(NASDAQ: OCUL)

TRANSFORMING DRUG DELIVERY LEVERAGING A NOVEL TECHNOLOGY PLATFORM

ANTONY MATTESSICH, CHIEF EXECUTIVE OFFICER July 2020



FORWARD LOOKING STATEMENTS

Any statements in this presentation about future expectations, plans, and prospects for the Company, including the commercialization of DEXTENZA®, ReSure Sealant, or any of the Company's product candidates; the commercial launch of, and effectiveness of reimbursement codes for, DEXTENZA; the development and regulatory status of the Company's product candidates, such as the Company's development of and prospects for approvability of DEXTENZA for additional indications including allergic conjunctivitis, OTX-TP for the treatment of primary open-angle glaucoma and ocular hypertension, OTX-CSI for the treatment of dry eye disease, OTX-TIC for the treatment of primary open-angle glaucoma and ocular hypertension, OTX-TKI for the treatment of retinal diseases including wet AMD, and OTX-IVT as an extended-delivery formulation of the VEGF trap aflibercept for the treatment of retinal diseases including wet AMD; the ongoing development of the Company's extended-delivery hydrogel depot technology; the potential utility of any of the Company's product candidates; the potential benefits and future operation of the collaboration with Regeneron Pharmaceuticals, including any potential future payments thereunder; the expected impact of the COVID-19 pandemic on the Company and its operations; the sufficiency of the Company's cash resources and other statements containing the words "anticipate," "believe," "estimate," "expect," "intend", "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 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, ReSure Sealant or any product candidate that receives regulatory approval, including the conduct of post-approval studies, the ability to retain regulatory approval of DEXTENZA, ReSure Sealant or any product candidate that receives regulatory approval, the ability to maintain reimbursement codes for DEXTENZA, the initiation, timing and conduct of clinical trials, availability of data from clinical trials and expectations for regulatory submissions and approvals, the Company's scientific approach and general development progress, the availability or commercial potential of the Company's product candidates, the Company's ability to generate its projected net product revenue on the timeline expected, if at all, the sufficiency of cash resources, the Company's existing indebtedness, the ability of the Company's creditors to accelerate the maturity of such indebtedness upon the occurrence of certain events of default, the outcome of the Company's ongoing legal proceedings, the severity and duration of the COVID-19 pandemic including its effect on the Company's and relevant regulatory authorities' operations, the need for additional financing or other actions and other factors discussed in the "Risk Factors" section contained in the Company's guarterly 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 forwardlooking statements at some point in the future, the Company specifically disclaims any obligation to do so except as required by law. These forwardlooking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this presentation.



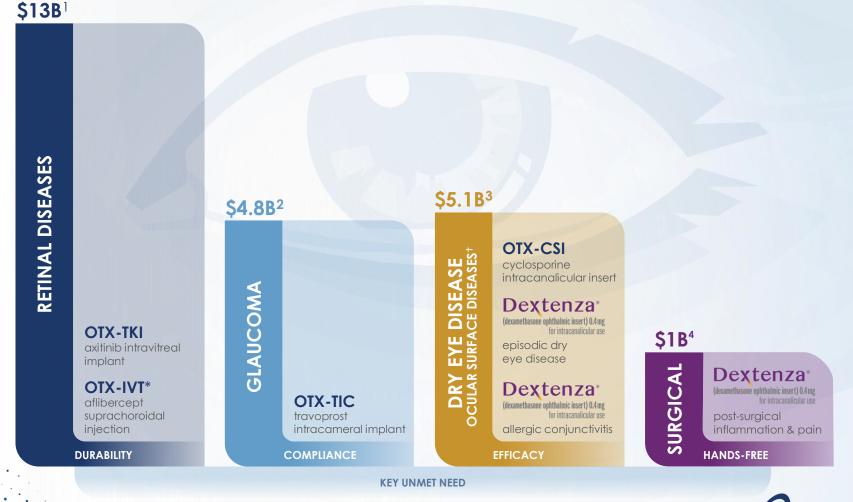
TRANSFORMING DRUG DELIVERY WITH A NOVEL TECHNOLOGY PLATFORM





TOTAL GLOBAL MARKETS

DEVELOPING PRODUCTS WITH THE POTENTIAL TO BECOME A STANDARD OF CARE FOR SELECT INDICATIONS IN SEVERAL OF THE LARGEST SEGMENTS IN OPHTHALMOLOGY



Δ

These data reflect the total global market for the respective indications. Our market opportunity for such indications reflects a portion of this market.

* In collaboration with REGENERON; †Data shown here is only representative of Dry Eye and not other Ocular Surface Diseases

1. 2019 Retina Pharma Market Scope Report 2. 2019 Glaucoma Pharma Market Scope Report 3. 2019 Dry Eye Market Scope Report 4. Estimated using historical costs of topical

eyedrops (not DEXTENZA) and the total addressable market based on the total US ocular surgical steroid market value 2019

PIPELINE AT A GLANCE

PRODUCT/PROGRAM	DISEASE STATE	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	REGULATORY APPROVAL
WET AMD						
OTX-TKI (axitinib intravitreal implant)	Wet AMD, DME and RVO [†]					
OTX-IVT * (aflibercept suprachoroidal injection)	Wet AMD, DME and RVO [†]					
GLAUCOMA						
OTX-TIC (travoprost intracameral implant)	Glaucoma and ocular hypertension					
DRY EYE DISEASE / OCULAR SURFACE DISEASES						
OTX-CSI (cyclosporine intracanalicular insert)	Dry eye disease					
Dextenza [®] (dexamethasone ophthalmic insert) 0.4 mg	Episodic dry eye disease					
Dextenza [®] (dexamethasone ophthalmic insert) 0.4mg	Allergic conjunctivitis					
SURGICAL						
Dextenza [®] (dexamethasone ophthalmic insert) 0.4 mg	Post-surgical ocular inflammation and pain					\diamond

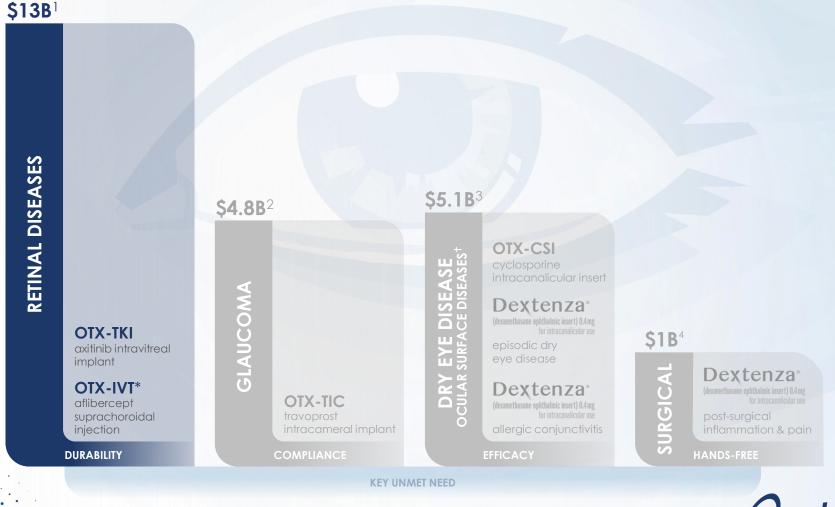
* In collaboration with REGENERON

[†]Wet Age-related Macular Degeneration (Wet AMD), Diabetic Macular Edema (DME), Retinal Vein Occlusion (RVO)



TOTAL GLOBAL MARKETS

DEVELOPING PRODUCTS WITH THE POTENTIAL TO BECOME A STANDARD OF CARE FOR SELECT INDICATIONS IN SEVERAL OF THE LARGEST SEGMENTS IN OPHTHALMOLOGY



6

These data reflect the total global market for the respective indications. Our market opportunity for such indications reflects a portion of this market.

