

Ocular Therapeutix Corporate Overview

43rd Annual J.P. Morgan Healthcare Conference | January 2025

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Any statements in this presentation about future expectations, plans, and prospects for the Company, including the development and regulatory status of the Company's product candidates, including the design of, and the timing of the enrollment of the Company's SOL-1 and SOL-R Phase 3 clinical trials of AXPAXLI™ (also called OTX-TKI) for the treatment of wet AMD; the Company's plans to advance the development of AXPAXLI and its other product candidates, including in additional indications such as NPDR; the size of potential markets for the Company's product candidates; the potential utility or adoption, if approved, of any of the Company's product candidates; the sufficiency of the Company's cash resources; and other statements containing the words "anticipate", "believe", "estimate", "expect", "intend", "designed", "goal", "may", "might", "plan", "predict", "project", "target", "potential", "will", "would", "could", "should", "continue", and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors. Such forward-looking statements involve substantial risks and uncertainties that could cause the Company's preclinical and clinical development programs, future results, performance, or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the timing and costs involved in commercializing DEXTENZA® or any product or product candidate that receives regulatory approval; the ability to retain regulatory approval of DEXTENZA or any product or product candidate that receives regulatory approval; the initiation, design, timing, conduct, and outcomes of clinical trials, including the SOL-1 trial, the SOL-R trial, and the Company's other ongoing clinical trials; the risk that the U.S. Food and Drug Administration, or FDA, will not agree with the Company's interpretation of the written agreement under the SPA for the SOL-1 trial and the FDA's other written guidance for the SOL clinical program; the risk that even though the FDA has agreed with the overall design of the SOL clinical program, the FDA may not agree that protocol and statistical analysis plan or the data generated by the SOL clinical program supports potential marketing approval, even if both SOL-1 and SOL-R are successful and meet their primary endpoints; the risk that the Company and the FDA may not agree on the registrational pathway for AXPAXLI for NPDR or any other indication; uncertainty as to whether the data from earlier clinical trials will be predictive of the data of later clinical trials, particularly later clinical trials that have a different design or utilize a different formulation than the earlier trials, whether preliminary or interim data from a clinical trial will be predictive of final data from such trial, or whether data from a clinical trial assessing a product candidate for one indication will be predictive of results in other indications; the timing of availability of data from clinical trials and expectations regarding the timing and sufficiency of regulatory submissions and approvals; the Company's scientific approach and general development progress; the availability or commercial potential of the Company's product candidates; uncertainties inherent in estimating the Company's cash runway, future expenses, and other financial results, including its ability to fund future operations, including clinical trials; the Company's existing indebtedness and the ability of the Company's creditors to accelerate the maturity of such indebtedness upon the occurrence of certain events of default; the Company's ability to enter into strategic alliances or generate additional funding on a timely basis, on favorable terms, or at all; and other factors discussed in the "Risk Factors" section contained in the Company's quarterly and annual reports on file with the Securities and Exchange Commission. In addition, the forward-looking statements included in this presentation represent the Company's views as of the date of this presentation. The Company anticipates that subsequent events and developments will cause the Company's views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so, whether as a result of new information, future events or otherwise, except as required by law. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this presentation.

This presentation discusses investigational product candidates in development. Their efficacy and safety profiles have not been established, and they have not been approved for marketing by the FDA.

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Retina Experience Redefined

Our retina experience is redefining your retina experience



Redefining treatment



Redefining development



Redefining outcomes

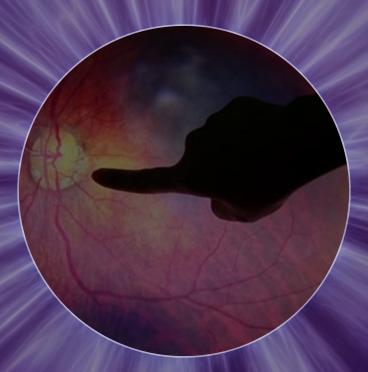


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Wet AMD: Significant Unmet Need

1.6M

people with wet AMD in U.S.¹



Poor long-term visual outcomes

INJECTION BURDEN

90% of patients require injection every 1-3 months²

up to

12 injections/yr for patients

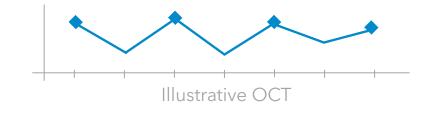
up to

12 PTO days/yr for caregivers

40% discontinue by one year³

FIBROSIS & ATROPHY

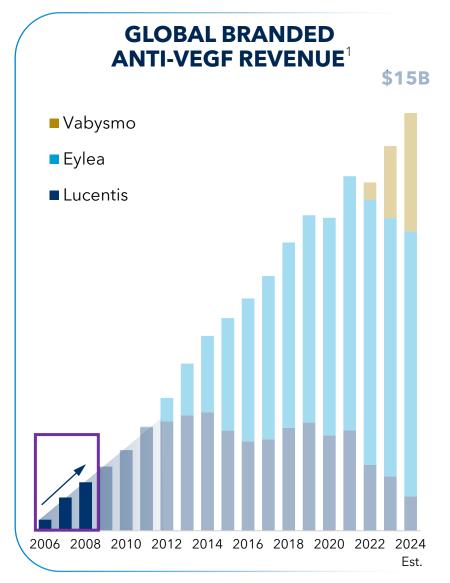
Pulsatile dosing leads to fibrosis and atrophy^{4,5}





