

August 19, 2014

HEALTHCARE/BIOTECHNOLOGY

Stock Rating:

OUTPERFORM

12-18 mo. Price Target \$25.00
OCUL - NASDAQ \$14.33

3-5 Yr. EPS Gr. Rate NA
52-Wk Range \$15.25-\$11.90
Shares Outstanding 20.6M
Float 6.5M
Market Capitalization \$294.8M
Avg. Daily Trading Volume NA
Dividend/Div Yield NA/NM
Book Value \$0.72
Fiscal Year Ends Dec
2014E ROE NA
LT Debt \$15.0M
Preferred NA
Common Equity \$56M
Convertible Available No
Trading range since July 2014 IPO.

EPS Diluted	Q1	Q2	Q3	Q4	Year	Mult.
2013A	--	--	--	--	(5.11)	NM
2014E	(2.45)A	(2.31)	(0.55)	(0.40)	(2.97)	NM
2015E	--	--	--	--	(1.42)	NM
Revenue (\$/mil)	Q1	Q2	Q3	Q4	Year	Mult.
2013A	--	--	--	--	0.0	NM
2014E	0.0A	0.1	0.1	0.2	0.3	NM
2015E	--	--	--	--	1.8	NM

Ocular Therapeutix

Underappreciated (Plug 'n) Play in Eye Disease; Initiating with Outperform

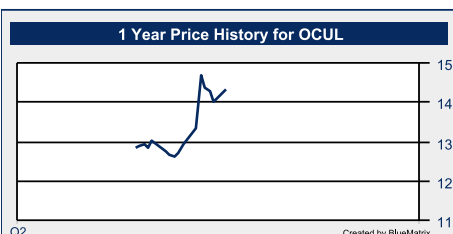
SUMMARY

We are initiating coverage of Ocular Therapeutix with an Outperform rating and a \$25 price target. Ocular is an appealing platform play in the ophthalmology space, driven by several technological advances that permit steady delivery of drugs to the eye using punctal plugs. The company's pipeline is substantially de-risked as Ocular's plugs deliver medications already approved for glaucoma (travoprost) and post-surgical inflammation (dexamethasone). Both the inflammation (OTX-DP) and glaucoma (OTX-TP) plugs have achieved clinical proof-of-concept, and we expect FDA approvals in 2016/2018, respectively. Longer term, we see the interplay between compliance advantages of plugs vs. generic/soon-to-be generic eyedrop markets as a key debate for the stock. However, at current levels even a conservative view of peak share suggests significant upside.

KEY POINTS

- **Unmet Need in Glaucoma Is Key Commercial Opportunity.** Our thesis rests largely on the glaucoma opportunity, where eyedrop compliance for chronic therapy is poor despite risks of blindness. We model ~\$250M in peak US sales for OTX-TP which assumes only an ~8% peak patient share of the diagnosed glaucoma market. Ex-US, we assume a partner/royalty.
- **Glaucoma Plug Retention.** The latest version of Ocular's punctal plug demonstrated 85% retention at 2 months, providing significant advantages over chronic eyedrops (20-30% compliance after ~2 years of therapy). Boosting the current 3-month retention of 54% to ~70-80% with further design enhancements in Ph3 could better leverage the typical 3-month cycle for glaucoma checkups.
- **Inflammation Plug.** Lower compliance hurdles for a 1-month eyedrop regimen for post-surgical inflammation create a more challenging commercial outlook vs. glaucoma. However, OTX-DP retention is high (>95%, 30 days) and eliminates IOP spikes from drops. Given generic dexamethasone drops, we see ~6% peak OTX-DP US share of cataract surgeries as initially reasonable (~\$35M peak).
- **ReSure + Early Pipeline.** ReSure is an FDA-approved cataract surgery sealant (replaces sutures) launched 1Q14. We model ~20% share of complicated/premium cases. OTX-MP (moxifloxacin plug) for bacterial conjunctivitis and OTX-DP for allergic conjunctivitis (data 4Q14) are too early for us to value.

Stock Price Performance



Company Description

Ocular Therapeutix, Inc. is a biopharmaceutical company focused on the development and commercialization of therapies for diseases and conditions of the eye using its hydrogel platform technology. The company's bioresorbable hydrogel based product candidates are designed to provide sustained delivery of therapeutic agents to the eye.

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Investment Thesis

Summary & Conclusions

We are initiating coverage of Ocular Therapeutix with an Outperform Rating and a \$25 price target. Ocular Therapeutix is a biopharmaceutical company focused on treating ophthalmological diseases using a proprietary punctal plug deliver platform (bioresorbable hydrogel matrix). We believe Ocular's technology platform incorporates several key advantages over existing plug technologies and has potential for application across a range of front-of-the-eye disorders. The company has concentrated development efforts on three indications apparently well-suited for drug delivery via punctal plugs: **1)** glaucoma, **2)** post-surgical inflammation and pain and **3)** conjunctivitis (allergic and bacterial). Ocular has also developed ReSure, an FDA-approved surgical sealant for corneal incisions post-cataract surgery, which launched in the US in early 2014. ReSure is an interesting and clinically effective product with favorable characteristics (vs. sutures) that should provide a modest initial revenue stream. ReSure is also important strategically for Ocular to develop a commercial presence in the ophthalmology space ahead of the larger market opportunities for the plugs. **That said, we see the bulk of the value proposition and upside potential for Ocular on the plug side of the business—and particularly glaucoma—given a large addressable market and poor compliance with eye drops. Key aspects of our thesis include:**

- **Innovator in Plug Design & Technology.** Ocular has substantially advanced the state-of-the-art in plug design and technology vs. earlier attempts (i.e., QLT's) that suggested drug delivery via punctal plugs may not be viable. Key improvements vs. QLT's approach include: **1)** only one plug required vs. upper and lower for QLT, **2)** bioresorbable hydrogel vs. non-absorbable material, **3)** constant release rate vs. high initial release rate and **4)** increased patient comfort. Given these engineering changes, we believe that Ocular's sustained drug delivery platform should validate the use of punctal plugs as an ophthalmic therapeutic modality, despite prior failures.
- **Clear Unmet Need in Chronic Therapy for Glaucoma.** Patient noncompliance on eye drops is a significant hurdle in the treatment of glaucoma. Adherence to therapy drops to 20-30% by two years from diagnosis and is responsible for blindness from glaucoma in ~10% of cases. Ocular's strategy to deliver glaucoma medication (travoprost) via a punctal plug **1)** addresses the compliance question by removing the requirement for eye drops and **2)** provides more consistent drug delivery vs. drops, limiting ocular damage and potentially improving disease control.
- **Retention for Glaucoma Is a Key Upside Variable.** Ocular has demonstrated 85%/54% plug retention at two/three months in a so-called non-significant risk (NSR3) study where plugs are not loaded with drug. The company is using a variation of this plug design (larger diameter) in the upcoming glaucoma Phase 2b (3Q14 start). Assuming **1)** retention rates at two months reach ~85% and **2)** IOP reduction is in line with that of timolol (active control drops), we believe Ocular should have a commercially viable plug that we project would capture ~8% peak share of the US glaucoma market (\$250M peak sales). Our conservatism on peak share acknowledges potential pressure from generic travoprost eye drops (expected in December 2014) and advanced-stage competitors for sustained delivery technology, particularly Allergan (Exhibit 4).

That said, we see a commercial adoption bull case where the slightly larger diameter plug in the upcoming Phase 2b drives ≥75% retention at three months (data 1H15) which could enable Ocular to take outsized share in the glaucoma eye drop market. Fundamentally, this degree of retention would synchronize particularly well with the typical 3-month window between glaucoma patient office visits.

- **Safety Substantially De-Risked.** Ocular is developing punctal plugs with FDA-approved medications travoprost for glaucoma, dexamethasone for inflammation, and moxifloxacin for bacterial infections. The concentrations and rate of release of these drugs in the plugs are substantially lower than those of corresponding eye drops, and we would be surprised to see new side effects not already described for these agents. The plugs are composed of bioresorbable PEG that is recognized as a GRAS compound (generally regarded as safe) by the FDA.¹
- **Inflammation Plug Provides Nearer-Term Market Entry.** With positive Phase 3 data expected in 1Q15, we expect approval and a 2016 launch for the OTX-DP dexamethasone plug. However, we see a relatively modest market opportunity (US peak sales ~\$35M and ~6% peak share of cataract surgeries) given **1)** a less convincing value proposition on compliance given a short 1-month eye drop regimen post-surgery, **2)** trends toward reduced rates of ocular inflammation from cataract surgery, and **3)** availability of generic dexamethasone drops.
- **ReSure Builds Commercial Visibility.** The recently launched cataract sealant provides commercial visibility for Ocular ahead of the inflammation plug launch in 2016 and glaucoma in 2018. We see ReSure as driving Ocular brand awareness for the plugs more so than the underlying revenue opportunity for the sealant, which we view as modest (\$15M peak sales in the US). However, ReSure revenues should help offset R&D spend ahead of the plug launches and alleviate the cash burn generally.
- **Early Pipeline Needs Time to Mature.** Ocular is also developing OTX-DP for allergic conjunctivitis and OTX-MP for bacterial conjunctivitis. While interesting, we are reserving judgment on these earlier stage programs as both candidates are too early in development for us to value. Data has been limited so far, and we await clinical proof-of-concept, particularly for allergic conjunctivitis with data in 4Q14, which could be a noteworthy catalyst given the size of the patient population. The anti-VEGF hydrogel depot for wet AMD could have the potential to reduce or eliminate anti-VEGF injections, but the asset is preclinical and too early to value.

ReSure—First Approved Product

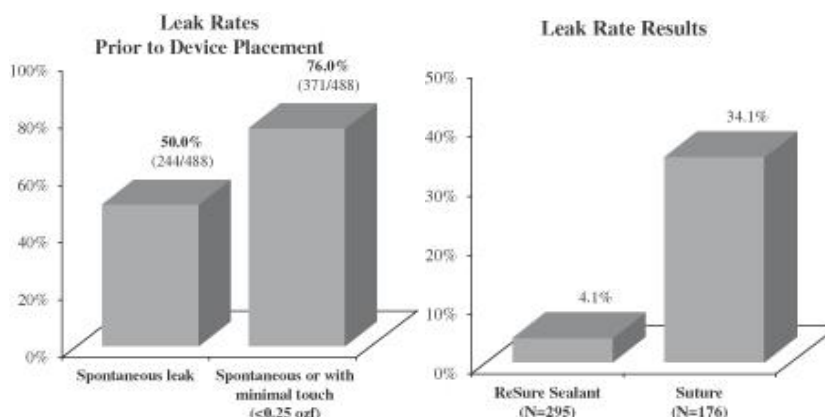
ReSure is the first approved product for the sealing of incisions post-cataract surgery. Corneal incisions are necessary to remove cataracts but need to be sealed post-surgery. ReSure is a liquid hydrogel bandage that polymerizes to form a protective barrier over the incision. Outside of the natural self-sealing process, sutures have been generally using for wound closure after surgery.

In the trial, 488 patients were randomized to treatment with ReSure and treatment with sutures post-cataract surgery. Incision leakage was assessed after surgery and in follow-up visits. Ocular reported leakage rates with ReSure eight times lower than with sutures (4.1% vs. 34.1%) with a low-adverse event rate (1.6% vs. 30.6% for sutures).

