This presentation contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements concerning the success and timing of planned regulatory filings and approvals, pre-commercial activities, commercialization strategy and timelines, business strategy, product labels, cash runway, scalability, future clinical trials in presbyopia (P), dim light/night vision disturbance (DLD) and diabetic retinopathy (DR) / diabetic macular edema (DME), including the potential for Nyxol to be a “best in class” presbyopia drop, and timing of planned future clinical trials for APX3330, timing and occurrence of an End-of-Phase 2 meeting with the FDA, the potential of a Phase 3 registration path for APX3330, the success and timing of planned regulatory filings, business strategy, cash runway, scalability, the potential for APX3330 to be the first line of therapy for DR patients, and the potential market opportunity for the slowing of DR progression. These forward-looking statements are based upon the Company’s current expectations and involve assumptions that may never materialize or may prove to be incorrect. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of various risks and uncertainties, including, without limitation: (i) the success, costs, and timing of regulatory submissions and pre-clinical and clinical trials, including enrollment and data readouts; (ii) regulatory requirements or developments; (iii) changes to clinical trial designs and regulatory pathways; (iv) changes in capital resource requirements; (v) risks related to the inability of Ocuphire to obtain sufficient additional capital to continue to advance its product candidates and its preclinical programs; (vi) legislative, regulatory, political and economic developments, (vii) changes in market opportunities, (viii) risks that the partnership with Viatris may not facilitate the commercialization or market acceptance of Ocuphire's product candidates; (ix) the success and timing of commercialization of any of Ocuphire’s product candidates, including the scalability of Ocuphire’s product candidates and (x) the maintenance of Ocuphire’s intellectual property rights. The foregoing review of important factors that could cause actual events to differ from expectations should not be construed as exhaustive and should be read in conjunction with statements that are included herein and elsewhere, including the risk factors detailed in documents that have been and may be filed by the Company from time to time with the SEC. All forward-looking statements contained in this presentation speak only as of the date on which they were made. The Company undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

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Corporate Highlights

Two Lead Clinical-Stage Novel Drugs Addressing Multiple Large Ophthalmology Markets with Limited to No Competition & Extensive Patent Portfolio

- **APX3330 oral tablets**
  - Diabetic Retinopathy/Diabetic Macular Edema (DR/DME)

- **Nyxol eyedrops**
  - Reversal of Mydriasis (RM) – eye dilation
  - Presbyopia (P) – age-related blurry near vision
  - Dim Light or Night Vision Disturbances (DLD)

Global License Agreement with Viatris to Fund the Development and Commercialization of Nyxol for All Indications

APX3330 – Paradigm Changing Oral Tablet for 8 million DR patients; Moving into Phase 3

Nyxol for RM Indication PDUFA Date on September 28, 2023

Strong Financial Position to Advance APX 3330 and Nyxol Clinical Programs into 2025
# Ocophile Pipeline

<table>
<thead>
<tr>
<th>Product Candidate</th>
<th>Indication</th>
<th>Pre-clinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Regulatory Approval</th>
<th>Upcoming Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>APX3330 Oral Pill</td>
<td>Diabetic Retinopathy (DR)/Macular Edema (DME)</td>
<td></td>
<td></td>
<td></td>
<td>EOP2 Meeting</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EOP2 Mtg 2H 2023 to Advance to Phase 3</td>
</tr>
<tr>
<td>Nyxol® Eye Drop</td>
<td>Reversal of Mydriasis (RM)</td>
<td></td>
<td></td>
<td></td>
<td>Partnered with Viatris</td>
<td>PDUFA Sept 28, 2023</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>PDUFA Date Sep 28, 2023</td>
</tr>
<tr>
<td>Nyxol® Eye Drop</td>
<td>Presbyopia (P)</td>
<td></td>
<td></td>
<td></td>
<td>Ph3 Initiated</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>VEGA-2 Phase 3 Topline Data Late 2023</td>
</tr>
<tr>
<td>Nyxol® + 0.4% Low Dose Pilocarpine (LDP) Eye Drops</td>
<td>Dim Light or Night Vision Disturbances (DLD)</td>
<td></td>
<td></td>
<td></td>
<td>Partnered with Viatris</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>LYNX-2 2nd Phase 3 trial (n=150+)</td>
</tr>
</tbody>
</table>
Global Partnership with Viatris for Nyxol

