
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the month of April 2024

Commission File No. 001-39621

OPTHEA LIMITED
(Translation of registrant's name into English)

Level 4
650 Chapel Street
South Yarra, Victoria, 3141
Australia
(Address of registrant's principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.
Form 20-F ☒ Form 40-F ☐

EXHIBIT INDEX

Exhibit	Description
99.1	Press Release - Opthea KOL Event on Sozinibercept

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereto duly authorized.

OPTHEA LIMITED
(Registrant)

By: /s/ Frederic Guerard
Name: Frederic Guerard
Title: Chief Executive Officer

Date: 04/03/2024



Transforming Patient Outcomes with Superior Vision Gains

Virtual KOL Event | April 3, 2024
NASDAQ (OPT); ASX (OPT.AX)



Disclaimer

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This presentation includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties as well as our own estimates of potential market opportunities. All of the market data used in this presentation involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research and other surveys, which may be based on a small sample size and may fail to accurately reflect market opportunities. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions.

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Featured Speakers

Opthea Management Joined by Clinical and Scientific Thought Leaders



Fred Guerard
PharmD, MS

Chief Executive Officer

- ✓ **Graybug Vision**, CEO
- ✓ **Novartis**, Worldwide Head Ophthalmology
- ✓ **Alcon**, Global Franchise Head Pharmaceuticals
- ✓ Led extension of Novartis ophthalmology pipelines: Encore Vision, Lubricin®, Luxturna®, Xiirdra®



Arshad M. Khanani
MD, MA, FASRS

Chief Medical Advisor

- ✓ **Sierra Eye Associates**, Managing Partner, Director of Clinical Research, Director of Fellowship
- ✓ **University of Nevada, Reno School of Medicine**, Clinical Professor



Charles C. Wykoff
MD, PhD

Chief Investigator for COAST
Clinical Advisory Board Member

- ✓ **Retina Consultants of Texas**, Director of Research
- ✓ **Retina Consultants of America**, Chairman of Research
- ✓ **Blanton Eye Institute, Houston Methodist Hospital**, Professor of Clinical Ophthalmology and Deputy Chair of Ophthalmology



Veeral S. Sheth
MD, MBA, FASRS, FACS

Principal Investigator for ShORe

- ✓ **University Retina and Macula Associates**, Partner
- ✓ **University of Illinois at Chicago**, Clinical Assistant Professor

Sozinibercept Has the Potential to Be the First Product in More Than 15 Years to Improve Visual Outcomes

Addressing High Unmet Need

- Wet age-related macular degeneration (wet AMD) is the leading cause of vision loss in the elderly, impacting ~3.5 million patients in the US and Europe, despite wide use of anti-VEGF-A standard of care

Proprietary Technology

- First-in-class VEGF-C/D TRAP intended for combination with standard of care anti-VEGF-A therapies
- Composition of Matter and Methods of Use Patents through 2034; opportunities to extend beyond 2034*

Superior Lead Asset

- Phase 2b demonstrated superiority in combination with SOC therapy, with well tolerated safety profile
- Sozinibercept has the potential to improve vision for millions of patients with wet AMD

Two Large Pivotal Trials Ongoing

- COAST enrollment complete as of Feb 2024; ShORe estimated 2Q CY2024 (96% enrolled as of 3 April 2024)
- Topline data from both trials expected mid-CY 2025

Substantial Market Opportunity

- Multibillion dollar commercial opportunity in a growing market with an established clinical practice
- Sozinibercept developed for use in combination with any anti-VEGF-A; not competing with any approved therapy

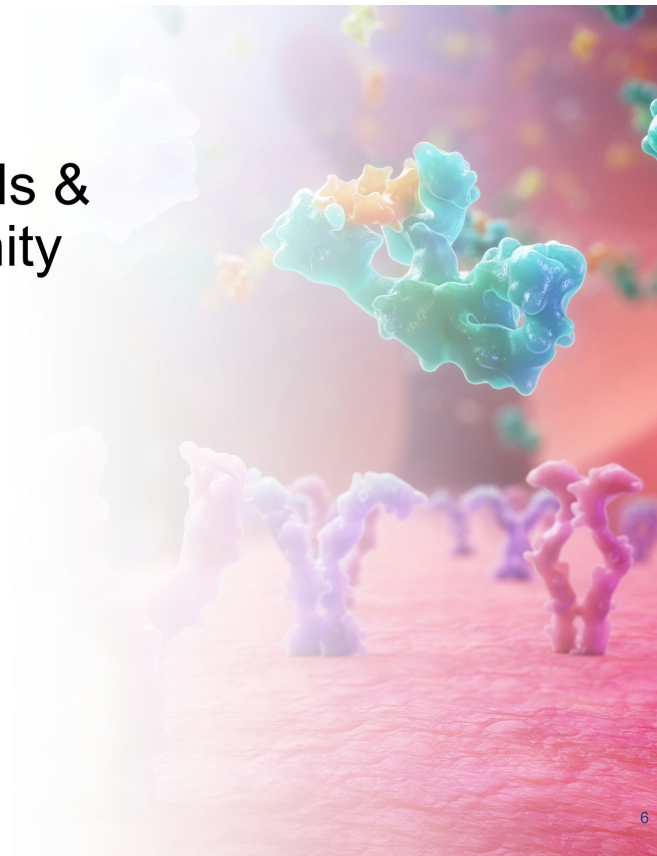
MOA – Mechanism of Action; SOC – Standard of care
*Potential for Patent Term Extensions & Data and Market Exclusivity (12 Years for Biologic)

Opthea KOL Event Agenda

Topic	Speaker
Welcome	Fred Guerard, PharmD, MS
Wet AMD Unmet Medical Needs and Sozinibercept Market Opportunity	Arshad M. Khanani, MD, MA, FASRS
Sozinibercept Phase 2b Wet AMD Data Overview	Charles C. Wykoff, MD, PhD
Sozinibercept COAST and ShORe Phase 3 Wet AMD Trial Design	Veeral S. Sheth, MD, MBA, FASRS, FACS
Strategic Outlook	Fred Guerard, PharmD, MS
Q&A Session	All

Wet AMD Unmet Medical Needs & Sozinibercept Market Opportunity

Arshad M. Khanani, MD, MA, FASRS



Current Wet AMD Treatment Landscape

Last therapy to improve visual outcomes for wet AMD patients was launched *over 15 years ago*



Despite Treatment with Standard of Care Anti-VEGF-A Therapies, the Majority of Patients Achieve Suboptimal Vision Outcomes

Despite treatment with anti-VEGF-A therapy*

>45% do not achieve significant vision gains

>60% will have **persisting macular fluid**

25% will have **further vision loss at 12+ months**



The majority¹ of patients fail to achieve

20/40 vision



Most patients

cannot resume

routine daily activities, such as driving or reading

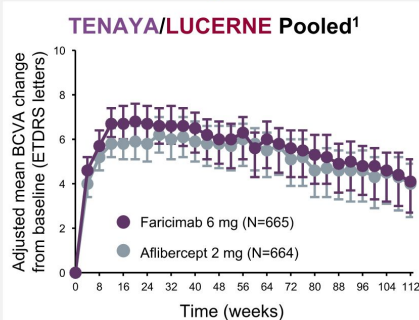
*Based on randomised, controlled clinical trial data; >45% fail to achieve ≥ 2 lines improvement in Best Corrected Visual Acuity (BCVA); Persisting fluid: SD-OCT CST ≥ 300 μ M or Time-Domain OCT CST ≥ 250 μ M

¹ Mettu PS, et al. Prog Retin Eye Res. 2021

Unmet Needs in the Treatment of Wet AMD



Efficacy

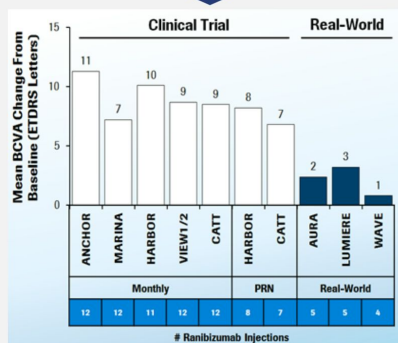


Faricimab trials in wet AMD – Year 1²:

- 20%* gained ≥ 15 letters
- 57%[†] with $\geq 20/40$ (driving vision)
- 9%[†] with vision $\leq 20/200$



