in 0.05mL) in patients with retinitis pigmentosa

Inclusion Highlights

Diagnosis of retinitis pigmentosa due to rhodopsin gene mutations, including P23H

Dosing Regimen

Cohort A (n = 4):

Monthly injections of ADX-2191 for three months

Cohort B (n = 4):

Twice-monthly injections of ADX-2191 for three months

Primary Endpoint

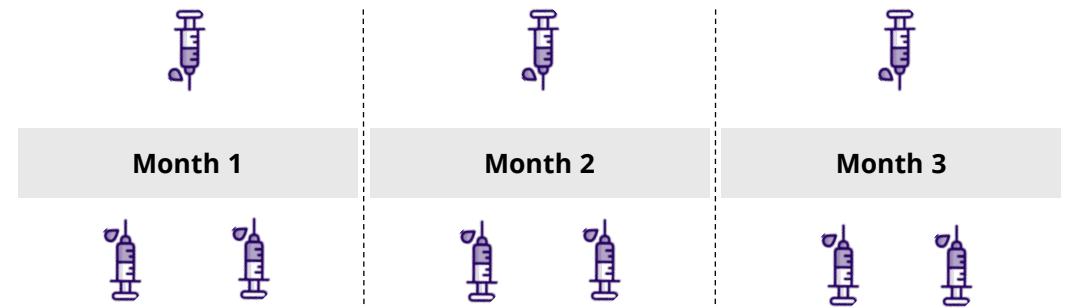
Safety and tolerability

Secondary Endpoints

1. Best corrected and low-light visual acuity
2. Macular retinal sensitivity as assessed by MAIA perimetry
3. Dark-adapted flash analyzed by ERG
4. Peripheral retinal sensitivity as assessed by DAC perimetry
5. Retinal morphology as assessed by OCT