We believe the results demonstrated in the pivotal Phase 3 trial in cataract surgery patients support our belief that uptake of ReSure will be favorable among cataract and corneal surgeons and that ReSure could offer an attractive alternative to sutures for wound closure. However, the cost of ReSure is not expected to be separately reimbursed by insurance, and surgeons will need to absorb the ReSure expense within the existing cataract surgery reimbursement structure.

¹ Green Chem, 2005, 7, 64-82.

Exhibit 1 ReSure Phase 3 Clinical Trial Results



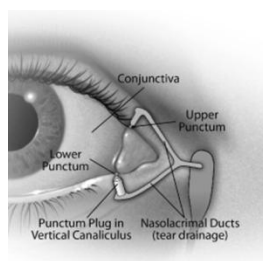
Source: Ocular Therapeutix

Therefore, we focus our revenue estimates on 1) cataract cases involving premium lenses (~14% of cataract surgeries) where higher procedure costs minimize the impact on margins and 2) complicated cases (~8% of surgeries) where there is a medical driver to improve incision closure beyond what sutures can offer. Additionally, the overall trend in the cataract surgery space is toward smaller and smaller incisions, supporting our conservatism regarding ReSure revenue projections. That said, longer-term there may be potential applications for ReSure beyond cataract surgery, for instance, for back-of-the-eye sealing procedures (i.e., sclerotomy port sealing), which could offer upside but would require substantial additional investment and clinical studies (we would not expect any off-label use for back-of-the-eye procedures given unproven safety/efficacy). We project approval of ReSure in the EU and Japanese markets by the end of 2016 and ~\$30M/\$15M peak sales worldwide/in the US, respectively.

Punctum Plug Technology

Ocular Therapeutix is developing an ophthalmic drug delivery platform that utilizes a bioresorbable hydrogel matrix to deliver ocular therapeutic agents. This hydrogel matrix is composed of cross-linked polyethylene glycol (PEG) molecules containing an active pharmaceutical ingredient (API) to be delivered to the ocular surface through the punctum of the eye (the punctum is a small opening inside the edge of the eyelid.) Ocular utilizes punctum plugs (non-drug eluting punctum plugs are commonly indicated for dry eye disease) that are inserted into one of the two puncta present in each eye. The breakdown of the drug-containing microspheres in the hydrogel matrix causes the release of the therapeutic agent to the surface of the eye.

Exhibit 2 Punctum Plug Positioned in Vertical Canaliculus



Source: Ocular Therapeutix

Ocular acquired several patents from Incept LLC, a company founded by the CEO of Ocular Therapeutix, for the formulation of hydrogel matrices (US 6673093) and drug delivery through hydrogel plugs (US 8409606). See Exhibit 17 for details.

OTX-TP for Treatment of Glaucoma

Glaucoma is a group of diseases characterized by progressive optic nerve damage.

The degeneration of retinal ganglion cells and their axons causes a decrease in the width of the neuroretinal rim leading to vision loss and blindness.² Open-angle glaucoma is the most common form of the disease classified by the appearance of the iridocorneal angle.³ Glaucoma is often asymptomatic with vision loss beginning at the periphery. The most common risk factor for optic nerve damage is elevated intraocular eye pressure (IOP). Some 2.2 million Americans suffer from glaucoma⁴ although actual US prevalence rates appear to be much higher.⁵ Glaucoma is the leading cause of blindness in the United States.⁶

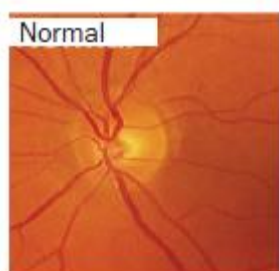
The first line of treatment for glaucoma patients consists of a daily eye drop regimen to prevent the progression of optic nerve damage. This treatment reduces IOP by draining intraocular ocular fluid.

Patient adherence to daily eye drop regimens has been widely reported to be low for several key reasons: 1) improper administration and poor technique, 2) low bioavailability, and 3) side effects from topical eye drops.

One study found that 25.6% of patients reported missing one administration per week while 6.8% of patients had improper technique.⁷ Approximately 10% of blindness from glaucoma is caused by noncompliance.⁸ **Even when the drug is properly administered, only 1-7% of the drug actually reaches the aqueous humor.** Permeability barriers (such as tear duct drainage) result in low drug bioavailability of topical eye drops in the eye.⁹ To achieve clinically significant IOP reduction, prostaglandin eye drops utilize high API concentrations. These concentrations can generate side effects that prevent optimal patient compliance.

Many patients have ocular surface disease which is exacerbated by the presence of preservatives (such as BAK) in these eye drops. One study found that over half of patients with glaucoma had ocular surface disease in at least one eye.¹⁰ Although the first preservative-free prostaglandin eye drop solution (tafluprost) was approved in the US in 2012, many patients also experience hyperemia (redness). **In one study, 69% of patients taking eye drops reported hyperemia as a side effect of treatment and 7% of patients overall discontinued due to treatment.** However, even in a preservative-free version of Travatan (Travatan Z), hyperemia was still observed to be 30 to 50%.¹¹ In response to these concerns with prostaglandin analog eye drops, several companies have developed punctal plug delivery systems as a potential therapeutic modality in the treatment of glaucoma.

Exhibit 3 Glaucoma Optic Disc



A Optic disk photograph

Source: Weinreb RN, Khaw PT. Primary open-angle glaucoma. Lancet. 2004;363:1711–17120.

² Weinreb RN, Khaw PT. Primary open-angle glaucoma. Lancet. 2004;363:1711–17120.

³ Kwon YH, Fingert JH, Kuehn MH, Alward WLM. Primary open-angle glaucoma. N Eng J Med. 2009;360:1133–1113.

⁴ Friedman DS et al. Arch Ophthalmol 2004; 122 (4): 532-538.

⁵ 2010 US Prevalence Rates - Glaucoma – National Eye Institute.

⁶ Kwon YH, Caprioli J. Primary open angle glaucoma. In: Tasman W, Jaeger EA, editors. Duane's clinical ophthalmology. Philadelphia: J.B. Lippincott; 1999. pp. 1–30.

⁷ Kholdebarin R, Campbell RJ, Jin YP, Buys YM. Multicenter study of compliance and drop administration in glaucoma. Can J Ophthalmol. 2008;43:454–461.

⁸ Ashburn F, Goldberg I, Kass M. Compliance with ocular therapy. Surv Ophthalmol. 1980;24:237-246.

⁹ Kompella UB, Kadam RS, Lee VHL. Recent advances in ophthalmic drug delivery. Therapeutic Delivery. 2010;1:435-456.

¹⁰ Leung EW, Medeiros FA, Weinreb RN. Prevalence of ocular surface disease in glaucoma patients. J Glaucoma. 2008;17(5):350-5.

¹¹ Zimmerman T.J. et al. The Impact of Ocular Adverse Effects in Patients Treated With Topical Prostaglandin Analogs: Changes in Prescription Patterns and Patient Persistence. Journal of Ocular Pharmacology and Therapeutics. April 2009, 25(2): 145-152.

Exhibit 4**Competition in the Sustained Release Ocular Therapeutic Space for Glaucoma**

Company	Product	Stage
Allergan	Bimatoprost Sustained-Release System	Phase 3 to start YE14
ForSight VISION5	Helios Sustained-Release Insert below eyelid	Phase 2
Mati Therapeutics	Latanoprost Punctal Plug Delivery System (L-PDDS)	Phase 2
Envisia	ENV515 (Biodegradable PRINT particle implant)	Pre-Clinical
Amorphex Therapeutics	Contact Lens variant under eyelid TODDD system	R&D Stage
Polyactiva	Bioerodable ocular latanoprost implant in subconjunctival space	In vitro Proof of Concept
Euclid (EVS Glaucoma Therapeutics)	Biodegradable and collagen-based drug delivery system for glaucoma medication.	R&D Stage

Sources: Ocular Therapeutix, Oppenheimer Research

QLT & Ocular Therapeutix—Differentiating Ocular's Punctum Plug Delivery System from the Competition

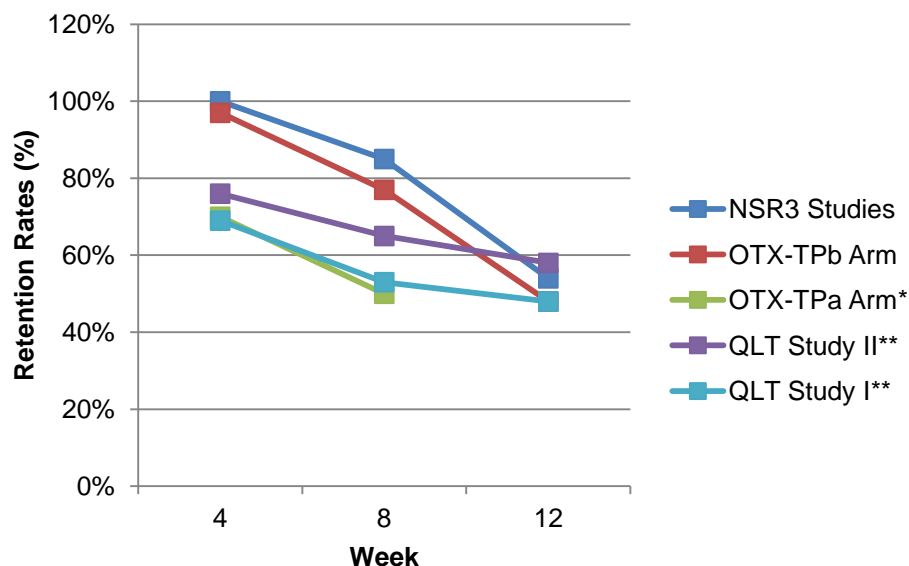
In our view, one of the major limitations of previous sustainable drug delivery systems was the inability to demonstrate retention in the eye after insertion. QLT Technologies reported results in 2012 from a Phase 2 trial that evaluated the use of a latanoprost punctal plug delivery system in glaucoma patients.

Exhibit 5**Upper Punctum Retention Rates* in QLT's Phase 2 Study**

Week	PPL GLAU 12	PPL GLAU 13
4	69%	76%
8	53%	65%
12	48%	58%

* Lower punctum retention rates was greater than 92% at twelve weeks for both studies

Source: QLT Technologies

Exhibit 6**Retention Rate Comparison: QLT vs. Ocular**

Week	QLT Study I**	QLT Study II**	OTX-TPa Arm*	OTX-TPb Arm	NSR3 Studies
4	69%	76%	70%	97%	100%
8	53%	65%	50%	77%	85%
12	48%	58%	N/A	48%	54%

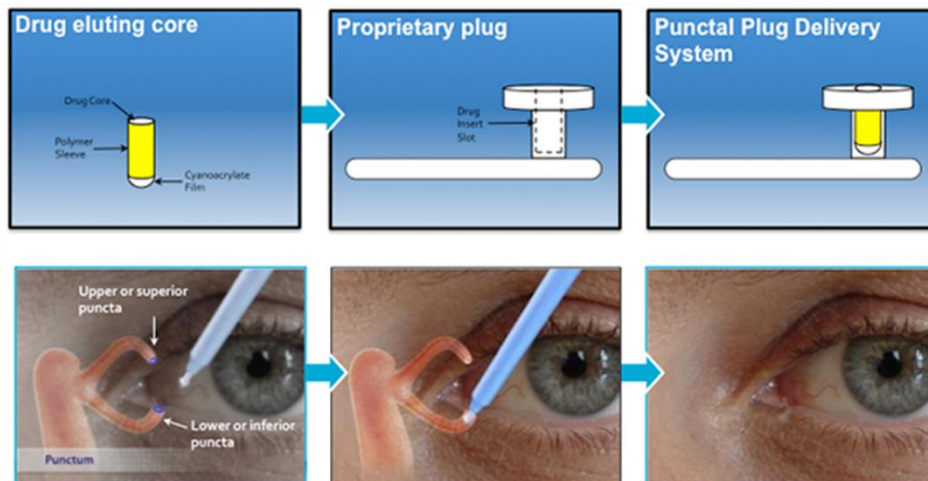
Sources: Ocular Therapeutix, QLT Technologies

In the case of QLT's punctum plug system, both puncta needed to be plugged to generate clinically significant IOP reduction (> 5 mmHg) in each of the two studies.