* In collaboration with REGENERON; †Data shown here is only representative of Dry Eye and not other Ocular Surface Diseases

1. 2019 Retina Pharma Market Scope Report 2. 2019 Glaucoma Pharma Market Scope Report 3. 2019 Dry Eye Market Scope Report 4. Estimated using historical costs of topical

eyedrops (not DEXTENZA) and the total addressable market based on the total US ocular surgical steroid market value 2019

THE UNMET NEED IN RETINAL DISEASES

PROBLEMS WITH IMMEDIATE-RELEASE INJECTIONS

- While anti-VEGF drugs are effective, they are also rapidly cleared from the vitreous humor; therefore, to reach and to maintain effective concentrations, repeated administrations every 4-8^{1,2} weeks are necessary¹
- Repeated intravitreal injections may cause side effects such as endophthalmitis, hemorrhage, damage to the lens, retinal detachment, and poor patient tolerance over time³
- Discomfort, eye pain, decreased vision, increased photosensitivity, and floaters are just some of the patient complaints with injections³
- Repeated injections also have a significant impact on patients emotionally and financially and place a time and transportation burden on caregivers⁴

A New Therapy is Needed.

New Mechanism of Action TKIs act upstream of Anti-VEGF

Longer Duration of Action TKIs are potent small molecules

Clinical Question:

Does axitinib (a tyrosine kinase inhibitor) injected into the eye have biological activity?

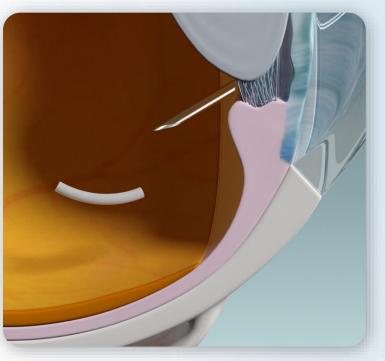


1. EYLEA Full Prescribing information 2019 2. Lucentis full Prescribing Information 2019 3. Bochot A, Fattal E. Liposomes for intravitreal drug delivery: a state of the art. J Control Release. 2012;161(2):628-634. 4. Boyle J, Vukicevic M, Koklanis K, Itsiopoulos C, Rees G. Experiences of patients undergoing repeated intravitreal anti-vascular endothelial growth factor injections for neovascular age-related macular degeneration. *Psychol Health Med*. 2018;23(2):127-140.

DRUG DELIVERY TO THE INTRAVITREAL SPACE

FACTORS FOR CONSIDERATION IN DESIGNING A LONG DURATION INTRAVITREAL IMPLANT:

Clinically-meaningful decrease in retinal fluid Well-tolerated with clinically-meaningful efficacy **Extended duration of therapy** 3 months or more **Consistently bioresorbable** Duration of drug and duration of carrier vehicle **Implant location and limited movement** Compact geometry, designed to avoid optical impact, but able to be monitored





INTRAVITREAL INJECTION FOR THE TREATMENT OF AGE-RELATED MACULAR DEGENERATION

OTX-TKI (axitinib intravitreal implant)

DESCRIPTION:

- Targeting sustained release for 6+ months
- Broader anti-angiogenic profile than anti-VEGF alone and longer duration (small molecule)
- Systemic TKI efficacy established in oncology
- Small fiber (27-30G needle) with minimal/no visual impact; product candidate can be monitored by physician
- Potential to provide an additional option for patients and providers
- Different target than traditional VEGF therapies
- Preservative-free

IN PRECLINICAL MODELS (RABBIT CHALLENGE):

- Sustained, steady state in vitro and in vivo release for up to 12 months with a single insert
- PK, PD and tolerability with no negative safety signals reported to date



Video shown in real time in simulated vitreous humor



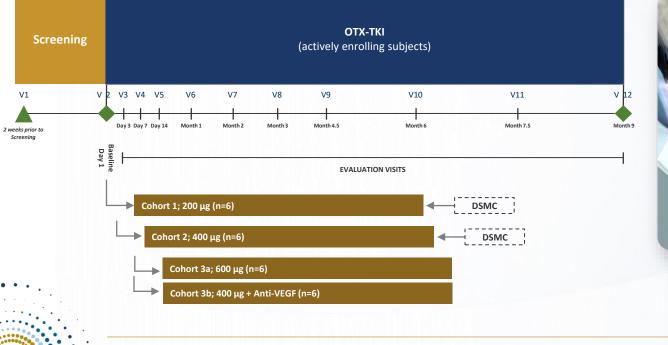
OTX-TKI PHASE 1 STUDY

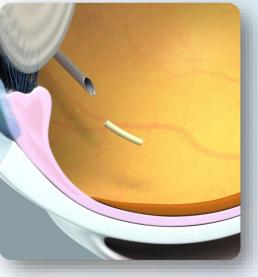
DESIGN

- Open-label, dose-escalation, feasibility study
- 5 sites in Australia
- 9-month study
- One eye treated per patient
- Key Inclusion criteria:
 - Active primary subfoveal neovascularization (SFNV) secondary to AMD – previously treated or naïve subjects but with retinal fluid present

OBJECTIVES

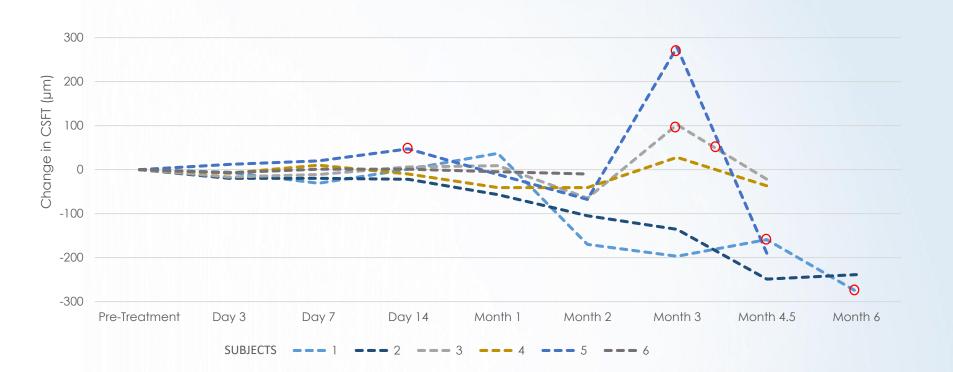
- Safety, tolerability, and biological activity
- Safety evaluations at all visits; mean change in central subfield thickness (CSFT) measured by SD-OCT, BCVA, and clinically-significant leakage on FA and/or OCT-A at 6 months