Viatris Has Selected Nyxol to be a Key Element of its Global Eye Care Division

- Partner for Nyxol global commercialization
- Fully funded development and commercialization costs for all 3 Nyxol indications
- Allows Ocuphire to focus on APX3330 development
- Strengthens cash position into 2025
- $35 million upfront
- Funding for potentially all R&D and commercialization for all 3 indications globally
- $130 million in regulatory and sales milestones
  - First potential $10 million milestone payment on FDA approval in RM
- Tiered double digit royalties through 2040
APX3330
ORAL TABLET

Diabetic Retinopathy
Diabetic Macular Edema

DR
DME

"I could lose my hearing, I could lose talking but.... It's frightening to lose my eyesight."

Patient Diagnosed with DR
Diabetic Retinopathy At a Glance

Larger Disease to Manage with Growing Diabetes

There are **8M** adults in the U.S. with DR\(^1\)

DR/DME affects about **1 in 4** people with type 1 and type 2 diabetes

DR is the **leading cause of blindness** among working-age adults

**$13B** (2020) Global Intravitreal Injection Revenues

Majority of patients with mild to moderate DR are **not treated with anti-VEGF due to injection fear and burden**

---

1. American Diabetes Association; International Diabetes Federation; Healthline
DRSS Predicts Vision-Threatening Complications (PDR/DME)

Early screening and treatment for DR can reduce vision loss by up to 94%

Regardless of severity, all eyes worsen over time

Broad Opportunities to Treat Retinal Diseases with APX3330

34 Million Diabetics in US

10M Diabetic Retinopathy

Mild NPDR
6M

Moderate to Severe NPDR
(DRSS 43-53)
1M

PDR
(DRSS >60)
1M

~8M+
DR Patients

Addressable Market

US Market Opportunity

~$10B+
Market Revenues

APX3330

APX3330 / APX2009 / APX2014 (Local Delivery)

Inflammatory component is common across these retina indications as well & potentially addressable by MOA of Ref-1

DME 1M
Wet AMD 2M
Dry AMD 10M+
GA 1M

Potential First Oral Rx for Retina Diseases with Multi-Billion Revenue Opportunity

Source:
1. American Diabetes Association; International Diabetes Federation; Healthline; *Ocuphire internal analysis and assumptions;
3. Patient survey adapted from Lions International Foundation and International Diabetes Foundation-Europe; Meltzer 2000
4. Estimates are provided by the National Eye Institute, FactSheet, Global Data, and Research and Markets. Estimated values are rounded.
5. Estimated prevalence in the U.S.: DME- Diabetic Macular Edema; Age-related Macular Degeneration; Geographic Atrophy; Retinal Vein Occlusion

APX3330

Anti-VEGF treatments
# APX3330 Profile Overview

**Oral, First-In-Class Ref-1 Inhibitor with Favorable Human Safety Data from 12 Completed Trials**

---

**APX3330: Well-tolerated Oral Dose up to 600 mg/day | Twice Daily Dosing**

<table>
<thead>
<tr>
<th>MOA and Efficacy Signals in DR</th>
<th>Favorable Safety Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Novel MOA for Treating Retina</strong></td>
<td></td>
</tr>
<tr>
<td>↓ Inflammation</td>
<td></td>
</tr>
<tr>
<td>↓ Abnormal Angiogenesis</td>
<td></td>
</tr>
<tr>
<td><strong>Good Patient Compliance in ZETA-1 with Convenient Oral Dosing</strong></td>
<td></td>
</tr>
<tr>
<td><strong>APX3330 Demonstrated Slowing of Progression of Diabetic Retinopathy</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Over 350 Subjects (Healthy, Liver, Cancer, Diabetic) treated with Several Subjects Systemically Dosed ~1 Year and Others at 24-Wks</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Few Systemic AEs Across All Doses (120mg-720mg)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 5% Mild Skin Rash/Pruritis (reversible)</td>
<td></td>
</tr>
<tr>
<td>&lt; 5% Mild Diarrhea</td>
<td></td>
</tr>
<tr>
<td><strong>No Treatment-Related Organ Toxicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Minimal Ocular Side Effects</strong></td>
<td></td>
</tr>
</tbody>
</table>

