

Equity Research

August 19, 2014

Price: \$14.33 (08/18/2014)

Price Target: \$40.00

OUTPERFORM (1)

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Key Data

Symbol	NASDAQ: OCUL
52-Week Range:	\$15.25 - 11.90
Market Cap (MM):	\$294.8
Net Debt (MM):	\$(15.1)
Cash/Share:	\$6.54
Dil. Shares Out (MM):	21.0
Enterprise Value (MM):	\$358.4
ROIC:	NA
ROE (LTM):	NA
BV/Share:	\$(20.57)
Dividend:	NA

FY (Dec)	2014E	2015E	2016E
Revenue (MM)			
Year	\$1.5	\$8.5	\$22.5
EV/S	238.9x	42.2x	15.9x
Earnings Per Share			
Year	\$(1.25)	\$(1.15)	\$(0.65)
P/E	NM	NM	NM

Initiating Coverage

Initiation: Novel Technology Should Create Significant Value

The Cowen Insight

Ocular Therapeutix has one FDA-approved product and a promising pipeline, including a variety of drug-eluting punctum plugs and a long-duration intravitreal anti-VEGF hydrogel depot. Our price target of \$40 per share is predicated on success of OTX-TP in glaucoma alone, and only factors conservative penetration rates. Success in the other programs could yield significantly higher value.

Novel Technology Is Well-Suited To Address Multiple Markets

Ocular Therapeutix has one FDA-approved product, ReSure Sealant, and a promising pipeline, including a variety of drug-eluting punctum plugs and a long-duration intravitreal anti-VEGF hydrogel depot. In February 2014, Ocular launched ReSure, its first commercial product, which is indicated to close corneal incisions following cataract surgery. While ReSure allows Ocular to develop brand recognition among physicians and will provide some cash flows to help support development efforts, the main focus for investors – and where the value will be created – is via the Company's emerging ophthalmic pipeline. Ocular's lead development programs are OTX-TP and OTX-DP. OTX-TP is a travoprost punctum plug in Phase II development for glaucoma and ocular hypertension. OTX-DP is a dexamethasone punctum plug in Phase III clinical development for post-surgical ocular inflammation and pain and Phase II studies for allergic conjunctivitis. Additionally, Ocular has completed Phase I trials for OTX-MP, a moxifloxacin punctum plug for the prevention/treatment of bacterial conjunctivitis after cataract surgery. Finally, the Company is in collaboration with undisclosed partner(s) to develop a long-acting anti-VEGF hydrogel depot that has successfully demonstrated a duration of 4-6 months in in vitro studies. While this program is admittedly very early, we view it as having tremendous valuation optionality given its potential blockbuster status. Stated more clearly, our price target of \$40 per share is predicated on OTX-TP in glaucoma alone with reasonable penetration rates into its target market. Meaningful success in the other programs – especially the Company's anti-VEGF hydrogel depot – could more than double our target valuation.

Several Opportunities For Value Creation Exist

Our base case valuation model assumes approval for OTX-TP in 2017, and U.S. peak sales eventually reaching approximately \$450MM, which is a conservative penetration of roughly 5% of total U.S. glaucoma prescriptions by 2020. We also assume modest ex-U.S. sales for OTX-TP with a peak sales value of ~\$150MM. For OTX-DP, we assume a successful approval in 2015 with steady growth and total peak sales of \$300MM across all indications. We also expect growth for ReSure to be stable with total worldwide peak sales of approximately \$150MM. Finally, we assume Ocular moves forward with OTX-MP and the product is launched in 2018/2019. Our peak sales estimate for the product is slightly above \$100MM. We would note, our valuation does not attribute any value to the long-duration anti-VEGF hydrogel which has the greatest potential upside of any of Ocular's products. If the Company successfully entered the \$3B+ and growing wet AMD market, with a transformational duration product, our valuation could inflect to 2-3x our base case \$40 per share valuation.

Please see addendum of this report for important disclosures.

At A Glance

Our Investment Thesis

Our base case valuation model assumes approval for OTX-TP in 2017, and U.S. peak sales eventually reaching approximately \$450MM. We also assume modest ex-U.S. sales for OTX-TP with a peak sales value of ~\$150MM. For OTX-DP, we assume a successful approval in 2015 with steady growth and total peak sales of \$300MM across all indications. We also expect growth for ReSure to be stable with total worldwide peak sales of approximately \$150MM. Finally, we assume Ocular moves forward with OTX-MP and the product is launched in 2018/2019. Our peak sales estimate for the product is slightly above \$100MM. We would note, our valuation does not attribute any value to the long-duration anti-VEGF hydrogel which has the greatest potential upside of any of Ocular's products. If the Company successfully entered the \$3B+ and growing wet AMD market, with a transformational duration product, our valuation could inflect to 2-3x our base case \$40 per share valuation.