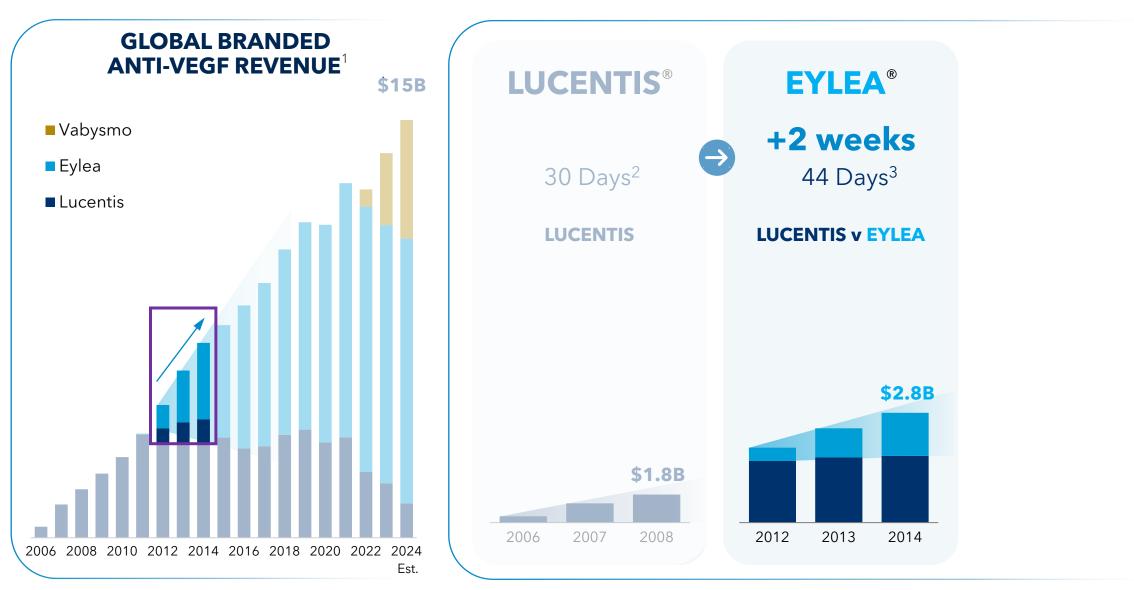




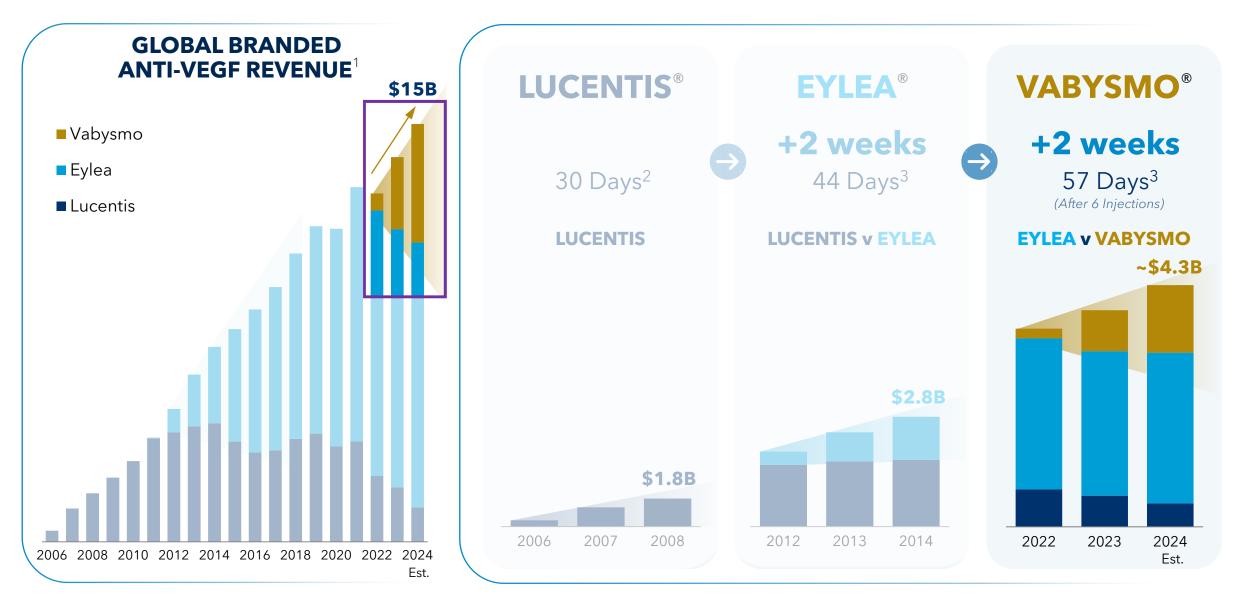














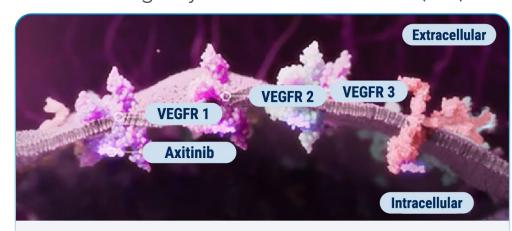




AXPAXLI is Designed to Redefine the Market

AXITINIB

Multi-target Tyrosine Kinase Inhibitor (TKI)

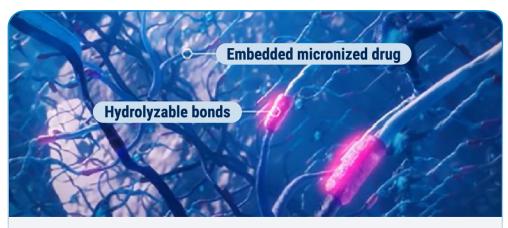


Highly selective pan VEGF inhibitor¹
Most potent TKI²



ELUTYXTM **TECHNOLOGY**

Bioresorbable, Sustained Drug Delivery



Proprietary hydrogel Versatile, biocompatible, tunable platform³

AXPAXLI

Single injection, single hydrogel³

Continuous and consistent delivery up to 12 months³

Complete and predictable bioresorption³

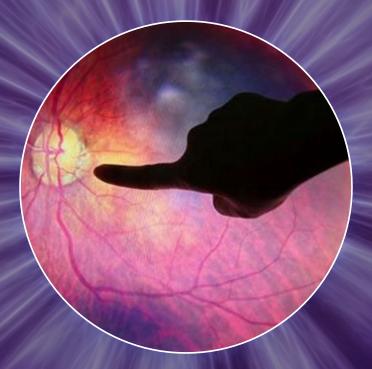


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Redefining treatment



Redefining development



Redefining outcomes



AXPAXLI Wet AMD Clinical Program Summary

Proof of Concept

PHASE 1

Demonstrated Activity and Durability

U.S.¹

100% rescue free per protocol at 6 months; 80% at 10 months

Australia²

Monotherapy activity in treatment-naive wAMD