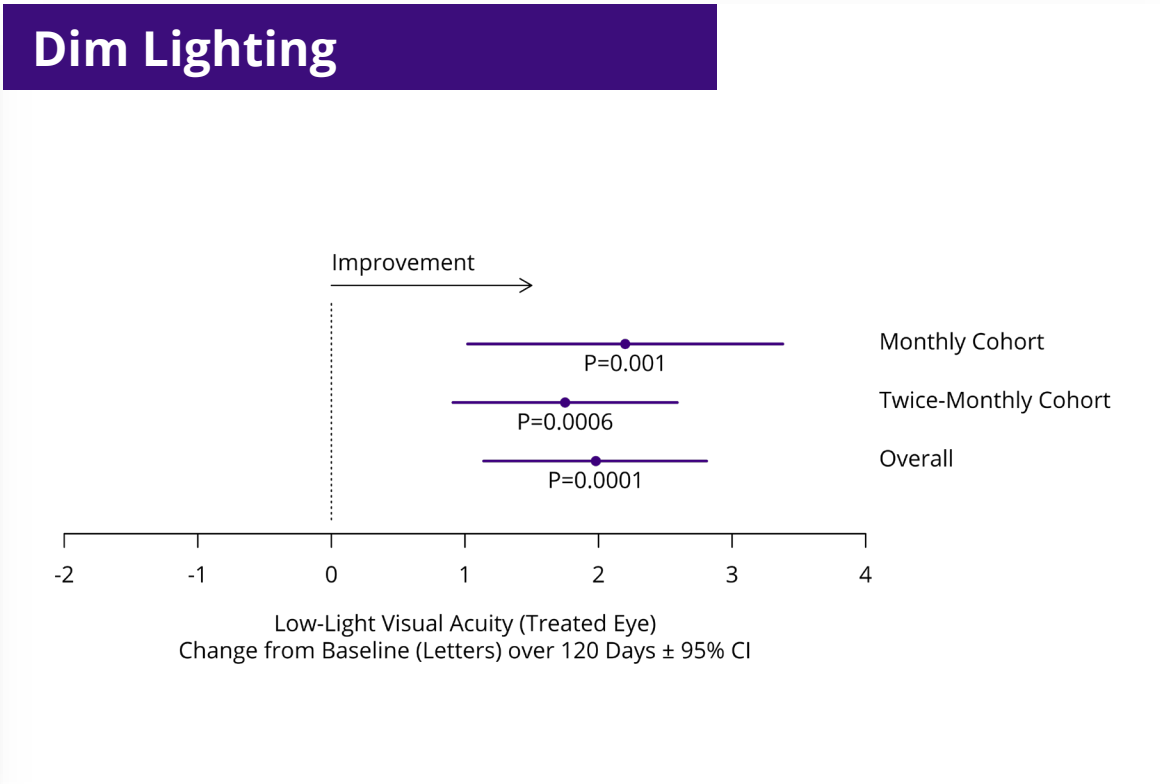
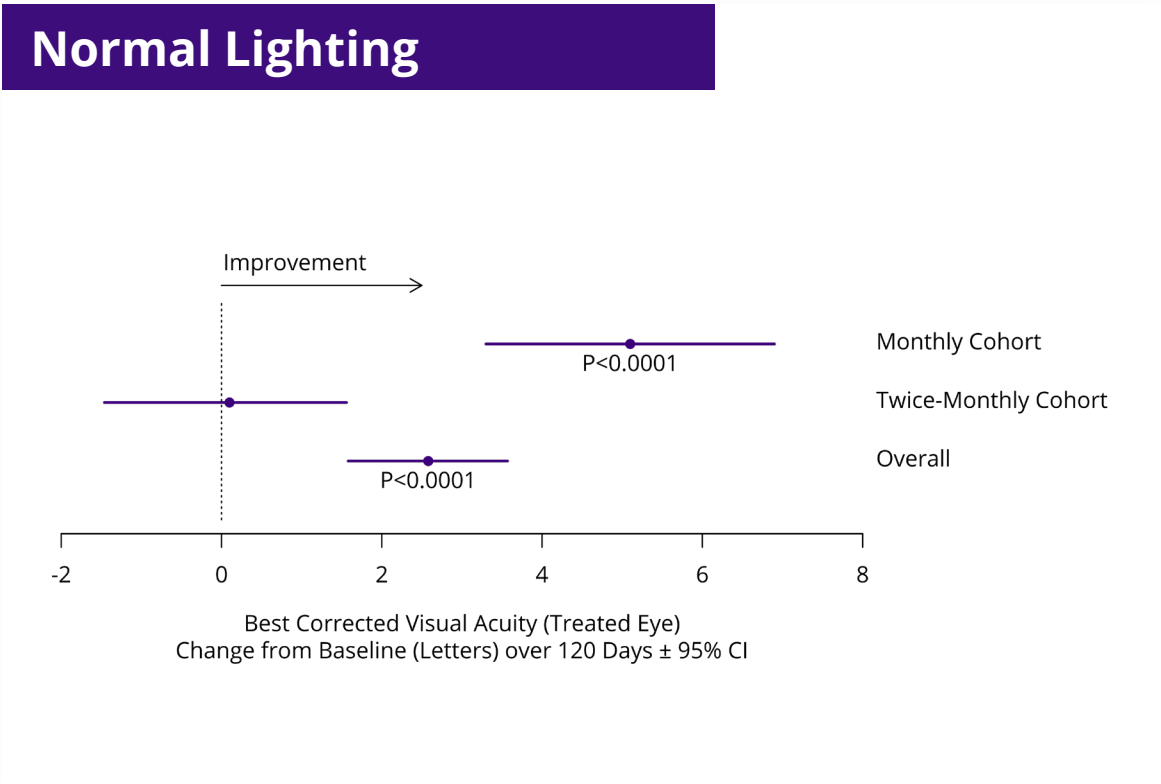
Acuity, perimetry, and OCT assessments were performed monthly for four months from initiation of therapy. ERG was performed at baseline and at 90 days from initiation of therapy.

