INVESTOR PRESENTATION

JUNE 2020

NASDAQ: EYPT

EYEPOINT PHARMACEUTICALS

FORWARD LOOKING

Various statements made in this presentation are forward-looking, and are inherently subject to risks, uncertainties and potentially inaccurate assumptions. All statements that address activities, events or developments that we intend, expect, plan or believe may occur in the future, including but not limited to statements about our expectations regarding the extent to which our business could be adversely impacted by the effects of the COVID-19 coronavirus pandemic, as well as the timing and clinical development of our product candidates, including EYP-1901; and the potential for EYP-1901 as a vital, novel six-month treatment for serious eye diseases, including wet age-related macular degeneration, diabetic retinopathy and retinal vein occlusion; and our longer term financial and business goals, are forward-looking statements. . Some of the factors that could cause actual results to differ materially from the anticipated results or other expectations expressed, anticipated or implied in our forward-looking statements are risks and uncertainties inherent in our business including, without limitation: the extent to which COVID-19 impacts our business; the effectiveness and timeliness of our clinical trials, and the usefulness of the data; the timeliness of regulatory approvals; our ability to achieve profitable operations and access to needed capital; fluctuations in our operating results; our ability to successfully produce sufficient commercial quantities of YUTIQ and DEXYCU and to successfully commercialize YUTIQ and DEXYCU in the U.S.; our ability to sustain and enhance an effective commercial infrastructure and enter into and maintain commercial agreements for YUTIQ and DEXYCU; the development of our YUTIQ line extension shorter-duration treatment for non-infectious uveitis affecting the posterior segment of the eye; potential off-label sales of ILUVIEN for non-infectious uveitis affecting the posterior segment of the eye; consequences of fluocinolone acetonide side effects for YUTIQ; consequences of dexamethasone side effects for DEXYCU; successful commercialization of, and receipt of revenues from, ILUVIEN for diabetic macular edema, or DME; Alimera's ability to obtain additional marketing approvals and the effect of pricing and reimbursement decisions on sales of ILUVIEN for DME; Alimera's ability to commercialize ILUVIEN for non-infectious uveitis affecting the posterior segment of the eye in the territories in which Alimera is licensed to do so; our ability to market and sell products; the success of current and future license agreements, including our agreement with Equinox Science, LLC; termination or breach of current license agreements, including our agreement with Equinox Science, LLC; our dependence on contract research organizations, contract sales organizations, vendors and investigators; effects of competition and other developments affecting sales of products; market acceptance of products; effects of guidelines, recommendations and studies; protection of intellectual property and avoiding intellectual property infringement; retention of key personnel; product liability; industry consolidation; compliance with environmental laws; manufacturing risks; risks and costs of international business operations; volatility of our stock price; possible dilution; absence of dividends; and other factors described in our filings with the Securities and Exchange Commission. We cannot guarantee that the results and other expectations expressed, anticipated or implied in any forward-looking statement will be realized. A variety of factors, including these risks, could cause our actual results and other expectations to differ materially from the anticipated results or other expectations expressed, anticipated or implied in our forward-looking statements. Should known or unknown risks materialize, or should underlying assumptions prove inaccurate, actual results could differ materially from past results and those anticipated, estimated or projected in the forward-looking statements. You should bear this in mind as you consider any forward-looking statements. Our forward-looking statements speak only as of the dates on which they are made. We do not undertake any obligation to publicly update or revise our forward-looking statements even if experience or future changes makes it clear that any projected results expressed or implied in such statements will not be realized.

AN EMERGING LEADER IN OPHTHALMOLOGY

EyePoint Pharmaceuticals

Ocular Disease Focus	Advancing Pipeline	Commercial Momentum	Validated Technology
Building portfolio of commercial- and clinical-stage assets targeting attractive areas of unmet need in ocular diseases	EYP-1901 in development as a sustained six-month anti-VEGF treatment for wet age-related macular degeneration	Expanding commercial footprint of YUTIQ® and DEXYCU® franchises across the U.S. through targeted physician engagement and volume-based agreements	Durasert® sustained-release technology platform has broad application across both internal programs and external partnerships

OCULAR DISEASE FOCUSED PIPELINE

EyePoint Pharmaceuticals

Program	Preclin.	Phase 1	Phase 2	Phase 3	Commercial	Rights
DEXYCU® post-operative inflammation following ocular surgery						WW[2]
YUTIQ® - three-year treatment for chronic non-infectious uveitis affecting the posterior segment						U.S.[1,2]
YUTIQ® 50 - six-month treatment for chronic non-infectious uveitis affecting the posterior segment						WW
EYP-1901 – Durasert Six-month TKI, vorolanib, treatment for wet AMD						WW[3]

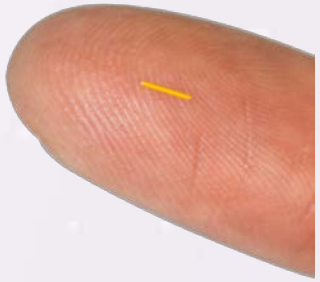
Durasert® Partners	Preclin.	Phase 1	Phase 2	Phase 3	Commercial
ILUVIEN/Alimera Sciences – DME					
Undisclosed – Ophthalmology programs					
Undisclosed - non-ophthalmology					
Undisclosed - Other small molecule					

[1] Alimera Sciences, Inc. owns worldwide rights to ILUVIEN® for DME and rights for YUTIQ® for non-infectious posterior uveitis in the EMEA with a royalty payable to EyePoint.
[2] Rights for China, Hong Kong, Taiwan and Macau licensed to Ocumension with milestones and royalty payable to EyePoint
[3] Excludes China, Hong Kong, Taiwan and Macau

Durasert® Technology

DURASERT® - Proven Sustained Release Technology

Four FDA-approved Products & Multiple Programs in Development Utilizing Durasert®



- Allows for sustained-release delivery of small molecules to the back of the eye
- Controlled and targeted release of drug allows for treatments ranging from months to years
- Single injection, in-office administration decreases patient compliance issues, frequent office visits and burdensome treatment schedule

Approved products[1]:

- YUTIQ® (2018, EyePoint) - *Posterior Segment Uveitis*
- ILUVIEN® (2014, Alimera) - *DME*
- RETISERT ® (2005, B&L) - *Uveitis*
- VITRASERT® (1996, B&L) - *CMV retinitis*

Development products:

- EYP-1901[2] (EyePoint) – Wet AMD
- YUTIQ® 50[1] (EyePoint) - *Posterior Segment Uveitis*
- Partner programs

[1] Uses Durasert® non-erodible technology
[2] Uses Durasert® bioerodible technology

EYP-1901 – 6-Month Durasert™ Vorolanib - Tyrosine Kinase Inhibitor (TKI)

Opportunity in wet AMD, Diabetic Retinopathy and Retinal Vein Occlusion

EyePoint Pharmaceuticals

EYP-1901 - Six-Month Durasert® Tyrosine Kinase Inhibitor Product Candidate Overview