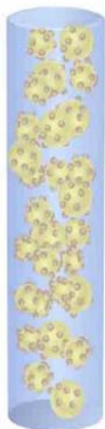
From our discussions with experts, we believe that the major issue in QLT's punctum plug delivery system was the design of the plug. Elution rates of the drug were not high enough to deliver enough API over the course of the optimal two- to three-month period, requiring plugging of both puncta to achieve clinically significant results. The problem of drug delivery was also seen in another punctum plug competitor, Vistakon Pharmaceuticals. Vistakon was unable to lower IOP more than a placebo in its Phase 2 clinical trial evaluating a bimatoprost sustainable delivery system.¹² In addition, we have heard feedback from several physicians that the QLT plug was difficult to insert and uncomfortable for patients.

QLT sold the rights to its punctum plug delivery system to privately held Mati Therapeutics after disappointing results in the Phase 2 clinical trial. We believe that **Ocular Therapeutix's punctum plug delivery system has several distinguishing features in comparison to QLT's.**

¹² CT Identifier: NCT00824720

Exhibit 7**QLT Technologies' Punctal Plug Delivery System**

Source: Mati Therapeutics

Exhibit 8**OTX-TP Travoprost Punctum Plug Design**

Source: Ocular Therapeutix.

Hydrogel Matrix Punctum Plugs

Ocular Therapeutix uses a bioresorbable hydrogel matrix that breaks down over time and clears through the nasolacrimal duct. Upon contact with tear fluid, the punctum plugs expand to fill the vertical canaliculus to secure the plugs in place in the eye. A fluorescent label system is a unique innovation that differentiates Ocular's punctum plug delivery system in allowing for patient self-evaluation of plug placement and retention.

The main challenge in the use of the punctum plug delivery platform for glaucoma is reconciling the need for 1) high elution rates to achieve clinically significant IOP reduction, 2) large enough drug volumes for a two-to three-month therapeutic window, and 3) a plug design that maximizes retention over the targeted 3-month time frame (time between glaucoma check-ups). Ocular's material scientists have made significant strides in addressing these design challenges in concert, though work still remains to reach all design objectives.

In Ocular's punctum plug system, the API is present in microspheres distributed throughout the hydrogel matrix (Exhibit 8) whereas QLT's API was concentrated in a drug eluting core. The higher capacity of Ocular's drug relieves the need for the presence of two punctal plugs (upper and lower puncta) to achieve clinically significant IOP reduction, a key technological advance. Additionally, Ocular's plug design advances succeed in delivering drug at a constant rate over the plug's resident time in the punctum.

We believe Ocular's plug technology addresses many of the weaknesses of prior efforts in plug design. However, Ocular's plug technology for glaucoma still requires additional optimization to simultaneously improve retention rates and maintain drug elution rates at therapeutically effective levels. Additionally, late-stage success in the sustainable punctal plug drug delivery space has not been demonstrated (or generated any marketed product). Given the development history, our overall bias is towards a cautiously optimistic view of Ocular's punctal plug therapeutic platform for front-of-eye conditions. **That said, Ocular's steady progress in iteratively improving plug design (see Exhibit 12) provides a fairly good basis for optimism that further refinements should achieve successive design goals.**

Phase 2a Results for OTX-TP in Glaucoma

Ocular has selected travoprost (known as Travatan) as its active pharmaceutical ingredient embedded in its hydrogel matrix for the treatment of glaucoma. Both travoprost

and latanoprost have similar efficacy profiles in generating clinically significant intraocular pressure reduction.^{13,14,15,16}

Ocular Therapeutix completed a randomized multi-center clinical trial in May 2014 that evaluated the safety and efficacy of OTX-TP in 41 patients with glaucoma. Patients were randomized into two arms evaluating two different versions of OTX-TP (OTX-TPa and OTX-TPb) as well as a placebo group with timolol eye drops (a common non-prostaglandin eye drop in glaucoma) and a punctum plug without API. Plugs were inserted in the lower punctum. The differences in the two arms were as follows:

Exhibit 9

Duration & Dosing OTX-TPa & OTX-TPb in Phase 2a Clinical Trial

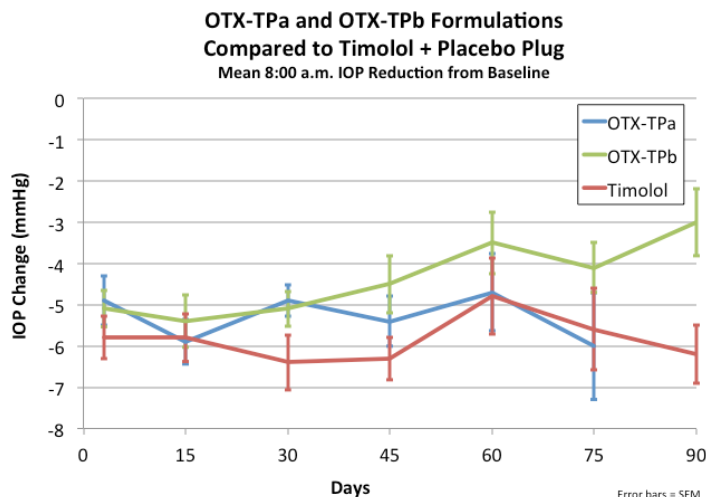
	Arm I (OTX-TPa)	Arm II (OTX-TPb)
Duration	Release over two month period	Release over three month period
Travoprost Drug Delivery Rate	3.5 µg per day	2.8 µg per day

Source: Ocular Therapeutix

IOP reduction in the OTX-TPa Arm (3.5 µg Travoprost) was generally consistent with efficacy comparable to timolol drops. At 75 days, a mean reduction of about 6 mmHg was reported. We note that retention rates in OTX-TPb arm were quite good out to the two-month point while OTX-TPa retention rates were generally underwhelming. We speculate that the higher rate of delivery of the drug in OTX-TPa (3.5 µg/day) vs OTX-TPb (2.8 µg/day) may have contributed to the reduced retention for the OTX-TPa plug.

Exhibit 10

OTX-TPa & OTX-TPb IOP Reductions in Phase 2a Clinical Trial



Source: Ocular Therapeutix

¹³ Camras CB, United States Latanoprost Study Group. Comparison of latanoprost and timolol in patients with ocular hypertension and glaucoma: a six-month, masked, multicenter trial in the United States. *Ophthalmology*. 1996;103:138–147.

¹⁴ Mishima HK et. al. (1996) A comparison of latanoprost and timolol in primary open-angle glaucoma and ocular hypertension. A 12 week study. *Arch Ophthalmol* 114:929–932.

¹⁵ Lewis RA, Katz GJ, Weiss MJ, et al. Travoprost 0.004% with and without benzalkonium chloride: a comparison of safety and efficacy. *J Glaucoma*. 2007;16(1):98–103.

¹⁶ Travatan Z Prescribing Label.

No major adverse events were reported or significant changes in hyperemia scores. We believe the results of the Phase 2a trial are promising, but require additional data to show **that both retention and drug delivery** can be maintained out to the desired 90-day interval. As discussed below, in the upcoming Phase 2b trial, Ocular will use the same dosing rate as OTX-TPa over a three-month period.

Exhibit 11

Retention Rates of Punctum Plug in Phase 2a Trial

Days	Retention in OTX-TPa Arm	Retention in OTX-TPb Arm
15	91%	100%
30	70%	97%
45	60%	84%
60	50%	77%
75	40%	55%
90	N/A	48%

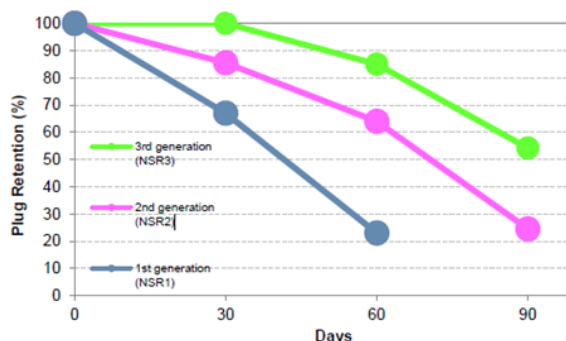
Source: Ocular Therapeutix

Non-Significant Risk Retention Studies

Ocular conducts NSR studies with the purpose of evaluating punctum plug composition and placement. These NSR studies are conducted without the active API which could influence reported plug retention rates in the clinical trial where plugs contain drug. We believe that these NSR studies are important to consider as they offer baseline retention rates that can be compared to other punctum plug systems widely used in ophthalmology practice. Ocular has achieved steady improvement in plug retention over time with iterations on plug design. The latest design from the NSR3 study achieved ~100% retention at 1 month, ~85% retention at two month, and ~54% at three months. To put Ocular's retention rates in perspective, a silicone based punctum plug for the treatment of dry eye obtained a retention rate of 85% after 12 weeks.¹⁷ However, the design requirements for dry eye silicone plugs are simpler because they do not elute drug. We would anticipate that Ocular will continue to evaluate and refine plug design in future NSR studies that could offer further insight into the retention rate ceiling achievable utilizing Ocular's hydrogel matrix technology.

Exhibit 12

Plug Retention Progress Using Non-Significant Risk (NSR) Trials



Source: Ocular Therapeutix

¹⁷ Horwath-Winter J, Thaci A, Gruber A, Boldin I. Long-term retention rates and complication of silicone punctal plugs in dry eye. Am J Ophthalmol. 2007;144(3):441–444. Long-term Retention Rates and Complications of Silicone Punctal Plugs in Dry Eye.

Exhibit 13

Retention Rates for NSR3 Study

Week	Retention
4	100%
8	85%
12	54%

Source: Ocular Therapeutix

Upcoming Phase 2b Trial & Changes vs. Phase 2a

Ocular's planned Phase 2b trial initiating in 3Q14 will evaluate OTX-TP in approximately 80 patients at ~15 US sites. Patients will be randomized 1:1 ratio to either OTX-TP and placebo eye drops BID or a placebo vehicle control punctum plug (does not contain drug) drug and timolol eye drops BID.

The plugs to be tested in the upcoming Phase 2b will incorporate the minor structural refinements (increase in PEG/microsphere ratio) evaluated in the NSR3 study discussed above (i.e., ~85% retention at 2 months). However, the plugs for the upcoming Phase 2b are being designed to deliver drug over a 3-month period at the same rate as the OTX-TPa plug tested in the Phase 2a. To achieve this design objective, Ocular is enlarging the OTX-TP plug's diameter to carry more drug, **meaning that the Phase 2b will test a slightly larger plug design than what was tested in NSR3.** Note that a plug of similar size to the one planned for the OTX-TP Phase 2b was tested in an earlier Phase 1 study of OTX-MP, and was rated as "easy" to use in 9/10 cases and "difficult" to use in 1 case.