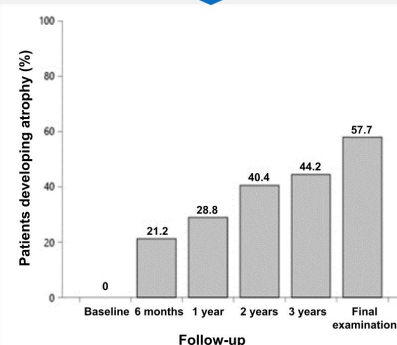
Durability



High treatment burden with frequent anti-VEGF-A injections leads to **sub-optimal vision gains in the real world**³



Disease Progression



Patients still develop **inflammation, fibrosis, atrophy, and ischemia** despite anti-VEGF-A therapy⁴

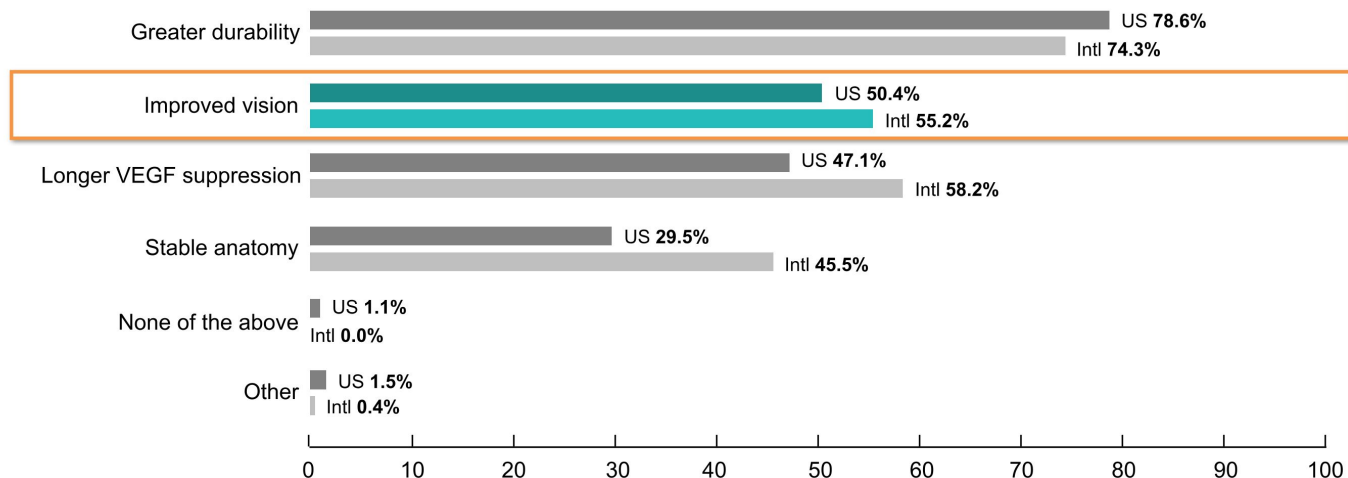
*Proportion averaged over Weeks 40, 44, and 48; [†]proportion at Week 48. BCVA, best-corrected visual acuity; ETDRS, Early Treatment Diabetic Retinopathy Study; nAMD, neovascular age-related macular degeneration; PRN, pro re nata (as needed); VEGF, vascular endothelial growth factor. 1. Khanani AM, et al. Presented at Angiogenesis 2023.2. Guymer R, et al, presented at the Angiogenesis, Exudation, and Degeneration 2022 Virtual Congress; 3. Summaries/composites from various clinical trials; 4. Sitniska V, et al. Ophthalmologica. 2019;241:154–60

Greater Durability and Improved Vision Are the Greatest Unmet Needs

ASRS PAT SURVEY 2023

What are the greatest unmet needs in treating wet AMD and DME?

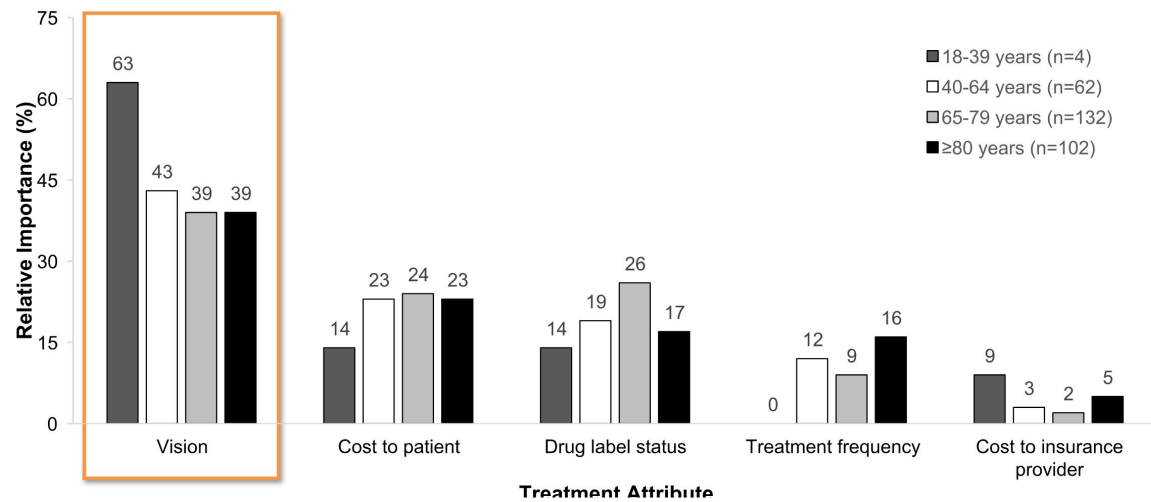
n=1,012



AMD, age-related macular degeneration; ASRS, American Society of Retinal Specialists; DME, diabetic macular edema; Intl, international; PAT, Preferences and Trends; US, United States of America; VEGF, vascular endothelial growth factor; Hahn P, ed. ASRS 2023 Preferences and Trends Membership Survey. Chicago, IL. American Society of Retina Specialists; 2023

Visual Outcomes Are the #1 Factor in Patients' Anti-VEGF-A Preference

Relative Importance of Treatment Attributes for Patients Receiving Anti-VEGF-A Monotherapy n=300



Bhagat D, Kirby B, Bhatt H, Jager R, George M, Sheth V. Patient Preferences Associated with Anti-Vascular Endothelial Growth Factor Therapies for Neovascular Age-Related Macular Degeneration and Diabetic Macular Edema. Clin Ophthalmol. 2020 Oct 1;14:2975-2982. doi: 10.2147/OPTH.S273564. PMID: 33061263; PMCID: PMC7534869.

Emerging Treatments for Wet AMD: Better Vision Outcomes or Durability

Sozinibercept is the only late-stage drug in development targeting **better vision outcomes**

Better Vision Outcomes

Sozinibercept (OPT-302)

Better Durability

Tyrosine Kinase Inhibitors

OTX-TKI

CLS-AX

EYP-1901

Gene Therapy

RGX-314

ADVM-022

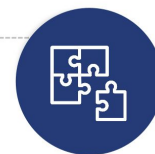
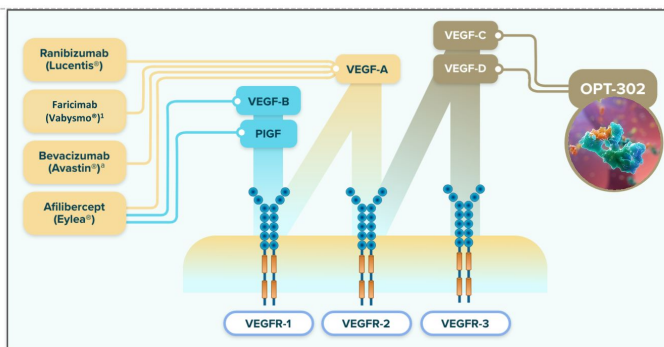
4D-150

Sozinibercept, a Proprietary VEGF-C/D “Trap” Inhibitor, Has the Potential to Address the Limitations of Anti-VEGF-A Therapies



The Problem

Wet AMD is a **multi-factorial disease**. Treatment with VEGF-A inhibitors **upregulates VEGF-C/D**, driving angiogenesis and vascular permeability.



The Solution

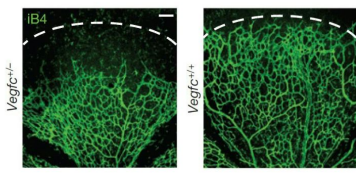
When used in combination with any VEGF-A inhibitor, **OPT-302 completely blocks** VEGFR-2 and VEGFR-3 signaling.