INDIVIDUAL CHANGE IN CENTRAL SUBFIELD THICKNESS OTX-TKI STUDY EYE – COHORT 2



*All CSFT values compared to Baseline visit

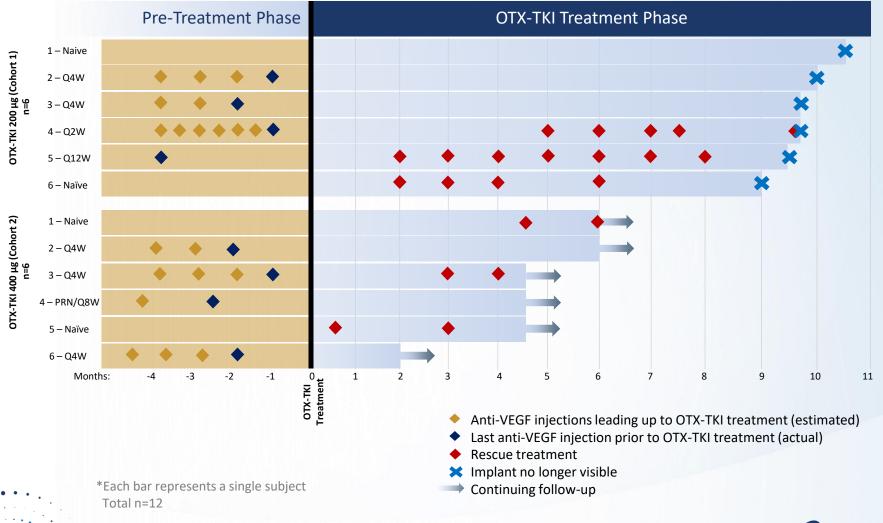
O Denotes administration of rescue therapy

NOTE: Values shown are Mean ± SEM;

Interim review, unmonitored data

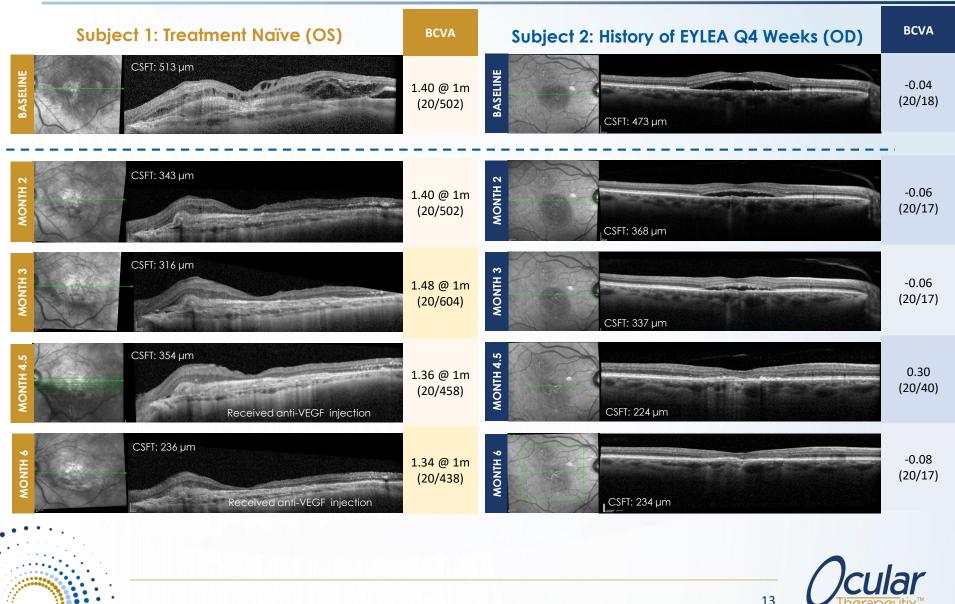


INDIVIDUAL SUBJECT DURABILITY ASSESSMENT





COHORT 2: SD-OCT EVALUATION



OTX-TKI CONCLUSIONS TO DATE

- OTX-TKI was generally well tolerated To date, observed to have a favorable safety profile in both fully enrolled cohorts
- Preliminary biological signal of clinicallymeaningful decrease in retinal fluid Some subjects showed a decrease in intraretinal and/or subretinal fluid by 2 months
- Therapy durability suggests extended duration of action
 - In the higher dose cohort, subjects have demonstrated durability of therapy for 4.5-6 months. Patients still being followed in cohort 2, to be further determined
- Consistent bio-resorption observed Implant biodegraded in all subjects in cohort 1 by 9-10.5 months
- Implant location observation suggests limited movement

Implant was able to be adequately monitored

Relative size of implant

Study is ongoing;

continued long-term evaluation of both cohorts

- Need to establish durability of treatment
- Identify Maximum Tolerated Dose (MTD)
- Understand utility of OTX-TKI with anti-VEGF injection



REGENERON PARTNERSHIP OTX-IVT (AFLIBERCEPT SUPRACHOROIDAL INJECTION)

UPDATE MAY 8, 2020

AMENDED AGREEMENT TO DEVELOP A NOVEL, SUSTAINED-RELEASE FORMULATION OF EYLEA® (AFLIBERCEPT)

- EYLEA is a vascular endothelial growth factor (VEGF) trap approved for the treatment of wet age-related macular degeneration (wet AMD) and other serious retinal diseases
 - EYLEA is the global market leader with \$7.5 billion in revenue in 2019¹
- Evaluating opportunity to incorporate aflibercept with our sustained release hydrogel for injection in the suprachoroidal space
 - Goal is to overcome limitations of intravitreal injections and extend aflibercept's duration of activity, thereby decreasing dosing frequency
- Deal parameters
 - Regeneron subsidizes Ocular Therapeutix formulation efforts
 - Regeneron to fund personnel and material costs associated with pre-clinical development
 - Regeneron to fund up to \$305 million in milestone payments with royalties in high single digits to low-to-mid-teens as a % of net sales
 - Includes only large molecule anti-VEGFs

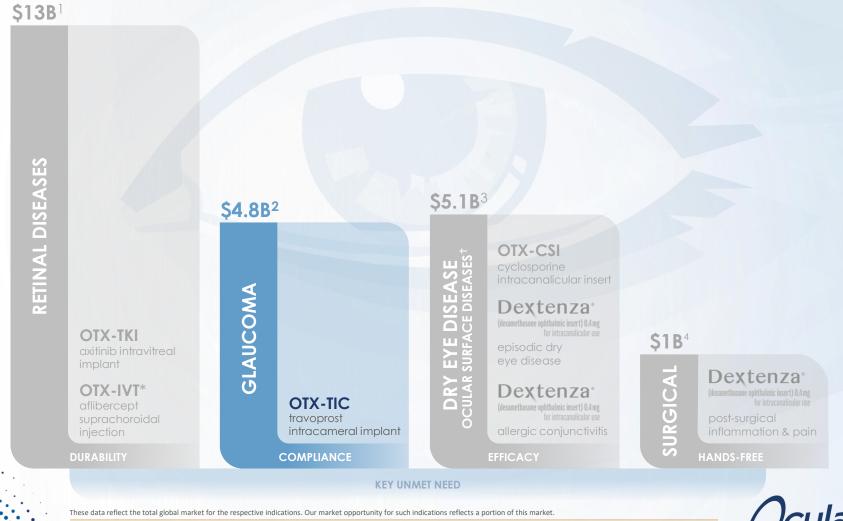


15

REGENERON

TOTAL GLOBAL MARKETS

DEVELOPING PRODUCTS WITH THE POTENTIAL TO BECOME A STANDARD OF CARE FOR SELECT INDICATIONS IN SEVERAL OF THE LARGEST SEGMENTS IN OPHTHALMOLOGY