Ocular is planning to conduct another NSR study to evaluate the larger plug before commencing its Phase 2b study. It remains somewhat unclear how the larger diameter plug may impact physician and patient experience. Human puncta would be expected to have a range of natural diameters, so a slightly wider plug may prevent easy insertion in a greater fraction of subjects. On the other hand, a larger diameter plug could be expected to achieve a more durable fit in patients where insertion succeeds. It is unclear whether Ocular will release the details of this new NSR study or just proceed to the Phase 2b.

Remaining Design Challenges Ahead

We look to 1H15 glaucoma data from the planned Phase 2b trial of OTX-TP to provide validation of the NSR3 studies (~85% 2-month retention) in a setting where **1)** plugs are loaded with drug and **2)** diameter is slightly larger. Prostaglandin analogs are large molecular weight molecules, and while not expected to be an issue, presence of the drug in the plug could influence retention rates. Aspects of plug placement and consistency of IOP reduction (as IOP varies throughout the day) may also emerge as potential issues in the next clinical trial.

Therefore, in the Phase 2b, we believe that Ocular needs to:

- 1) Demonstrate 2-month retention rates that meet or exceed the NSR3 study with a plug delivering drug at 3.5 µg/day, and**
- 2) Achieve IOP reductions in-line with OTX-TPa in the Phase 2a**

to solve remaining design challenges necessary to advance a 2-month plug into a Phase 3. Recall, in the Phase 2a, the OTX-TPa plug demonstrated weaker retention possibly given a higher 3.5 µg/day delivery rate. While Ocular has made enhancements to the Phase 2b OTX-TP plug design, it will be important for the company to demonstrate

that the higher delivery rate does not adversely impact retention. Beyond this, whether the larger plug can achieve 3-month retention materially above the ~54% seen in NSR3 is an open question that could be a source of significant upside. Regardless, we see a 2-month plug with ~85% retention and activity equivalent to timolol as commercially attractive, as such a product profile would already offer significant compliance advantages over eye drop delivery. Interestingly, a plug with a ~85%/~54% retention at two/three months would imply that ~70% of patients retain plugs through ~2.5 months, assuming a linear rate of loss. Of course, a 3-month plug would be ideal, as discussed below.

Physician Perspective on OTX-TP

Our diligence with several ophthalmologists uncovered several common themes with respect to OTX-TP:

- 1) Compliance issues with glaucoma patients have generated significant interest in adopting sustained delivery systems.
- 2) Many ophthalmologists have experience implementing silicone plugs for dry eye.
- 3) Favorable comments were made about plug comfort among patients (in contrast to QLT's PDDS which was "difficult to insert").
- 4) Treatment intervals of at least two months are desirable, but three months would be ideal.

These comments support our view that a punctum plug delivery system with clinically significant IOP reduction and retention rates out to two months or more should be 1) received well by ophthalmologists, 2) assimilated over time into clinical practice upon FDA approval and 3) benefit from greater adoption for a plug indicated for 3-month duration vs. 2-month duration.

Based on our physician diligence, we believe the ~85% retention at 2 months in the NSR3 studies is an acceptable threshold for a commercial plug product indicated for a 2-month duration. Our base case, therefore, assumes that Ocular moves forward in Phase 3 with the Phase 2b design (NSR3 albeit with larger diameter) and a 2-month plug. We model Ocular's 2-month plug capturing ~8% peak share of the US glaucoma market.

The Bull Case: 3-Month Retention > 75%

The potential to move forward into Phase 3 with a 3-month plug (the ideal plug lifetime as 3 months mirrors the typical time between glaucoma check-ups) appears to rest on the 3-month retention results in the planned Phase 2b using the larger diameter OTX-TP plug. In the base case, a reproduction of the ~54% seen in NSR3 would likely mean that **1) Ocular advances a 2-month plug design into Phase 3 or 2) engages in another round of NSR trials to further improve 3-month retention before initiating Phase 3.** However, we believe Ocular would lean toward moving directly to Phase 3 with claims to a 2-month plug to maintain development timelines. Interestingly, management cited a ~70-80% 3-month retention in the Phase 2b as potentially sufficient to claim a 3-month plug (though our physician diligence suggests ~80-90% 3-month retention as desirable). **Either way, design enhancements by Ocular that generate 3-month retention of ~75% or better could make us significantly more bullish on the adoption curve for OTX-TP.**

OTX-DP for Ocular Inflammation

Ocular is also utilizing its punctum plug delivery system in the treatment of ocular inflammation post-cataract surgery. Cataract surgeries are performed to replace the clouded lens with an artificial lens. These surgeries require corneal incisions to insert probes that break up the lens for removal. Surgical trauma to the eye causes the activation of the arachidonic acid cascade that metabolizes the fatty acid into

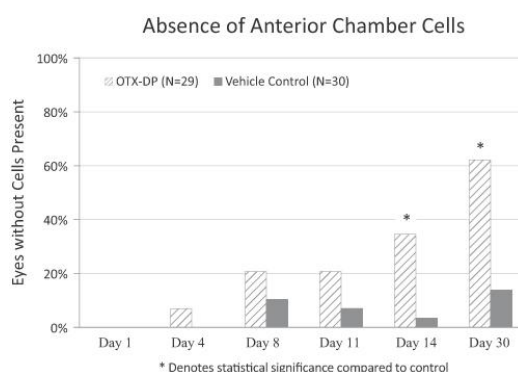
prostaglandins.¹⁸ The production of prostaglandins generates signs of ocular inflammation including hyperemia, redness of the eye, and pain. One type of inflammation known as anterior uveitis results from the swelling of the uvea. This affects the iris and anterior chamber of the eye. Common clinical symptoms of ocular inflammation include the presence of anterior chamber cells and flare.¹⁹

Dexamethasone is among the strongest anti-inflammatory agents used in the treatment of ocular inflammation with an anti-inflammatory potency (AIP) of 30 and potency five times that of prednisolone with a significantly long duration of effect (48-72 hours).²⁰ Ocular's choice of dexamethasone as its API in the treatment of ocular inflammation appears to be strongly motivated by the drug's physical properties given its low solubility.

Results from Phase 2 Clinical Trial

Exhibit 14

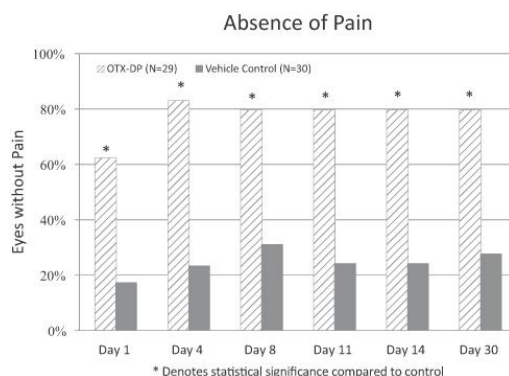
Absence of Anterior Chamber Cells for OTX-DP Phase 2 Clinical Trial



Source: Ocular Therapeutix

Exhibit 15

Absence of Pain for OTX-DP Phase 2 Clinical Trial



Source: Ocular Therapeutix

¹⁸ Cho H, Wolf KJ, Wolf EJ. Management of ocular inflammation and pain following cataract surgery: focus on bromfenac ophthalmic solution. Clin Ophthalmol. 2009;3:199–210.

¹⁹ Agrawal RV, Murthy S, Sangwan V, Biswas J. Current approach in diagnosis and management of anterior uveitis. Indian J Ophthalmol. 2010;58(1):11–19.

²⁰ http://www.merckmanuals.com/vet/pharmacology/anti-inflammatory_agents/corticosteroids.html.

In evaluating absence of pain in comparison to a placebo, the OTX-DP drug delivery system met statistical significance at all time points and demonstrated a fairly convincing analgesic profile. **However, absence of anterior chamber cells (their presence is a surrogate for inflammation) trended in favor of OTX-DP through Day 11 but only reached statistical significance at Day 14 versus control. Although pain results were quite good, the absence of statistically significant results for anterior chamber cells until mid-month is an area where we would like to see improvement in future studies.** Additionally, the side effect profile of corticosteroids generally precludes long-term use,²¹ so more immediate effects would be desirable in the post-surgical setting. However, given slower elution of dexamethasone from the plug relative to the high concentrations delivered via eye drops, there may be limits to how rapidly anterior chamber cells can resolve. Plug retention is not a concern for OTX-DP as Ocular has achieved very favorable retention rates (97-100%) out to the one-month period (see NSR3 study and OTX-TPb arm).

There are some concerns about increases in IOP after the administration of highly potent anti-inflammatory agents.²² This is important as many patients with cataracts also develop glaucoma and elevated IOP as well. Ocular has excluded patients with ocular hypertension and glaucoma in its Phase 3 clinical trial. Assuming approval, the FDA could issue a label limiting or contraindicating OTX-DP use in patients with a history of elevated intraocular pressure. While such a limitation could have some impact on the addressable market, we see the larger commercial issues for OTX-DP as related to **1) the wide availability of generic dexamethasone drops, 2) a shorter 1-month treatment window where compliance issues may be less relevant (vs. chronic therapy for glaucoma) and 3) questions around the clinical need for post-surgical anti-inflammatory agents, as discussed below.**

In our view, advances in surgical technology and the reduction in the post-operative inflammatory response may add barriers to adoption of OTX-DP. One study evaluating dexamethasone and other anti-inflammatory agents reported that only five of the sixty eyes previously receiving a placebo required rescue treatment, concluding **“most patients could manage without postoperative anti-inflammatory treatment.”**²³

From our perspective, we are somewhat less bullish about the prospects of OTX-DP in ocular inflammation for several reasons. **1) Unlike glaucoma, the treatment of ocular inflammation post-cataract surgery is limited to a period of about one month. 2) Physician comments indicate that post-op inflammation is quite low with low energy cataract surgery. 3) The side effect profile of dexamethasone is also a potential issue.** Therefore, we envision a modest market opportunity for the dexamethasone plugs with peak US sales of ~\$35M corresponding to a 6% share of cataract surgeries. However, we see the investment debate regarding the inflammation plug program as primarily a question of commercial adoption as opposed to outstanding significant clinical/regulatory risk (which we see as lower than average).

OTX-DP in Allergic Conjunctivitis

Ocular is also exploring the use of OTX-DP in the treatment of allergic conjunctivitis. The company has begun enrolling patients in a Phase 2 clinical trial with a primary endpoint of ocular itching and conjunctival redness at 14 days (data 4Q14).

Allergic conjunctivitis is a highly common group of ocular surface diseases associated with hypersensitivity to allergens. Ocular exposure to allergens results in mast cell degranulation releasing a cascade of inflammatory mediators, most commonly

²¹

<http://webcache.googleusercontent.com/search?q=cache:0RVherLsYRoJ:www.oteurope.com/ophthalmologytimeseurope/data/articlestandard//ophthalmologytimeseurope/502008/570212/article.pdf+&cd=3&hl=en&ct=clnk&gl=us>

²² [www.oteurope.com/ophthalmologytimeseurope/data/articlestandard//ophthalmologytimeseurope/502008/570212/article.pdf+&cd=11&hl=en&ct=clnk&gl=us](http://webcache.googleusercontent.com/search?q=cache:0RVherLsYRoJ:www.oteurope.com/ophthalmologytimeseurope/data/articlestandard//ophthalmologytimeseurope/502008/570212/article.pdf+&cd=11&hl=en&ct=clnk&gl=us)

²³ Laurell CG, Zetterström C. Effects of dexamethasone, diclofenac, or placebo on the inflammatory response after cataract surgery. Br J Ophthalmol. 2002;86(12):1380–1384.

histamine.²⁴ Topical administration of corticosteroids has been used to treat severe cases of allergic conjunctivitis. However, similar concerns remain in the use of dexamethasone as a treatment option in allergic conjunctivitis. The side effect profile of corticosteroids (such as elevated IOP (potentially leading to glaucoma) as well as cataracts) suggests treatment would be most appropriate for patients with severe and refractory cases.