Forthcoming Catalysts

- H2:2014 – Initiate OTX-TP Phase IIb glaucoma trials and file IND
- Q4:2014 – Data from OTX-DP Phase II allergic conjunctivitis study; potential Phase III trial initiation
- Q1:2015 – Data from both OTX-DP Phase III studies for post-cataract surgery pain and inflammation
- 2015 – OTX-TP Phase IIb glaucoma study data; potential Phase III trial initiation

Base Case Assumptions

\$40 assuming conservative market penetration from OTX-TP

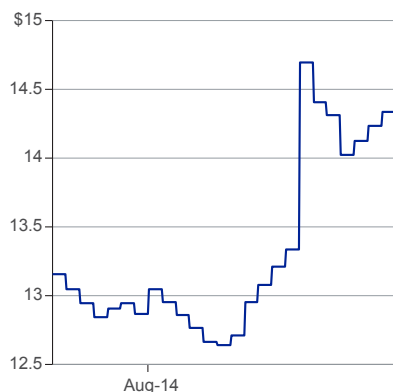
Upside Scenario

\$80+ if the long-duration anti-VEGF hydrogel depot product is successfully developed

Downside Scenario

\$15 on low commercial performance of products once they reach the market

Price Performance



Source: Bloomberg

Company Description

Ocular Therapeutix has one FDA-approved product, ReSure Sealant, and a promising pipeline, including a variety of drug-eluting punctum plugs and a long-duration intravitreal anti-VEGF hydrogel depot.

Analyst Top Picks

	Ticker	Price (08/18/2014)	Price Target	Rating
Teva Pharmaceutical	TEVA	\$52.39	\$70.00	Outperform
Allergan	AGN	\$155.61	\$NA	Outperform
Actavis	ACT	\$218.07	\$255.00	Outperform

Ocular Therapeutix' Novel Technology Is Well-Suited To Address Multiple Markets: Several Opportunities For Value Creation Exist

The Company is focused on large, addressable market segments with existing unmet needs that include glaucoma (~\$2B), post-cataract surgery (\$1B+), and wet AMD (\$3B+).

Ocular Therapeutix has one FDA-approved product, ReSure Sealant, and a promising pipeline, including a variety of drug-eluting punctum plugs and a long-duration intravitreal anti-VEGF hydrogel depot. The Company is focused on large, addressable market segments with existing unmet needs that include glaucoma (~\$2B), post-cataract surgery (\$1B+), and wet AMD (\$3B+). In February 2014, Ocular launched ReSure Sealant, its first commercial product, which is indicated to close corneal incisions following cataract surgery, and demonstrated a superior ability to minimize post-operative leaks with a leakage rate of 4.1% compared to 34.1% with suture closure. While ReSure allows Ocular to develop brand recognition among physicians and will provide some cash flows to help support development efforts, the main focus for investors – and where the value will likely be created – is via the Company's emerging ophthalmic pipeline. Ocular's lead development programs are OTX-TP and OTX-DP. OTX-TP is a travoprost punctum plug in Phase II development for glaucoma and ocular hypertension. OTX-DP is a dexamethasone punctum plug in Phase III clinical development for post-surgical ocular inflammation and pain and Phase II studies for allergic conjunctivitis. Additionally, Ocular has completed Phase I trials for OTX-MP, a moxifloxacin punctum plug for the prevention/treatment of bacterial conjunctivitis after cataract surgery. Finally, the Company is in collaboration with undisclosed partner(s) to develop a long-acting anti-VEGF hydrogel depot that has successfully demonstrated a duration of 4-6 months in in vitro studies. While this program is admittedly very early, we view it as having tremendous valuation optionality given its potential blockbuster status. Stated more clearly, our price target of \$40 per share is predicated on OTX-TP in glaucoma alone with reasonable penetration rates into its target market. Meaningful success in the other programs – especially the Company's anti-VEGF hydrogel depot – could more than double our target valuation.

The next generation NSR3 plug design will be used in the Phase IIb study and we believe retention can continue to be improved. Consolidating all of the feedback from our clinicians, we believe OTX-TP could be at least a \$450MM product in the U.S. and if approved in the E.U. and Japan, could provide additional upside.