16

* In collaboration with REGENERON; †Data shown here is only representative of Dry Eye and not other Ocular Surface Diseases

1. 2019 Retina Pharma Market Scope Report 2. 2019 Glaucoma Pharma Market Scope Report 3. 2019 Dry Eye Market Scope Report 4. Estimated using historical costs of topical

eyedrops (not DEXTENZA) and the total addressable market based on the total US ocular surgical steroid market value 2019

THE UNMET NEED IN GLAUCOMA TREATMENT

POOR ADHERENCE HAS BEEN SHOWN TO BE ASSOCIATED WITH DISEASE PROGRESSION AND BLINDNESS



Glaucoma is an incurable, generally painless, chronic disease



Approximately 2.7 million individuals over 40 years old are affected in the U.S.



An estimated 3 million+ will be affected in 2020¹

- The primary goal of glaucoma treatment is to reduce intraocular pressure
- Various medications can significantly lower intraocular pressure and reduce the progression of glaucoma, but these are almost always life-long medications that must be taken on a daily basis
- Adherence to glaucoma therapies is particularly poor, with reported rates of nonadherence ranging from 30–80%^{2,3,4}
- Poor adherence has been shown to be associated with disease progression and blindness^{5,6}



17

) Tham YC, Li X, Wong TY, et al. Global Prevalence of Glaucoma and Projections of Glaucoma Burden through 2040: A Systematic Review and Meta-Analysis. Ophthalmol 2014;121:2081-90. 2) Olthoff CM, et al. Noncompliance with cular hypotensive treatment in patients with glaucoma or ocular hypertension an evidence-based review. Ophthalmology. 2005; 112:953–61. 3) Schwartz GF, et al. Adherence and persistence with glaucoma therapy. Surv phthalmol. 2008; 53(suppl1):S57–68. 4) Nordstrom BL, et al. Persistence and adherence with topical glaucoma therapy. Am J Ophthalmol. 2005; 112:953–606. 5) Rossi GC, et al. Do adherence rates and glaucomatous visual field rogression correlate? Eur J Ophthalmol. 2011; 21:410–4. 6) Sleath B, et al. The relationship between glaucoma medication adherence, eye drop technique, and visual field defect severity. Ophthalmology. 2011; 118:2398–402.

INTRACAMERAL DRUG DELIVERY

FACTORS FOR CONSIDERATION IN DESIGNING A LONG DURATION INTRACAMERAL IMPLANT:

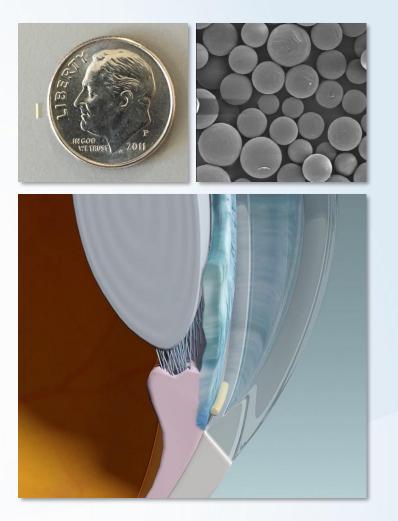
- Clinically-meaningful decrease in IOP
 Well-tolerated with clinically-meaningful efficacy
- Extended duration of therapy 4 months or more
- **Consistently bioresorbable**
 - Duration of drug and duration of carrier vehicle

Implant location and limited movement
 Limited movement and cosmetically invisible,

but able to be monitored

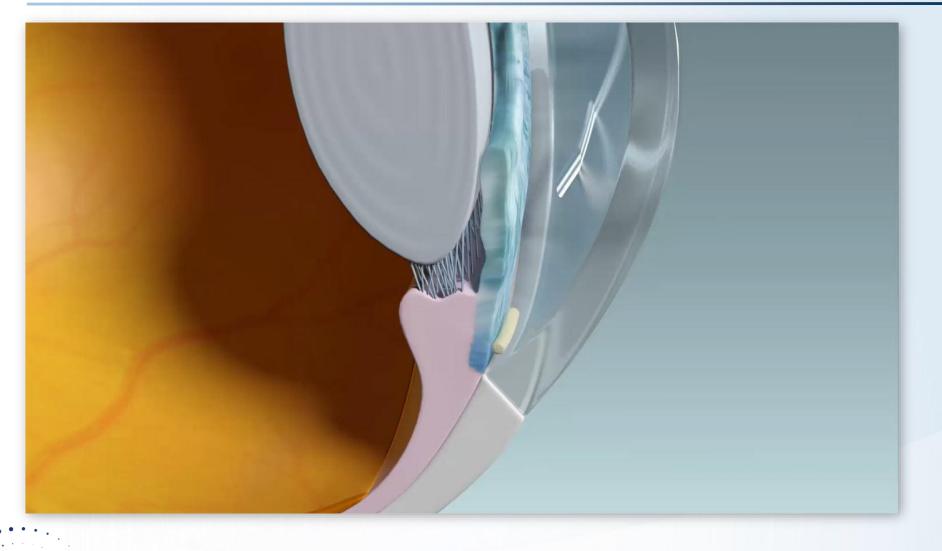
Corneal health

Gentle to the endothelium





OTX-TIC – INTRACAMERAL INJECTION





INTRACAMERAL INJECTION IN A PHASE 1 CLINICAL TRIAL FOR THE TREATMENT OF GLAUCOMA

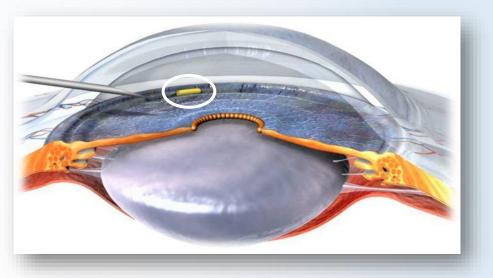
OTX-TIC (travoprost intracameral implant)

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 FOR THE TREATMENT OF GLAUCOMA