---

Source: ZETA-1 Clinical Trial

*1 subject had vision blur thought to be related by investigator in ZETA-1
APX3330 Ref-1 Inhibition – Decreases Abnormal Angiogenesis

Ref-1 Involved in Multiple Key Pathways that Contribute to DR and DME

- Ref-1 (reduction-oxidation effector factor-1), a novel target for retinal diseases, is a transcription factor regulator of angiogenesis (VEGF) and inflammation (NFκB)

- Unique dual MOA decreases abnormal angiogenesis and inflammation

- Anti-VEGF injections do not target inflammation

- Previously developed by Eisai for hepatic inflammatory indications and by Apexian for solid tumors in 11 Phase 1 and 2 trials

- Extensively studied in over 20 in-vitro and animal studies with favorable efficacy and safety
ZETA-1 Phase 2 Design – APX 3330 in DR

Randomized, Double-masked, Placebo-controlled 24-week Trial (Similar to Eylea P3 DR trial)

Eligibility Criteria

- 25 US sites
- N = 90-100 participants with moderately severe to severe NPDR or mild PDR (DRSS 47, 53, 61)

Key inclusion:
- ≥ 18 years of age
- DRSS 47, 53, or 61
  - Noncentral DME permitted
- ETDRS BCVA ≥ 60 letters (20/63)

Key exclusion:
- OCT CST >320 µm²
- Center involved DME allowed in fellow eye
- Anti-VEGF within past 6 months
- HbA1c ≥ 12.0%

Endpoints

Primary:
- % subjects with ≥ 2 step improvement on DRSS (Diabetic Retinopathy Severity Scale) at week 24

Secondary:
- DRSS worsening ≥1, ≥2, ≥3*, ≥4*
- Progression to vision threatening complications
- Central subfield thickness (CST)
- Best Corrected Distance Visual Acuity (BCDVA)
- Rescue subjects
- DME fellow eye status
- Safety and tolerability

Exploratory: Labs/PK

*Potential Phase 3 approvable endpoints

103 subjects enrolled (FPFV Apr 2021 to LPLV Aug 2022)
Topline announced in early 2023

1. By Central Reading Center
2. Center-Involved DME in Fellow Eye is Acceptable
3. Includes Systemic or IVT VEGF

www.clinicaltrials.gov (NCT04692688); Eylea® is registered trademark of Regeneron
NPDR = non-proliferative diabetic retinopathy PDR = proliferative diabetic retinopathy
Change in DRSS is Regulatory Approval Endpoint for DR

Local Drugs (Intravitreal Injections)

Precedent approvable endpoint for locally-delivered drugs (Non-Systemic) in DR:

- $\geq 2$-step DRSS improvement in study eye
- Aflibercept (PANORAMA trial)
- Ranibizumab (RISE/RIDE/DRCR trials)

Systemic Drugs

Potential approvable endpoints for systemic drug in DR (to be confirmed at the EOP2 FDA meeting) include:

- $\geq 3$-step binocular DRSS improvement
- $\geq 3$-step binocular DRSS worsening

End-of-Phase 2 meeting with FDA to align on binocular $\geq 3$-step DRSS worsening (i.e., sum of right and left eye change in DRSS) as an acceptable primary endpoint for registration.

This endpoint is distinct from historical anti-VEGF IVT precedent due to different delivery.