Phase 3 Registrational Trials

SOL-1

Designed to Show Superiority

Single injection AXPAXLI

SOL-R

Designed to Show Non-Inferiority to SoC

Repeat dosing

Complementary studies designed to show durability, repeatability, and flexibility



Redefining Development

De-risking Registrational Program



SOL-1 + SOL-R

De-risking Complementary Trials

- Compelling Phase 1 data
- Oe-risking Phase 3 designs
- De-risking regulatory path



SOL-1 Design: AXPAXLI First Registration Study in Wet AMD



Superiority Study Comparing a Single AXPAXLI Dose to a Single Aflibercept (2 mg) Dose

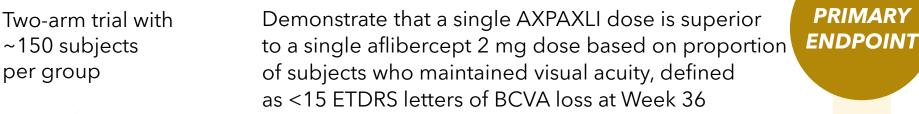
DESIGN

~150 subjects per group

TRIAL SCHEMATIC

enter SOL-R

PRIMARY ENDPOINT (36 WEEKS)



Week R 1:1 **52** 53-104 36 0 Monthly Study Visits Post-**AXPAXLI** week 52 safety Monthly Study Visits follow-up **Aflibercept** (2mg) Randomization failures Loading failures



enter SOI -R

SOL-1 Design: De-risking



DESIGN

Two-arm trial with ~150 subjects per group

PRIMARY ENDPOINT (36 WEEKS)

