TRANSFORMING GLAUCOMA CARE WITH DRUG DELIVERY
LEVERAGING A NOVEL TECHNOLOGY PLATFORM

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GLAUCOMA 360 | FEBRUARY 7, 2020
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Dr. Goldstein is an employee of Ocular Therapeutix
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## PIPELINE AT A GLANCE

<table>
<thead>
<tr>
<th>PRODUCT/PROGRAM</th>
<th>DISEASE STATE</th>
<th>PRECLINICAL</th>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>REGULATORY APPROVAL</th>
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<tbody>
<tr>
<td><strong>INTRACANALICULAR INSERTS</strong></td>
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<td>Dextenza* (dexamethasone ophthalmic insert 0.4 mg)</td>
<td>Post-surgical ocular inflammation and pain</td>
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<td>Dextenza* (dexamethasone ophthalmic insert 0.4 mg)</td>
<td>Allergic conjunctivitis</td>
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<td>Dextenza* (dexamethasone ophthalmic insert 0.4 mg)</td>
<td>Episodic dry eye</td>
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<td>OTX-CSI (cyclosporine)</td>
<td>Chronic dry eye</td>
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<td>OTX-TP (travoprost insert)</td>
<td>Glaucoma and ocular hypertension</td>
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<td>OTX-BPI (bupivacaine)</td>
<td>Acute ocular pain</td>
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<td>OTX-BDI (besifloxacin &amp; dexamethasone)</td>
<td>Post-op pain, inflammation &amp; anti-bacterial</td>
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<td><strong>INTRACAMERAL IMPLANT</strong></td>
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<td>OTX-TIC (travoprost implant)</td>
<td>Glaucoma and ocular hypertension</td>
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<td><strong>INTRA-VITREAL IMPLANTS</strong></td>
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<tr>
<td>OTX-TKI (tyrosine kinase inhibitor implant)</td>
<td>Wet AMD, DME and RVO†</td>
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<tr>
<td>OTX-IVT* (anti-VEGF antibody implant)</td>
<td>Wet AMD, DME and RVO†</td>
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* In Partnership with REGENERON
† Wet Age-related Macular Degeneration (Wet AMD), Diabetic Macular Edema (DME), Retinal Vein Occlusion (RVO)
Drug Delivery to the Intracameral Space

Factors for Consideration in Designing a Long Duration Intracameral Implant:

- Clinically-meaningful decrease in IOP
  Well-tolerated with clinically-meaningful efficacy

- Duration of therapy
  4 months or more

- Bioresorbable
  Duration of drug and duration of carrier vehicle

- Implant location and movement
  Limited movement and cosmetically invisible, but able to be monitored

- Corneal health
  Gentle to the endothelium
INTRACAMERAL INJECTION IN A PHASE 1 CLINICAL TRIAL FOR THE TREATMENT OF GLAUCOMA

OTX-TIC (travoprost implant) for intracameral injection

Description:

• Travoprost loaded microparticles in hydrogel
• Preservative-free
• Administered via a single injection with proprietary injector (27G)
• Implant resides in the iridocorneal angle, hydrates in 2 minutes
• Fully biodegradable

In preclinical models (beagle dogs):

• Steady state in vitro and in vivo release through 4 months, which correlates to a duration of 4-6 months in humans
• Demonstrated IOP lowering effect of approximately 25-30% through 4 months
OTX-TIC PHASE 1 STUDY DESIGN

- Open-label, proof-of-concept study
- US study, approximately 20 subjects at 5 sites
- 5 subjects per cohort, 4 cohorts
- 7 month study
- One eye per patient will be treated
- Key Inclusion criteria:
  - Controlled ocular HTN or POAG
  - Open, normal anterior chamber angles on gonioscopy

Objectives
- Safety, tolerability, and biological activity
- Diurnal IOP at Baseline, 2 weeks, 6 weeks, 12 weeks, Month 4, and Month 6 (8 AM)

Active Comparator:
Non-study eye receives topical travoprost daily

- Key Inclusion criteria:
  - Controlled ocular HTN or POAG
  - Open, normal anterior chamber angles on gonioscopy
If the study eye was given other IOP lowering medication, the IOP value was removed from the analysis.
COHORT 2: MEAN IOP CHANGE FROM BASELINE

NB: Interim look; Unmonitored data.

*If the study eye was given other IOP lowering medication, the IOP value was removed from the analysis.
COHORT 1 VS COHORT 2: IOP CHANGE FROM BASELINE

NB: Interim look; Unmonitored data.
IMPLANT VISUALIZATION

Day 1

Day 3

Day 14

Day 28

Month 4

Month 5

Month 6

Month 7
COHORT 1 & 2: SAFETY OVERVIEW

OCULAR ADVERSE EVENTS IN THE STUDY EYE

<table>
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<tr>
<th>Number of subjects with ocular AEs:</th>
<th>OTX-TIC N=9</th>
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<tbody>
<tr>
<td>Iritis</td>
<td>4</td>
</tr>
<tr>
<td>Peripheral anterior synechiae</td>
<td>3</td>
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<tr>
<td>Corneal Edema</td>
<td>1</td>
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</tbody>
</table>

NB: In Cohort 1, same subjects had iritis and peripheral anterior synechiae. Events were mild and inflammation resolved with medical treatment.

NB: Interim look; Unmonitored data.
COHORT 1 & 2: CORNEAL HEALTH

- No clinically-meaningful changes in endothelial cell counts or pachymetry from baseline through for 9/9 subjects in Month 3; 8/8 subjects through Month 6; 6/6 subjects through Month 9
- No clinically-meaningful changes observed in quality of cells
- No changes in values in patients who have reached 9+ months of follow-up (n=5) or 12+ months of follow-up (n=2)

Baseline

| ECC M 3012/mm² | ECC A: 2584/mm² |
| Pachymetry: 590 µm |

Day 85

| ECC M: 3022/mm² | ECC A: 3067/mm² |
| Pachymetry: 594.33 µm |

Month 6

| ECC M: 2950/mm² | ECC A: 2571/mm² |
| Pachymetry: 574 µm |

Month 9

| ECC M: 2950/mm² | ECC A: 3003/mm² |
| Pachymetry: 573.67 µm |

Note: M: manual; A: auto-tracing
**CONCLUSIONS**

- **Clinically-meaningful decrease in IOP**
  Mean IOP values were decreased in patients receiving both OTX-TIC and topical travoprost as early as two days following administration, and mean IOP values remained decreased from baseline values.

- **Duration of therapy**
  Two subjects exhibited duration of IOP-lowering effect of 9+ months.

- **Bioresorbable**
  Implant biodegraded in 9 of 9 subjects by 7 months.

- **Implant location and movement**
  Implant was not observed to move at slit lamp and was visible at all exams in all patients; in one subject, there was slight rotation noted at the Day 14 visit as compared to the Day 7 visit.

- **Corneal health**
  Endothelial cell counts and pachymetry assessments indicate no changes from baseline.
NEXT STEPS

• Study is ongoing; Continued long-term evaluation of both cohorts

• Reformulation for implant that degrades more rapidly, with potential for lower drug concentrations to lower risk of inflammation

• Patient screening and enrollment has begun in Cohort 3 and Cohort 4
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(NASDAQ: OCUL)

THANK YOU