Phase 1 Study Design

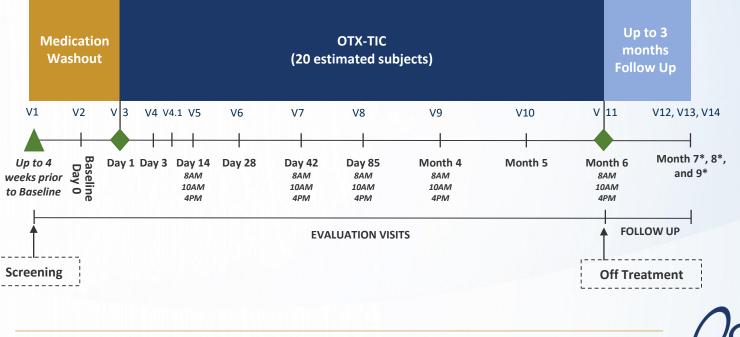
- Open-label, proof-of-concept study
- US study, approximately 20 subjects at 5 sites
- 5 subjects per cohort, 4 cohorts
- 7 month study
- One eye per patient will be treated
- Key Inclusion criteria:
 - Controlled ocular HTN or POAG
 - Open, normal anterior chamber angles on gonioscopy

Objectives

- Safety, tolerability, and biological activity
- Diurnal IOP at Baseline, 2 weeks, 6 weeks, 12 weeks, Month 4, and Month 6 (8 AM, 10 AM, 4 PM)

Active Comparator:

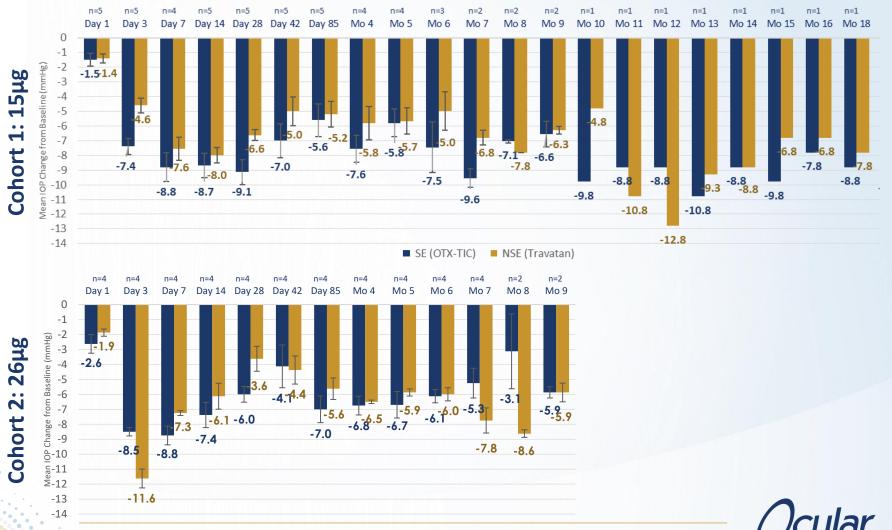
Non-study eye receives topical travoprost daily



Monthly visits until IOP is within 10% of baseline or until clinically stable

DECREASED IOP AS EARLY AS TWO DAYS AFTER OTX-TIC IMPLANTATION

IOP DECREASE UP TO 7-10 mmHG RECORDED IN COHORTS 1 (UP TO 18 MONTHS) & 2 (UP TO 9 MONTHS)

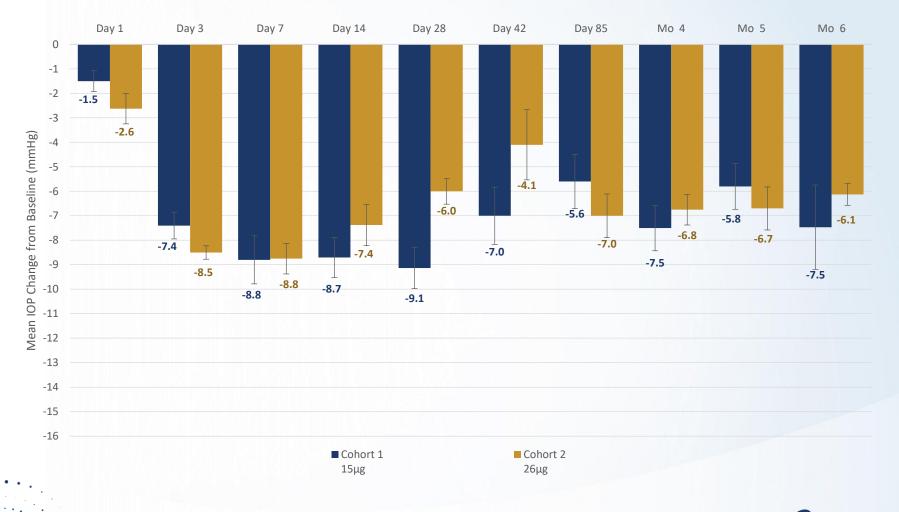


22

NB: Interim look; Unmonitored data *If the study eye was given other IOP lowering medication, the IOP value was removed from the analysis.

IOP DECREASE COMPARISON BETWEEN THE TWO COHORTS

MEAN IOP DECREASED FROM BASELINE VALUES SIMILARLY ACROSS BOTH COHORTS







OTX-TIC PHASE 1 INTERIM FINDINGS

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

Extended duration of therapy

Many subjects exhibited duration of IOP lowering effect of 6 months or longer

Consistently bioresorbable

Implant biodegraded in most subjects by 6-7 months

Implant location and limited 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

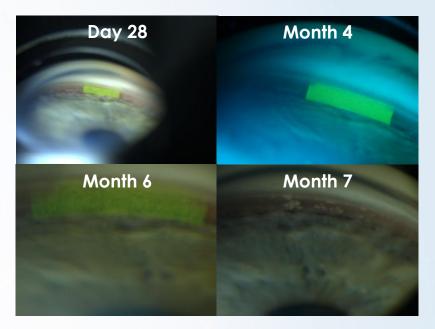
 \mathbf{N}

 \mathbf{N}

 \mathbf{N}

Endothelial cell counts and pachymetry assessments indicate no changes from baseline

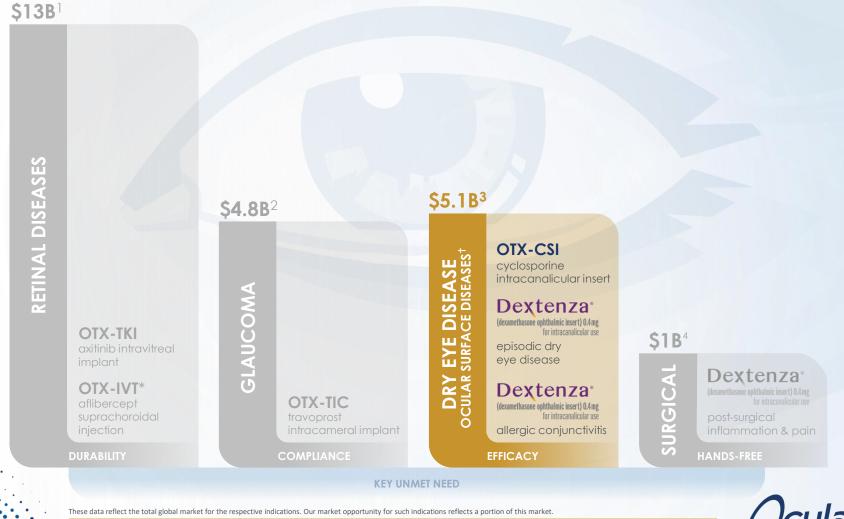
IMPLANTS VISUALIZED IN ALL SUBJECTS AT ALL VISITS THROUGH 7 MONTHS





TOTAL GLOBAL MARKETS

DEVELOPING PRODUCTS WITH THE POTENTIAL TO BECOME A STANDARD OF CARE FOR SELECT INDICATIONS IN SEVERAL OF THE LARGEST SEGMENTS IN OPHTHALMOLOGY