Cohort A: Monthly Intravitreal Injections



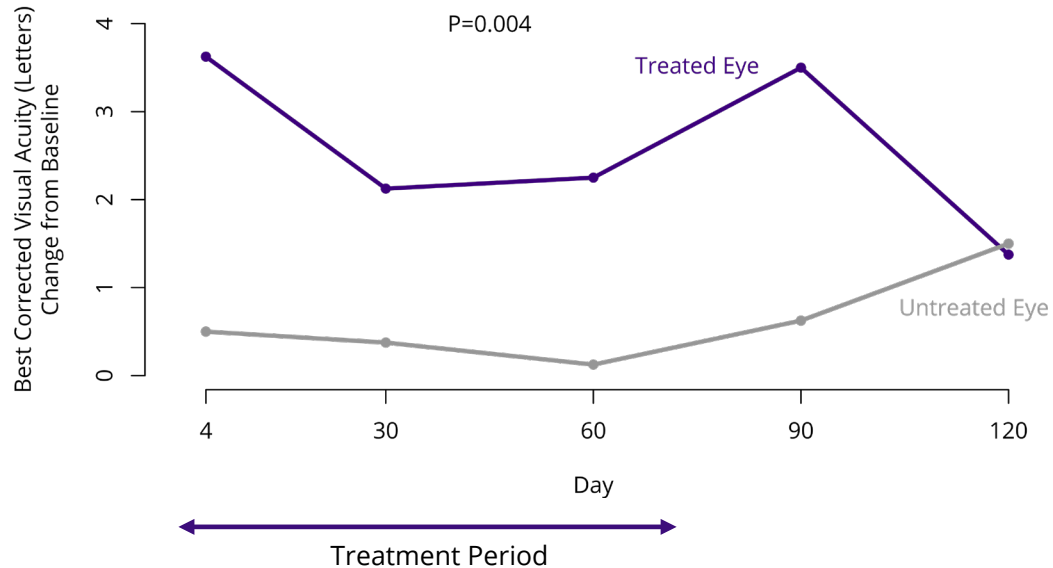
Cohort B: Twice-Monthly Intravitreal Injections

Statistically Significant Improvement in Visual Acuity Observed in the Retinitis Pigmentosa Phase 2 Clinical Trial

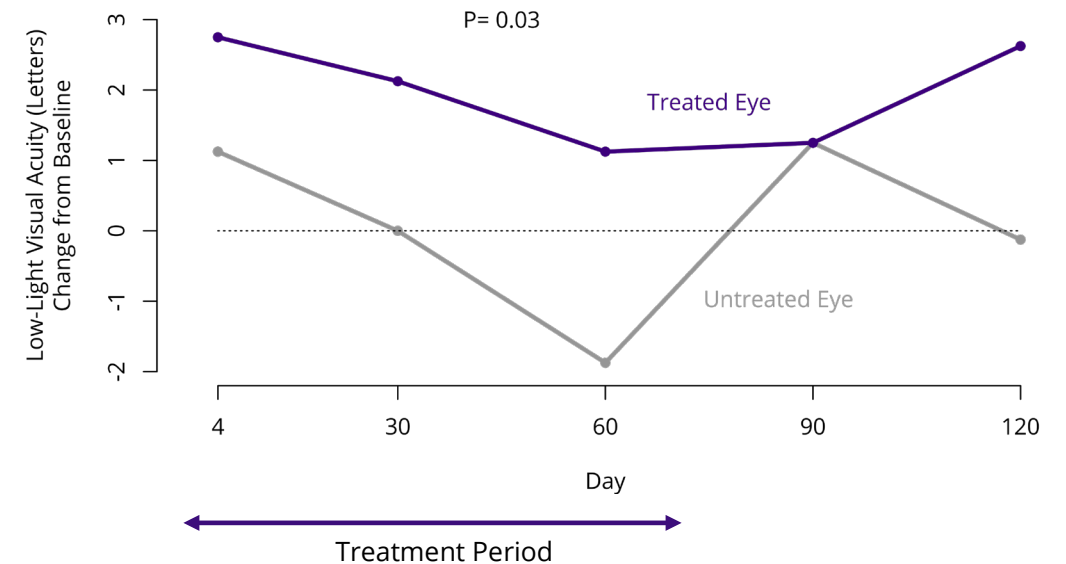


In the Retinitis Pigmentosa Phase 2 Clinical Trial, Visual Acuity in ADX-2191-Treated Eyes Was Superior to that of Untreated Eyes