- EYP-1901 is being studied as a single injection anti-VEGF treatment providing sustained delivery of drug over a minimum six-month period and reducing need for more frequent anti-VEGF injections in wet AMD patients
- Leverages bioerodible Durasert technology and anti-VEGF molecule, vorolanib, a tyrosine kinase inhibitor (TKI)
  - Vorolanib previously studied in Phase 1 and 2 trials as oral therapy providing efficacy signals
- Preliminary safety toxicity study of EYP-1901 completed in mini pig model, a validated ocular animal model
- Non-GLP rabbit PK and safety study of EYP-1901 completed
- EYP-1901 GLP toxicology program underway with Q4 data expected

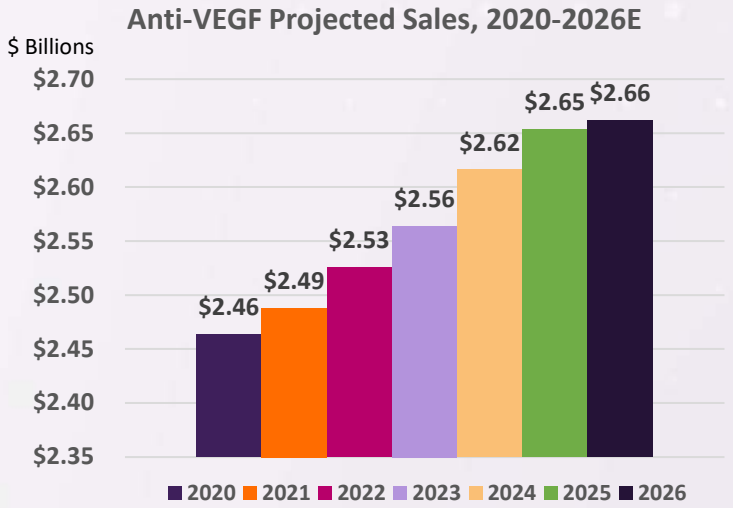
EYP-1901 TARGETING ATTRACTIVE MARKETS

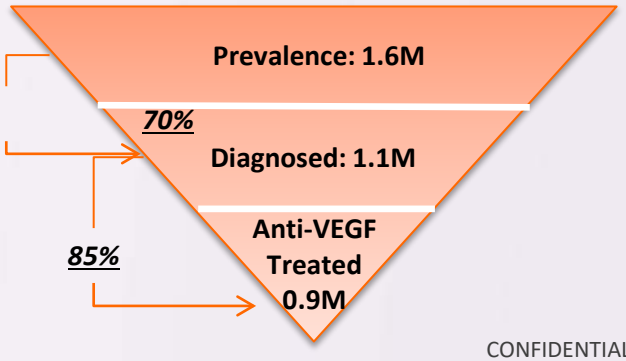
Potential in Wet Age-related Macular Degeneration (wet AMD), Diabetic Retinopathy and Retinal Vein Occlusion

Patient Experience

- Debilitating retinal disease and the leading cause of progressive vision loss in patients over 65
- As U.S. population ages, retinal disease is becoming more frequent
- Currently available anti-VEGF treatments require frequent and painful ocular injections providing treatment for a short-period of time with frequent missed injections common
- Long-lasting activity is a key missing attribute in available standards of care

Market Potential





Sources: KOL insights; Datamonitor 2019; Kodiak Sciences; Cowen Therapeutic Categories Outlook 2019; AAO; Centers for Disease Control; Global Data

VOROLANIB CLINICAL HISTORY[1]

Molecule Demonstrates Positive Efficacy Signal From Oral Delivery wAMD Trials

Phase 1 Trial – 24 Weeks

Visual Acuity (BCVA)

- Despite low retreatment rates, best-corrected visual acuity was maintained to within four letters of baseline at the 24-week end point or improved in all except 1 participant.[2]
- Mean change was +3.8 +/- 9.6 letters (n=25 completers)

Anti—VEGF Rescue Injections

- 60% of patients (15 of 25) required no injections while on 24-week study
- The mean time to the first rescue injection was 130 days in the 10 participants who completed the study and required an injection[3]

Central Retinal Thickness

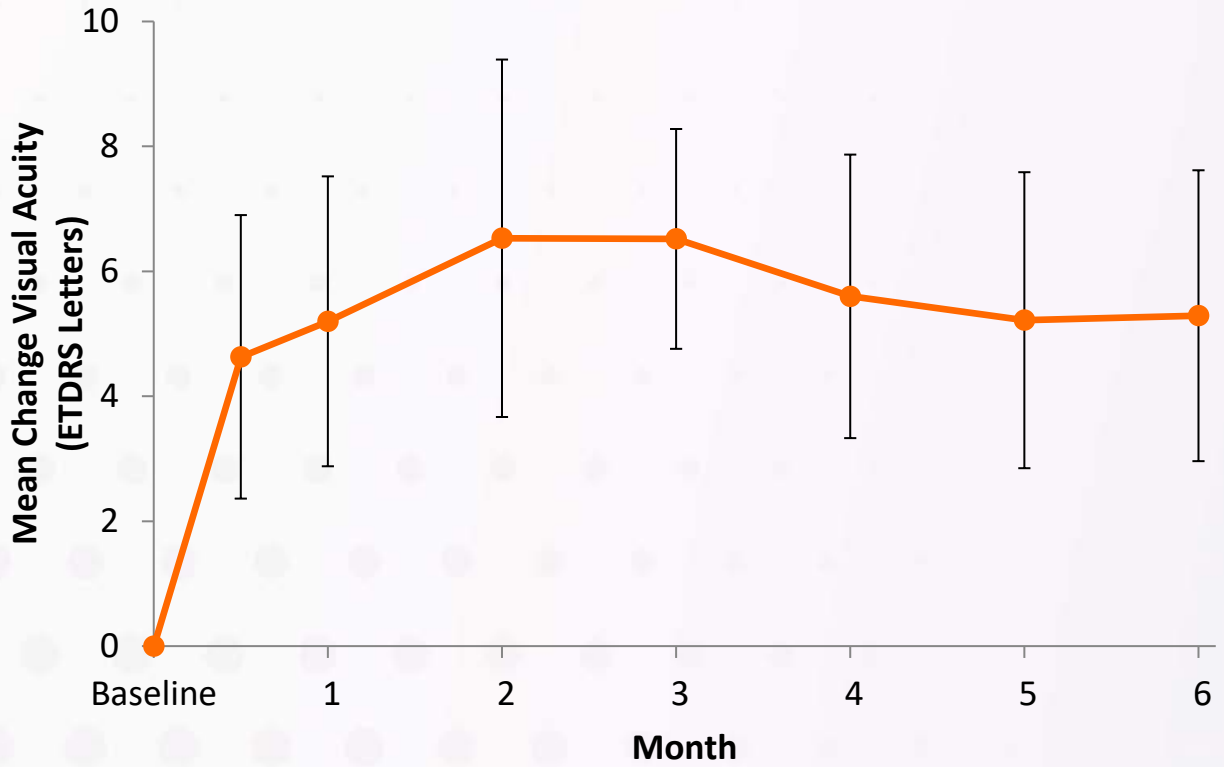
- Mean OCT thickness in completers was reduced by -50 +/- 97 µm[3]
- Mean OCT thickness in treatment-naïve patients was reduced by ~80 µm[4]