25

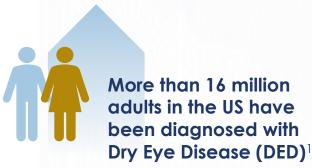
* In collaboration with REGENERON; †Data shown here is only representative of Dry Eye and not other Ocular Surface Diseases

In conadulation with Regenerous, i Data shown here is only representative of Dry Eye and not other occurr surface Diseases

1. 2019 Retina Pharma Market Scope Report 2. 2019 Glaucoma Pharma Market Scope Report 3. 2019 Dry Eye Market Scope Report 4. Estimated using historical costs of topical

eyedrops (not DEXTENZA) and the total addressable market based on the total US ocular surgical steroid market value 2019

THE UNMET NEED IN THE TREATMENT OF DRY EYE DISEASE





9 million US diagnoses of DED are classified as moderate to severe¹



Current standard of care:

- Artificial tears, gels and ointments (over-the-counter)
- Topical cyclosporine and lifitegrast
- Topical corticosteroids
- Lid hygiene
- Punctal plugs

Unmet Needs:

- Better tolerability
- More rapid onset of action
- Better efficacy



INTRACANALICULAR INSERT IN A PHASE 1 CLINICAL TRIAL FOR THE TREATMENT OF DRY EYE DISEASE

OTX-CSI (cyclosporine intracanalicular insert)

Description:

- Cyclosporine loaded in hydrogel
- Preservative-free
- Designed to provide effective therapy up to 12 weeks with a single insert
- Hands-free alternative to traditional eye drops
- Occludes the punctum
- Fully biodegradable insert
- Conjugated with fluorescein for visualization

First patient dosed in PH1 clinical trial in May 2020





OTX-CSI STUDY DESIGN FOR DRY EYE DISEASE

Phase 1 Study Design

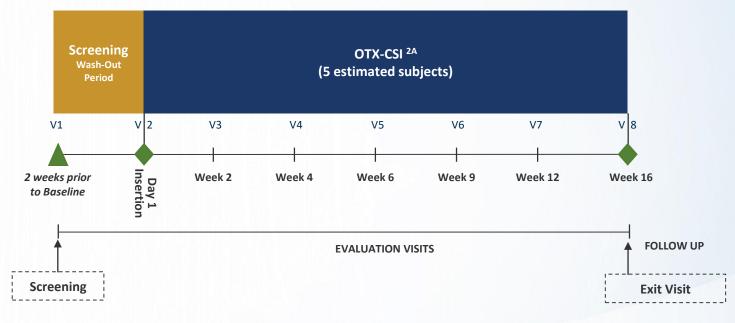
- Open-label, proof-of-concept study
- US study, approximately 5 subjects at 1 site
- 4 month study
- Both eyes will be treated

Objectives

 Safety, tolerability, durability and biological activity

Endpoints:

- Tear production
- Corneal fluorescein staining
- Patient reported outcomes





DEXTENZA FOR THE TREATMENT OF EPISODIC DRY EYE

STEROIDS ARE KNOWN TO BE EFFECTIVE

Dextenza®

(dexamethasone ophthalmic insert) 0.4mg for intracanalicular use

- A non-abusable formulation
- Occludes the canaliculus giving it rapid onset of action
- Preservative-free so it is less irritating to the ocular surface
- May have a clearer regulatory pathway following the possible approval of a competitive steroid drop therapy for episodic dry eye
- Leverages strong safety profile for DEXTENZA in the treatment of allergic conjunctivitis and inflammation and pain following ophthalmic surgery



THE UNMET NEED IN ALLERGIC CONJUNCTIVITIS

SEASONAL AND PERENNIAL ALLERGIC CONJUNCTIVITIS ARE INFLAMMATORY-MEDIATED OCULAR SURFACE DISORDERS INDUCED BY ALLERGENS



Standard of Care:

- Topical antihistamines and mast cell stabilizers act to reduce the signs and symptoms of the early phase allergic response1.
- There is evidence that patients with ocular allergies exhibit a persistent late phase response^{2,3}



- **Corticosteroids are effective** in treating both signs and symptoms of acute and chronic allergy
- However, corticosteroids are atypically prescribed due to the **ability to abuse** and/or overuse the treatment



- Most common symptoms are itchy, watery, red eyes⁶
- Treatment requires frequent administration of eyedrops, and hands touching the face several times per day

30



Carr W, Schaeffer J, Donnenfeld E. Treating allergic conjunctivitis: A once-daily medication that provides 24-hour symptom relief. Allergy Rhinol (Providence). 2016;7(2):e107-e114; 2.) Choi SH, Bielory L Late-phase reaction in ocular allergy. Curr Opin ergy Clin Immunol. 2008;8(5):438-444; 3) Bielory BP, O'Brien TP, Bielory L Management of seasonal allergic conjunctivitis: guide to therapy. Acta Ophthalmologica. 2012;9(0):539-407; 4) Bielory L, Metter EO, Nichols KK, Melton R, Thomas RK, Bartlett An algorithm for the management of allergic conjunctivitis. Allergy Asthma Proc. 2013;4(5):408-4420; 5) Leonardi A, Castegnaro A, Valerio ALG, Lazzarini D. Epidemiology of allergic conjunctivitis: allergearance and treatment patterns in a pulation-based study. *Curr Opin Allergy Clin Immunol.* 2015;15(5):482-448; 6) Rosaño N, Bielory L, Editemiology of allergic conjunctivitis: allergy Clin Immunol. 2015;14(5):482-448; 6) Rosaño N, Bielory C, Melton S, Tofon Allergy Clin Immunol. 2017;14(5):471-476

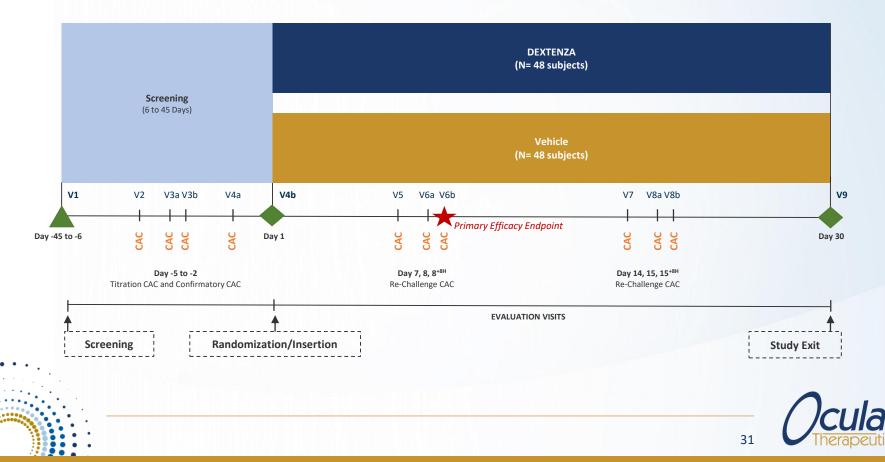
DEXTENZA FOR THE TREATMENT OF ALLERGIC CONJUNCTIVITIS