Normal Lighting

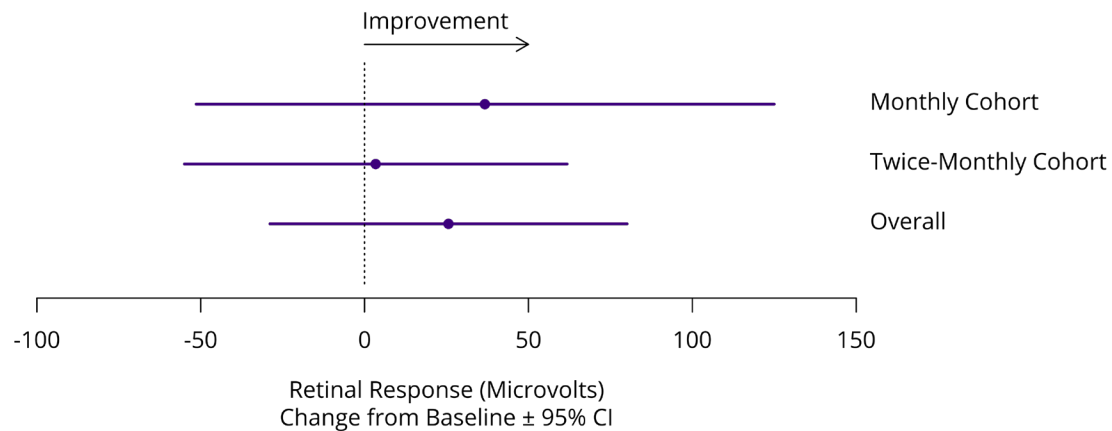


Dim Lighting

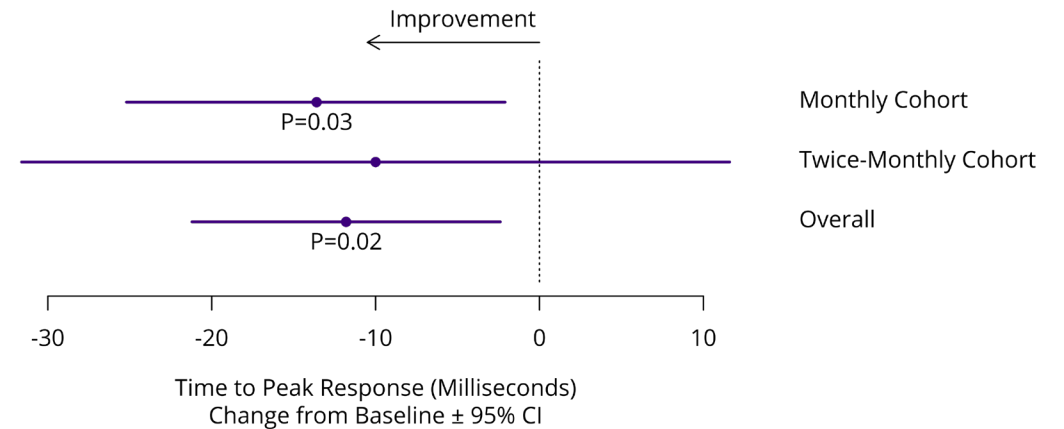


As Assessed by ERG, Retinal Function Improved in the Retinitis Pigmentosa Phase 2 Clinical Trial