1 – Study completed by Tyrogenix, Inc.
[2] Jackson TL et al. JAMA Ophthalmology July 2017 Volume 135, Number 7, 2017 – page 766
[3] -Jackson TL et al. JAMA Ophthalmology July 2017 Volume 135, Number 7, 2017 – page 765
[4] -Jackson TL et al. JAMA Ophthalmology July 2017 Volume 135, Number 7, 2017 – page 765 –figure 4

VOROLANIB CLINICAL HISTORY[1] - wAMD

Phase 1 Oral Delivery Trial - Preliminary Evidence of BCVA Improvements and Ocular Safety

Subjects Who Completed 6 Months Without Rescue Injections (N=15)



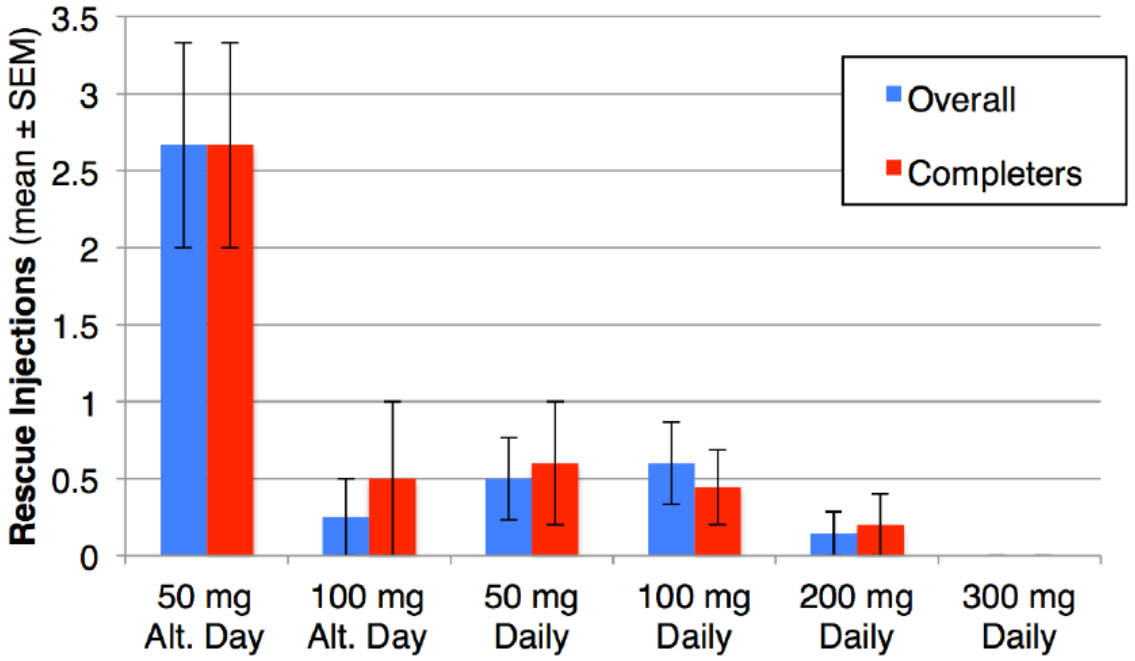
Mean Change in ETDRS Score ± SEM from Baseline

- 15 completers (60%) with no rescue through 24 weeks (shown in graph)
- 25/35 completed with 10 discontinued due to systemic AEs and non-drug related events
- No significant ocular AEs

1 – Study completed by Tyrogenix, Inc.

VOROLANIB CLINICAL HISTORY[1] - wAMD

Phase 1 Oral Delivery Trial - Reduced Rescue Injections over 6 months



- The graphs shows the mean number of intravitreal anti-vascular endothelial growth factor (VEGF) rescue injections that participants required in each of the X-82 groups.
- The completers' group (red) comprises the 25 participants who reached the 24 week endpoint, and the overall group (blue) comprises all 35 participants.

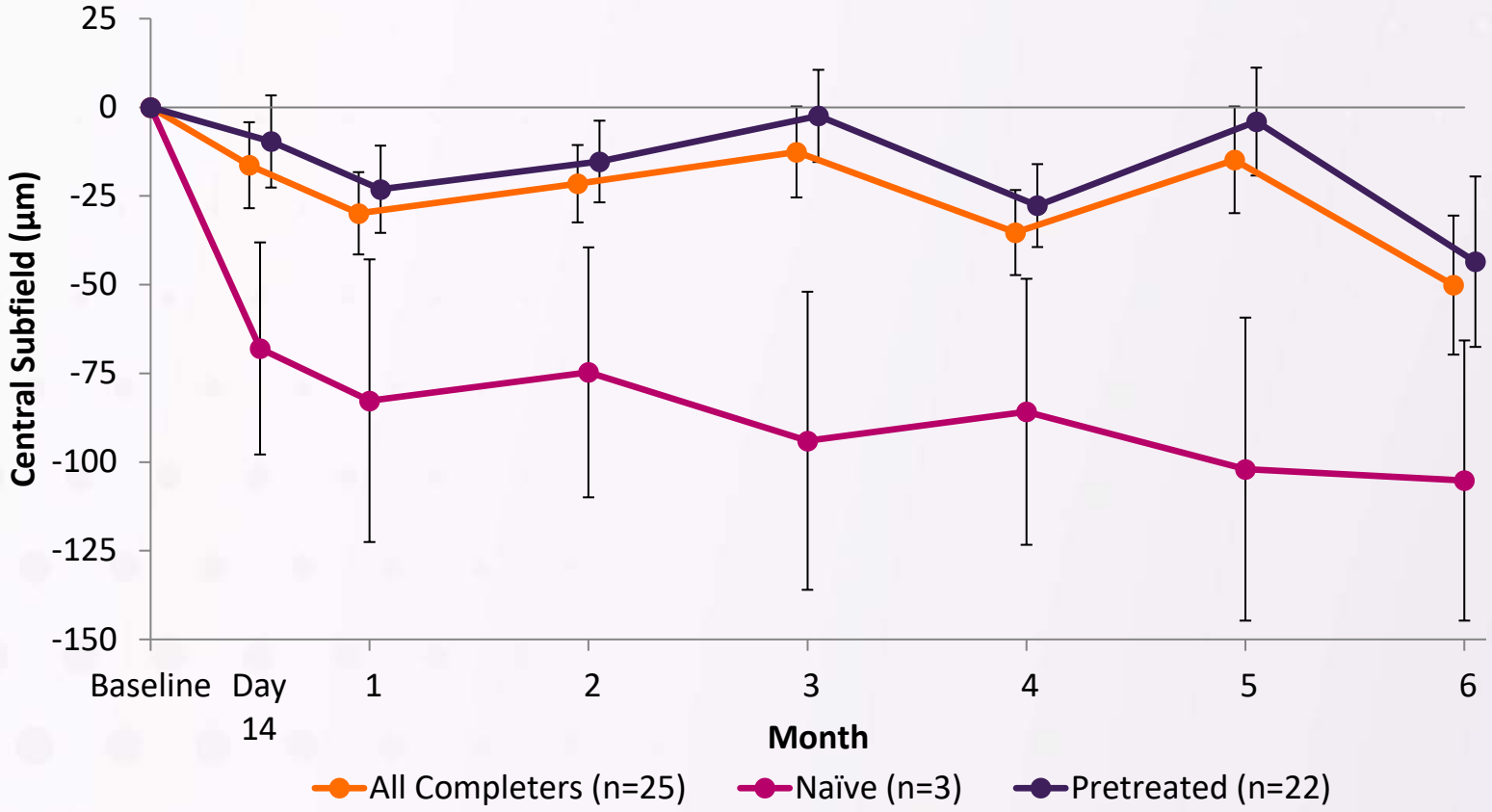
- Clear dose response with daily oral dosing between 50 mg and 200 mg
- Subjects dosed at 300 mg dropped out due to GI AEs attributed to oral dosing