The Phase IIa data for OTX-TP looks promising as efficacy was comparable to timolol with a duration of 2-3 months. The poor compliance for topical glaucoma eye drops is well understood by the physician community and the improvement in compliance seen with once-daily PGAs relative to treatments that require multiple daily drops suggests that a product that only requires administration every 2-3 months could have a profound impact on compliance. Despite our initial concerns about plug retention, our consultants noted that a treatment option that lasted anywhere between 60 and 90 days would be a “game changer” and that the 2-3 month duration of the product would fit well into the currently established glaucoma treatment protocol. The next generation NSR3 plug design will be used in the Phase IIb study and we believe retention can continue to be improved. Consolidating all of the feedback from our clinicians, we believe OTX-TP could be at least a \$450MM product in the U.S. and if approved in the E.U. and Japan, could provide additional upside. For OTX-DP, the positive Phase II data and the established efficacy of dexamethasone for the treatment of post-operative ocular inflammation and pain gives us confidence in the ongoing Phase III trials. The current standard of care requires 4-6 daily administrations for 30 days, so our consultants noted that a one-time administration would clearly be preferred. A follow-on indication in allergic conjunctivitis for OTX-DP could provide additional value since penetration of the market for steroids is currently limited due to concerns about drug-induced side effects associated with topical steroid drops. Many of these side effects are associated with spikes in drug concentration, which will be limited for OTX-DP, which produces a steady release of drug over time. Furthermore, a steroid class label for the product could provide even more upside for OTX-DP as steroids are well-established and treating a wide range of inflammatory conditions.

Our analysis suggests OTX-DP could be at least a \$300MM product across all indications.

ReSure Sealant will provide incremental cash flow, which Ocular can use to help fund the development of its robust pipeline. We expect worldwide sales of \$150MM for the highly effective incision sealant. OTX-MP also has \$100MM+ potential for bacterial conjunctivitis, but is still earlier-stage as only Phase I studies have been completed. Assuming clinical success of these products via the lower risk 505(b)(2) regulatory pathway, we arrive at a base valuation of \$40 per share. Of note, this valuation does not factor in any potential incremental upside such as a steroid class label for OTX-DP or approval of the long-duration anti-VEGF hydrogel depot. The anti-VEGF hydrogel itself has blockbuster potential and if successful, could potentially argue for a transformational valuation that is at least 2-3x our base case. Importantly, Ocular has long duration on its assets, as patents for the punctum plug products will not expire until 2030. ReSure's patents have the earliest expiration in 2025, and if successfully developed and approved, patents on the long-duration anti-VEGF hydrogel depot are expected to expire in 2032. Finally, we believe the valuation is supported as even our low case scenario with poor commercial success would justify a price of \$15 per share.

Ocular Has Reported Positive Data For Multiple Programs

The bottom-line is that these results demonstrate efficacy similar for OTX-TP that is similar to common prescribed glaucoma treatments and we believe the development risk for the future Phase IIb and Phase III studies is low given the well-validated active ingredient, travoprost. Plug retention has – and we believe will – continue to improve with the updated NSR3 model being used in the future Phase IIb program.

In May of 2014, Ocular successfully completed a Phase IIa study for OTX-TP. The clinical study enrolled 41 patients (82 treated eyes) and among the patients in the OTX-TPa treatment arm (drug release rate of 3.5µg/day; 60-75 day duration), with a baseline IOP of 25.8 mmHg, mean IOP was maintained at or below 21.1 mmHg at all measured time points from day 15 through 75. Mean reduction in IOP ranged from 3.2 mmHg to 6.0 mmHg. For patients in the OTX-TPb treatment arm (drug release rate of 2.8µg/day; up to 90 days), with a baseline IOP of 26.4 mmHg, mean IOP was maintained at or below 23.4 mmHg at all measured time points from day 15 to 90. Mean reduction in IOP ranged from 2.0 mmHg to 5.4 mmHg. Finally, for patients in the timolol control group, with a baseline IOP of 26.1 mmHg, mean IOP was maintained at or below 21.3 mmHg at all measured time points from day 15 to 75. Mean reduction in IOP ranged from 3.2 mmHg to 6.4 mmHg. The bottom-line is that these results demonstrate efficacy similar for OTX-TP that is similar to common prescribed glaucoma treatments and we believe the development risk for the future Phase IIb and Phase III studies is low given the well-validated active ingredient, travoprost. Plug retention has – and we believe will – continue to improve with the updated NSR3 model being used in the future Phase IIb program.

Importantly, no spikes or fluctuations in IOP were demonstrated at any point in the study with OTX-DP and will help alleviate any worries about drug-induced side effects especially as Ocular pursues an indication for allergic conjunctivitis.