¹ Faricimab also has inhibitory effect on Ang-2.

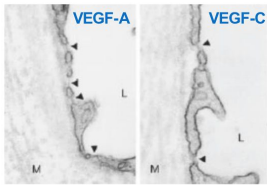
² Bevacizumab is used 'off-label' for the treatment of neovascular (wet) AMD

Published Evidence Supports Broader VEGF Pathway Inhibition with Sozinibercept

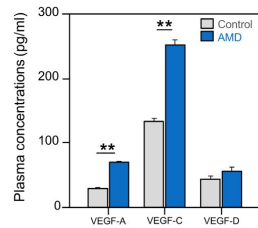
VEGF-C Stimulates Retinal Angiogenesis[^]



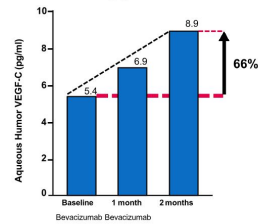
VEGF-A and VEGF-C Induce Vascular Leakage/permeability[#]



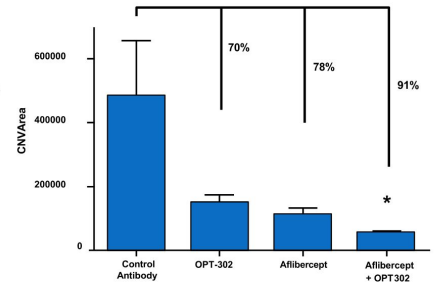
Circulating VEGF-C Levels Significantly Elevated in AMD Patients[†]



Elevated VEGF-C in Aqueous Humor Following Anti-VEGF-A therapy in Wet AMD Patients^{*}



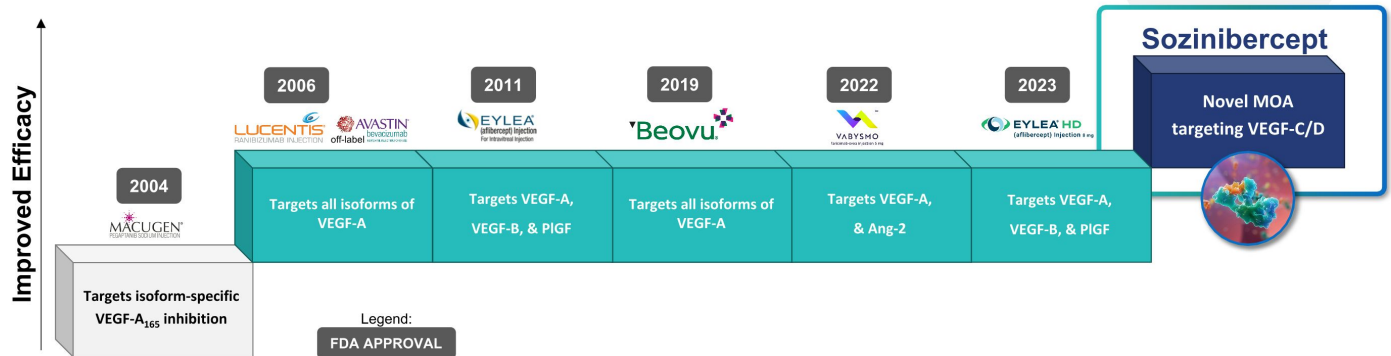
Additive Benefit of VEGF-A and VEGF-C/D Inhibition in Mouse Wet AMD Model



[^]Tammela et al., Nature Cell Biology, 2011; [#]Zhou et al. BMC Ophthalmology (2020) 20:15; [†]Cao et al., Circ Res., 2004; [†]Lashkari et al, 2013 ARVO Annual Meeting, 4999-A0128; ^{*}Cabral et al., 2018 Ophthalmology Retina (2018).

Sozinibercept Has the Potential to Be the First Therapy in More Than 15 Years to Improve Visual Outcomes in Patients with Wet AMD

Sozinibercept has demonstrated strong clinical evidence of superior patient visual outcomes



Jackson, Timothy L., et al. "A randomized controlled trial of OPT-302, a VEGF-C/D inhibitor for neovascular age-related macular degeneration." *Ophthalmology*, vol. 130, no. 6, June 2023, pp. 588–597, <https://doi.org/10.1016/j.ophtha.2023.02.001>; MOA – Mechanism of Action

Sozinibercept Seamlessly Integrates into Current Anti-VEGF-A Clinical Practice



Patients

- Superior visual outcomes meaningfully improves patients' lives
- Intended to be administered at same anti-VEGF-A visit



Retina Specialists

- Better vision outcomes is a high unmet medical need
- Designed to be agnostic to anti-VEGF-A treatment type, including biosimilars

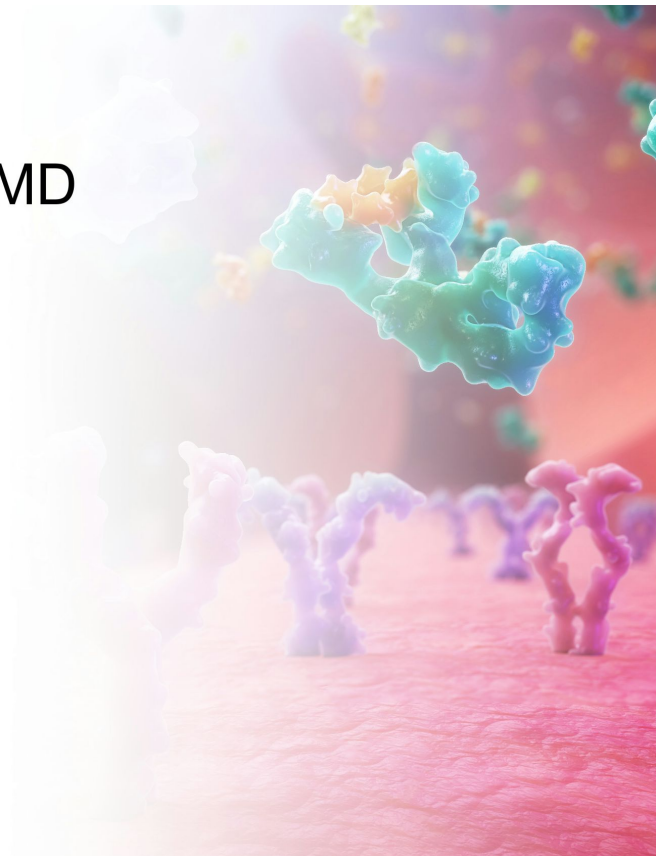


Payers

- Better clinical outcomes represent better health economics
- Visual benefits a key driver in reimbursement

Sozinibercept Phase 2b Wet AMD Data Overview

Charles C. Wykoff, MD, PhD



Near-term Focus Is on Sozinibercept Phase 3 Execution

Pivotal Program Design Informed by Phase 2b and Optimized for Success

Ongoing Phase 3 Trials

Topline data from both trials anticipated in mid-CY 2025

Completed Phase 1-2 Trials

Phase 2b (n=366)
Treatment **naïve** wet AMD
OPT-302: 6 x monthly dosing
Comparator: Ranibizumab (monthly)

Phase 1b/2a (n=153)
Prior-treated DME
OPT-302: 3 x monthly dosing
Comparator: Aflibercept (monthly)

Phase 1/2a: (n=51)
Treatment Naïve/Prior-treated wet AMD
OPT-302 + Ranibizumab:
3 x monthly dosing

Enrollment Complete

COAST

Phase 3 - wet AMD
(treatment naïve)
n=~990

Comparator:

Aflibercept (Eylea®)
once every two months
after three monthly doses

Standard Dosing

OPT-302
once every month

Extended Dosing

OPT-302
once every two
months after three
monthly doses

Anticipated CY 2Q 2024

ShORe

Phase 3 - wet AMD
(treatment naïve)
n=~990

Comparator:

Ranibizumab (Lucentis®)
once every month

Standard Dosing

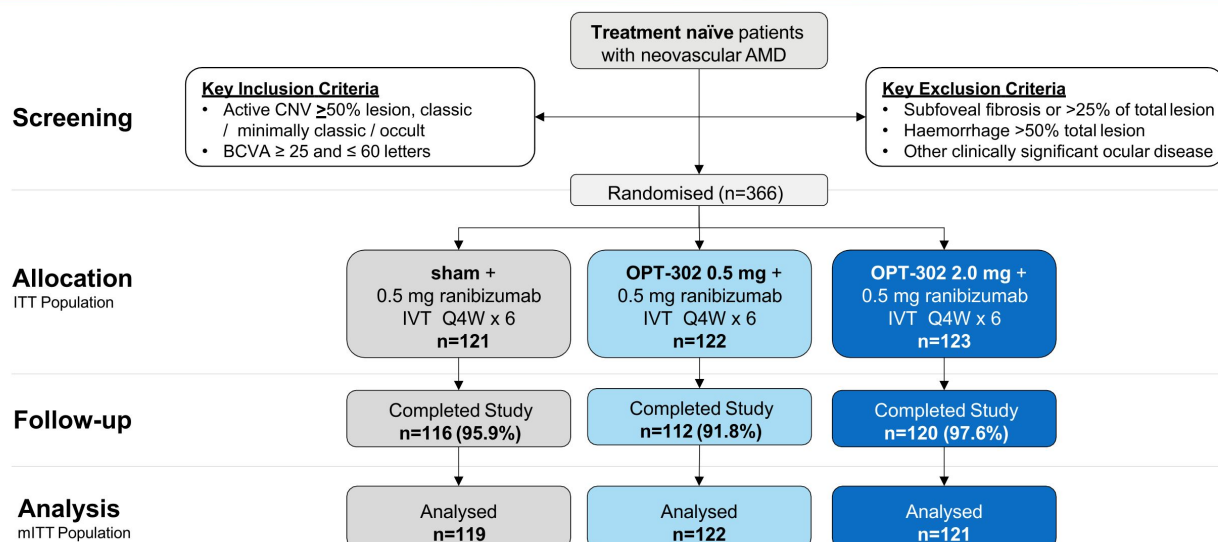
OPT-302
once every month

Extended Dosing

OPT-302
once every two
months after three
monthly doses

Ranibizumab (Lucentis®); Aflibercept (Eylea®)

Phase 2b Wet AMD Trial Overview



CNV – choroidal neovascularisation; IVT – intravitreal; Q4W – once every 4 weeks; ITT – Intent to Treat Population, all participants who were randomised into the study irrespective of whether study medication was administered or not; Safety Population - all participants in the ITT but excluding those who did not receive at least one dose of study medication; mITT – Modified ITT Population, all participants in the Safety Population but excludes any participant without a Baseline VA score and/or any participant who did not return for at least one post-baseline visit

Phase 2b Primary and Secondary Endpoints

Primary Endpoint

Mean change from baseline in BCVA at week 24

Key Secondary Endpoints

Proportion of patients gaining ≥ 15 letters from baseline at week 24

Change in central subfield thickness (CST) from baseline at week 24

Change in intra-retinal and sub-retinal fluid from baseline to week 24

Safety and tolerability

Select Pre-specified Subgroups

Predominantly classic, minimally classic, & occult lesions
(Stratification Factor)

Retinal Angiomatous Proliferation (RAP)
detected/not detected at baseline

Polypoidal Choroidal Vasculopathy (PCV)
detected/not detected at baseline

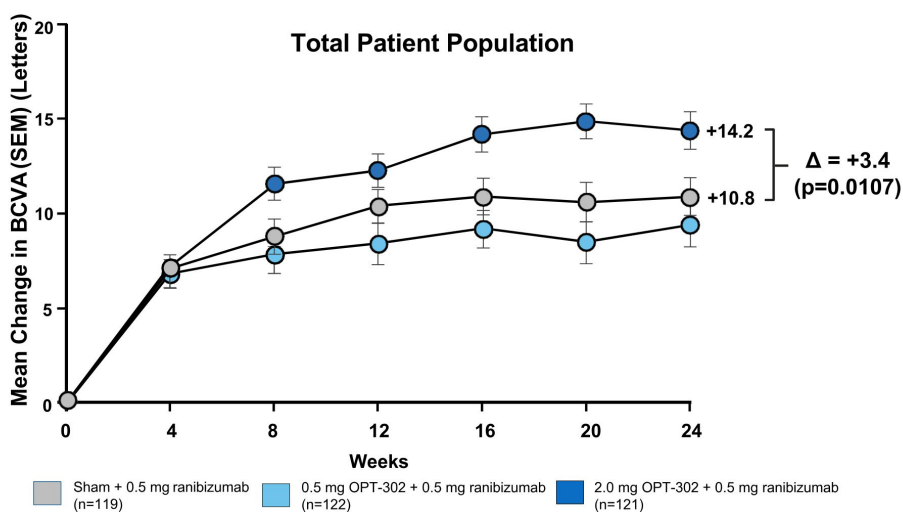
Phase 2b Trial Demographics and Baseline Characteristics

Demographic/Baseline Disease Characteristic	Sham + ranibizumab n=121	0.5 mg OPT-302 + ranibizumab n=122	2.0 mg OPT-302 + ranibizumab n=123
Mean Age – years \pm SD	76.1 \pm 9.48	78.8 \pm 8.16	77.8 \pm 8.82
Sex – n (%)	Male	48 (39.7%)	49 (40.2%)
	Female	73 (60.3%)	73 (59.8%)
Caucasian Race – n (%)	117 (99.2%)	119 (99.2%)	117 (97.5%)
Mean Visual Acuity (BCVA) – letters \pm SD	50.7 \pm 10.21	51.1 \pm 8.96	49.5 \pm 10.26
Mean Total Lesion Area - mm ² \pm SD	6.08 \pm 3.21	6.48 \pm 3.30	6.62 \pm 3.39
Lesion Type	Predominantly classic – n (%)	15 (12.4%)	15 (12.3%)
	Minimally classic – n (%)	53 (43.8%)	51 (41.8%)
	Occult - n (%)	53 (43.8%)	56 (45.9%)
	PCV detected ¹ – n (%)	20 (16.5%)	24 (19.7%)
	RAP detected ² – n (%)	15 (12.7%)	22 (18.5%)
Mean central subfield thickness (CST) - mm \pm SD	412.10 \pm 110.62	425.18 \pm 120.45	414.12 \pm 123.25
Sub-retinal fluid (SRF) present – % participants	89.3%	84.4%	87.8%
Intra-retinal cysts present – % participants	57.9%	63.9%	56.1%

Intent-to-Treat (ITT) population; SD: standard deviation; BCVA: Best Corrected Visual Acuity. ¹PCV - polypoidal choroidal vasculopathy, detected by SD-OCT, FA and fundus photography. ²RAP - retinal angiomatous proliferation, detected by SD-OCT, FA and fundus photography.

Sozinibercept 2.0 mg Combination Therapy Demonstrated Superiority in Visual Acuity over Ranibizumab Monotherapy

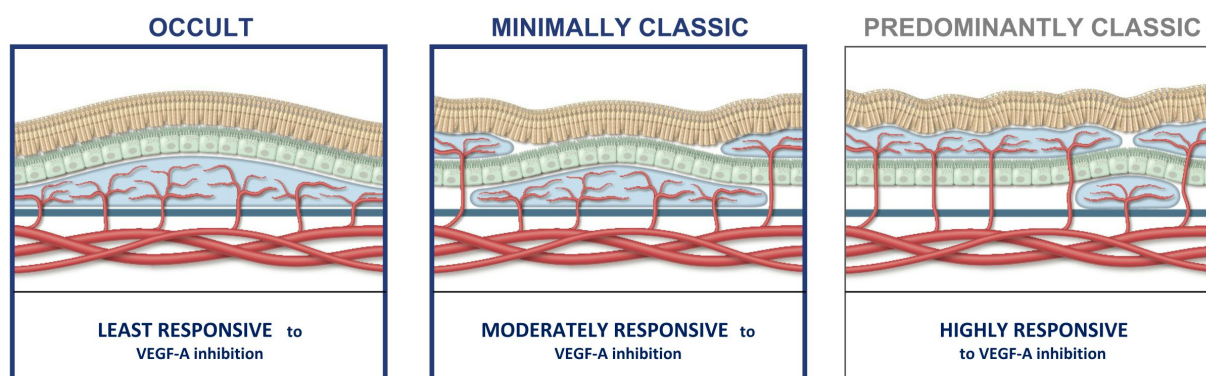
Phase 2b Primary Endpoint Achieved



Jackson, Timothy L., et al. "A randomized controlled trial of OPT-302, a VEGF-C/D inhibitor for neovascular age-related macular degeneration." *Ophthalmology*, vol. 130, no. 6, June 2023, pp. 588–597, <https://doi.org/10.1016/j.ophtha.2023.02.001>.