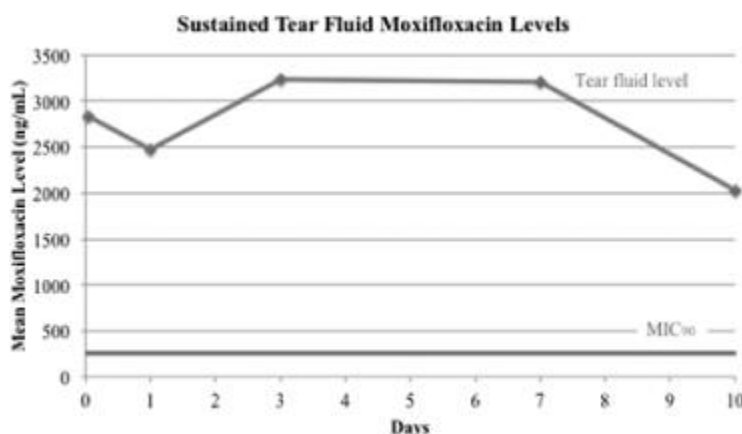
Our Take: Although highly common, the revenue opportunity may be limited given that corticosteroids such as dexamethasone may not have an appropriate risk-benefit profile for the majority of patients with allergic conjunctivitis. We speculate that plug retention rates may be an issue if patients rub their eyes in response to itching sensations. Pending data in 4Q14 should help clarify whether our concern is valid. Given the early stage of this asset, and ahead of proof-of-concept, we are not currently including allergic conjunctivitis revenues for OTX-DP in our model.

OTX-MP in Bacterial Conjunctivitis

Ocular completed a single-center open label Phase 1 clinical trial (timing of completion uncertain) which evaluated OTX-MP in 10 post-cataract surgery patients. Tear fluid level of moxifloxacin was above MIC₉₀ drug potency threshold (i.e., the concentration needed to inhibit growth of 90% of bacterial strains isolated from patients). Pharmacokinetic data (Exhibit 16) indicated that drug levels were above 2-3 µg/mL over the course of the seven-day period. No significant adverse events were reported. Plug retention rates were 100% through day 10. Plugs and API were not present at day 30 which was as intended.

Exhibit 16

Moxifloxacin Levels in Sustained Tear Fluid



Source: Ocular Therapeutix

Our Take: A good start though too early to draw conclusions. The short duration of therapy required for use in postoperative clear corneal cataract surgery suggests that punctum plugs may be an attractive therapeutic modality for treating bacterial conjunctivitis. We would like to proof-of-concept in a randomized Phase 2 trial for OTX-MP vs. approved antibiotic drops to develop greater confidence in this early stage asset. Additionally, the market potential for patients who need advanced antibiotics post-cataract surgery is unclear. Given the stage of this asset, and without proof-of-concept, we are not currently including bacterial conjunctivitis revenues for OTX-MP in our model.

²⁴ Ono SJ, Abelson MB. Allergic conjunctivitis update on pathophysiology and prospects for future treatment. J Allergy Clin Immunol. 2005;115(1):118–122.

Exhibit 17
US Patent Portfolio

Product	Expiration	Type	License	Status
ReSure	2025	Process of making & using hydrogel compositions	Incept	Granted
ReSure	2030	Sealant Package	Incept	Application
ReSure	2019	Hydrogel Composition	Incept	Granted
ReSure	2017-2019	Compositions of making + using hydrogel + visualization	Incept	Granted
Punctum Plug	2030	Composition + Method of Drug Delivery + Design of Punctum Plugs	Incept	Granted
Punctum Plug	2018-2020	Hydrogel Composition of Plugs + Implants that swell in tissue	Incept	Granted
Punctum Plug	2018	Hydrogel composition OTX-TP & OTX-MP + drug release particles	Incept (Non-exclusive)	Granted
Punctum Plug	2018	Hydrogel composition OTX-TP & OTX-MP + drug release particles	Incept	Application

Sources: Ocular Therapeutix, Oppenheimer Research

Valuation

Our valuation reflects revenues for **1)** OTX-TP in glaucoma (~8% US peak share of diagnosed glaucoma population), **2)** OTX-DP in inflammation post cataract surgery (6% peak share WW of cataract surgeries) and **3)** ReSure, a minor product already FDA-approved to seal cataract incisions. However, we need to see evidence of proof-of-concept for OTX-DP in allergic conjunctivitis and OTX-MP (moxifloxacin plug) in bacterial conjunctivitis before modeling. Additionally, the anti-VEGF loaded intravitreal hydrogel for wAMD is pre-clinical and too early for us to value.

Exhibit 18

DCF Valuation

Time of Valuation	Aug-14
WACC	10%
Intermediate CF Growth	20%
Terminal FCF Growth	0.0%
NPV FCF (2014-2030)	\$275
Terminal FCF Value \$MM	\$255
Total PV FCF \$MM	\$530
Cash \$MM	\$70
Debt \$MM	\$15
Equity Value \$MM	\$585
Diluted Shares Outstanding (MM)	23.8

DCF Value / Share	\$25
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Source: Oppenheimer Research Estimates

Valuation Method: We value Ocular Therapeutix using a discounted cash flow (DCF) analysis with a weighted average cost of capital (WACC) of 10% and a 0% terminal growth rate post 2030, generating a terminal value of \$255M.

Discount Rate: Our valuation paradigm uses 10% for commercial stage companies.

Terminal Growth Rate: We explicitly model cash flows to 2024. From 2025 to 2030, we grow cash flows at 20% of the prior year growth FCF growth rate. After 2030, we assume a terminal growth rate of 0% given expiration of market exclusivity and competition from other sustainable release punctum plug technologies (last of Ocular's granted US punctum plug patents expires in 2030).

Exhibit 19

Catalyst Calendar

3Q14	Initiate Phase 2b Trial in Glaucoma
4Q14	OTX-DP Phase 2 Data in Allergic Conjunctivitis
YE14	Completion of feasibility studies for Anti-VEGF hydrogel depot for wet AMD
1Q15	OTX-DP Phase 3 data (two trials) in post-surgical ocular inflammation & pain
2Q15	Submit NDA for OTX-DP in post-surgical ocular inflammation & pain

Sources: Ocular Therapeutix, Oppenheimer Research

OTX-TP Glaucoma Model Assumptions

Glaucoma prevalence estimates and growth rates. The National Eye Institute reported an open-angle glaucoma prevalence of ~2.2M in 2000, rising to ~2.7M by 2010, or a ~2% implied CAGR. This translates into a prevalence of ~2.9M open-angle glaucoma patients in the US in 2013, or 1.97% of the age 40+ US population.²⁵ We therefore assume ~2% YoY growth in prevalence in our model, yielding ~3.3M by 2020 which is consistent with estimates from the literature.²⁶ For the EU, we used the reported worldwide glaucoma incidence rate of 1.96% of the above-40 population.²⁷ For Japan, the glaucoma prevalence is a higher ~3.5% of the above-40 population given a substantially more aged population.

Launch timing. With Phase 3 data expected in late 2016, and an NDA submission targeted for 2Q17 (per Ocular) we model a 2018 US launch, and 2019/2020 launches in the EU/Japan, respectively.

Pricing. Our discussions with management suggest pricing of a pair of punctum plugs indicated for a 2-month duration of \$250, or ~\$1,500 annually, with 1% YoY increases. We believe this is an appropriate initial working assumption on price despite the availability of generic Travatan drops (expected December 2014) in light of the potential for substantially increased compliance and reduced risk of blindness with OTX-DP vs. eye drops. We do not currently expect significant pricing pressure driven by a generic version of Ocular's plug until 2030 (last-to-expire patent). We assume EU/Japan pricing ~75%/~90% of the US.

Market share. A range of literature studies²⁸ suggest ~50% of glaucoma patients are unaware of their disease, so we assume a ~50% diagnosis rate worldwide. We assume ~50% of diagnosed patients are successfully treated with topical eye drops and ~50% exhibit some degree of non-compliance. Among the non-compliant, our research suggests up to ~10% of patients may develop hyperemia (redness) and discontinue use, suggesting potential benefit from a sustainable drug release system.²⁹ Another ~10% of the noncompliant population may exhibit conditions such as ocular surface disease that would suggest a sustainable drug release system as an appropriate option. Given these arguments, we conservatively project peak US market share for Ocular's OTX-TP of ~8%.

To put our assumptions in perspective, this degree of adoption would correspond to ~150,000 patients of ~1.8M diagnosed being prescribed OTX-TP by 2024. As we have argued above, plug technology that could deliver ~75% or better 3-month retention rates with comparable IOP reductions to drops could drive significantly higher adoption.

²⁵ Based on NEI Data - <http://www.nei.nih.gov/eyedata/glaucoma.asp>. The number of patients with glaucoma is expected to grow to 4.2 million Americans by 2030.

²⁶ Arch Ophthalmol. Apr 2004; 122(4): 532–538.

²⁷ Quigley H.A., Broman A.T. The number of people with glaucoma worldwide in 2010 and 2020. British Journal of Ophthalmology. 2006;90:262–267.

²⁸ JAMA. 1991;266:369–374; Arch Ophthalmol. 1994;112:821–829; Ophthalmology. 1996;103:1661–1669; Ophthalmology. 1998;105:733–739.

²⁹ Thom J.Zimmerman, Steven R.Hahn, Laurie Gelb, Hiangkiat Tan, and Elizabeth E. Kim. The Impact of Ocular Adverse Effects in Patients Treated With Topical Prostaglandin Analogs: Changes in Prescription Patterns and Patient Persistence. Journal of Ocular Pharmacology and Therapeutics. April 2009, 25(2): 145-152. doi:10.1089/jop.2008.0072.