For OTX-DP, Ocular has successfully completed a Phase II trial for post-operative ocular inflammation and pain and has started two Phase III trials for the indication. The Company has also initiated a Phase II trial to evaluate the product for allergic conjunctivitis. The completed Phase II trial did not meet the primary endpoint for absence of inflammatory cells on day 8 following cataract surgery, but achieved very high statistical significance on Days 14 ($p < 0.0027$) and 30 ($p < 0.0002$). We do not find this concerning as many other approved topical ophthalmic steroids have used Day 14 as the primary endpoint when evaluating absence of anterior chamber cells in their pivotal studies. The ongoing Phase III studies for OTX-DP are using Day 14 as the primary endpoint, which we believe is positive given the result described above. Importantly, no spikes or fluctuations in IOP were demonstrated at any point in the study with OTX-DP and will help alleviate any worries about drug-induced side effects especially as Ocular pursues an indication for allergic conjunctivitis. In March 2014, Ocular initiated a Phase II clinical study to evaluate OTX-DP for allergic conjunctivitis.

Similar to OTX-TP, Ocular's use of an already approved compound (dexamethasone) for OTX-DP considerably lowers the development risk.

Upcoming Milestones For Ocular Include:

2014:

- ReSure Sealant E.U. filing
- H2 – Initiate OTX-TP Phase IIb glaucoma trials and file IND
- Q4 – Data from OTX-DP Phase II allergic conjunctivitis study; potential Phase III trial initiation

2015:

- Q1 – Data from both OTX-DP Phase III studies for post-cataract surgery pain and inflammation
- Q2 – File potential OTX-DP NDA for post-cataract surgery pain and inflammation
- OTX-TP Phase IIb glaucoma study data; potential Phase III trial initiation

2016:

- Potential OTX-DP launch for post-cataract surgery pain and inflammation
- Potential data from OTX-TP Phase IIIa and IIIb glaucoma studies

2017:

- Potential OTX-TP NDA filing and launch

Valuation Appears Attractive Here

Ocular's use of FDA approved compounds for all of its pipeline products, in conjunction with the 505(b)(2) regulatory pathway significantly reduces development risk for the Company. Furthermore, our industry checks suggest the improved convenience and compliance with the drug-eluting punctum plugs could be transformational, especially for the treatment of chronic conditions like glaucoma. Our consultants note that OTX-TP especially has potential to be a "game changer" and could garner strong uptake, so our estimate could in fact eventually prove conservative.

Our base case valuation model assumes approval for OTX-TP in 2017, and U.S. peak sales eventually reaching approximately \$450MM, which is a conservative penetration of roughly 5% of U.S. glaucoma prescriptions by 2020. We also assume modest ex-U.S. sales for OTX-TP with a peak sales value of ~\$150MM. For OTX-DP, we assume a successful approval in 2015 with steady growth and total peak sales of \$300MM across all indications. We also expect growth for ReSure to be stable with total worldwide peak sales of approximately \$150MM. Finally, we assume Ocular moves forward with OTX-MP and the product is launched in 2018/2019. Our peak sales estimate for the product is slightly above \$100MM. Ocular's use of FDA approved compounds for all of its pipeline products, in conjunction with the 505(b)(2) regulatory pathway significantly reduces development risk for the Company. Furthermore, our industry checks suggest the improved convenience and compliance with the drug-eluting punctum plugs could be transformational, especially for the treatment of chronic conditions like glaucoma. Our consultants note that OTX-TP especially has potential to be a "game changer" and could garner strong uptake, so our estimate could in fact eventually prove conservative. Our base case assumes sales force expansion in 2017 for the launch of OTX-TP and margins of 85% with SG&A and R&D costs within the range of normal industry standards. We would note, our valuation does not attribute any value to the long-duration anti-VEGF hydrogel which has the greatest potential upside of any of Ocular's products. If the Company successfully entered the \$3B+ and growing wet AMD market, with a transformational duration product, our valuation could inflect to 2-3x our base case \$40 per share valuation.

Below we provide are market models for OTX-TP, OTX-DP, OTX-MP, and ReSure Sealant to provide a perspective on the size of the product opportunities. On the following pages we publish our base case DCF scenarios as well as a low case DCF scenario to illustrate what we believe is the support level to the Ocular share price.