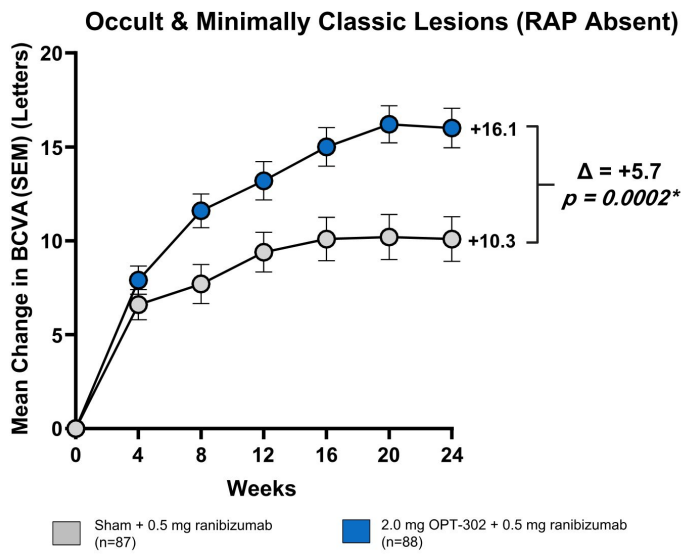
Wet AMD Lesion Types

Differ in Vessel Location, Leakiness, and Responsiveness to VEGF-A Inhibitors



~75% of Wet AMD Patients Have Occult or Minimally Classic Lesions

Best Responding Phase 2b Patients Represents Primary Analysis Population in the Pivotal Phase 3 Trials to Maximize Probability of Success



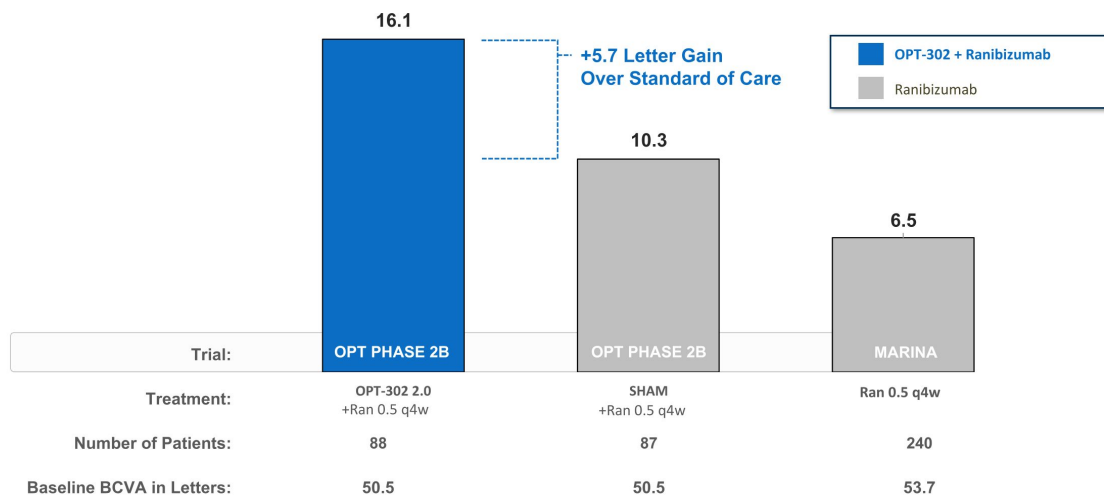
*Unadjusted p-value

Phase 2b demonstrated **superior efficacy** of **+5.7 letter gain over standard of care**, based on a **pre-determined analysis**

This patient population (minimally classic & occult) represents **~75% of Wet AMD patients**

Control Arm in Phase 2b Overperformed MARINA Trial at Week 24 in Similar Lesion Type Patient Population

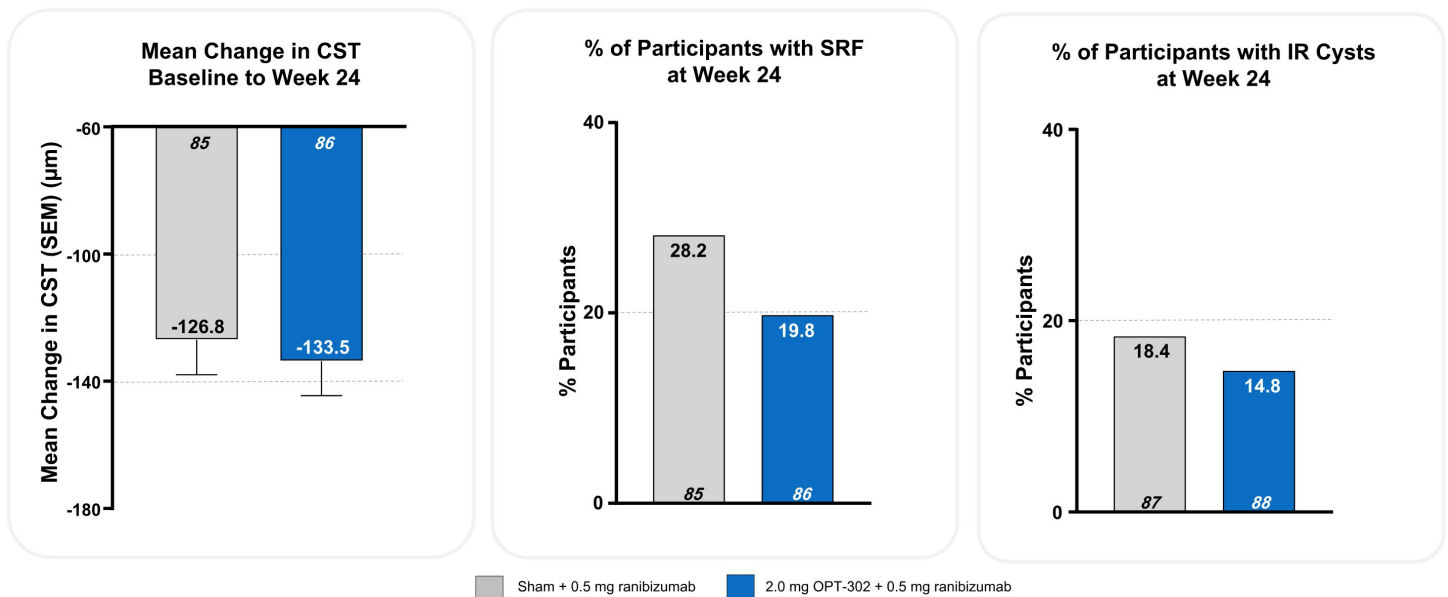
Mean Change in BCVA from Baseline at Week 24 – OPT-302 Phase 2b vs. MARINA Trial
Occult and Minimally Classic Lesions



MARINA was a Phase 3 registrational trial. Baseline BCVA values across trials vary. Number of patients randomised to treatment group (n, bottom table). Mean change in Best Corrected Visual Acuity (BCVA) from baseline shown in ETDRS letters (top of bars).

Reduced Retinal Thickness and Better Retinal Drying

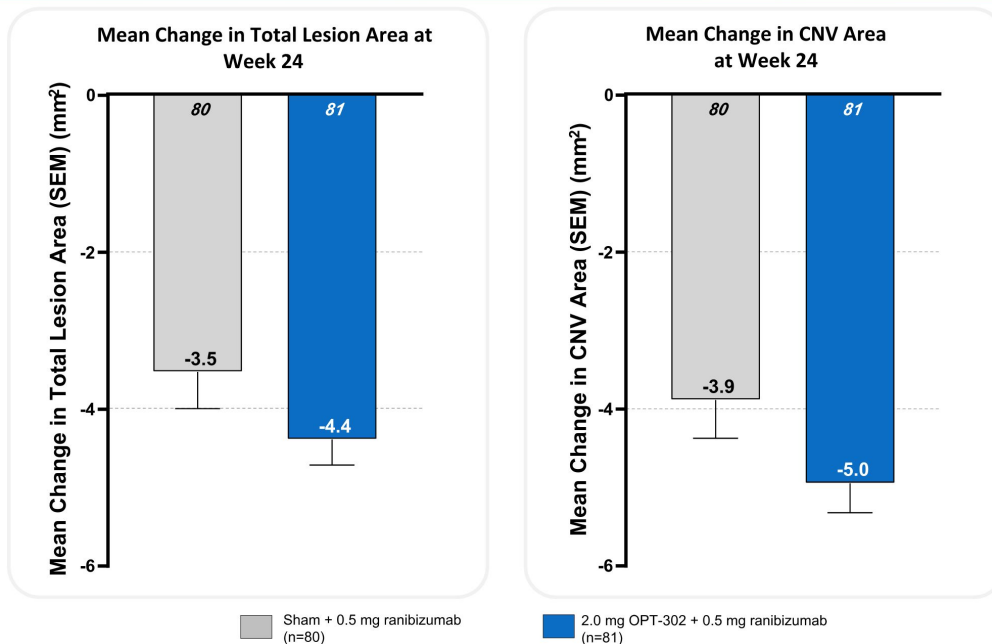
With Combination Therapy in Occult & Minimally Classic (RAP Absent) Patients



mITT; as observed; top of bar – statistic, bottom of bar – n.
CST: Central Subfield Thickness; SRF: Subretinal fluid; IR: Intra-retinal.