Phase 3C Study Design

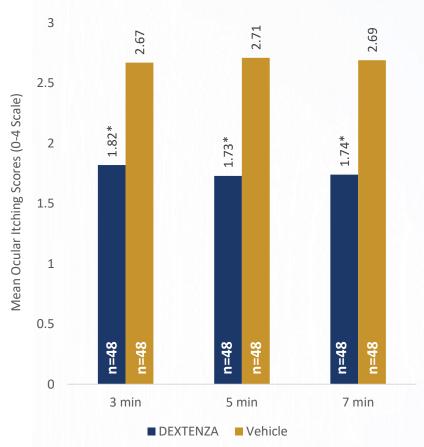
- Double-masked, parallel-arm, vehicle-controlled study
- US study, 96 randomized subjects at 6 sites
- Key Inclusion criteria:
 - History of allergic conjunctivitis;
 - Positive skin test to both seasonal and perennial allergen
 - Bilateral Conjunctival Allergan Challenge (CAC) reaction

Primary Endpoint

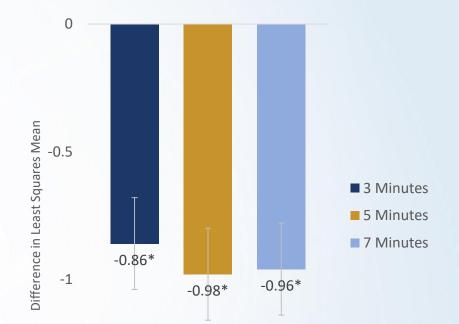
• Ocular itching evaluated by the subject on Day 8 (Visit 6b) at 3, 5, and 7 minutes post-challenge



MEAN OCULAR ITCHING SCORES



DIFFERENCE BETWEEN DEXTENZA AND VEHICLE

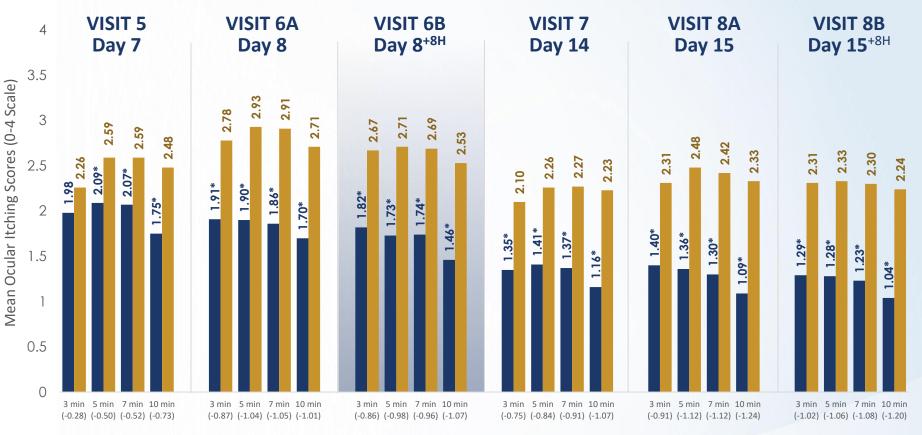




*Statistically Significant; P≤0.0001; Least Squares Means; Population: ITT + MCMC; Bars represent Standard Error

-1.5

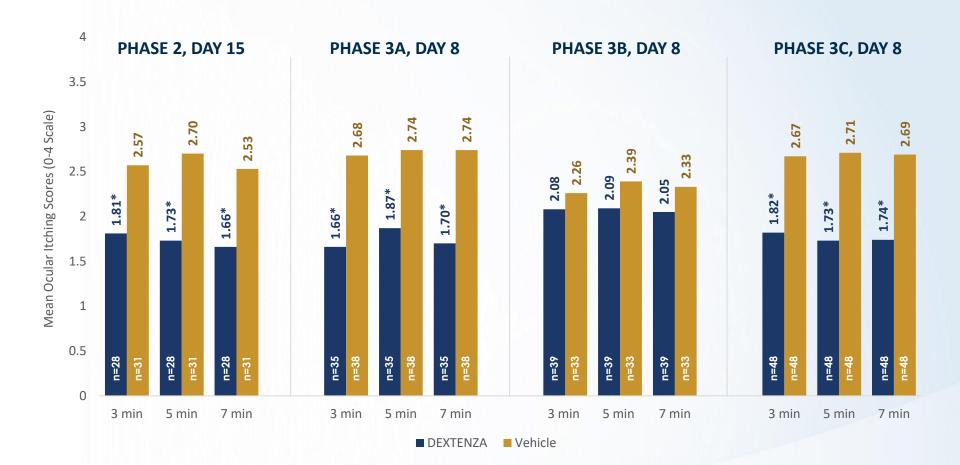
RESULTS: SECONDARY EFFICACY ENDPOINTS MEAN OCULAR ITCHING SCORES ACROSS ALL VISITS



DEXTENZA Vehicle (n=48) (n=48)



RESULTS: PRIMARY EFFICACY ENDPOINT MEAN OCULAR ITCHING SCORES ACROSS ALL STUDIES



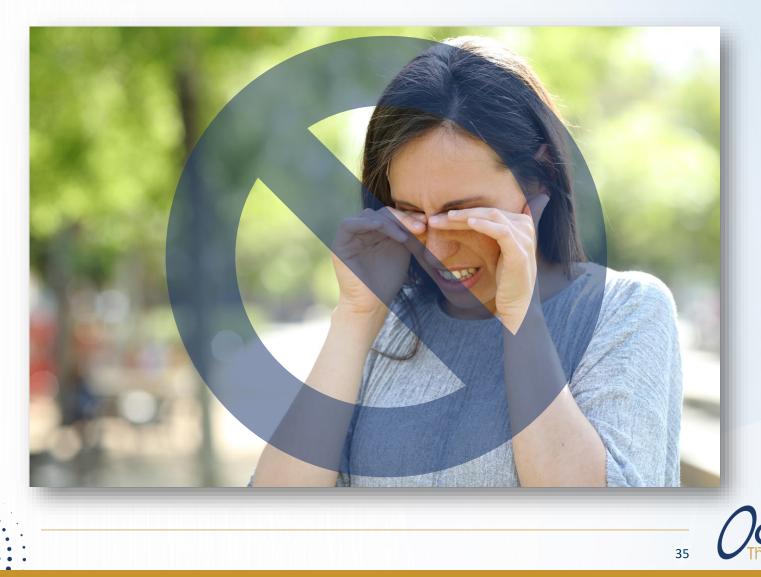


*Statistically Significant; P≤0.0025; Population: ITT + LOCF (Phase 2) & ITT + MCMC (Phase 3)

McLaurin E, et al. Evaluating the Safety and Efficacy of DEXTENZA, a Dexamethasone Insert (0.4 mg) for the Treatment of Ocular Itching. Presented at the American Society of Cataract and Refractive Surgery Annual Meeting; San Diego, CA, May 3-7, 2019.