Source: ZETA-1 Clinical trial; Eylea® is registered trademark of Regeneron; Lucentis® is registered trademark of Roche/Genentech
### ZETA-1: Baseline Characteristics - Well-Balanced Across Arms

#### DRSS Scores

<table>
<thead>
<tr>
<th>DRSS Score – Study Eye</th>
<th>APX3330 n=51</th>
<th>Placebo n=52</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>22 (43%)</td>
<td>18 (35%)</td>
</tr>
<tr>
<td>(Moderately severe to severe NPDR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>25 (49%)</td>
<td>28 (54%)</td>
</tr>
<tr>
<td>(Moderately severe to severe NPDR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>4 (8%)</td>
<td>6 (12%)</td>
</tr>
<tr>
<td>(Mild proliferative diabetic retinopathy)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DRSS Score – Fellow Eye</th>
<th>APX3330 n=51</th>
<th>Placebo n=52</th>
</tr>
</thead>
<tbody>
<tr>
<td>43 or Lower</td>
<td>14 (31%)</td>
<td>12 (24%)</td>
</tr>
<tr>
<td>(Mild to moderate NPDR or better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>13 (29%)</td>
<td>19 (39%)</td>
</tr>
<tr>
<td>(Moderately severe to severe NPDR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>12 (27%)</td>
<td>9 (19%)</td>
</tr>
<tr>
<td>(Moderately severe to severe NPDR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>1 (2%)</td>
<td>4 (8%)</td>
</tr>
<tr>
<td>(Mild proliferative diabetic retinopathy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 or Higher</td>
<td>5 (11%)</td>
<td>5 (10%)</td>
</tr>
<tr>
<td>(Moderate to severe prolif. DR)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 15 fellow eyes were CST>320 microns (center-involved DME eyes)

#### Key Visual Metrics

<table>
<thead>
<tr>
<th></th>
<th>APX3330 n=51</th>
<th>Placebo n=52</th>
<th>Total n=103</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCVA Study Eye</td>
<td>81</td>
<td>78</td>
<td>80 (20/25 Snellen)</td>
</tr>
<tr>
<td>Letters (mean)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCVA Fellow Eye</td>
<td>76</td>
<td>77</td>
<td>77 (20/32 Snellen)</td>
</tr>
<tr>
<td>Letters (mean)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCT CST Study Eye</td>
<td>270</td>
<td>271</td>
<td>271</td>
</tr>
<tr>
<td>(µm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCT CST Fellow Eye</td>
<td>292</td>
<td>286</td>
<td>289</td>
</tr>
<tr>
<td>(µm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraretinal Fluid in the Center of SE</td>
<td>Y – 21  N – 26</td>
<td>Y – 12  N – 31</td>
<td>Y – 33  N – 57</td>
</tr>
<tr>
<td>Intraretinal Fluid at the Foveal Center of SE</td>
<td>Y – 1  N – 20</td>
<td>Y – 1  N – 41</td>
<td>Y – 2  N – 61</td>
</tr>
<tr>
<td>Intraocular Pressure in Study Eye (mmHg)</td>
<td>15</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>
ZETA-1: % of Subjects with Binocular Improvement/Worsening in DRSS at Wk 24

APX3330 Demonstrated Statistical Efficacy on Potential Phase 3 Registration Endpoint

Percent of Subjects With Binocular Improvement or Worsening in DRSS of ≥ 1, ≥ 2, ≥ 3, and ≥ 4 Steps From Baseline (mITT-LOCF)

Source: ZETA-1 Clinical Trial
ZETA-1: Percent of Subjects With Binocular ≥ 3-Step Worsening in DRSS

Primary Endpoint for Planned Phase 3 Demonstrates Prevention of Progression

Percent of Subjects With Worsening in DRSS of ≥3 Steps From Baseline by Visit Binocular Eyes (mITT-LOCF)

Based on extrapolation from ZETA-1 and Rise/Ride extension trials¹, estimated ~25% of untreated patients may progress by ≥ 3 steps in binocular DRSS over 1 year

BCVA data shows function followed structure with fewer APX3330 treated subjects losing visual acuity compared to placebo at week 24

Source: ZETA-1 Clinical Trial
Note: Images from Central Reading Center will be reviewed prior to EOP2 FDA meeting
Note: Large “N” indicates total number of participants within each arm for the mITT-LOCF population. Small “n” indicates total number of evaluable eyes for each respective endpoint and arm.
ZETA-1: Treatment Emergent Adverse Events