Figure 1 U.S. And International Glaucoma Treatment Market Model

ESTIMATED WW GLAUCOMA TREATMENT MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Total U.S. Glaucoma Market Sales (MM)	\$1,787	\$1,821	\$1,825	\$1,715	\$1,835	\$1,575	\$1,535	\$1,510	\$1,485	-2%	Growth expected to slow, clipped by generics
% Growth		+8%	+0%	-11%	-5%	-4%	-3%	-2%	-2%		
Total U.S. Glaucoma Market Annual Prescriptions ('000)	26,087	26,748	26,750	26,100	25,905	25,780	25,610	25,440	25,190	-0%	
Total International Glaucoma Market Sales (MM)	\$1,900	\$1,700	\$1,870	\$1,710	\$1,700	\$1,690	\$1,680	\$1,670	\$1,660	-2%	Similar dynamics to the U.S. market
% Growth		-11%	-2%	+2%	-1%	-1%	-1%	-1%	-1%		
Total International Glaucoma Market Annual Prescriptions ('000)	58,400	57,250	56,240	57,887	57,250	56,913	56,576	56,240	55,903	-1%	
Total Worldwide Glaucoma Market Sales (MM)	\$3,687	\$3,521	\$3,695	\$3,425	\$3,535	\$3,265	\$3,215	\$3,180	\$3,145	-2%	
% Growth		-2%	-1%	-5%	-3%	-2%	-2%	-1%	-1%		
Total Worldwide Glaucoma Market Annual Prescriptions ('000)	84,487	83,998	82,990	83,987	83,155	82,703	82,186	81,680	81,093	-1%	
ESTIMATED U.S. PROSTAGLANDIN MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Lumigan (bimatoprost) U.S. Penetration Of Estimated Glaucoma Market (AGN)	26%	26%	25%	24%	23%	23%	22%	21%	21%		- Superior efficacy to Xalatan; patent protection to 2027
Average Price Per Prescription	\$140	\$153	\$155	\$155	\$160	\$160	\$165	\$165	\$165		- Generic Xalatan reduces growth
Annual Prescriptions ('000)	3,286	3,216	3,065	2,710	2,375	2,219	2,030	1,939	1,848		- High incidence of hyperemia has tempered some growth
Estimated Sales U.S. (\$MM)	\$460	\$492	\$475	\$420	\$380	\$355	\$335	\$320	\$305	-5%	- Once daily dosing
Travatan (travoprost) U.S. Penetration Of Estimated Glaucoma Market (NVS/Aicon)	25%	23%	23%	17%	15%	13%	12%	11%	10%		- Generic Travatan expected as early as 2014
Average Price Per Prescription	\$133	\$146	\$145	\$145	\$145	\$145	\$150	\$150	\$150		- Includes Travatan Z formulation
Annual Prescriptions ('000)	3,381	3,038	3,034	2,069	1,724	1,448	1,233	1,100	1,000		- Similar efficacy to Xalatan
Estimated Sales U.S. (\$MM)	\$448	\$445	\$440	\$300	\$250	\$210	\$185	\$165	\$150	-13%	- Once daily dosing
Xalatan (latanoprost) U.S. Penetration Of Estimated Glaucoma Market (PFE)	2%	1%	1%	1%	1%	1%	1%	1%	1%		- Generic Xalatan available since 2011
Average Price Per Prescription	\$122	\$153	\$155	\$155	\$155	\$155	\$155	\$155	\$155		- Increased competition from branded products
Annual Prescriptions ('000)	282	185	161	65	65	65	65	65	65		- Lower efficacy than Lumigan
Estimated Sales U.S. (\$MM)	\$35	\$28	\$25	\$10	\$10	\$10	\$10	\$10	\$10	-14%	
Zioptan U.S. Penetration Of Estimated Glaucoma Market (MRK/AKRXX)	0%	1%	1%	1%	1%	1%	1%	1%	1%		
Average Price Per Prescription	\$138	\$131	\$135	\$135	\$135	\$135	\$140	\$140	\$140		
Annual Prescriptions ('000)	45	141	148	148	148	148	143	143	143		
Estimated Sales U.S. (\$MM)	\$6	\$19	\$20	\$20	\$20	\$20	\$20	\$20	\$20	+16%	
Generic/Others U.S. Estimated Penetration Of Glaucoma Market	5%	6%	6%	9%	10%	10%	12%	12%	13%		- Generic Xalatan reduces growth
Average Price Per Prescription	\$10	\$12	\$13	\$14	\$14	\$14	\$15	\$15	\$16		- Generic Pricing
Annual Prescriptions ('000)	8,488	9,482	9,500	10,500	11,200	11,700	12,100	12,300	12,400		