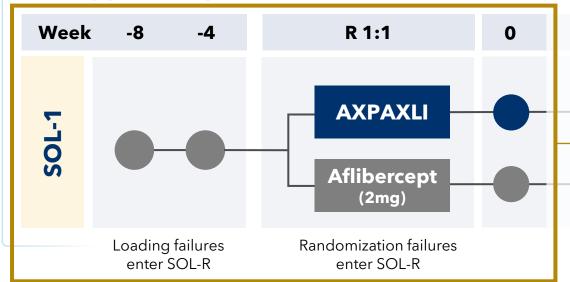
Demonstrate that a single AXPA to a single aflibercept 2 mg bas of subjects who maintained visuas <15 ETDRS letters of BCVA letters

SOL-1

Superiority Trial

- Randomizing strong anti-VEGF responders
- Designed to establish AXPAXLI durability
- Designed to enable superiority claim on label
- FDA alignment through SPA

- TRIAL SCHEMATIC





Redefining Development

De-risking Registrational Program



SOL-1 + SOL-R

De-risking Complementary Trials

- Compelling Phase 1 data
- Oe-risking Phase 3 designs
- De-risking regulatory path



SOL-R Design: AXPAXLI Second Registration Study in Wet AMD



Non-Inferiority Study Comparing AXPAXLI Q6M to Aflibercept (2mg) Q8W

DESIGN

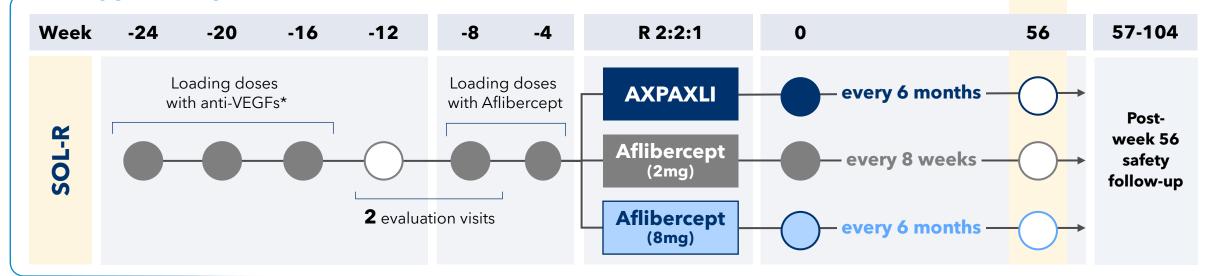
Three-arm trial with 825 total subjects randomized 2:2:1

PRIMARY ENDPOINT (56 WEEKS)

Demonstrate that AXPAXLI is non-inferior to fixed-dose aflibercept 2mg Q8W with respect to mean change in BCVA at Week 56 from baseline in wet AMD patients



TRIAL SCHEMATIC





SOL-R Design: De-risking



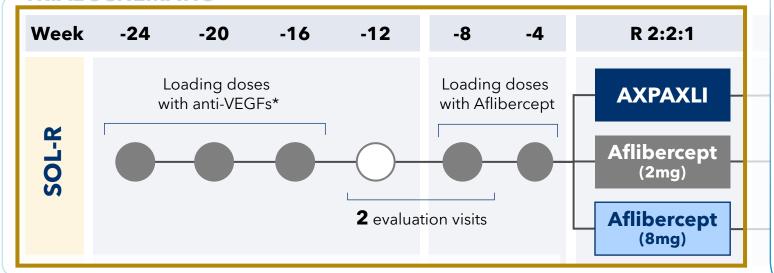
DESIGN

Three-arm trial with 825 total subjects randomized 2:2:1

PRIMARY ENDPOINT (56 WEEKS)

Demonstrate that AXPAXLI is non-inferior to fixedaflibercept 2mg Q8W with respect to mean chang at Week 56 from baseline in wet AMD patients