Oral APX3330 Showed a Favorable Safety Profile Consistent with Prior Trials

<table>
<thead>
<tr>
<th></th>
<th>APX3330 (n=51)</th>
<th>Placebo (n=52)</th>
<th>Total (n=103)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total AEs</td>
<td>91</td>
<td>120</td>
<td>211</td>
</tr>
<tr>
<td># of Subjects with AEs</td>
<td>29 (57%)</td>
<td>35 (67%)</td>
<td>64 (62%)</td>
</tr>
<tr>
<td>Treatment Related AEs</td>
<td>14 (45%)</td>
<td>17 (55%)</td>
<td>31 (30%)</td>
</tr>
<tr>
<td>Serious AEs</td>
<td>3 (3%)</td>
<td>11 (9%)</td>
<td>14 (7%)</td>
</tr>
<tr>
<td>Subjects Withdrawals Due to AEs</td>
<td>2 (4%)</td>
<td>1 (2%)</td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Deaths</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
<td>1 (1%)</td>
</tr>
</tbody>
</table>

AEs in >5% of Subjects*

<table>
<thead>
<tr>
<th>Eye disorders</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetic Retinal Edema</td>
<td>2 (4%)</td>
<td>5 (10%)</td>
<td>7 (7%)</td>
</tr>
<tr>
<td>Diabetic Retinopathy</td>
<td>1 (2%)</td>
<td>6 (12%)</td>
<td>7 (7%)</td>
</tr>
<tr>
<td>Vitreous detachment</td>
<td>0 (0%)</td>
<td>3 (6%)</td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Cataract</td>
<td>3 (6%)</td>
<td>1 (2%)</td>
<td>4 (4%)</td>
</tr>
<tr>
<td>Pruritus</td>
<td>6 (12%)</td>
<td>1 (2%)</td>
<td>7 (7%)</td>
</tr>
<tr>
<td>Rash</td>
<td>3 (6%)</td>
<td>1 (2%)</td>
<td>4 (4%)</td>
</tr>
<tr>
<td>COVID-19</td>
<td>1 (2%)</td>
<td>5 (10%)</td>
<td>6 (6%)</td>
</tr>
</tbody>
</table>

APX3330 Safety Profile:
- Limited AEs, most mild in severity
- AEs similar to or less than placebo (except for pruritis/rash)
- Few serious treatment-related AEs, all unrelated to study medication
- No ocular AEs other than expected DR progression
- No effect on clinical labs
- No adverse effects on heart, kidney, liver, CNS, GI
- No effect on vital signs (HR, BP)
- Patients continued routine medications to manage their diabetes comorbidities

*Preferred Term within Organ Class
APX3330 - Phase 2 Summary and Next Steps

ZETA-1 Summary

- APX3330 is the most advanced oral program in development for diabetic eye disease
- APX3330 demonstrated favorable safety with compelling potential to slow progression of diabetic retinopathy
- ZETA-1 statistically significant results on potential Phase 3 registration endpoint:
  - 0% APX3330-treated patients had a binocular ≥ 3-step worsening of DRSS from baseline compared with 16% for placebo-treated patients (p=0.04)

APX3330 Next Steps

- Further analysis of ZETA-1 Phase 2 data, including insights for Phase 3 trial design
- Prepare for EOP2 FDA meeting in 2H 2023 to formally confirm Phase 3 design and endpoints
- Advance APX3330 into Phase 3 program

Our Goals for Patients

To have a clinically meaningful impact on preventing progression to reduce likelihood of vision loss in diabetic retinopathy patients
NYXOL® EYE DROPS

THREE INDICATIONS

NEW PARTNERSHIP WITH VIATRIS

Reversal of Mydriasis (RM)

Presbyopia

Dim Light or Night Vision Disturbances (DLD)

Nyxol as a Single Drop

Nyxol with LDP Adjunctive Therapy

1

2

NEW PARTNERSHIP WITH VIATRIS
Nyxol’s Differentiated MOA as an Alpha-1 Blocker

No Engagement of Ciliary Muscle, No Headaches and Lower Risk of Retinal Detachment

Phentolamine is the Active Ingredient in Nyxol: a non-selective α Antagonist

Phentolamine blocks α1 receptors on the Iris Dilator Muscle up to 24 hours

Decreases pupil size (moderately) without affecting the iris sphincter or ciliary muscles