DEXTENZA FOR ALLERGIC CONJUNCTIVITIS NEXT STEPS

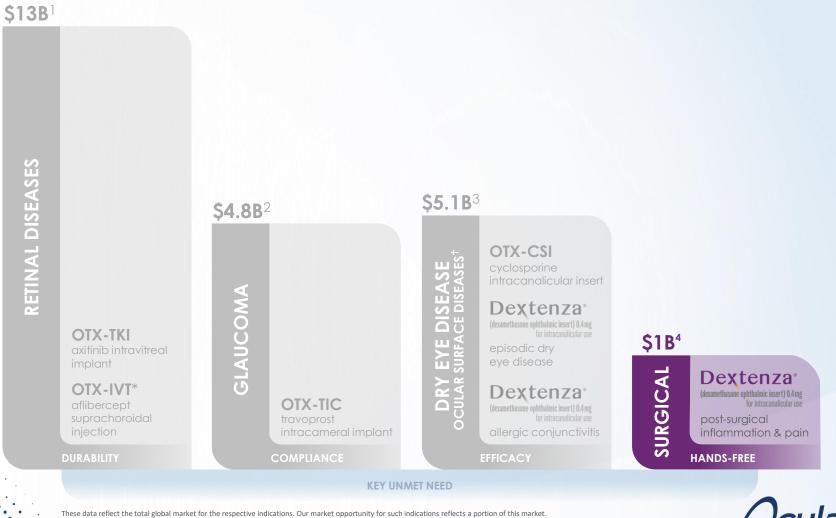
PLAN TO DISCUSS WITH FDA AND SUBMIT A SUPPLEMENTAL NDA IN 2020



ılar

GLOBAL MARKET VALUES

DEVELOPING PRODUCTS WITH THE POTENTIAL TO BECOME A STANDARD OF CARE FOR SELECT INDICATIONS IN SEVERAL OF THE LARGEST SEGMENTS IN OPHTHALMOLOGY



36

* In collaboration with REGENERON; †Data shown here is only representative of Dry Eye and not other Ocular Surface Diseases

1. 2019 Retina Pharma Market Scope Report 2. 2019 Glaucoma Pharma Market Scope Report 3. 2019 Dry Eye Market Scope Report 4. Estimated using historical costs of topical

eyedrops (not DEXTENZA) and the total addressable market based on the total US ocular surgical steroid market value 2019

THE UNMET NEED IN TREATMENT OF PAIN AND INFLAMMATION FOLLOWING SURGERY

EYE DROPS HAVE POOR CORNEAL RESIDENCE TIME^{3,4}



STEROID DROPS ARE THE MOST COMPLEX POST-OP CATARACT TREATMENT REGIMEN

Common clinical approach: 4 weeks with taper¹



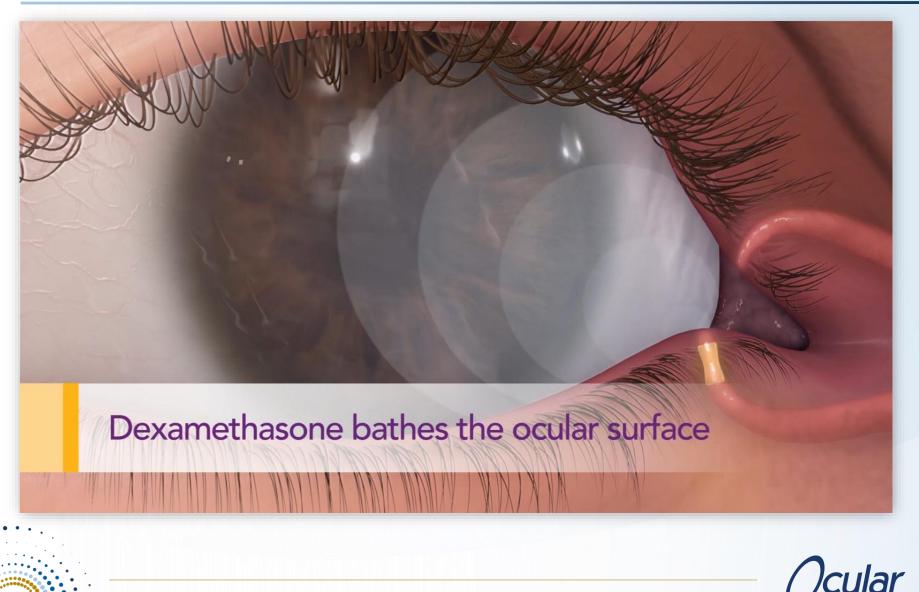
Ocular rebound inflammation may develop secondary to rapid tapering or abrupt discontinuation of steroids³



37

1. Kessel L et al. Ophthalmology. 2014;121(10):1915-24. 2. Data on file 00663. Ocular Therapeutix Inc. 3. Renfro L, Snow JS. Dermatol Clin. 1992;10(3):505-512 3. Kushwaha SK et al. Int J Pharm Investig. 2012;2(2):54-60. 4. Gaudana, R, et al. AAPS Journal. 2010;12 (3):348-360.

AN INNOVATIVE INTRACANALICULAR INSERT





DEXTENZA® STATUS

FDA APPROVED

DEXTENZA[®] is a corticosteroid indicated for the treatment of ocular inflammation and pain following ophthalmic surgery.

REIMBURSEMENT AND CODING

- Product J-code 1096
- Procedure CPT code 0356T
- Reimbursement support services DEXTENZA360[™]

LIFECYCLE MANAGEMENT

- Multiple active investigator-initiated trials (IIT) program
- P3 studies for the treatment of ocular itching associated with allergic conjunctivitis being completed
- Plan to request meeting with FDA and to file sNDA for ocular itching associated with allergic conjunctivitis by end of 2020

Provides a tapered delivery of preservative-free steroid onto the ocular surface for 30 days







DEXTENZA [package insert]. Bedford, MA: Ocular Therapeutix Inc; 2019.
 Data on file 00663. Ocular Therapeutix Inc.

DEXTENZA® LAUNCH METRICS



BILLABLE INSERTS

ACCOUNT ORDERING TRENDS



OF ORDERING ACCOUNTS BY MONTH





RECENT AND ANTICIPATED NEAR-TERM MILESTONES

OTX-TKI - first two cohorts fully enrolled, enrolling cohort 3 for PH1 clinical trial

OTX-IVT – Recently amended collaboration agreement with Regeneron

OTX-TIC - first 3 cohorts fully enrolled and 4th cohort currently enrolling in PH1 clinical trial

OTX-CSI – PH1 clinical trial initiated with first patient dosed May 2020

DEXTENZA[®] - sNDA for ocular itching associated with allergic conjunctivitis to be filed by end of 2020



(NASDAQ: OCUL)

TRANSFORMING DRUG DELIVERY LEVERAGING A NOVEL TECHNOLOGY PLATFORM

THANK YOU