Exhibit 20

OTX-TP Glaucoma Market Model

	2018	2019	2020	2021	2022	2023	2024
US Glaucoma Model							
US Population	325,304,520	326,931,043	328,565,698	330,208,526	331,859,569	333,518,867	335,186,461
% Growth	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
US Population 40+	150,299,069	151,050,565	151,805,817	152,564,847	153,327,671	154,094,309	154,864,781
% of Population 40+	46%	46%	46%	46%	46%	46%	46%
Open-angle Glaucoma prevalence	3,202,334	3,268,446	3,335,922	3,404,791	3,475,083	3,546,825	3,620,048
% prevalence	2.13%	2.16%	2.20%	2.23%	2.27%	2.30%	2.34%
Open-angle Glaucoma diagnosed	1,601,167	1,634,223	1,667,961	1,702,396	1,737,541	1,773,412	1,810,024
% diagnosed	50%	50%	50%	50%	50%	50%	50%
Penetration of Addressable Market	1.0%	2.3%	3.5%	4.8%	6.0%	7.3%	8.5%
Patients on OTX-TP	16,012	36,770	58,379	80,864	104,252	128,572	153,852
Average Annual Cost	\$1,577	\$1,592	\$1,608	\$1,624	\$1,641	\$1,657	\$1,674
Cost Growth %	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Revenue (\$MM)	\$25	\$59	\$94	\$131	\$171	\$213	\$257
EU Glaucoma Model							
EU Population	511,382,909	512,719,760	514,066,808	515,424,147	516,791,875	518,170,090	519,558,889
% Growth	0.26%	0.26%	0.26%	0.26%	0.27%	0.27%	0.27%
EU Population 40+	264,556,255	265,247,855	265,944,730	266,646,929	267,354,503	268,067,501	268,785,975
% of Population 40+	52%	52%	52%	52%	52%	52%	52%
Open-angle Glaucoma prevalence	5,185,303	5,198,858	5,212,517	5,226,280	5,240,148	5,254,123	5,268,205
% prevalence	1.96%	1.96%	1.96%	1.96%	1.96%	1.96%	1.96%
Open-angle Glaucoma diagnosed	2,592,651	2,599,429	2,606,258	2,613,140	2,620,074	2,627,062	2,634,103
% diagnosed	50%	50%	50%	50%	50%	50%	50%
Penetration of Addressable Market	0.0%	0.8%	1.7%	2.6%	3.6%	4.5%	5.4%
Patients on OTX-TP	0	19,496	43,981	68,595	93,340	118,218	143,229
Average Annual Cost	\$1,182	\$1,194	\$1,206	\$1,218	\$1,230	\$1,243	\$1,255
Cost Growth %	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Sales (\$MM)	\$0	\$23	\$53	\$84	\$115	\$147	\$180
20% Royalty from Future Partner	\$0	\$5	\$11	\$17	\$23	\$29	\$36
JP Glaucoma Model							
JP Population	125,714,711	125,400,424	125,086,923	124,774,206	124,462,271	124,151,115	123,840,737
% Growth	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%
JP Population 40+	65,007,098	64,844,580	64,682,468	64,520,762	64,359,460	64,198,562	64,038,065
% of Population 40+	52%	52%	52%	52%	52%	52%	52%
Open-angle Glaucoma prevalence	2,361,056	2,355,153	2,349,265	2,343,392	2,337,533	2,331,690	2,325,860
% prevalence	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%	3.63%
Open-angle Glaucoma diagnosed	1,180,528	1,177,577	1,174,633	1,171,696	1,168,767	1,165,845	1,162,930
% diagnosed	50%	50%	50%	50%	50%	50%	50%
Penetration of Addressable Market	0.0%	0.0%	0.8%	1.7%	2.6%	3.6%	4.5%
Patients on OTX-TP	0	0	8,810	19,772	30,680	41,533	52,332
Average Annual Cost	\$1,419	\$1,433	\$1,447	\$1,462	\$1,476	\$1,491	\$1,506
Cost Growth %	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Sales (\$MM)	\$0	\$0	\$13	\$29	\$45	\$62	\$79
20% Royalty from Future Partner	\$0	\$0	\$3	\$6	\$9	\$12	\$16
Total Revenue (\$MM)	\$25	\$63	\$107	\$154	\$203	\$255	\$309

Sources: Ocular Therapeutix, Oppenheimer Research Estimates

OTX-DP Inflammation Model Assumptions

Cataract Surgeries & Addressable Population. According to the market research firm Market Scope, 3.65 million cataract surgeries will be performed in the US in 2014, and we assume an annual growth rate of ~1%. Since only a small fraction of cataract surgeries are simultaneous bilateral (one source we found indicated ~0.3%³⁰), we assume each cataract surgery involves one eye. We based our EU estimate on data indicating ~650 cataract surgeries per 100,000 persons in the EU^{23,31}. Our Japan estimate of ~1.3M cataract surgeries was constructed from data collected from a survey of members of the Japanese Society of Ophthalmic Surgeons.³²

³⁰ <http://www.aao.org/publications/eyenet/201109/upload/Simultaneous-Bilateral-Cataract-Surgery-The-Debate-Continues-PDF.pdf>.

³¹ http://www.oecd.org/health/Comparing-activities-and-performance-of-the-hospital-sector-in-Europe_Inpatient-and-day-cases-surgical-procedures.pdf.

³² Acta Ophthalmol Scand. 2007 Dec;85(8):848-51. Epub 2007 Apr 24.

Launch timing. With Phase 3 data for OTX-DP expected in 1Q15, and an NDA submission targeted for 2Q15 (per Ocular), we model a 2016 US launch, and 2017 launches in the EU/Japan.

Pricing. In line with pricing of a punctum plug pair at \$250, we assume \$125 for one OTX-DP plug inserted post cataract surgery intended for 30-day residence time. We assume EU/JP pricing ~75%/~90% of the US.

Market Share. As discussed above, we assume the majority of patients will not need treatment for ocular inflammation. However, we assume ~20% of cataract surgeries will require treatment for inflammation, of which ~33% may be amenable to treatment with OTX-DP. Therefore, we initially assume a peak market penetration rate of ~6% in major markets. **To put this in perspective, this degree of adoption would correspond to the use of OTX-DP for ~230,000 cataract surgeries in the US by 2020 (see Exhibit 21 below).**

Exhibit 21 OTX-DP Inflammation Market Model

US Inflammation Model	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cataract Surgeries	3,723,365	3,760,599	3,798,205	3,836,187	3,874,549	3,913,294	3,952,427	3,991,951	4,031,871
Market Penetration Rate	1%	3%	5%	6%	6%	6%	6%	6%	6%
Patients on OTX-DP	37,234	112,818	189,910	230,171	232,473	234,798	237,146	239,517	241,912
Cost per plug	\$129	\$130	\$131	\$133	\$134	\$135	\$137	\$138	\$139
Cost Growth %	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Revenue (\$MM)	\$5	\$15	\$25	\$31	\$31	\$32	\$32	\$33	\$34
EU Inflammation Model									
Cataract Surgeries	3,370,544	3,404,250	3,438,292	3,472,675	3,507,402	3,542,476	3,577,901	3,613,680	3,649,817
Market Penetration Rate	0%	1%	3%	5%	6%	6%	6%	6%	6%
Patients on OTX-DP	0	34,042	103,149	173,634	210,444	212,549	214,674	216,821	218,989
Average Annual Cost	\$97	\$98	\$99	\$100	\$101	\$102	\$103	\$104	\$105
Cost Growth %	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Revenue (\$MM)	\$0	\$3	\$10	\$17	\$21	\$22	\$22	\$22	\$23
20% Royalty from Future Partner	\$0	\$1	\$2	\$3	\$4	\$4	\$4	\$4	\$5
JP Inflammation Model									
Cataract Surgeries	1,316,206	1,329,368	1,342,662	1,356,089	1,369,650	1,383,346	1,397,179	1,411,151	1,425,263
Market Penetration Rate	0%	1%	3%	5%	6%	6%	6%	6%	6%
Patients on OTX-DP	0	13,294	40,280	67,804	82,179	83,001	83,831	84,669	85,516
Average Annual Cost	\$116	\$117	\$118	\$119	\$121	\$122	\$123	\$124	\$126
Cost Growth %	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Revenue (\$MM)	\$0	\$2	\$5	\$8	\$10	\$10	\$10	\$11	\$11
20% Royalty from Future Partner	\$0	\$0	\$1	\$2	\$2	\$2	\$2	\$2	\$2
Total Revenue (\$MM)	\$5	\$16	\$28	\$36	\$37	\$38	\$39	\$40	\$40

Sources: Ocular Therapeutix, Oppenheimer Research Estimates

ReSure Model Assumptions

Cataract Surgeries & Addressable Population. See comments above for OTX-DP.

Pricing. We assume a net price of \$75 per ReSure package (contains 2 wells for up to 2 applications for a single surgery) and 1% YoY price increases. We assume EU/JP pricing ~75%/~90% of the US.

Market Share. We see a limited market scope as the majority of cataract patients do not require sutures (Market Scope reports that 14% of all cataract extraction procedures require sutures) and ReSure is not separately reimbursed, potentially creating an economic dis-incentive for physician adoption. However, premium lens cases and complicated cases are areas where we see ReSure gaining meaningful share, and we assume ~20% peak worldwide share in these segments. **For the US, our model implies ~175,000 cataract surgeries involving applications of ReSure sealant by 2021.**

Exhibit 22

ReSure Market Model

US ReSure Model	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cataract Surgeries	3,613,861	3,650,000	3,686,500	3,723,365	3,760,599	3,798,205	3,836,187	3,874,549	3,913,294	3,952,427	3,991,951	4,031,871
% Complicated	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
% Premium	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%
Complicated and/or Premium	795,050	803,000	811,030	819,140	827,332	835,605	843,961	852,401	860,925	869,534	878,229	887,012
Market Penetration Rate	0%	0.5%	3.0%	5.0%	10.0%	12.0%	15.0%	18.0%	20.0%	20.0%	20.0%	20.0%
Cataract Procedures Using ReSure	0	4,088	24,331	40,957	82,733	100,273	126,594	153,432	172,185	173,907	175,646	177,402
Cost per Procedure		\$80	\$75	\$76	\$77	\$77	\$78	\$79	\$80	\$80	\$81	\$82
Growth %	0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Revenue (\$MM)	\$0	\$0.3	\$2	\$3	\$6	\$8	\$10	\$12	\$14	\$14	\$14	\$15
EU ReSure Model												
Cataract Surgeries	3,271,417	3,304,131	3,337,173	3,370,544	3,404,250	3,438,292	3,472,675	3,507,402	3,542,476	3,577,901	3,613,680	3,649,817
% Complicated	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
% Premium	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%
Complicated and/or Premium	719,712	726,909	734,178	741,520	748,935	756,424	763,989	771,628	779,345	787,138	795,010	802,960
Market Penetration Rate	0%	0%	0.5%	1.0%	2.0%	3.0%	5.0%	10.0%	12.0%	15.0%	18.0%	20.0%
Cataract Procedures Using ReSure	0	0	3,671	7,415	14,979	22,693	38,199	77,163	93,521	118,071	143,102	160,592
Cost per Procedure		\$60	\$56	\$57	\$57	\$58	\$59	\$59	\$60	\$60	\$61	\$62
Growth %	0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Sales (\$MM)	\$0	\$0	\$0	\$0	\$1	\$1	\$2	\$5	\$6	\$7	\$9	\$10
20% Royalty from Future Partner	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$1	\$2	\$2
JP ReSure Model												
Cataract Surgeries	1,277,497	1,290,272	1,303,175	1,316,206	1,329,368	1,342,662	1,356,089	1,369,650	1,383,346	1,397,179	1,411,151	1,425,263
% Complicated	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
% Premium	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%
Complicated and/or Premium	281,049	283,860	286,698	289,565	292,461	295,386	298,339	301,323	304,336	307,379	310,453	313,558
Market Penetration Rate	0%	0%	0%	1.0%	2.0%	3.0%	5.0%	10.0%	12.0%	15.0%	18.0%	20.0%
Cataract Procedures Using ReSure	0	0	0	2,896	5,849	8,862	14,917	30,132	36,520	46,107	55,882	62,712
Cost per Procedure		\$72	\$68	\$69	\$69	\$70	\$71	\$71	\$72	\$72	\$73	\$74
Growth %	0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Sales (\$MM)	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$2	\$3	\$3	\$4	\$5
20% Royalty from Future Partner	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$1	\$1
Total Revenue (\$MM)	\$0	\$0	\$2	\$3	\$7	\$8	\$11	\$13	\$15	\$16	\$17	\$17

Sources: Ocular Therapeutix, Oppenheimer Research Estimates

Financial Model Assumptions

Revenue. See Exhibits 23 and 24 below.