Allows for 3 indications: RM, Presbyopia and DLD

505(b)(2) Regulatory Pathway Supported by Prior Phentolamine Approvals in non-ophthalmic Indications
### Summary of Nyxol Trial Results

**Comprehensive Body of Clinical Data Supporting Efficacy and Safety Across 3 Indications**

<table>
<thead>
<tr>
<th>Indication</th>
<th>Primary Endpoint</th>
<th>Efficacy Data</th>
<th>Key Secondary Endpoint(s)</th>
<th>Safety &amp; Tolerability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RM</strong></td>
<td>Return to baseline pupil diameter at 90 minutes after dilation</td>
<td><strong>Met Phase 3 primary endpoint</strong>&lt;br&gt;MIRA-3: 58% Nyxol vs. 6% placebo (p&lt;0.0001)&lt;br&gt;MIRA-4: 64% Nyxol vs. 25% placebo</td>
<td>Efficacy across all mydriatic agents, iris color, 1 or 2 drops, and all ages (3-80)</td>
<td></td>
</tr>
<tr>
<td>Presbyopia (Nyxol Alone)</td>
<td>≥3 line gain in near vision with loss of no more than 1 line in distance vision</td>
<td><strong>Met planned Phase 3 primary endpoint</strong>&lt;br&gt;VEGA-1: 29% Nyxol vs. 12% placebo at 12 hrs post-Nyxol dose (p=0.02)</td>
<td>Durable near vision (18 hrs) Optimal pupil size Pupillary light reflex</td>
<td>• No headaches&lt;br&gt;• No blurry vision&lt;br&gt;• ~5% mild redness&lt;br&gt;• No change in IOP&lt;br&gt;• No SAEs&lt;br&gt;• Most AEs were mild</td>
</tr>
<tr>
<td>Presbyopia (Nyxol + LDP)</td>
<td>≥3 lines (eye test) of improvement in mesopic low contrast best-corrected distance visual acuity (mLCVA)&lt;br&gt;LYNX-1: 13% Nyxol vs. 3% placebo at Day 8 (p&lt;0.05) and 21% in Nyxol vs.3% placebo at Day 15 (p&lt;0.01)</td>
<td><strong>Met Phase 3 primary endpoint</strong>&lt;br&gt;LYNX-1: 13% Nyxol vs. 3% placebo at Day 8 (p&lt;0.05) and 21% in Nyxol vs.3% placebo at Day 15 (p&lt;0.01)</td>
<td>Improvement visual acuity measures (distance and near) in dim light conditions</td>
<td></td>
</tr>
</tbody>
</table>

* Trend toward statistical significance even in smaller POS arm from time 0 to time 6 hours (n=30); larger sample size for all arms planned in Phase 3 program
A New, Differentiated MOA and Combination Therapy Offers Tunability

- **Nyxol’s potential differentiation:**
  1) New MOA class (iris dilator muscle inhibitor)
  2) Favorable safety and tolerability (e.g.: no headaches, no accommodative spasm, no risk of retinal detachment)
  3) 24-hour durability
  4) Broad range of patients including high myopes
  5) Improvement in night vision disturbances

- **Nyxol+LDP may offer added efficacy and tunability**

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**Other Cholinergic Agonists***

- **Alpha Antagonist**
- **Lenz**
  - Acetidine; Acetidine + brim
- **Visus**
  - Brimochol® (carbachol + brim)
- **Ocuphire**
  - Nyxol (0.75% phentolamine)
  - Nyxol + 0.4% pilo
- **Eyenovia**
  - MicroLine (2% pilo)
- **Allergan**
  - VUVITY™; (1.25% pilo)
- **Orasis**
  - CSF-1 (Low dose pilo)

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**Cholinergic Agonist* (pilocarpine)**
Corporate Highlights

Two Lead Clinical-Stage Novel Drugs Addressing Multiple Large Ophthalmology Markets with Limited to No Competition & Extensive Patent Portfolio