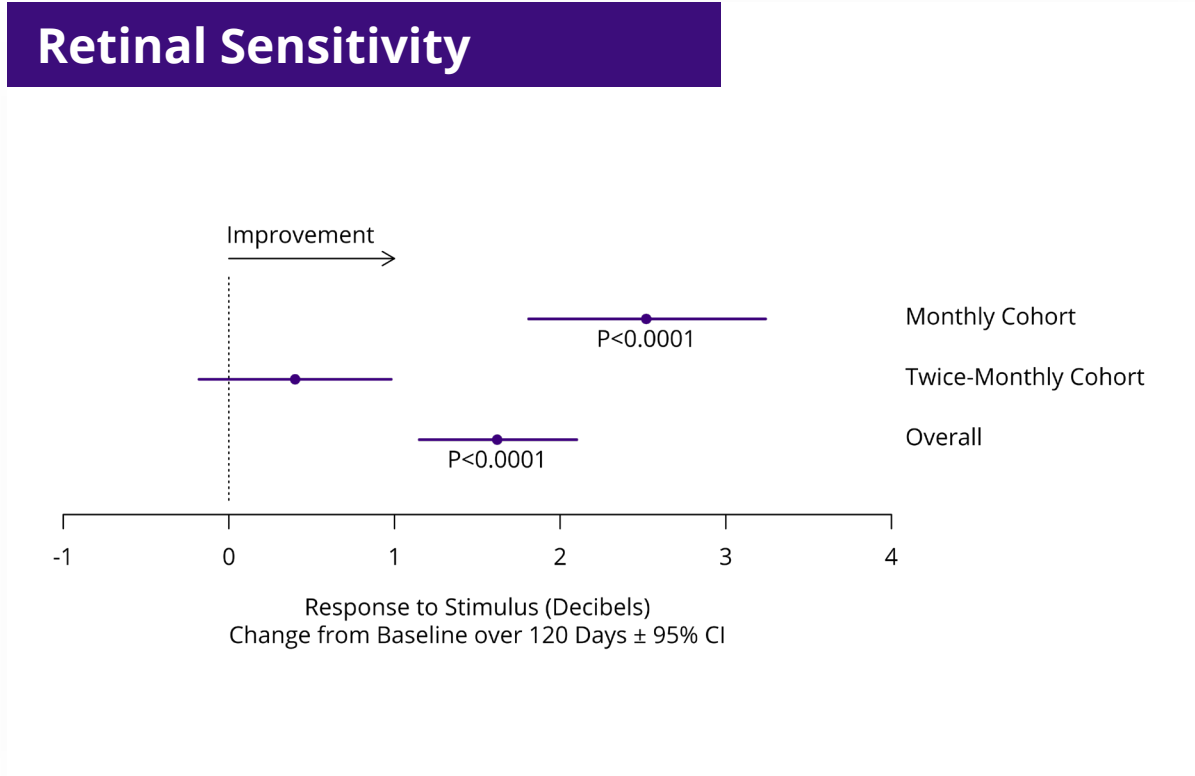
Peak Response



Time to Response

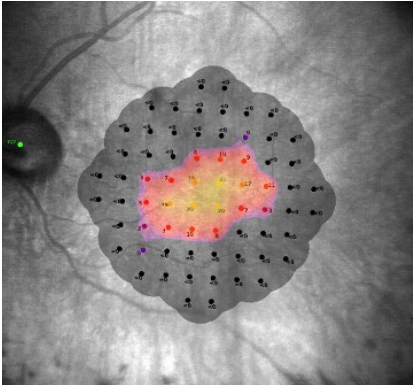


As Assessed by MAIA Microperimetry, Statistically Significant Improvement in Retinal Sensitivity Observed in the Retinitis Pigmentosa Phase 2 Clinical Trial

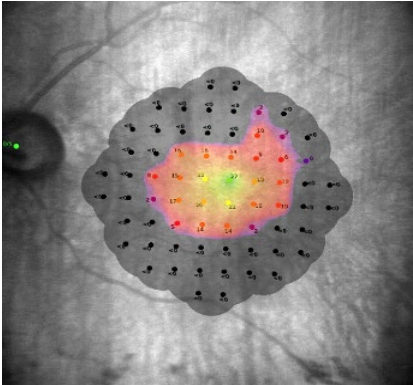


Illustrative results from an enrolled patient indicate central and peripheral improvement in macular retinal sensitivity