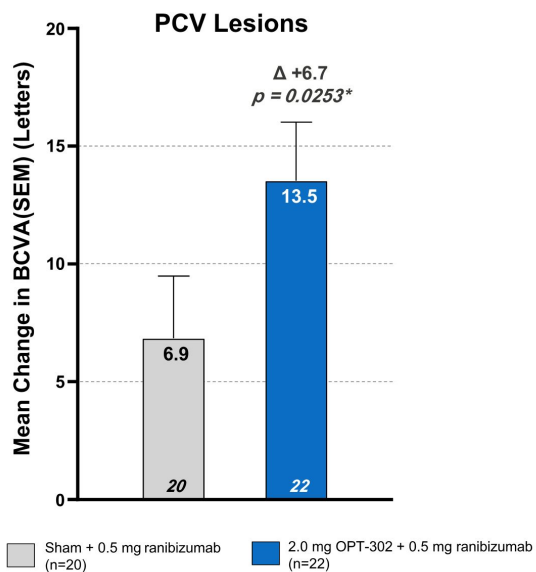
Greater CNV and Lesion Regression

With Combination Therapy in Occult & Minimally Classic (RAP Absent) Patients



mITT; as observed; top of bar – statistic, bottom of bar – n. CNV: Choroidal Neovascular.

Sozinibercept Further Demonstrated Superior Vision Gains in a Pre-Specified Subgroup of PCV Lesion Patients



*Unadjusted p-value

¹ Evaluated by color FP, FA and SD-OCT

Polypoidal Choroidal Vasculopathy (**PCV**) is a difficult-to-treat wet AMD subtype; it is often described as the **most prevalent form of wet AMD worldwide**

PCV is **highly prevalent in Asian populations** (up to ~60%), while ~8-13% prevalence in Caucasians

Phase 3 ShORe and COAST trials enrolled patients with PCV¹

Phase 2b Safety

Combination Therapy Well Tolerated and Comparable to Standard of Care

N Participants (%)	Sham + ranibizumab N=121	0.5 mg OPT-302 + ranibizumab N=120	2.0 mg OPT-302 + ranibizumab N=124
Treatment emergent AEs (TEAEs)	84 (69.4%)	87 (72.5%)	93 (75.0%)
Ocular AEs - Study Eye – related to study product(s) ¹	17 (14.0%)	17 (14.2%)	19 (15.3%)
Ocular AEs - Study Eye – Severe ²	1 (0.8%)	2 (1.7%)	1 (0.8%)
Serious AEs	10 (8.3%)	16 (13.3%)	7 (5.6%)
Ocular SAEs in Study Eye	0 (0.0%)	2 ³ (1.7%)	0 (0.0%)
Intraocular inflammation ⁴ – Study Eye	2 ^{5,6} (1.7%)	2 ³ (1.7%)	1 ³ (0.8%)
Participants with AEs leading to study IP discontinuation only	2 (1.7%)	3 (2.5%)	0 (0.0%)
Participants with AEs leading to study discontinuation	1 ⁷ (0.8%)	0 (0.0%)	0 (0.0%)
Any APTC event	0 (0.0%)	1 ⁸ (0.8%)	0 (0.0%)
Deaths	2 ⁹ (1.7%)	0 (0.0%)	0 (0.0%)

Safety population analysed according to medication received

¹ Assessed by investigator to be "possibly related", "probably related" or "definitely related" to administration of study drug(s); ² Assessed by Investigator to be National Institutes of Health (NIH) Common Terminology Criteria for Adverse Events (CTCAE) grade 3 or above, or, if CTCAE grade is unavailable, an AE assessed as "causing an inability to perform normal daily activities"; ³ SAE of endophthalmitis, with AEs of hypopyon and anterior chamber cell (n=1), SAE of vitritis (n=1); ⁴ AEs considered to be indicative of intraocular inflammation, defined prior to database lock as: Endophthalmitis, iritis, vitritis, iridocyclitis, uveitis, hypopyon, viral iritis, or anterior chamber inflammation; ⁵ Transient anterior chamber cell (trace 1-4 cells); ⁶ Not reported as a TEAE; ⁷ Squamous cell carcinoma of the lung diagnosed shortly after Baseline visit; ⁸ Non-fatal myocardial infarction; ⁹ Pneumonia (n=1), infective endocarditis (n=1)

Pooled Safety for Completed OPT-302 Trials

Combination Therapy Well Tolerated and Comparable to Standard of Care Monotherapy

N Participants (%)	OPT-302 Any dose* N=399 (N=1,842 injections)	OPT-302 2.0 mg N=263 (N=1,121 injections)	Sham + anti-VEGF-A control N=170 (N=854 injections)
Ocular TEAEs - Study Eye – related to study product(s)	41 (10.2%)	22 (8.4%)	20 (11.8%)
Ocular TEAEs - Study Eye – Severe	4 (1.0%)	2 (0.8%)	2 (1.2%)
Intraocular inflammation – Study Eye	7 ^{1,2,3} (1.8%)	3 ¹ (1.1%)	3 ¹ (1.8%)
Participants with AEs leading to treatment discontinuation	4 ^{2,4-6} (1.0%)	1 ⁴ (0.4%)	2 ^{7,8} (1.2%)
Any APTC event	4 ^{4,5,9,10} (1.0%)	3 ^{5,9,10} (1.1%)	2 ^{11,12} (1.2%)
Deaths	2 ^{10,13} (0.5%)	2 ^{10,13} (0.8%)	2 ^{14,15} (1.2%)

¹Transient anterior chamber cell (trace 1-4 cells); ²SAE of endophthalmitis, with AE's of hypopyon and anterior chamber cell (n=1; 0.5 mg); ³SAE of vitritis (n=1; 0.5 mg); ⁴Non-fatal myocardial infarction; ⁵Cerebrovascular accident; ⁶Enteritis; ⁷Abdominal pain; ⁸Increased IOP; ⁹Non-fatal angina pectoris; ¹⁰Fatal congestive heart failure/myocardial infarction; ¹¹Non-fatal arterial embolism; ¹²Embolic stroke; ¹³Metastatic ovarian cancer; ¹⁴Pneumonia; ¹⁵infective endocarditis. * Any dose (OPT-302 0.3 mg, 1 mg or 2 mg)

Very Low Intraocular Inflammation Observed in Combination Therapy Study Eye Across Completed OPT-302 Trials

N Participants (%)	OPT-302 Any dose* N=399 (N=1,842 injections)	OPT-302 2.0 mg N=263 (N=1,121 injections)	Sham + anti-VEGF-A control N=170 (N=854 injections)
Intraocular Inflammation¹	7 (1.8%)	3 (1.1%)	3 (1.8%)
OPT-302-1001 (Phase 1/2a wet AMD)	2	0	0
Uveitis with anterior chamber cell 1+	1	0	0
Uveitis with anterior chamber cell 2+	1	0	0
OPT-302-1002 (Phase 2b wet AMD)	3	1	2 ^a
Endophthalmitis with anterior chamber 1+ and hypopyon	1	0	0
Vitritis	1	0	0
Anterior chamber cell, trace	1	1	2 ^a
OPT-302-1003 (Phase 1b/2a DME)	2 ^b	2 ^b	1
Iritis with keratic precipitates and anterior chamber cell 2+	1	1	0
Iritis with anterior chamber cell 2+	0	0	1
Anterior chamber cell 4+, associated with cataract extraction/ intraocular lens implant and hyphema	1 ^b	1 ^b	0

Safety population

¹AEs observations considered to be indicative of intraocular inflammation, defined prior to database lock