Exhibit 23

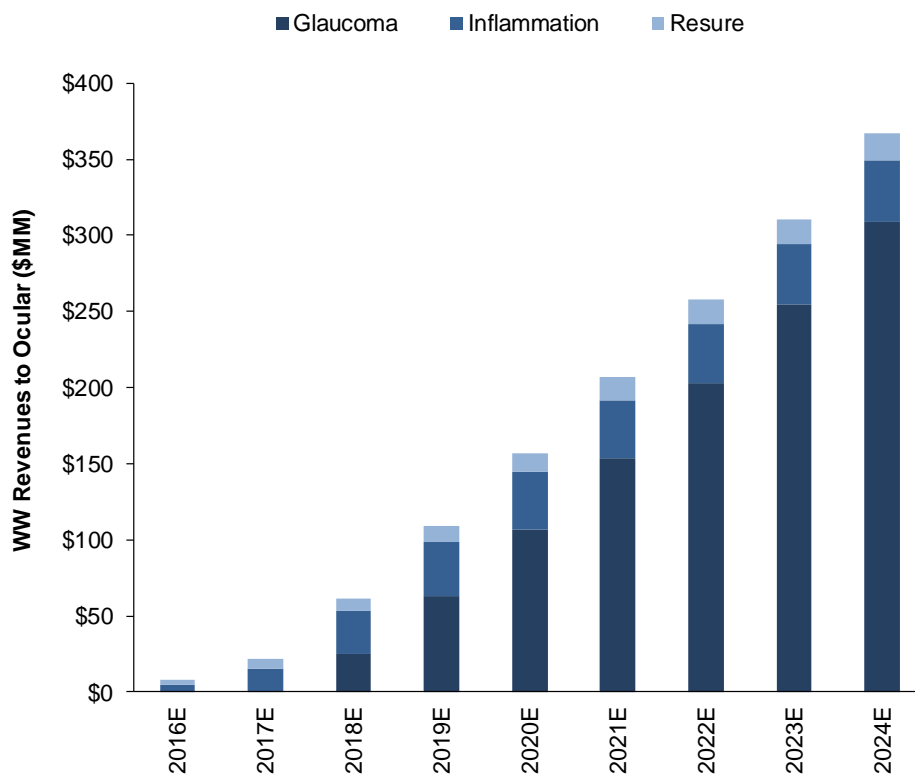
Key Assumptions in Our Revenue Model

Product	FDA Approval	Peak Sales Worldwide*	Peak Sales Year	Peak US Penetration Rate
ReSure	1Q14	~\$30 M	2024	~4%
OTX-TP Glaucoma	2018E	~\$500 M	2024	~8%
OTX-DP Inflammation	2016E	~\$70 M	2024	~6%

Source: Oppenheimer Research Estimates. * Revenues to Ocular are projected to be lower than peak sales as we assume a 20% royalty to Ocular for ex-US sales of OTX-TP, OTX-DP, and ReSure.

Exhibit 24

Worldwide Revenues from Ocular's Products



Source: Oppenheimer Research Estimates. * Revenues above take into account an assumed 20% royalty to Ocular for ex-US sales of OTX-TP, OTX-DP, and ReSure.

Economics

COGS: We assume 10% for the plugs and 5% for ReSure.

Third-party royalties: Incept is entitled to a low single-digit royalty for all of Ocular Therapeutix's products including OTX-TP, OTX-DP and ReSure, and we assume ~2%. Future potential partners/sublicensees will be responsible for paying the royalty to Incept. Therefore, for ex-US sales where we assume a 20% royalty to Ocular from a future partner, we do not include the Incept royalty in Ocular's COGS.

Operating Expenses

R&D: We see R&D in the \$20-\$25M range over 2014-2017. Assuming profitability per our model, we see R&D trending down to ~13-14% of revenues, and leveling off at ~\$40-50M per year as the company continues to develop its product portfolio.

SG&A: We see SG&A relatively stable at ~\$10M over 2014-2015. Currently, the company is selling ReSure through independent ophthalmology distributors. However, we understand that Ocular intends to commercialize the plug products independently in the US and hire a sales force. We project a significant rise to ~\$20M in 2016 with the assumed US launch of OTX-DP and another larger step-up to ~\$50M by 2018 as the company launches the larger glaucoma product OTX-TP. We do not include SG&A for ex-US commercialization as we assume partner(s) and a straight royalty (20%).

Financings: We assume additional financings of \$50M per year in 2016-2018.

Investment Risks:

Key risks include the following: **1)** Future retention rates and/or the degree of IOP reductions in Phase 2b and/or Phase 3 for OTX-TP in glaucoma may prove insufficient for widespread treatment adoption. **2)** The Phase 3 post-surgical inflammation and pain trial may fail to meet clinical endpoints. **3)** Future competitors may develop punctal plug products with better clinical efficacy and/or retention characteristics than Ocular's. **4)** Ocular's patent estate could be challenged by third parties owning related pending or issued patents for technology similar to ReSure and/or the hydrogel plugs. **5)** Ocular may not be successful in commercializing OTX-TP and OTX-DP and/or share capture may be weaker than our current projections. **6)** Our pricing assumptions may not be supportable in view of generic dexamethasone eye drops and soon-to-be generic travoprost eye drops. **7)** Ocular will likely need additional dilutive capital to develop its products, and we assume additional financings of \$150M over 2016-2018. **8)** OCUL has a relatively small float (~6.5M of ~20.6M shares outstanding), which could generate high volatility. **9)** Approximately ~15.6M shares are restricted securities under Rule 144, securities that existing holders may elect to sell upon waiver or expiration of the 180-day post-IPO lockup period (i.e., Versant Ventures, Polaris Ventures, SV Life Sciences, CHV II LP and others entities own ~70% of the restricted securities, and directors and named executive officers own ~30%).

Exhibit 25
Ocular Therapeutix Income Statement

(\$MMs except per share data)

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E
OTX-TP Glaucoma		0.0	0.0	0.0	0.0	25.2	63.2	107.0	153.8	203.1	254.8	309.2
OTX-DP Inflammation		0.0	0.0	4.8	15.7	27.9	35.6	37.4	38.1	38.9	39.7	40.5
ReSure		0.3	1.8	3.1	6.5	8.0	10.3	12.8	15.0	15.6	16.4	17.1
Total Revenue	0.0	0.3	1.8	7.9	22.1	61.2	109.1	157.2	207.0	257.6	310.8	366.8
COGS		0.0	0.1	0.8	2.3	6.9	12.4	17.8	23.5	29.3	35.5	41.9
OTX-TP Glaucoma		0.0	0.0	0.0	0.0	2.5	6.3	10.7	15.4	20.3	25.5	30.9
OTX-DP Inflammation		0.0	0.0	0.5	1.6	2.8	3.6	3.7	3.8	3.9	4.0	4.0
ReSure		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.8	0.8	0.8	0.9
Royalties to Incept		0.0	0.0	0.2	0.4	1.2	2.0	2.7	3.5	4.3	5.2	6.1
R&D	10.5	21.0	22.0	23.1	25.4	28.0	30.8	33.8	37.2	40.9	45.0	49.5
SG&A	2.4	9.4	10.3	18.1	27.1	50.1	55.1	57.9	58.5	59.1	59.7	60.3
Operating Income	(12.9)	(30.0)	(30.6)	(34.0)	(32.7)	(23.8)	10.8	47.6	87.8	128.2	170.7	215.0
Interest Income	0.0	0.5	0.3	0.2	0.3	0.3	0.4	0.4	0.5	0.9	1.3	1.8
Interest Expense	(0.4)	(1.0)	1.1	0.7	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Other income (expense), net	0.0	(0.1)										
Pre-Tax Income	(13.3)	(30.7)	(29.2)	(33.1)	(32.2)	(22.9)	11.2	48.0	88.4	129.1	172.0	216.8
Tax Expense (Benefit)	0	0	0	0	0	0	0	0	0	36.7	60.2	75.9
Tax Rate	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Net Income to Common	(13.3)	(30.7)	(29.2)	(33.1)	(32.2)	(22.9)	11.2	48.0	88.4	92.4	111.8	140.9
Net Income per Share	(5.11)	(2.97)	(1.42)	(1.46)	(1.31)	(0.86)	0.37	1.60	2.95	3.08	3.73	4.69
Weighted average shares, basic	2.6	10.3	20.6	22.6	24.6	26.7	26.7	26.7	26.7	26.8	26.8	26.8
Weighted average shares, diluted	2.6	11.1	23.8	25.8	27.8	29.9	29.9	29.9	29.9	30.0	30.0	30.0

Sources: Oppenheimer Research Estimates, Ocular Therapeutix Filings.

Exhibit 26
Ocular Therapeutix Balance Sheet
(\$MMs except per share data)

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E
Assets												
Cash and Equivalents	17.5	60.9	38.3	52.0	61.3	76.0	71.8	106.8	180.9	258.7	355.3	480.3
Prepaid Expenses and Other Current Assets	0.2	0.3	1.3	1.7	2.2	3.4	3.9	4.4	4.8	5.2	5.6	6.1
Inventory	-	0.0	0.1	0.7	1.9	5.7	10.3	14.9	19.6	24.4	29.6	34.9
Accounts receivable from related party	0.0	0.0										
Deferred Offering Costs		0.3	-	-	-	-	-	-	-	-	-	-
Receivables	0.3	0.1	0.2	1.0	2.8	7.6	13.6	19.6	25.9	32.2	38.9	45.8
Other Current Assets	-	0.0	0.0	0.2	0.6	1.5	2.7	3.9	5.2	6.4	7.8	9.2
Current Assets	18.0	61.8	40.0	55.5	68.7	94.3	102.4	149.6	236.3	327.0	437.1	576.4
Property, Plant, & Equipment	0.9	3.3	2.3	1.6	1.3	2.8	6.2	10.5	15.3	20.3	25.4	30.7
Restricted Cash	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Deposits	-	-	-	-	-	-	-	-	-	-	-	-
Other Long-Term Assets	-	-	-	-	-	-	-	-	-	-	-	-
Total Assets	19.1	65.3	42.5	57.3	70.2	97.3	108.9	160.4	251.8	347.5	462.7	607.3
Liabilities												
Accounts Payables	0.5	0.9	3.2	4.2	5.5	8.5	9.8	11.0	11.9	12.9	14.0	15.2
Accrued Liabilities	0.7	1.0	3.9	5.0	6.6	10.2	11.8	13.1	14.3	15.5	16.8	18.2
Deferred Revenue	0.3	-										
Notes Payable, net of discount, current	1.8	-										
Taxes Payable	-	0.0	0.0	0.1	0.2	0.6	1.1	1.6	2.1	2.6	3.1	3.7
Loans Payable, Current Portion	-	1.3	5.0	5.0	3.8	-	-	-	-	-	-	-
Other		0.4	1.6	2.1	2.7	4.2	4.9	5.5	6.0	6.5	7.0	7.6
Current Liabilities	3.3	3.5	13.8	16.4	18.8	23.6	27.6	31.2	34.2	37.5	41.0	44.6
Preferred Stock Warrants	0.3	-	-	-	-	-	-	-	-	-	-	-
Deferred rent, long-term	0.0	-	-	-	-	-	-	-	-	-	-	-
Loans Payable, Less Current Portion	-	13.8	10.0	8.8	5.0	3.8	-	-	-	-	-	-
Other Liabilities	-	-	-	-	-	-	-	-	-	-	-	-
Notes Payable, net of discount, long-term	0.7											
Total Liabilities	4.3	17.3	23.8	25.2	23.8	27.3	27.6	31.2	34.2	37.5	41.0	44.6
Redeemable convertible preferred stock	74.3											
Common stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional paid-in capital	1.3	139.4	139.4	185.9	232.4	278.9	278.9	278.9	278.9	278.9	278.9	278.9
Accumulated surplus/(deficit)	(60.8)	(91.4)	(120.6)	(153.7)	(185.9)	(208.8)	(197.6)	(149.7)	(61.3)	31.1	142.9	283.8
Shareholders' Equity	14.9	48.0	18.8	32.1	46.5	70.0	81.2	129.2	217.6	310.0	421.8	562.7
Total Liabilities & Equity	19.1	65.3	42.5	57.3	70.2	97.3	108.9	160.4	251.8	347.5	462.7	607.3

Sources: Oppenheimer Research Estimates, Ocular Therapeutix Filings.