Baseline

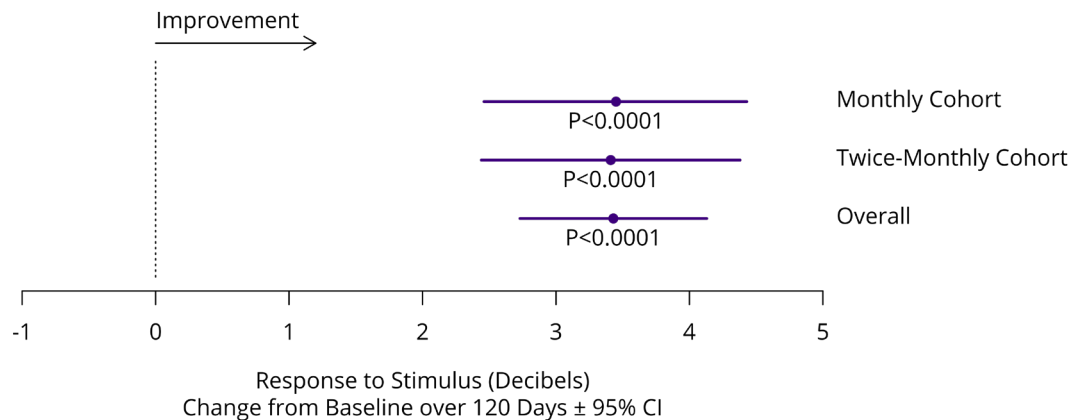


Day 90

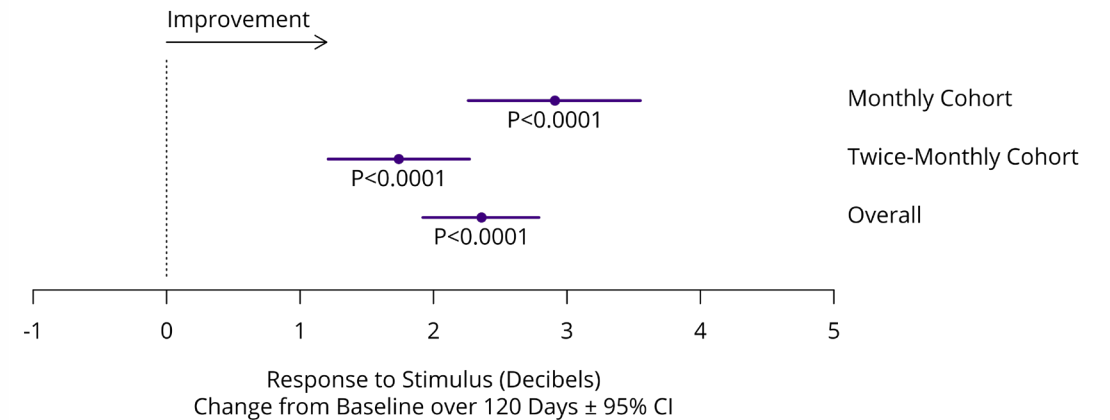


As Assessed by DAC Perimetry, Statistically Significant Improvement in Retinal Sensitivity Observed in the Retinitis Pigmentosa Phase 2 Clinical Trial

Green Stimulus



Red Stimulus



Planned Phase 2/3 Clinical Trial of ADX-2191 in Retinitis Pigmentosa

Design	Randomized, double-masked, clinical trial
Dosing	40 µg vs. 400 µg administered monthly for 12 months
Size	30 retinitis pigmentosa patients with rhodopsin mutations, randomized 1:1
Primary Endpoint	Peripheral vision sensitivity to green (rod-mediated) light under dimly lit (scotopic), dark-adapted conditions
Other Endpoints	Best-corrected and low-light visual acuity, safety

Clinical trial initiation expected in H2 2024[†]