X-82 is prior program name for vorolanib
1 – Study completed by Tyrogenix, Inc.

VOROLANIB CLINICAL HISTORY[1]

Phase 1 Oral Delivery Trial – Central Subfield Thickness Maintained or Reduced over 6 months

Subjects Who Completed 6 Months Treatment



1 – Study completed by Tyrogenix, Inc.
Mean ± Standard Error.

VOROLANIB CLINICAL HISTORY[1]

Phase 2b Oral Delivery Trial in wAMD[2]

Prematurely Terminated by DSMB Due to Negative Systemic AEs
No Significant Ocular AEs Were Reported

- Study started in March 2015 and enrolled 157 patients
- Randomized 40, 39, 39 and 39 patients at 50, 100, 200 mg and placebo respectively
- The trial was expected to take place for 56 weeks (52 weeks with additional 4 weeks of follow up)
- Study stopped prematurely at the second interim analysis (36 weeks follow up) based on concern of gastrointestinal and hepatobiliary toxicity[3]

1 – Study completed by Tyrogenix, Inc.
2 - Cohen M et al. The Retina Society. 52nd Annual Scientific Meeting. London, September 11-15, 2019.
3 - Cohen M et al. The Retina Society. 52nd Annual Scientific Meeting. London, September 11-15, 2019 – page 101

Vorolanib Clinical History - Phase 2b Oral Delivery Trial in Wet AMD

EyePoint Pharmaceuticals

BCVA was Stable Through 12-Months in Patients Already Controlled by Current Anti-VEGF Therapies

Change in VA from baseline to week 52	Placebo n=39	50 mg n=40	100 mg n=39	200 mg n=39
n	22	23	19	17
Mean (SD)	-0.3 (10.63)	0.2 (4.14)	-0.9 (6.57)	1.7 (5.58)
Median	1.5	0.0	-3.0	2.0
Min, Max	-18, 23	-8, 10	-15, 9	-13, 9

Study completed by Tyrogenex, Inc.

Vorolanib Phase 2b Oral Delivery Trial in wAMD – Oral Administration

BCVA stabilization was achieved with ~50% fewer rescue interventions vs. placebo

Number of anti-VEGF injections per year	Placebo n=39	50 mg n=40	100 mg n=39	200 mg n=39
Mean (SD)	8.1 (3.90)	6.7 (4.64)	6.0 (3.69)	4.7 (3.59)
Median	8.6	6.2	6.3	5.0
Min, Max	0.0, 13.0	0.0, 22.0	0.0, 12.5	0.0, 12.2

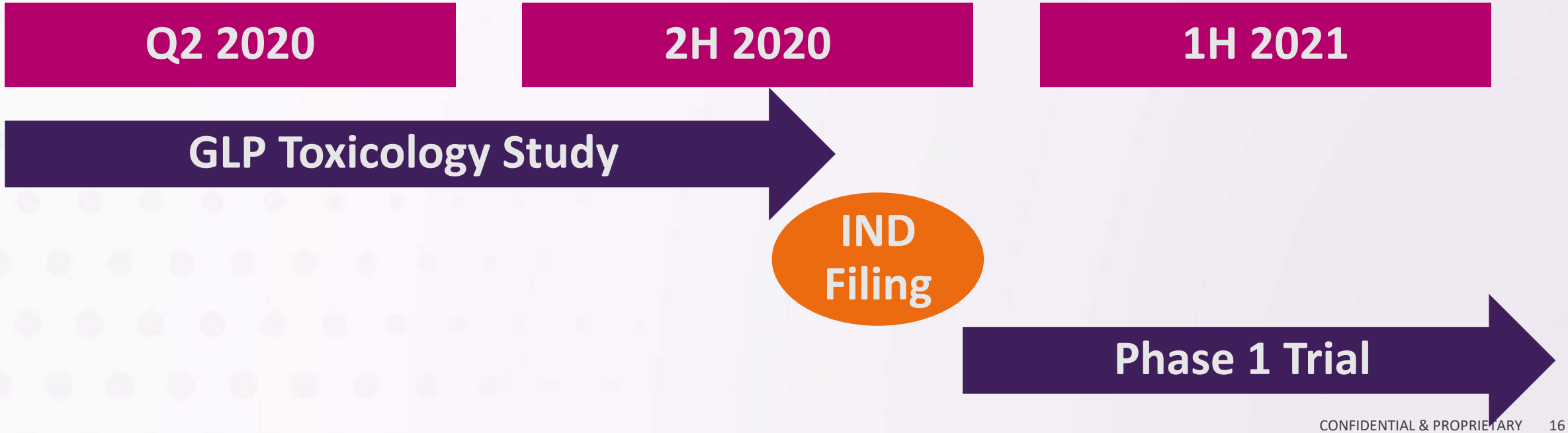
For subjects followed ≥ 6 months, number of anti-VEGF injections per year*	Placebo n=33	50 mg n=34	100 mg n=30	200 mg n=26
Mean (SD)	8.4 (3.74)	6.5 (4.59)	6.0 (3.68)	4.4 (3.26)
Median	9.0	6.1	5.8	4.6
Min, Max	0.0, 13.0	0.0, 22.0	0.0, 12.5	0.0; 11.2

*Normalized for number of months on study

Study completed by Tyrogenex, Inc.