Exhibit 27
Ocular Therapeutix Cash Flow Statement

(\$MMs except per share data)

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E
Operating Cash Flows												
Net Income	(13.3)	(30.7)	(29.2)	(33.1)	(32.2)	(22.9)	11.2	48.0	88.4	92.4	111.8	140.9
Adjustments:												
Non-cash Interest expense	0.0	0.0										
Licensing and consulting fees paid in common stock		2.4										
Depreciation	0.4	0.9	1.1	1.1	1.4	1.6	2.0	3.6	5.6	7.9	10.4	13.0
Amortization	-	-	-	-	-	-	-	-	-	-	-	-
Loss on Extinguishment of Debt	-	-	-	-	-	-	-	-	-	-	-	-
Share-Based Compensation	0.5	0.5	-	-	-	-	-	-	-	-	-	-
Revaluation of preferred stock warrants	(0.0)	0.1										
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Sources	(12.4)	(26.8)	(28.1)	(32.0)	(30.8)	(21.3)	13.2	51.5	93.9	100.3	122.2	153.9
Prepaid Expenses and other current assets	0.1	(0.1)	(1.0)	(0.4)	(0.5)	(1.2)	(0.5)	(0.5)	(0.4)	(0.4)	(0.4)	(0.5)
Inventory	-	(0.0)	(0.1)	(0.6)	(1.3)	(3.8)	(4.6)	(4.5)	(4.7)	(4.9)	(5.1)	(5.4)
Accounts Receivable from third party	0.0	(0.0)	0.0	-	-	-	-	-	-	-	-	-
Accounts Receivables	(0.3)	0.2	(0.2)	(0.8)	(1.8)	(4.9)	(6.0)	(6.0)	(6.2)	(6.3)	(6.7)	(7.0)
Other Current Assets	-	(0.0)	(0.0)	(0.2)	(0.4)	(1.0)	(1.2)	(1.2)	(1.2)	(1.3)	(1.3)	(1.4)
Accounts Payable	(0.2)	0.2	2.4	1.0	1.3	3.0	1.3	1.1	1.0	1.0	1.1	1.2
Accrued Liabilities	(0.2)	0.2	2.9	1.1	1.5	3.6	1.6	1.4	1.2	1.2	1.3	1.4
Taxes Payable	-	0.0	0.0	0.1	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.6
Deferred Revenue	0.3	(0.3)	-	-	-	-	-	-	-	-	-	-
Other	-	0.3	1.5	0.5	0.6	1.5	0.7	0.6	0.5	0.5	0.5	0.6
Changes in Operating Assets/Liabilities	(0.2)	0.4	5.6	0.8	(0.3)	(2.3)	(8.2)	(8.7)	(9.5)	(9.6)	(10.1)	(10.6)
Operating Cash Flow	(12.6)	(26.4)	(22.5)	(31.2)	(31.1)	(23.7)	5.0	42.9	84.4	90.7	112.1	143.4
Capital Expenditures	(0.4)	(3.3)	(0.1)	(0.4)	(1.1)	(3.1)	(5.5)	(7.9)	(10.4)	(12.9)	(15.5)	(18.3)
Purchase/Maturities of Securities	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
Investing Cash Flow	(0.4)	(3.3)	(0.1)	(0.4)	(1.1)	(3.1)	(5.5)	(7.9)	(10.4)	(12.9)	(15.5)	(18.3)
Proceeds from issuance of redeemable convertible preferred s	8.5	(74.4)	-	-	-	-	-	-	-	-	-	-
Issuance/Purchase of Stock	-	135.2	-	46.5	46.5	46.5	-	-	-	-	-	-
Issuance/Payment Debt	-	14.6	-	(1.3)	(5.0)	(5.0)	(3.8)	-	-	-	-	-
Proceeds from exercise of stock options	0.0	0.0										
Repayment of notes payable	(1.8)	(2.3)	-	-	-	-	-	-	-	-	-	-
Financing Cash Flow	6.7	73.2	-	45.2	41.5	41.5	(3.8)	-	-	-	-	-
Effect of Exchange Rates	-	-	-	-	-	-	-	-	-	-	-	-
Beginning Cash	23.9	17.5	60.9	38.3	52.0	61.3	76.0	71.8	106.8	180.9	258.7	355.3
Net Increase (Decrease) in Cash	(6.3)	43.4	(22.6)	13.6	9.3	14.7	(4.2)	35.0	74.1	77.9	96.6	125.0
Ending Cash	17.5	60.9	38.3	52.0	61.3	76.0	71.8	106.8	180.9	258.7	355.3	480.3

Sources: Oppenheimer Research Estimates, Ocular Therapeutix Filings.

Investment Thesis

Ocular is an appealing platform play in the ophthalmology space, driven by several technological advances that permit steady delivery of drugs to the eye using punctal plugs. The company's pipeline is substantially de-risked as Ocular's plugs deliver medications already approved for glaucoma (travoprost) and post-surgical inflammation (dexamethasone). Both the inflammation (OTX-DP) and glaucoma (OTX-TP) plugs have achieved clinical proof-of-concept, and we expect FDA approvals in 2016/2018, respectively. Longer term, we see the interplay between compliance advantages of plugs vs. generic/soon-to-be generic eyedrop markets as a key debate for the stock. However, at current levels even a conservative view of peak share suggests significant upside.

Price Target Calculation

We value Ocular Therapeutix using a discounted cash flow (DCF) analysis with a weighted average cost of capital (WACC) of 10% and a 0% terminal growth rate post 2030, generating a terminal value of \$255M. Our DCF valuation indicates an equity value of ~\$585M or \$25 per diluted share.

Key Risks to Price Target

Key risks include the following: 1) Future retention rates and/or the degree of IOP reductions in Phase 2b and/or Phase 3 for OTX-TP in glaucoma may prove insufficient for widespread treatment adoption. 2) The Phase 3 post-surgical inflammation and pain trial may fail to meet clinical endpoints. 3) Future competitors may develop punctal plug products with better clinical efficacy and/or retention characteristics than Ocular's. 4) Ocular's patent estate could be challenged by third parties owning related pending or issued patents for technology similar to ReSure and/or the hydrogel plugs. 5) Ocular may not be successful in commercializing OTX-TP and OTX-DP and/or share capture may be weaker than our current projections. 6) Our pricing assumptions may not be supportable in view of generic dexamethasone eyedrops and soon-to-be generic travoprost eyedrops. 7) Ocular will likely need additional dilutive capital to develop its products and we assume additional financings of \$150MM over 2016-2018. 8) OCUL has a relatively small float (~6.5M of ~20.6M shares outstanding), which could generate high volatility. 9) Approximately ~15.6M shares are restricted securities under Rule 144, shares which existing shareholders may elect to sell upon waiver or expiration of the 180-day post-IPO lockup period (i.e., Versant Ventures, Polaris Ventures, SV Life Sciences, CHV II LP and others entities own ~70% of the restricted securities, and directors and named executive officers own ~30%).

Stock prices of other companies mentioned in this report (as of 8/18/2014, intraday):

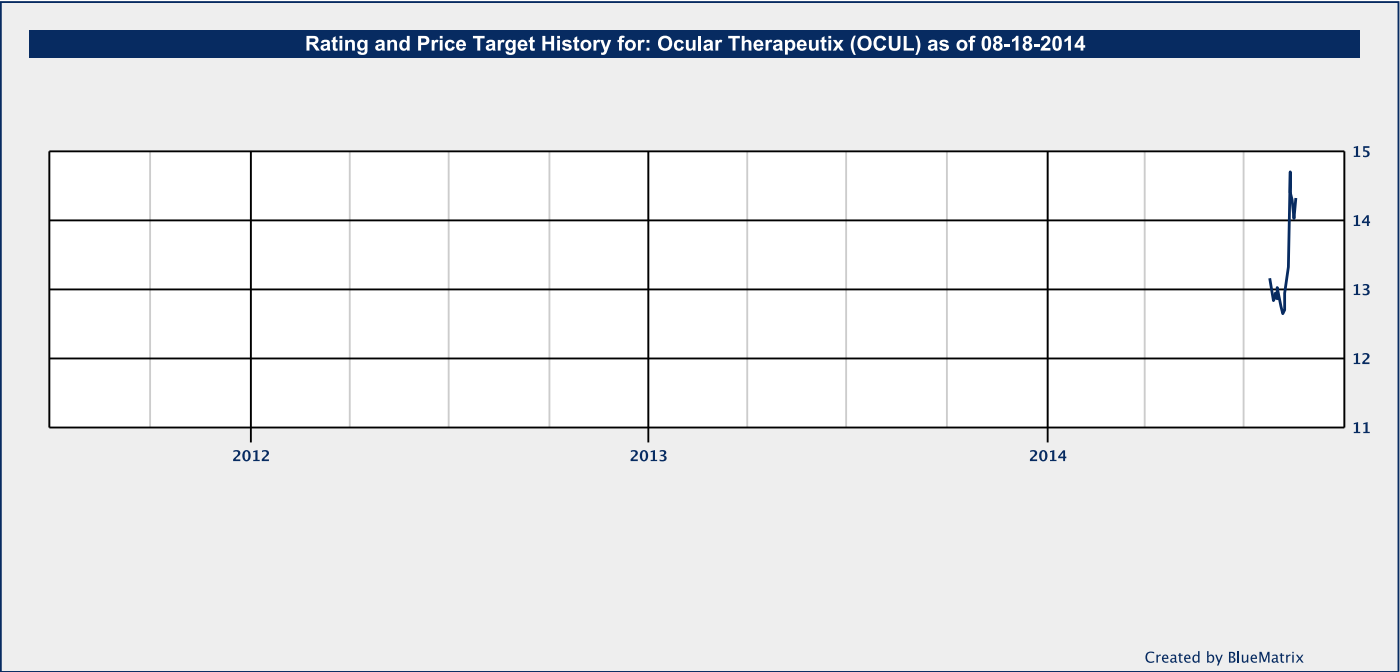
Allergan (AGN-NYSE, \$156.43, Not Covered)
QLT Inc. (QLTI-NASDAQ, \$5.19, Not Covered)

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Distribution of Ratings/IB Services Firmwide				
Rating	Count	IB Serv/Past 12 Mos.		
		Percent	Count	Percent
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PERFORM [P]	281	46.60	97	34.52
UNDERPERFORM [U]	10	1.66	3	30.00

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