Questions

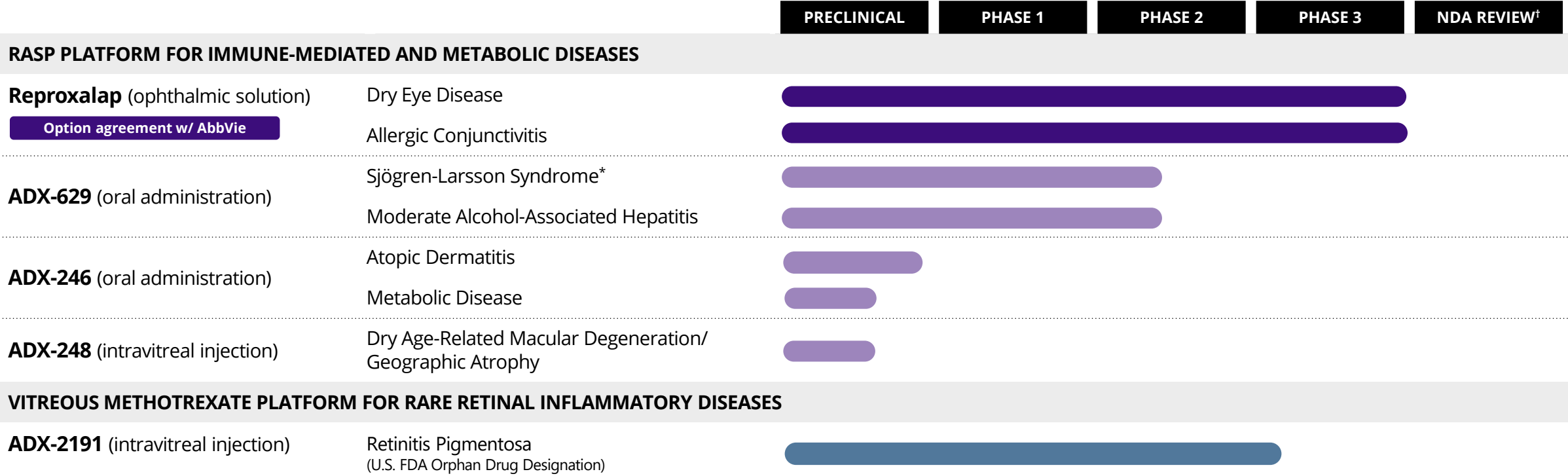




Todd C. Brady, M.D., Ph.D., Chief Executive Officer, Aldeyra Therapeutics

Pipeline and Milestone Review

Aldeyra Is a Well-Capitalized Biotechnology Company with a Broad Immunology and Metabolic Pipeline



As of 12/31/2023, cash and cash equivalents were \$142.8M, which Aldeyra believes will be sufficient to fund the Company beyond 2026.‡

Clinical and Regulatory Milestones



ReproXalap



Allergic Conjunctivitis

Positive Phase 3 INVIGORATE 2 trial top-line results announced



Dry Eye Disease

Proposed clinical trial top-line results and potential NDA resubmission expected in second half of 2024, pending clinical trial results, feedback from ongoing FDA discussions, and other factors^{† ‡}



Sjögren-Larsson Syndrome

Phase 2 clinical trial top-line results announced*



Moderate Alcohol-Associated Hepatitis

Open-label Phase 2 clinical trial results expected H2 2024[‡]



ADX-629



Atopic Dermatitis

Phase 1 clinical trial initiation expected in H1 2024[‡]



Metabolic Disease

Pre-clinical program initiated



ADX-246



ADX-248



Dry Age-Related Macular Degeneration/Geographic Atrophy

IND expected to be submitted in 2024



Retinitis Pigmentosa

Phase 3 clinical trial initiation expected in H2 2024[‡]



ADX-2191

[†]Regulatory review and discussion timelines are flexible and subject to change based on the regulator's workload and other potential review issues. [‡]The timing of clinical trials depends, in part, on the availability of clinical research facilities and staffing, the ability to recruit patients, and the number of patients in the trial. *Investigator sponsored.



Todd C. Brady, M.D., Ph.D., Chief Executive Officer, Aldeyra Therapeutics

Concluding Remarks