Estimated Sales U.S. (\$MM)	\$87	\$115	\$124	\$147	\$157	\$164	\$182	\$185	\$198	+11%	- Use remains steady
Total U.S. Prostaglandin Market Sales (MM)	\$1,038	\$1,099	\$1,085	\$895	\$815	\$760	\$730	\$700	\$685	-5%	- Steady decline due to generics, combinations, and improved therapies
% Growth		+8%	-1%	-18%	-8%	-7%	-4%	-4%	-2%		
Total U.S. Prostaglandin Annual Prescriptions ('000)	15,402	16,062	15,910	15,490	15,510	15,580	15,670	15,545	15,455	-0%	
ESTIMATED U.S. COMBINATION MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Combigan U.S. Penetration Of Estimated Glaucoma Market (AGN)	11%	12%	12%	14%	16%	17%	18%	19%	20%		- Combination of Alphagan (brimonidine) and timolol
Average Price Per Prescription	\$110	\$125	\$130	\$130	\$135	\$135	\$140	\$140	\$145		- Patent coverage until 2022
Annual Prescriptions ('000)	1,724	1,782	1,810	1,845	1,890	1,925	1,961	2,000	2,000		- Growth impacted by generic Alphagan
Estimated Sales U.S. (\$MM)	\$189	\$223	\$235	\$240	\$255	\$260	\$275	\$280	\$290	+5%	
Cocept U.S. Penetration Of Estimated Glaucoma Market (AKRXX)	1%	1%	1%	2%	2%	2%	2%	2%	2%		
Average Price Per Prescription	\$154	\$165	\$165	\$165	\$170	\$170	\$175	\$175	\$175		
Annual Prescriptions ('000)	91	133	150	165	175	185	190	195	200		
Estimated Sales U.S. (\$MM)	\$14	\$22	\$25	\$27	\$30	\$31	\$33	\$34	\$35	+12%	
Simbrinza U.S. Penetration Of Estimated Glaucoma Market (NVS/Aicon)	0%	0%	0%	1%	1%	1%	1%	1%	1%		
Average Price Per Prescription	\$110	\$110	\$110	\$110	\$110	\$115	\$115	\$115	\$115		
Annual Prescriptions ('000)	59	75	90	102	108	116	122	127	127		
Estimated Sales U.S. (\$MM)	\$7	\$8	\$10	\$11	\$12	\$13	\$14	\$15	\$15	+11%	
Total U.S. Combination Market Sales (MM)	\$208	\$252	\$270	\$275	\$295	\$305	\$320	\$330	\$340	+7%	- Steady growth due to favored use of combination therapy
% Growth		+24%	+7%	+2%	+7%	+3%	+5%	+3%	+3%		
Total U.S. Combination Annual Prescriptions ('000)	1,815	1,974	2,035	2,100	2,165	2,220	2,265	2,315	2,325	+8%	
ESTIMATED U.S. CARBONIC ANHYDRASE MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Carbonic Anhydrase Inhibitors (Branded) U.S. Penetration Of Estimated Glaucoma Market	7%	7%	7%	7%	7%	7%	7%	7%	7%		- Includes Diamox (acetazolamide), Neptazane (methazolamide), Trusopt (dorzolamide), Azopt (brinzolamide)
Average Price Per Prescription	\$130	\$149	\$150	\$150	\$155	\$155	\$160	\$160	\$160		
Annual Prescriptions ('000)	936	911	933	840	790	750	710	680	650		
Estimated Sales U.S. (\$MM)	\$122	\$136	\$140	\$126	\$122	\$116	\$110	\$109	\$104	-3%	
Carbonic Anhydrase Inhibitors (Generic) U.S. Penetration Of Estimated Glaucoma Market	5%	5%	5%	5%	5%	5%	6%	6%	6%		
Average Price Per Prescription	\$53	\$53	\$50	\$50	\$50	\$50	\$50	\$50	\$50		
Annual Prescriptions ('000)	1,620	1,715	1,800	1,800	1,760	1,730	1,720	1,700	1,680		
Estimated Sales U.S. (\$MM)	\$85	\$91	\$90	\$90	\$88	\$87	\$86	\$85	\$84	-0%	
Total U.S. Carbonic Anhydrase Market Sales (MM)	\$207	\$227	\$230	\$216	\$210	\$205	\$196	\$195	\$190	-1%	- Steady decline due to generics, combinations, and improved therapies
% Growth		+9%	+1%	-7%	-2%	-2%	-5%	+0%	-3%		
Total U.S. Carbonic Anhydrase Inhibitor Annual Prescriptions ('000)	2,556	2,628	2,735	2,640	2,550	2,480	2,430	2,380	2,330	-1%	