TRIAL SCHEMATIC



SOL-R

Non-Inferiority Trial

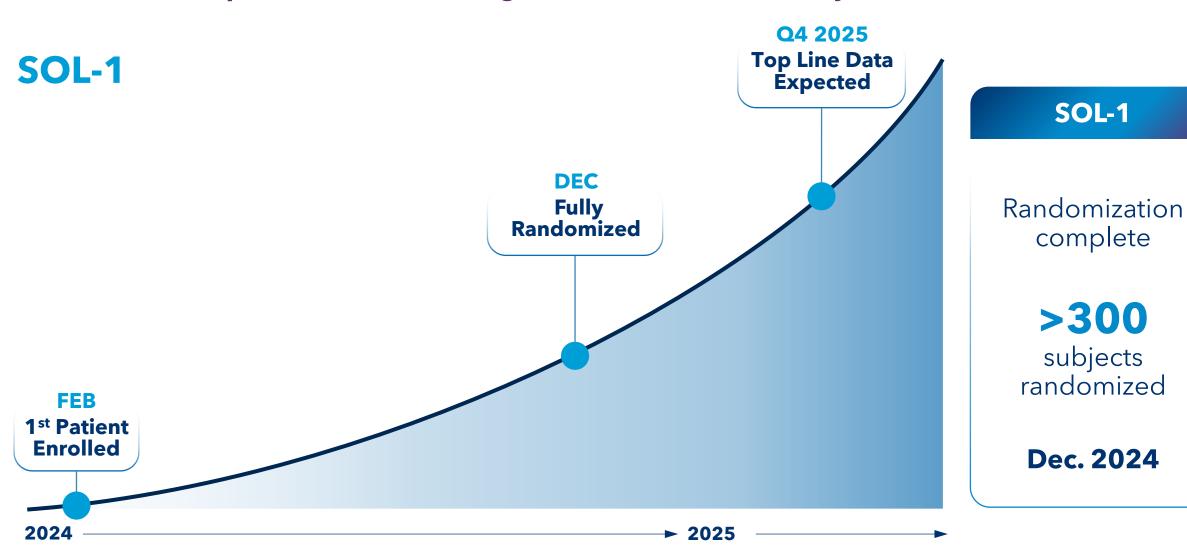
- V
- Randomizing reliable anti-VEGF responders
- Designed to enable Q6M dosing on label
- Provides commercially relevant data
- FDA alignment with Type C written response



Clinical Execution Exceeds Expectations



Retina Leadership Drives AXPAXLI Program for Wet AMD and Beyond

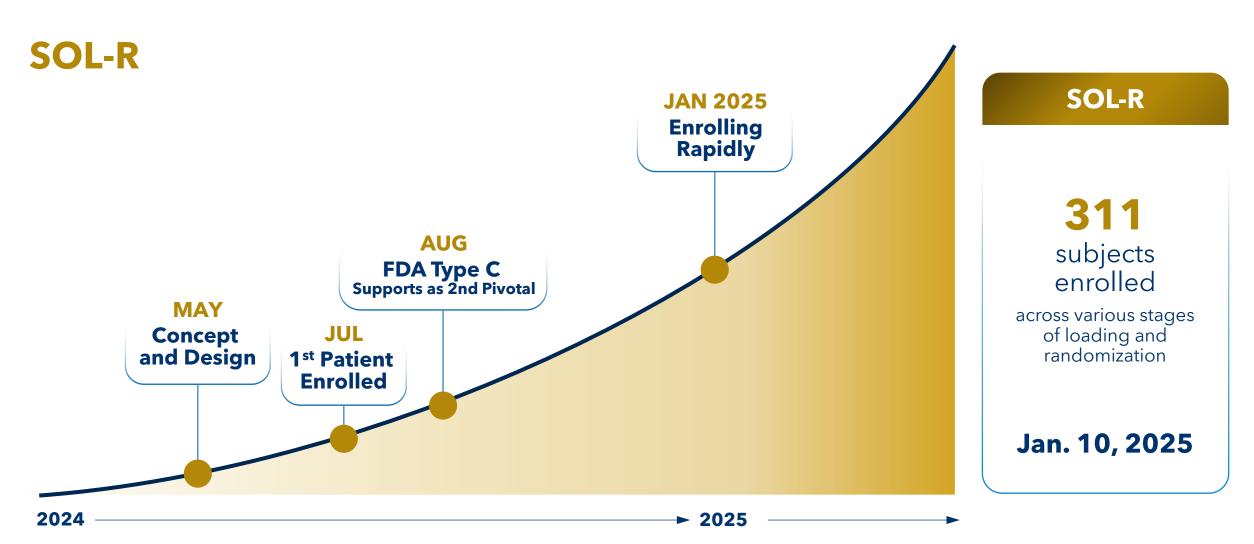




Clinical Execution Exceeds Expectations



Retina Leadership Drives AXPAXLI Program for Wet AMD and Beyond

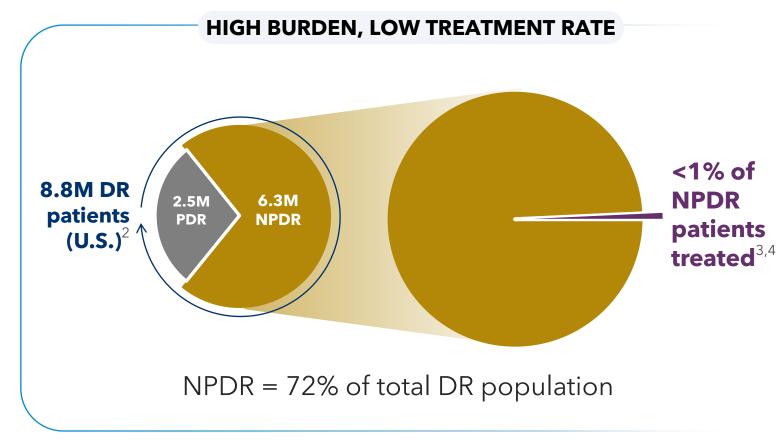




Diabetic Retinopathy (DR): Large and Unrealized Market Opportunity



DR is the leading cause of blindness in the working-age population¹





HELIOS: Phase 1 Study of AXPAXLI in NPDR



DESIGN

Multi-center, double-masked, randomized, parallel group study of AXPAXLI in modsevere to severe NPDR without CI-DME