^aObserved during ophthalmic examination, but not reported as TEAEs

^bConsidered associated with lens extraction and not reported as TEAEs

Sozinibercept Is the Only Drug in Development Having Demonstrated Superiority in Combination with Anti-VEGF-A Therapy for Wet AMD

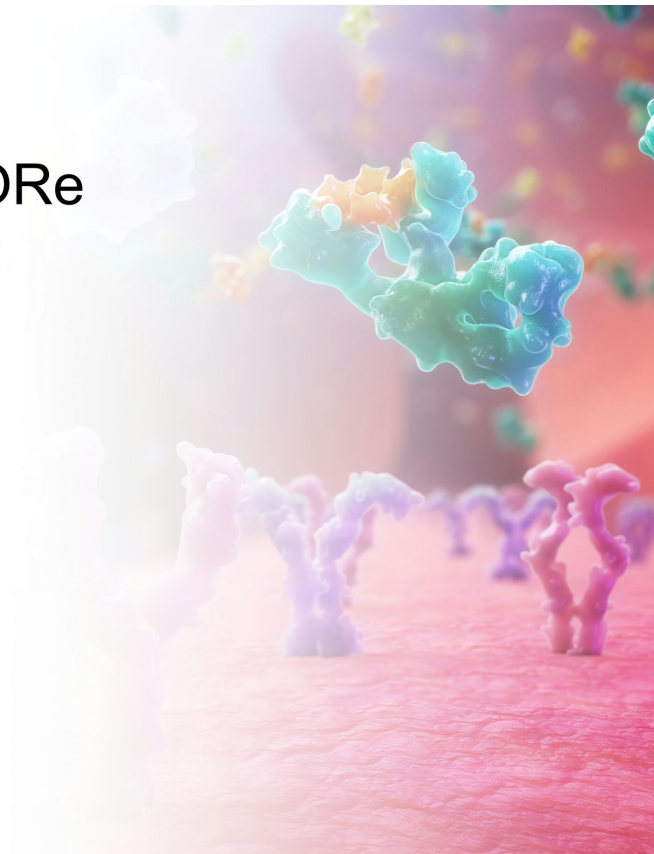
1 Superior vision gains observed for combination therapy over Lucentis® alone

2 Consistent anatomical improvements further validate novel MOA

3 Safety profile similar to standard of care observed in over 1,800 injections

Sozinibercept COAST and ShORe Phase 3 Wet AMD Trial Design

Veeral S. Sheth, MD, MBA, FASRS, FACS



Phase 3 Clinical Program Is Informed by Phase 2b Results and Optimized for Success



Hierarchical primary analysis first conducted in the high-responding occult and minimally classic population (RAP absent), followed by total patient population



Two robust pivotal trials studying sozinibercept in combination with Eylea® and Lucentis® in treatment naïve patients with wet AMD



Phase 3 designed to support broad label for use in combination with any VEGF-A inhibitor for all wet AMD patients (treatment naïve and prior treated)

Phase 3 Wet AMD Trials COAST and ShORe Are Well Advanced

Complete Enrollment Anticipated in Q2 CY2024 | Topline Data Mid-CY2025

Design

- Multi-center, double-masked, randomized (1:1:1), sham control
- Treatment naïve wet AMD patients

Sample Size

- ~990 per trial
- ~330 patients per arm: 2 mg sozinibercept q4w & q8w, or sham control

Comparators

- 2 mg Eylea® q8w (COAST) & 0.5 mg Lucentis® q4w (ShORe)

Regulatory Quality

- ~90% power, 5% type I error rate

Phase 3 Primary and Secondary Endpoints

Primary Efficacy Endpoint at Week 52 to Support BLA Submission

Primary Endpoint

Mean change from baseline in BCVA at week 52

Key Secondary Endpoints (Baseline to Week 52)

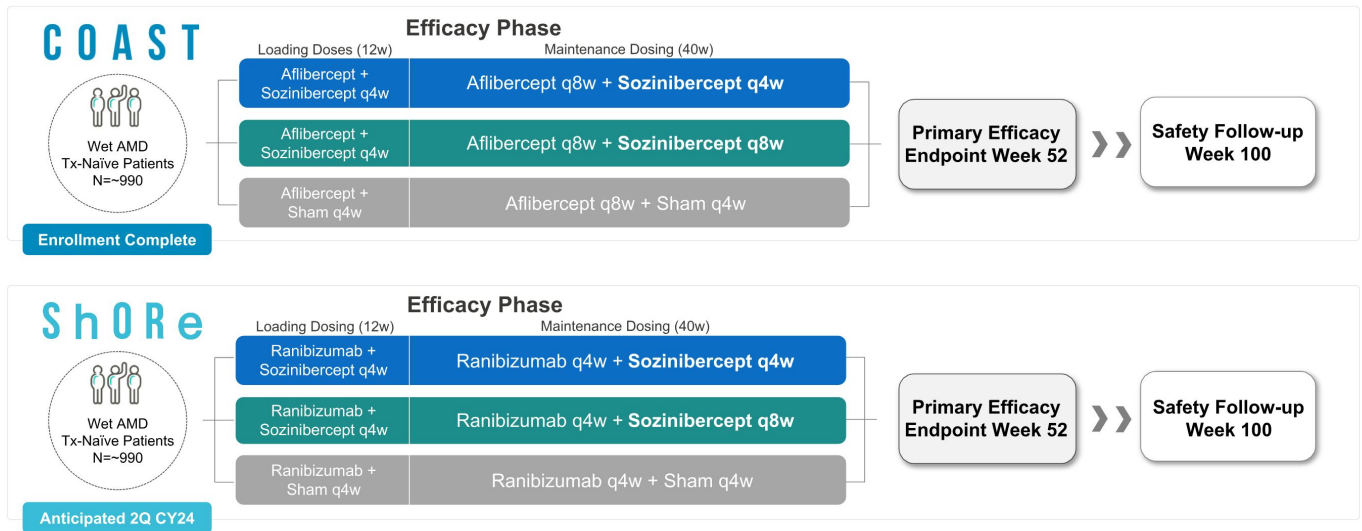
Proportion of participants gaining ≥ 15 letters

Proportion of participants gaining ≥ 10 letters

Change in choroidal neovascularization area

Proportion of participants with absence of both sub-retinal fluid and intra-retinal cysts

Phase 3 Trial Design Supports Potential Broad Label for Use With Any Anti-VEGF-A Therapy



Standard of care administered according to approved dosing schedule: **aflibercept** (2.0 mg IVT q8w after 3 loading doses) and **ranibizumab** (0.5 mg IVT q4w after 3 loading doses). Sozinibercept dosed at 2.0 mg. Note that Sham administered at visits when sozinibercept is not administered. Maintenance dosing continued through end of the safety follow-up.

Sozinibercept Has the Potential to Transform Wet AMD Clinical Practice

1

Design supports potential broad label for combination with any anti-VEGF-A therapy and provides data on sozinibercept durability

2

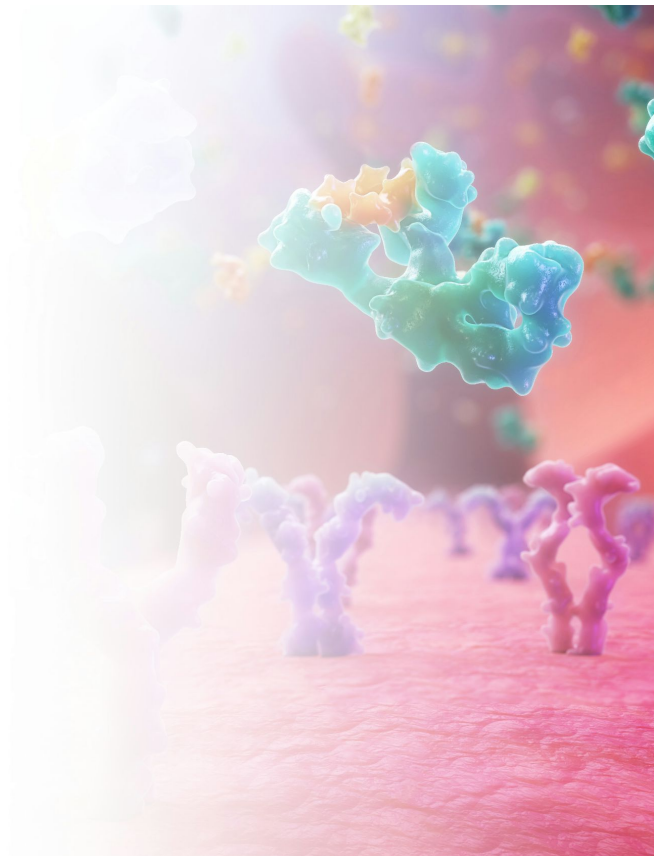
Well powered, robust pivotal trials optimized for success with primary analysis on high responding patient population