EYP-1901 NEXT STEPS AND DEVELOPMENT PLAN

- Type B Pre-IND meeting completed with FDA in January 2020;
- GLP toxicology study initiated in March 2020; unaffected by COVID-19 shut-downs
- IND filing in Q4 2020 with Phase 1 initiation to follow
- Initial data expected in 2H of 2021



Commercial Programs

EYEPOINT PHARMACEUTICALS

TWO COMMERCIAL PRODUCT FRANCHISES

EyePoint Pharmaceuticals

0.18 mg YUTIQ™ (fluocinolone acetonide intravitreal implant) 0.18 mg

Chronic non-infectious uveitis affecting the posterior segment of the eye

- Addresses limitations of short-acting standard of cares to decrease uveitis flares
- Permanent and specific J-Code

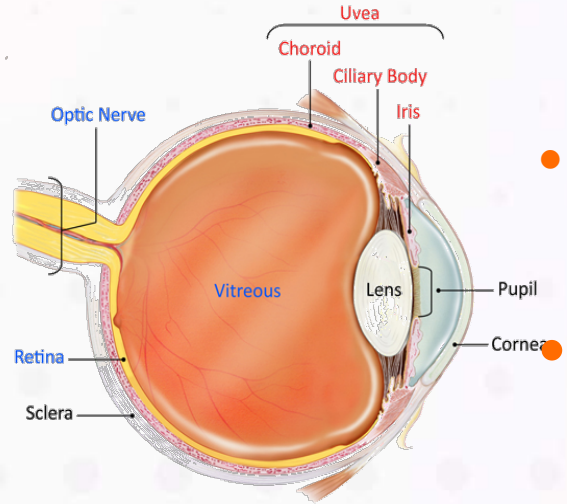
DEXYCU® (dexamethasone intraocular suspension) 9%

Postoperative inflammation following ocular surgery

- Single long-lasting treatment compared with complicated eyedrop regimen
- Permanent and specific J-Code with solid reimbursement experience

CHRONIC, NONINFECTIOUS UVEITIS MARKET

Patient Experience



- Uveitis is caused by inflammation of the Uveal tract (iris, ciliary body, choroid), or adjacent structures (lens, retina, vitreous, optic nerve)
- Uncontrolled and spontaneous uveitic flares can lead to severe vision loss or blindness
- The disease is often lifelong and current standard of care steroids provide short-term relief and frequent office visits

Market Potential

~60K–100K

Patients in the U.S. with Chronic Non-infectious Posterior Segment Uveitis

- ~30,000 new cases of blindness per year in the U.S.
- 3rd leading cause of blindness in the U.S.

YUTIQ® PRODUCT PROFILE ADVANTEGEOUS AS A LONG-TERM TREATMENT ALTERNATIVE

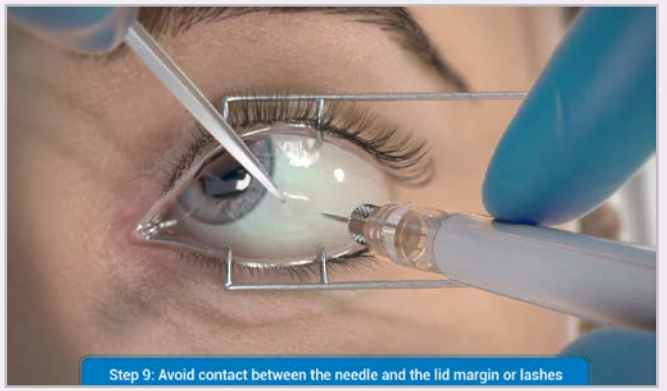
EyePoint Pharmaceuticals

YUTIQ® Is Designed to Deliver a Sustained Release of Fluocinolone for Patients with Chronic Noninfectious Posterior Uveitis for Up To 36 Months