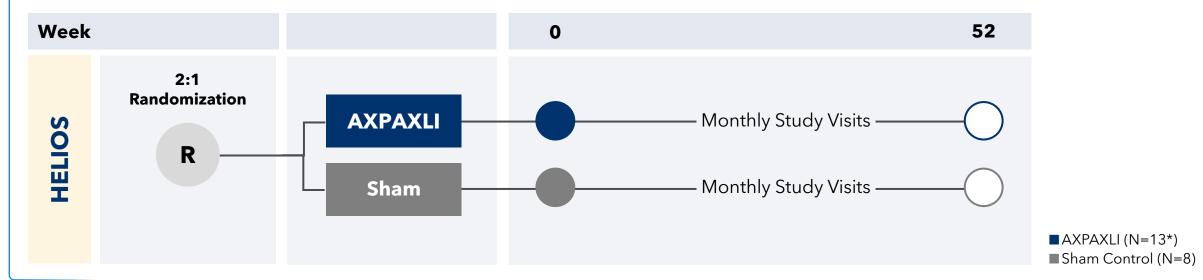
PRIMARY ENDPOINT

Safety and tolerability of AXPAXLI

SECONDARY ENDPOINT

DRSS changes, rescue therapy, BCVA / CSFT, vision threatening complications (VTCs)

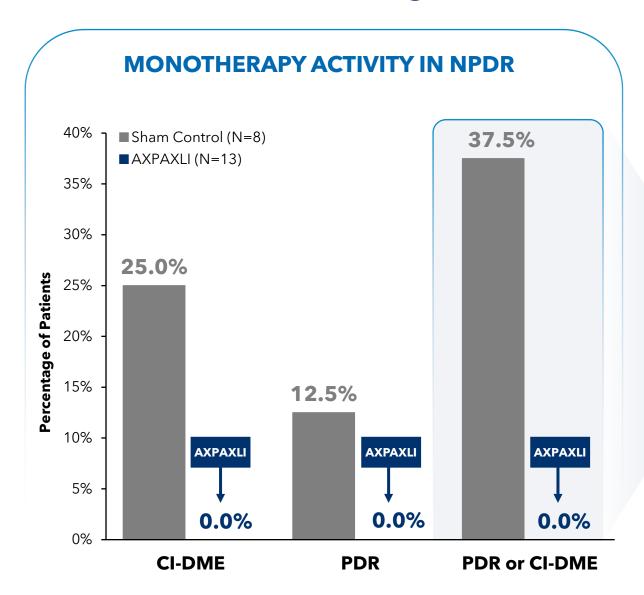
TRIAL SCHEMATIC





Phase 1: No Disease Progression with AXPAXLI at Week 48



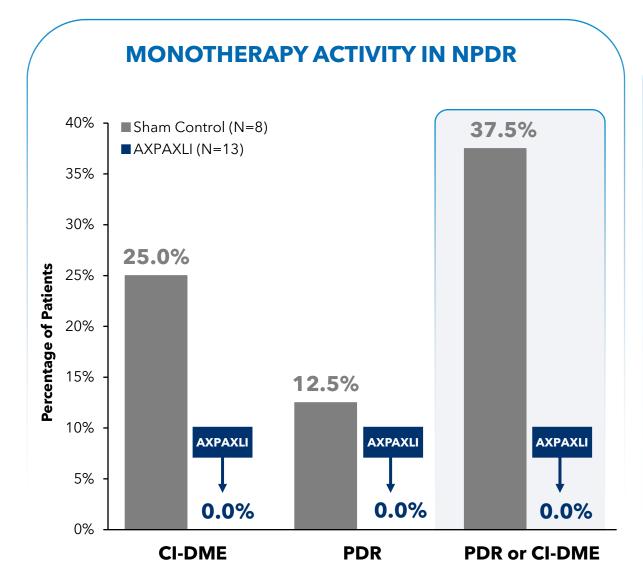


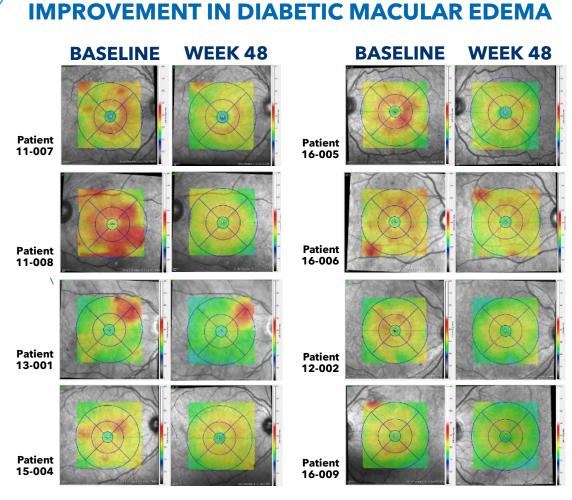
0% in the AXPAXLI arm developed PDR or CI-DME at Week 48 compared to 37.5% in the sham arm