3

Only late-stage therapy targeting superior visual outcomes with topline data Mid-CY2025

Strategic Outlook

Fred Guerard, PharmD



Advancing Bold Therapeutic Innovations to Transform Patient Outcomes with Superior Vision Gains

We are dedicated to advancing sozinibercept to **improve patients’ visual outcomes**

Next Steps	Clinical Milestones	<ul style="list-style-type: none">• Complete enrollment in 2nd Phase 3 trial (ShORe) in Q2 CY2024• Mid-CY2025 topline data from both pivotal Phase 3 studies
	Manufacturing Scale-up	<ul style="list-style-type: none">• Production of validation batches supportive of BLA filing and launch
	Regulatory Preparations	<ul style="list-style-type: none">• FDA Fast Track designation allows rolling submission of completed BLA modules
	Commercial Readiness	<ul style="list-style-type: none">• Strengthen medical expert engagement and develop market access strategy• Complete development of product launch plan

Sozinibercept Is Not Competing with Any Approved Drug

Differentiated Combination Approach Targeting Better Visual Outcomes Drives Commercial Value

1

Addressing unmet medical need of improved efficacy in large wet AMD patient population in a potential ~\$14B market

2

First and only therapy to have demonstrated superior visual outcomes over anti-VEGF-A therapy with a novel and highly differentiated MOA

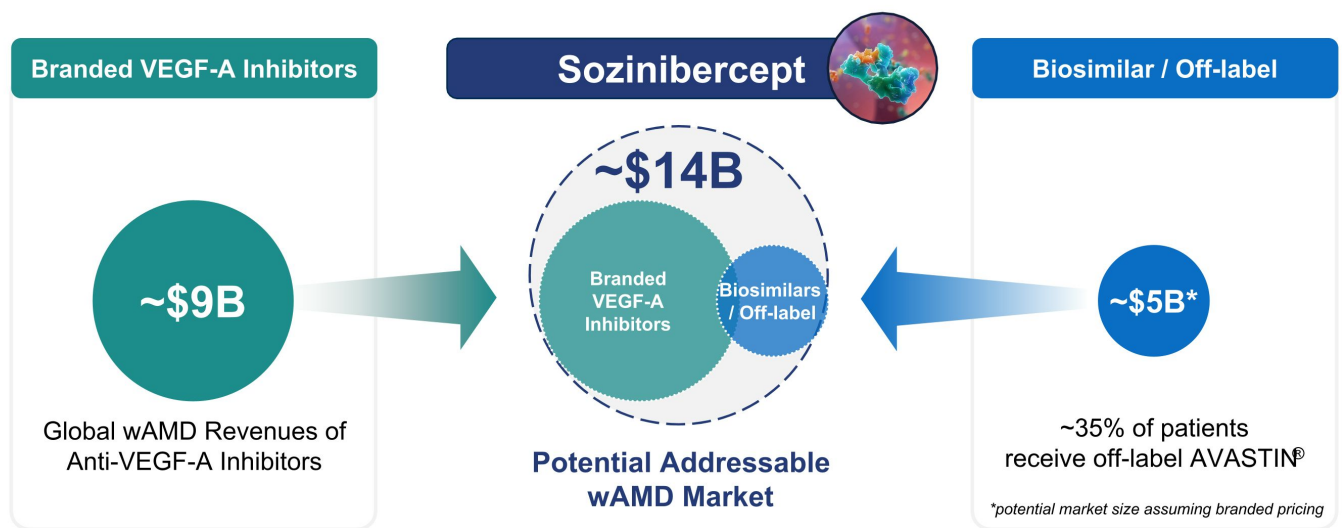
3

Only asset in near or long-term pipeline with potential to disrupt treatment paradigm on basis of efficacy in wet AMD

4

Concentrated prescriptions in U.S. enables potential self-commercialization opportunity with lean and targeted organization

Sozinibercept Builds on Wet AMD Market as a Potential Combination Therapy with Any VEGF-A Inhibitor



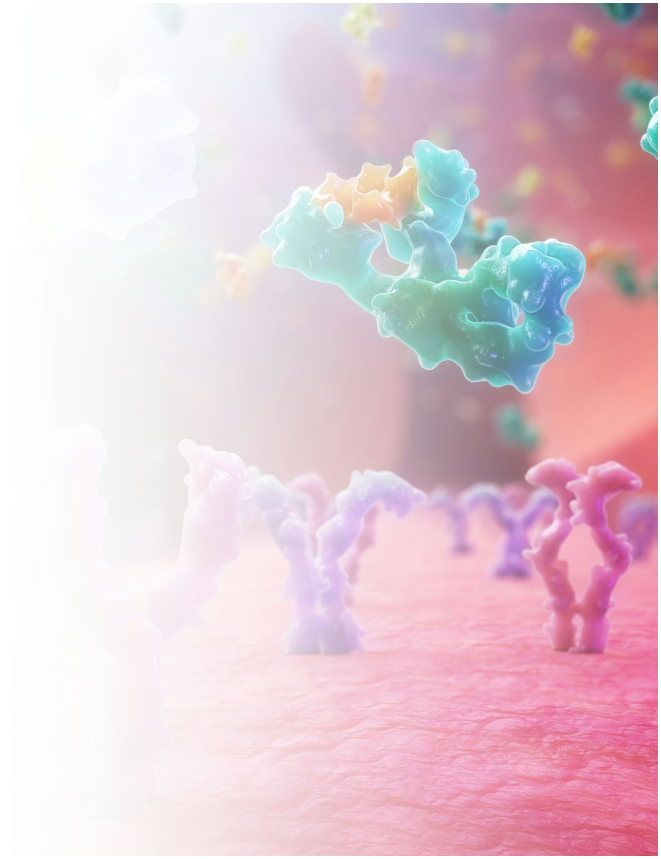
Long-term Value Opportunities for Sozinibercept

Main Patent Family Extends through 2034, with Expansion Opportunities Beyond 2034*

PROGRAM	DEVELOPMENT PHASE				ANTICIPATED MILESTONES
	RESEARCH / PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	
Wet Age-Related Macular Degeneration (Wet AMD)					
Sozinibercept For use in combination with anti-VEGF-A therapies	<div></div>	<div></div>	<div></div>	<div></div>	Complete enrollment of pivotal trials: Q2 CY 2024 Topline data: mid-CY 2025
Diabetic Macular Edema (DME)					
Sozinibercept For use in combination with anti-VEGF-A therapies	<div></div>	<div></div>	<div></div>		Phase 3 ready
Co-formulation (Sozinibercept + VEGF-A Inhibitor)					
Sozinibercept Co-formulation with VEGF-A Inhibitor	<div></div>				Feasibility underway

*Potential for Patent Term Extensions & Data and Market Exclusivity (12 Years for Biologic)

Question & Answer Session



Featured Speakers

Opthea Management Joined by Clinical and Scientific Thought Leaders



Fred Guerard
PharmD, MS

Chief Executive Officer

- ✓ **Graybug Vision**, CEO
- ✓ **Novartis**, Worldwide Head Ophthalmology
- ✓ **Alcon**, Global Franchise Head Pharmaceuticals
- ✓ Led extension of Novartis ophthalmology pipelines: Encore Vision, Lubricin®, Luxturna®, Xiirdra®



Arshad M. Khanani
MD, MA, FASRS

Chief Medical Advisor

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- ✓ **University of Nevada, Reno School of Medicine**, Clinical Professor



Charles C. Wykoff
MD, PhD

Chief Investigator for COAST
Clinical Advisory Board Member

- ✓ **Retina Consultants of Texas**, Director of Research
- ✓ **Retina Consultants of America**, Chairman of Research
- ✓ **Blanton Eye Institute, Houston Methodist Hospital**, Professor of Clinical Ophthalmology and Deputy Chair of Ophthalmology



Veeral S. Sheth
MD, MBA, FASRS, FACS

Principal Investigator for ShORe

- ✓ **University Retina and Macula Associates**, Partner
- ✓ **University of Illinois at Chicago**, Clinical Assistant Professor

Thank you!

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