Durasert Technology

Packaging

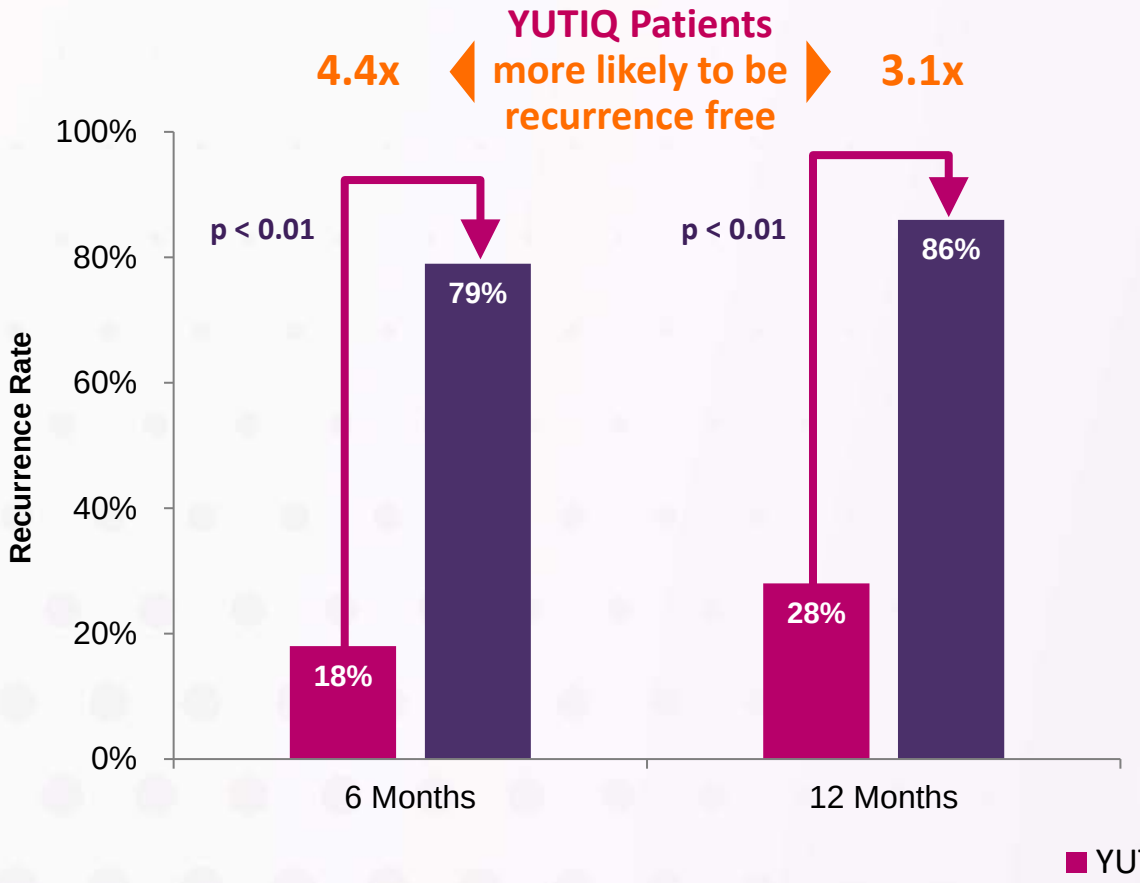
YUTIQ Placement



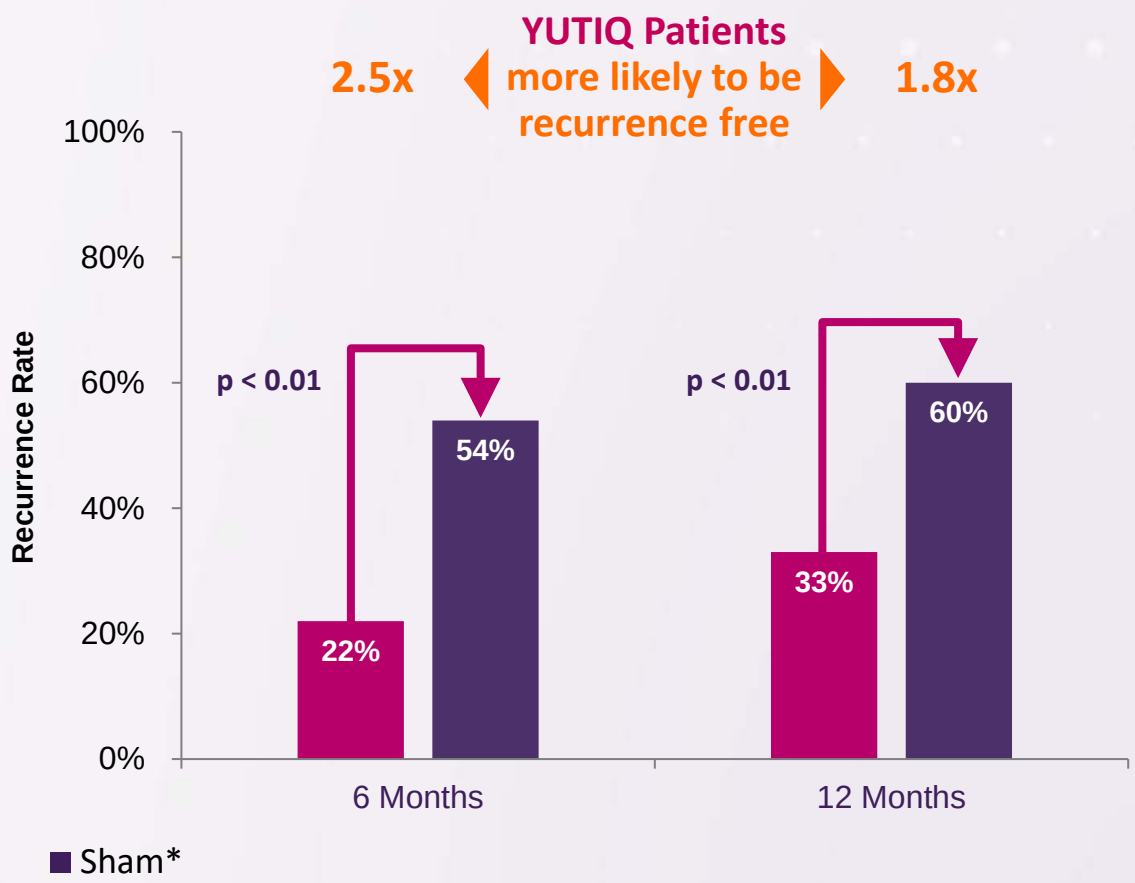
YUTIQ® LONG-LASTING, ANTI-INFLAMMATORY ACTIVITY

Recurrence Rate at Six and Twelve Months vs Sham

Study 1 (Recurrence Rate at 6 and 12 Months)



Study 2 (Recurrence Rate at 6 and 12 Months)



YUTIQ Sham*

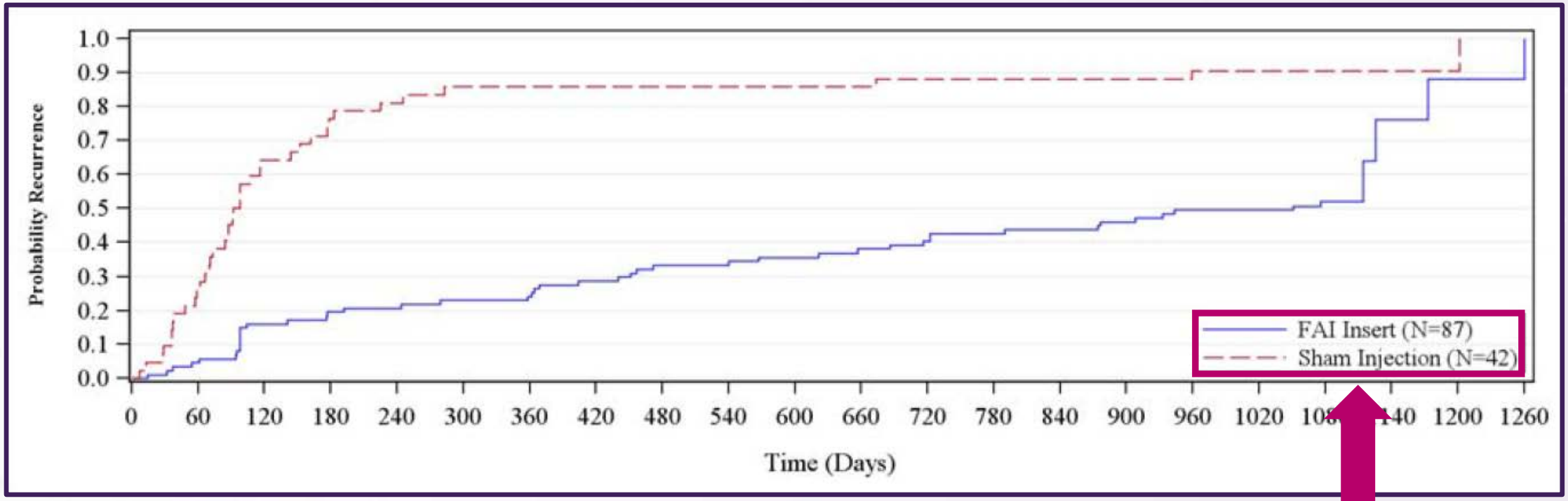
* Sham includes standard of care.
Note: Refer to the full YUTIQ® product label at www.eyepointpharma.com

YUTIQ® ABILITY TO DECREASE UVEITIS FLARES KEY TO PREVENTING BLINDNESS

EyePoint Pharmaceuticals

Single Insert Reduced Probability of Uveitis Recurrence Through 36 Months

ITT Population



YUTIQ Median Time to First Recurrence: 1,051 Days

Note: Sham patients include patients that received rescue therapy.