Phase 1: No Disease Progression with AXPAXLI at Week 48









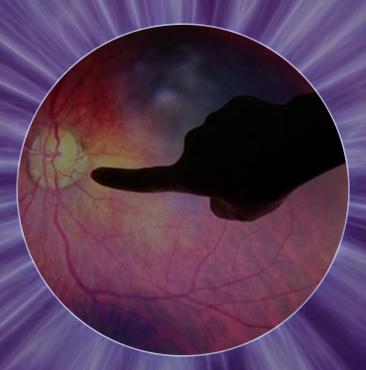
AXPAXLI-Treated Patients with non-CI-DME

Retina Experience Redefined

Our retina experience is redefining your retina experience



Redefining treatment



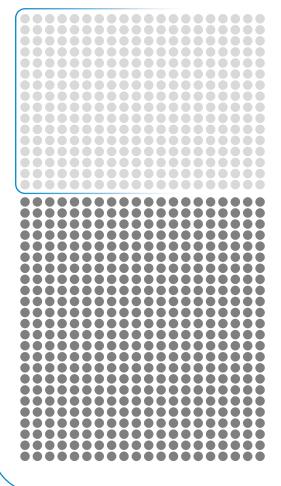
Redefining development



Redefining **outcomes**



40% discontinue by one year¹









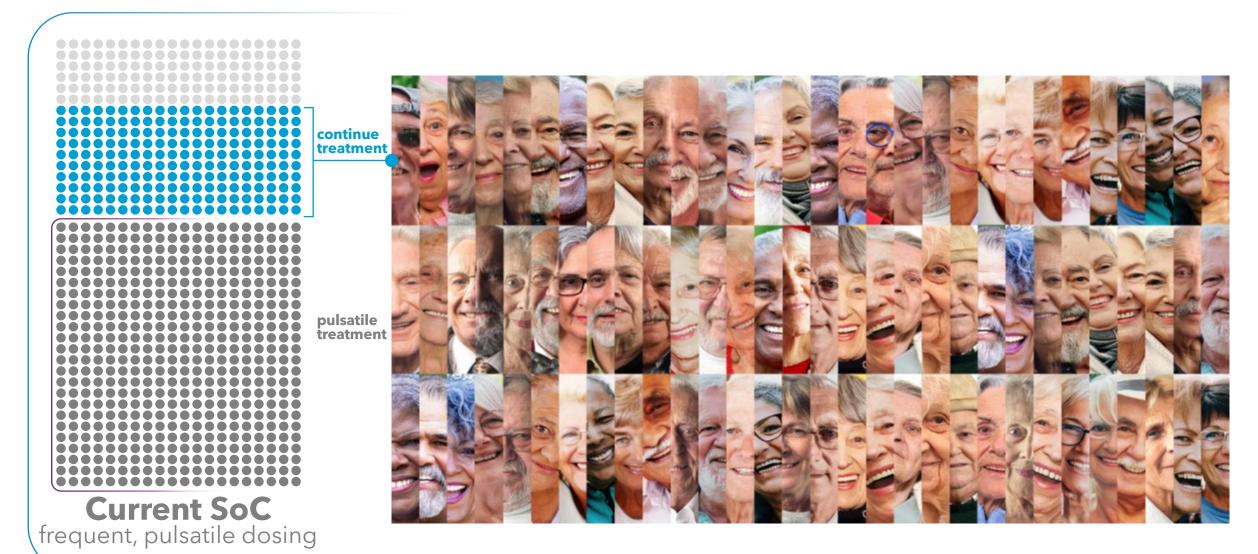
If 25% discontinued treatment >150K additional patients could avoid vision loss in the U.S. alone continue treatment



If 15% discontinued treatment >250K additional patients could avoid vision loss in the U.S. alone treatment