<table>
<thead>
<tr>
<th>APX3330 oral tablets</th>
<th>Nyxol eyedrops</th>
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<tr>
<td><strong>Diabetic</strong></td>
<td><strong>Reversal of Mydriasis (RM) – eye dilation</strong></td>
</tr>
<tr>
<td><strong>Diabetic Retinopathy/Diabetic Macular Edema (DR/DME)</strong></td>
<td><strong>Presbyopia (P) – age-related blurry near vision</strong></td>
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<tr>
<td></td>
<td><strong>Dim Light or Night Vision Disturbances (DLD)</strong></td>
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Global License Agreement with Viatris to Fully Fund the Development and Commercialization of Nyxol for All Indications

APX3330 – Paradigm changing oral for 8 million DR patients; Moving into Phase 3

Nyxol for RM Indication PDUFA Date on September 28, 2023

Strong Financial Position to Advance APX and Nyxol Clinical Programs into 2025
Appendix:
Team and Nyxol Data
Management Team with Decades of Drug Development Experience

Richard Rodgers, MBA
Interim CEO

Ronil Patel, MS
SVP, Operations and BD

Charlie Hoffmann, MBA
SVP, Corporate Development

Amy Rabourn, CPA
SVP, Finance

Drey Coleman
VP, Clinical Operations

Mitch Brigell, PhD
Head, Clinical Development and Strategy

Barbara Withers, PhD
VP, Clinical and Regulatory Strategy

Bindu Manne
Head, Market Development and Commercialization

Chris Ernst
Global Head, QA and Manufacturing

Laura Gambino
Director, Project Management

Daniela Oniciu, PhD
Global Head, R&D, Chemistry and Product Development
Ocuphire's World-Class Medical Advisory Board

**Chief Medical Advisor, Ocuphire**
Jay Pepose, MD, PhD
UCLA School of Medicine

**Refractive Specialist**
Zaina Al-Mohtaseb, MD
Baylor College of Medicine

**Refractive Specialist**
Y. Ralph Chu, MD
Northwestern University

**Refractive Specialist**
Mitch Jackson, MD
University of Chicago

**Refractive/Glaucoma Specialist**
Thomas Samuelson, MD
University of Minnesota

**Retinal Specialist**
James Katz, MD
University of Illinois

**Retinal Specialist**
Marguerite McDonald, MD
Columbia University

**Retinal Specialist**
Eliot Lazar, MD
Georgetown University

**Retinal Specialist**
Caroline Baumal, MD
University of Toronto

**Retinal Specialist**
Inder Paul Singh, MD
The Chicago Medical School

**Retinal Specialist**
Anat Lowenstein, MD, PhD
The Hebrew University

**Retinal Specialist**
Michael Allingham, MD, PhD
University of North Carolina

**Retinal Specialist**
David Boyer, MD
Chicago Medical School

**Retinal Specialist**
Jeffrey Heier, MD
Boston University

**Retinal Specialist**
David Brown, MD
Baylor University

**Retinal Specialist**
Atan Lowenstein, MD, PhD
The Hebrew University

**Retinal Specialist**
David Lally, MD
Vanderbilt University

**Optometrist**
Douglas Devries, OD
University of Nevada

**Optometrist**
Paul Karpecki, OD
Indiana University

**Optometrist**
Leslie O'Dell, OD
Salus University

**Optometrist**
Selina McGee, OD
Northeastern State University

**Optometrist**
Justin Schweitzer, OD
Pacific University

**Co-Founder**
Apexian/APX3330
Mark Kelley, PhD
Indiana University
Ocuphire Board of Directors

Seasoned Directors with Decades of Drug Development, M&A/Financings, and Ophthalmology

Richard Rodgers, MBA
Interim President & CEO
Board Director

Sean Ainsworth, MBA
Lead Independent Director,
Board Director

Jay Pepose, MD, PhD
Board Director

Cam Gallagher, MBA
Chair, Board Director

James Manuso, PhD/MBA
Board Director

Mina Sooch, MBA
Board Director

Susan Benton, MBA
Board Director

Sean Ainsworth, MBA
Lead Independent Director,
Board Director

Jay Pepose, MD, PhD
Board Director