TWO COMMERCIAL PRODUCT FRANCHISES

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Postoperative inflammation following ocular surgery

- Single long-lasting treatment compared with complicated eyedrop regimen
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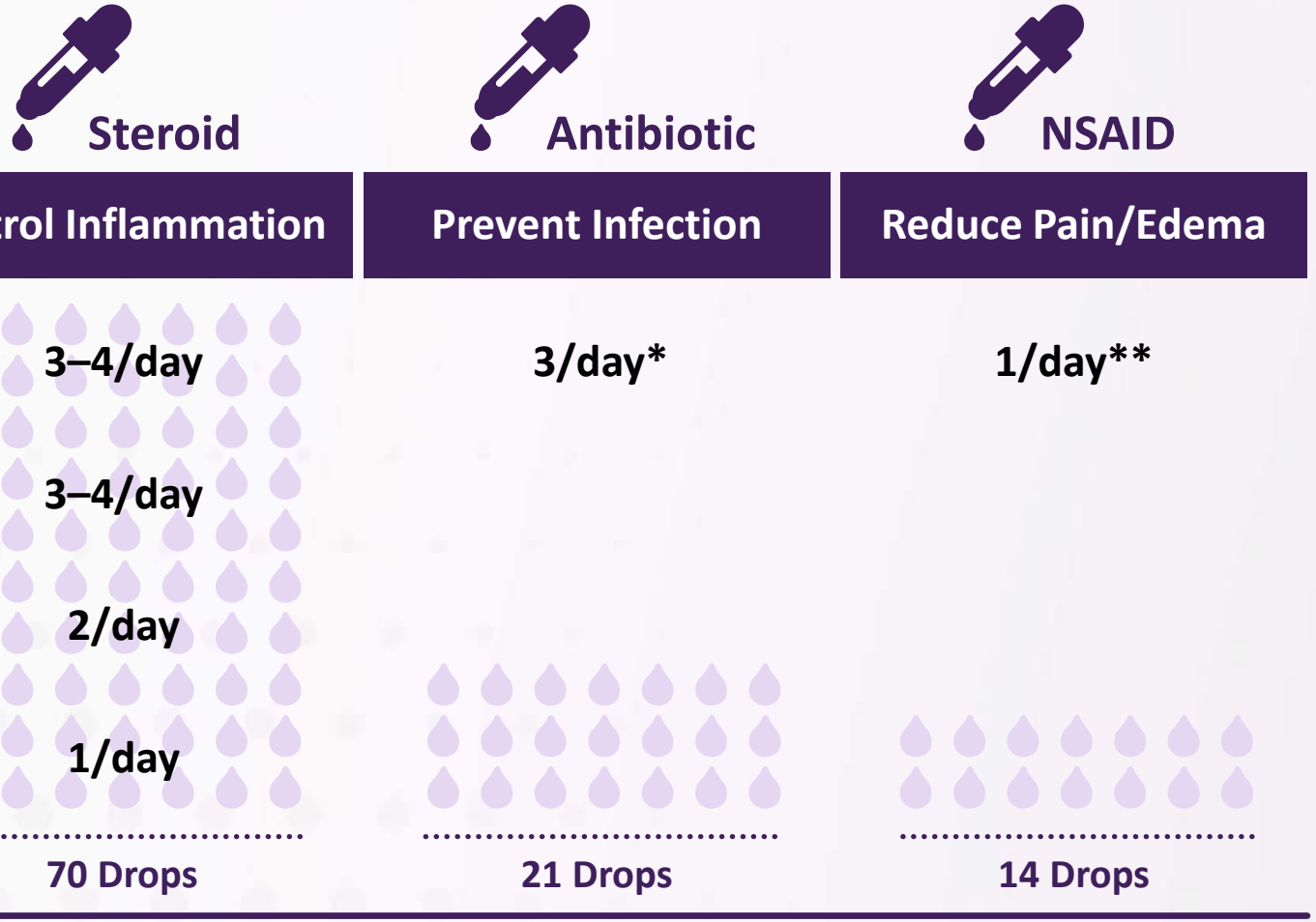
OCULAR INFLAMMATION PATIENT EXPERIENCE

Post-cataract Treatment Regimen Requires Multiple Daily Eyedrops



Up to 100 Drops Over Four Weeks

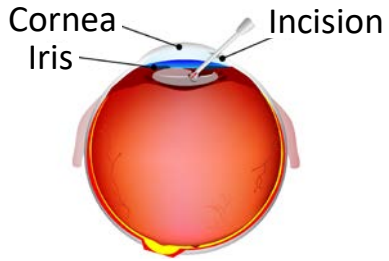
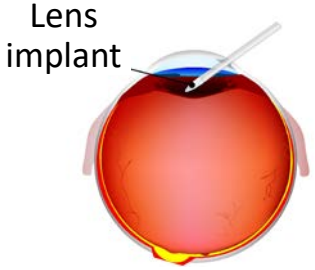
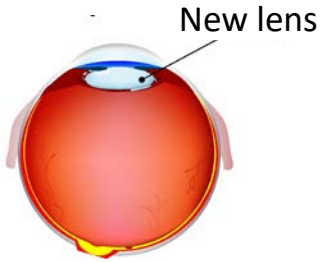
Physician Perspective

- Poor patient compliance with drops could lead to **poor outcomes**
- Patient call backs are time consuming and **disruptive to physician office**
- Patients/caregivers are **frustrated and confused with regimen**

*Source: Vigamox/Besivance product labeling (not specifically indicated for this use, but are commonly prescribed for use).
**Source: Prolensa/Bromday product labeling (not specifically indicated for this use, but are commonly prescribed for use).

SIGNIFICANT CATARACT SURGERY MARKET

U.S. Cataract Surgery Very Large and Growing

Step 1	Step 2	Step 3
Diseased lens is removed	**Intraocular lens is inserted**	**Intraocular lens is positioned**
		

- Steroids typically needed to prevent post-operative inflammation

3.8 Million*

Cataract Surgeries in 2018

- 8% annual growth rate in the U.S.
- Most performed surgery in the U.S.

Baby boomers; longer life expectancy with greater access to healthcare

Improvements in technology

Improved outcomes

* Based upon company estimates for 2018.
Source: imaged from the American Optometric Association.

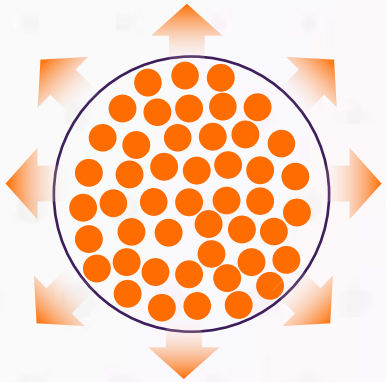
DEXYCU® PRODUCT PROFILE FAVORABLE COMPARED TO EYEDROP REGIMEN

EyePoint Pharmaceuticals

First and Only FDA-approved Single-dose, Sustained-release, Intracameral Steroid for the Treatment of Postoperative Inflammation Following Ocular Surgery

- Single dose (5µL) administered in the posterior chamber (behind the iris) at the end of surgery
- Encapsulated in bioerodible Verisome® technology for extended release of dexamethasone