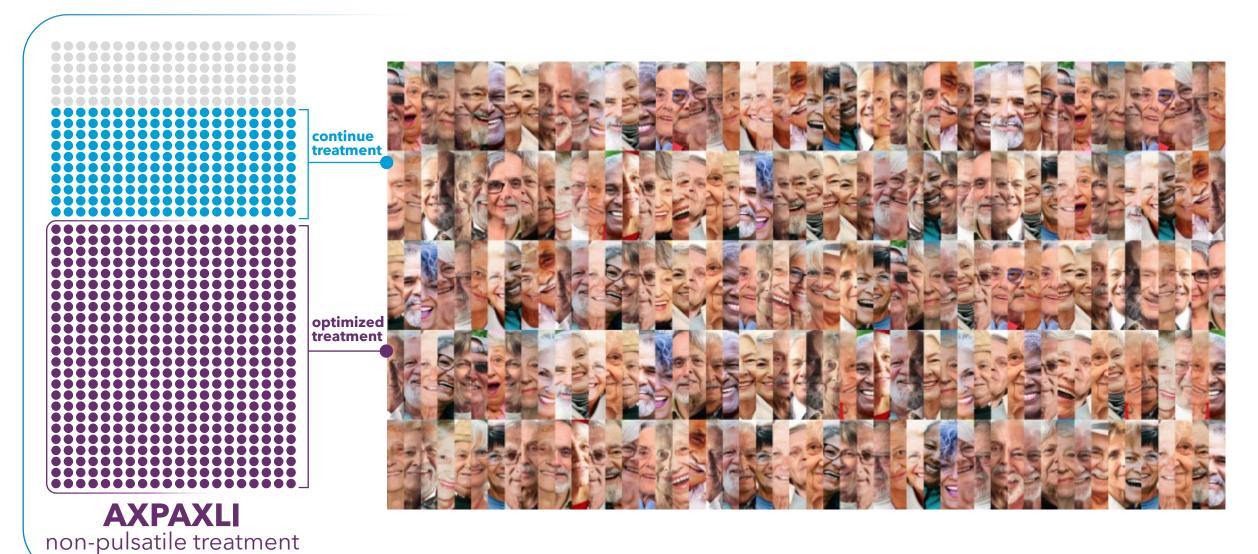


Redefining Outcomes in Wet AMD: Addressing Pulsatile Dosing





Redefining Outcomes in Wet AMD: Addressing Pulsatile Dosing





AXPAXLI Estimated U.S. Market Potential: 9.2M Patients¹

Registrational Trials in Planning

Mod-Severe NPDR: 2.7M*

Future Opportunities



RVO: 1.4M



PDR: 1.7M^{*}



DME: 1.7M





wAMD: 1.65M

Over half (52%) of anti-VEGF injections today are for wet AMD²

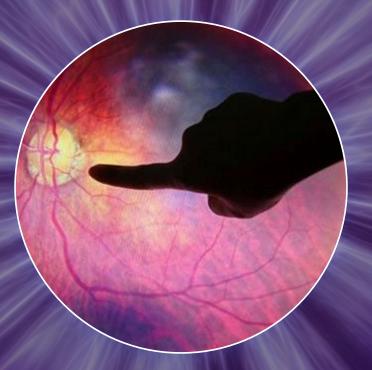


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Our retina experience is redefining your retina experience



Redefining treatment



Redefining development



Redefining outcomes



Redefining Treatment: AXPAXLI

Potential for up to 12-month dosing across retinal diseases

Proven MoA / Proven Delivery

ELUTYXTM **AXITINIB TECHNOLOGY**

Multi-targeted Highly selective Most potent TKI Bioresorbable Tunable Hydrogel

Compelling Early Results



100% rescue free per protocol at 6 months¹

80% rescue free per protocol at 10 months¹

Monotherapy activity in treatment-naive wAMD²



NPDR

0% vision threatening complications at one year³

Improvement in DME³



Redefining Development: Risk-Off Approach to Registrational Program



Complementary trials with measures taken to de-risk outcomes

SOL-1

Superiority Trial

- Randomizing strong anti-VEGF responders
- Designed to establish AXPAXLI durability
- Designed to enable superiority claim on label
- FDA alignment through SPA

SOL-R

Non-Inferiority Trial

- Randomizing reliable anti-VEGF responders
- Designed to enable Q6M dosing on label
- Provides commercially relevant data
- FDA alignment with Type C written response



Redefining the Market: AXPAXLI Designed with Ease of Adoption In Mind



Our retina experience tells us...

To succeed in the retinal vascular disease market, new products **MUST** meet three key criteria:



Safe





To drive utilization **QUICKLY**, new products should also be:



Flexible



With AXPAXLI, we intend to check all these boxes, and more.



Resourced for Success: Infrastructure, Capital, and Expertise to Execute





Strong cash position (\$427M at 9/30/24) expected to fund operations into 2028¹





World-class team played key roles in the approvals of Lucentis, Eylea, and Vabysmo



Retina Experience Redefined

Our retina experience is redefining your retina experience



Redefining **treatment**



Redefining development



Redefining outcomes





THANK YOU.

Investor Relations bslattery@ocutx.com