Source: Cowen and Company; Company Reports

Figure 2 U.S. And International Glaucoma Treatment Market Model (Continued)

ESTIMATED U.S. BETA BLOCKER MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Beta Blocker (Branded) U.S. Penetration Of Estimated Glaucoma Market	4%	4%	4%	4%	4%	4%	3%	3%	3%		- Includes Betagan (levobunolol), Betoptic (betaxolol),
Average Price Per Prescription	\$149	\$180	\$180	\$180	\$180	\$185	\$185	\$185	\$185		- Betimol (timolol hemihydrate), Istalol (timolol maleate),
Annual Prescriptions ('000)	497	378	390	360	330	300	270	240	220		- OptiPranolol (metipranolol), Ocupress (carteolol)
Estimated Sales U.S. (\$MM)	\$74	\$68	\$70	\$65	\$59	\$56	\$50	\$44	\$41	-7%	- Timoptic (timolol maleate gel)
Beta Blocker (Generic) U.S. Penetration Of Estimated Glaucoma Market	4%	3%	3%	3%	3%	3%	3%	3%	3%		
Average Price Per Prescription	\$15	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13		
Annual Prescriptions ('000)	4,158	4,180	4,200	4,100	4,000	3,920	3,840	3,780	3,730		
Estimated Sales U.S. (\$MM)	\$63	\$54	\$55	\$53	\$52	\$51	\$50	\$49	\$48	-3%	
Total U.S. Beta Blocker Market Sales (MM)	\$137	\$122	\$125	\$120	\$110	\$105	\$100	\$95	\$90	-5%	- Steady decline due to generics, combinations, and improved therapies
% Growth		-11%	+2%	-4%	-8%	-5%	-5%	-5%	-5%		
Total U.S. Beta Blocker Annual Prescriptions ('000)	4,655	4,558	4,590	4,460	4,330	4,220	4,110	4,020	3,950	-2%	
ESTIMATED U.S. ALPHA AGONIST AND CHOLINERGIC MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Alphagan U.S. Penetration Of Estimated Glaucoma Market (AGN)	11%	11%	11%	12%	12%	13%	12%	12%	12%		- Includes Alphagan P
Average Price Per Prescription	\$128	\$145	\$145	\$150	\$150	\$155	\$155	\$160	\$160		- Majority of franchise converted to Alphagan P
Annual Prescriptions ('000)	1,558	1,518	1,470	1,400	1,340	1,280	1,225	1,170	1,120		- Patent coverage until 2022
Estimated Sales U.S. (\$MM)	\$200	\$220	\$213	\$210	\$201	\$198	\$190	\$187	\$179	-1%	
Cholinergic U.S. Penetration Of Estimated Glaucoma Market	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Average Price Per Prescription	\$190	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200		
Annual Prescriptions ('000)	21	10	10	10	10	10	10	10	10		
Estimated Sales U.S. (\$MM)	\$4	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	-8%	
Total U.S. Alpha Adrenergic Agonist and Cholinergic Market Sales (MM)	\$204	\$222	\$215	\$210	\$205	\$200	\$190	\$190	\$180	-2%	- Steady decline due to generics, combinations, and improved therapies
% Growth		+9%	-8%	-2%	-2%	-2%	-5%	+0%	-5%		
Total U.S. Alpha Adrenergic Agonist Annual Prescriptions ('000)	1,579	1,528	1,480	1,410	1,350	1,280	1,235	1,180	1,130	-4%	
Total U.S. Glaucoma Market Sales (MM)	\$1,787	\$1,921	\$1,925	\$1,715	\$1,635	\$1,575	\$1,535	\$1,510	\$1,485	-2%	
% Growth		+8%	+0%	-11%	-5%	-4%	-3%	-2%	-2%		
Total U.S. Glaucoma Market Annual Prescriptions ('000)	26,087	26,748	26,750	26,100	25,905	25,790	25,610	25,440	25,190	-0%	
ESTIMATED U.S. GLAUCOMA TREATMENT MARKET / OT-TXP ESTIMATED SALES											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
OTX-TP U.S. Sales											- In-line pricing to branded prostaglandins annual cost (\$1500)
Average Cost							\$250	\$250	\$250		- Assuming a duration of 2 months (1/6*1500 = \$250); ASP price
Sales (\$MM)							\$95.0	\$100.0	\$260.0		
% of Estimated U.S. Glaucoma Market Prescriptions							1.5%	3.0%	4.4%		
OTX-TP International Sales											
Average Cost							\$170.0	\$170.0	\$170.0		- Weighted ASP price estimate (EU: \$120, JP: \$270)
Sales (\$MM)							\$15.0	\$50.0	\$95.0		
% of Estimated International Glaucoma Market Prescriptions							0.2%	0.5%	1.0%		
Total WW OTX-TP Sales (MM)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$110.0	\$240.0	\$375.0	+17%	- Stable growth should continue
% Growth								+118%	+86%		
ESTIMATED WW GLAUCOMA TREATMENT MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Total U.S. Glaucoma Market Sales (MM)	\$1,787	\$1,921	\$1,925	\$1,715	\$1,635	\$1,575	\$1,535	\$1,510	\$1,485	-2%	
% Growth		+8%	+0%	-11%	-5%	-4%	-3%	-2%	-2%	+0%	
Total U.S. Glaucoma Market Annual Prescriptions ('000)	26,087	26,748	26,750	26,100	25,905	25,790	25,610	25,440	25,190	-0%	
Total International Glaucoma Market Sales (MM)	\$1,900	\$1,700	\$1,670	\$1,710	\$1,700	\$1,690	\$1,680	\$1,670	\$1,660	-2%	- Similar dynamics to the U.S. market
% Growth		-11%	-2%	+2%	-1%	-1%	-1%	-1%	-1%	+0%	
Total International Glaucoma Market Annual Prescriptions ('000)	58,400	57,250	58,240	57,587	57,250	56,813	56,578	56,240	55,893	-1%	
Total Worldwide Glaucoma Market Sales (MM)	\$3,687	\$3,621	\$3,595	\$3,425	\$3,335	\$3,265	\$3,215	\$3,180	\$3,145	-2%	- Growth expected to slow, clipped by generics
% Growth		-2%	-1%	-5%	-3%	-2%	-2%	-1%	-1%	+0%	
Total Worldwide Glaucoma Market Annual Prescriptions ('000)	84,487	83,998	82,990	83,687	83,155	82,703	82,188	81,680	81,093	-1%	