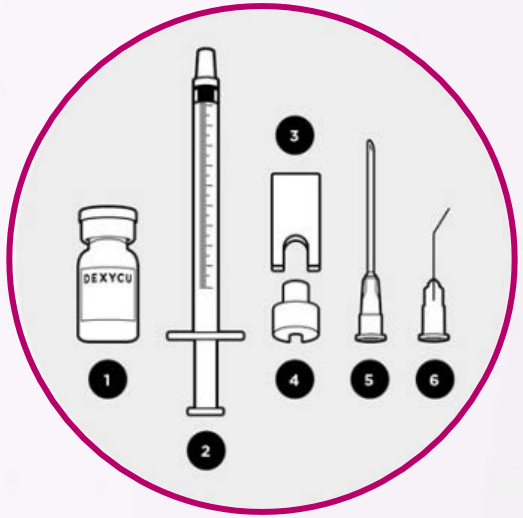
Verisome® Technology



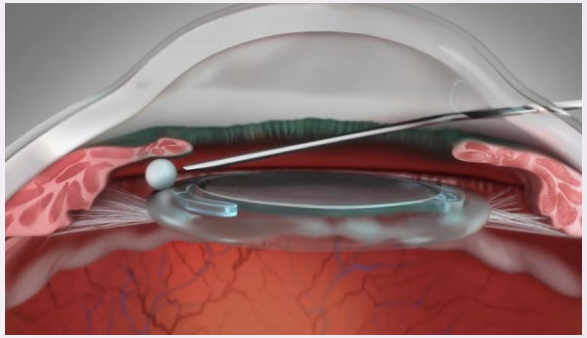
Dexamethasone

Detectable up to 22 days after single injection[1]

DEXYCU® Kit



DEXYCU® Placement



Suspension placed behind the iris

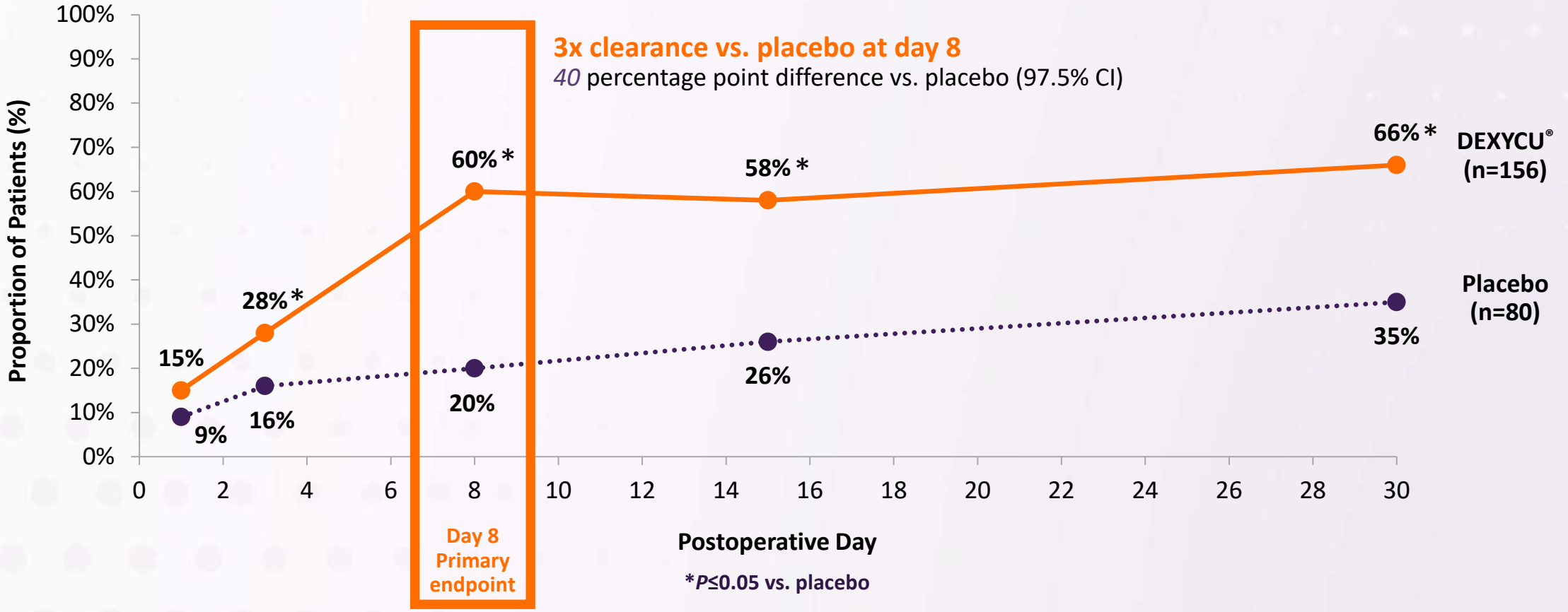
[1] Wong V. et al. Pharmacokinetic Study of 10090 in the Anterior Chamber of Rabbits (2013).

Note: Refer to the full DEXYCU® product label at www.eyepointpharma.com.

DEXYCU® CLINICAL DATA HIGHLIGHTS LONG-LASTING, ANTI-INFLAMMATORY ACTIVITY

Statistically Significant Inflammation Reduction

Patients with Anterior Chamber Cells (ACC) Clearing at Each Visit



Note: Refer to the full DEXYCU® product label at www.eyepointpharma.com.

KEY ACCESS AGREEMENTS TO EXPAND PRODUCT REACH

- Continuing to advance discussion to secure additional volume-based agreements with ambulatory surgical centers and integrated healthcare networks for DEXYCU®
- Strategy in alignment with our targeted commercial focus on high-volume surgery centers that have the potential to bulk order DEXYCU®

One of Largest Integrated Delivery Systems in the U.S.

- DEXYCU® available to its 8.5 million patients
- 2-year contract includes California, Washington, Georgia, Colorado and Mid-Atlantic states

vizient™

- Three-year agreement for DEXYCU®
- Vizient's network includes more than 50% of the nation's acute care providers, including 95% of the nation's academic medical centers, and more than 20% of ambulatory care providers

UPCOMING CORPORATE EVENTS

- **Pipeline**
  - Completion of GLP toxicology study of EYP-1901
  - Filing and acceptance of Investigational New Drug application for EYP-1901
  - Initiation of Phase 1 trial of EYP-1901 in wet AMD
- **Commercial Programs**
  - Securing additional volume-based agreements with ambulatory surgical centers and integrated healthcare networks for DEXYCU®

AN EMERGING LEADER IN OPHTHALMOLOGY

EyePoint Pharmaceuticals

Ocular Disease Focus	Advancing Pipeline	Commercial Momentum	Validated Technology
Building portfolio of commercial- and clinical-stage assets targeting attractive areas of unmet need in ocular diseases	EYP-1901 in development as a sustained six-month anti-VEGF treatment for wet age-related macular degeneration	Expanding commercial footprint of YUTIQ® and DEXYCU® franchises across the U.S. through targeted physician engagement and volume-based agreements	Durasert® sustained-release technology platform has broad application across both internal programs and external partnerships