Source: Cowen and Company; Company Reports

Figure 3 U.S. Ophthalmic Steroid Market Model

ESTIMATED U.S. OPHTHALMIC STEROID TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Total U.S. Ophthalmic Steroid Market Sales (MM)	\$461	\$501	\$615	\$640	\$680	\$625	\$625	\$625	\$620	+2%
% Growth		+29%	+4%	-12%	-2%	-1%	+0%	+0%	-1%	
Total U.S. Glaucoma Market Annual Prescriptions ('000)	14,828	14,799	14,875	14,820	14,850	14,855	14,880	14,885	14,920	
ESTIMATED U.S. OPHTHALMIC STEROID TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Lotemax U.S. Penetration Of Ophthalmic Steroid Market (VRXB-IL)	33%	30%	31%	22%	20%	19%	17%	16%	15%	- Generic expected in 2014/2015
Average Price Per Prescription	\$136	\$143	\$150	\$150	\$155	\$155	\$155	\$160	\$160	
Annual Prescriptions ('000)	1,102	1,231	1,265	800	700	630	580	540	500	
Estimated Sales U.S. (\$MM)	\$150	\$176	\$190	\$120	\$109	\$98	\$90	\$86	\$80	-8%
Durezol U.S. Penetration Of Ophthalmic Steroid Market (NWS/Acon)	19%	16%	16%	16%	15%	15%	15%	15%	14%	- Generic expected in 2019
Average Price Per Prescription	\$97	\$102	\$105	\$105	\$110	\$115	\$125	\$125	\$125	- Generic Lotemax impacts growth
Annual Prescriptions ('000)	897	920	930	800	740	690	650	615	590	
Estimated Sales U.S. (\$MM)	\$87	\$94	\$98	\$84	\$81	\$79	\$81	\$77	\$74	-2%
Alexx U.S. Penetration Of Ophthalmic Steroid Market (VRXB-IL)	10%	8%	7%	7%	6%	5%	5%	5%	4%	
Average Price Per Prescription	\$134	\$157	\$160	\$165	\$165	\$170	\$170	\$175	\$175	
Annual Prescriptions ('000)	335	287	280	220	190	165	150	140	130	
Estimated Sales U.S. (\$MM)	\$45	\$45	\$45	\$36	\$31	\$28	\$26	\$25	\$23	-8%
Ozurdex U.S. Penetration Of Ophthalmic Steroid Market (AGN)	5%	5%	6%	8%	9%	10%	11%	12%	13%	- Recently expanded label for DME
Average Price Per Prescription	\$164,179	\$193,750	\$195,000	\$195,000	\$195,000	\$200,000	\$200,000	\$200,000	\$200,000	
Annual Prescriptions ('000)	0.13	0.16	0.18	0.21	0.24	0.27	0.30	0.33	0.35	
Estimated Sales U.S. (\$MM)	\$22	\$31	\$35	\$41	\$47	\$54	\$60	\$65	\$70	+16%
Generic/Other U.S. Estimated Penetration Of Ophthalmic Steroid Market	34%	41%	41%	48%	50%	51%	51%	52%	53%	
Average Price Per Prescription	\$13	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	
Annual Prescriptions ('000)	12,194	12,361	12,500	13,000	13,200	13,350	13,500	13,600	13,700	
Estimated Sales U.S. (\$MM)	\$157	\$245	\$250	\$260	\$264	\$267	\$270	\$272	\$274	+7%
Total U.S. Ophthalmic Steroid Market Sales (MM)	\$461	\$501	\$615	\$640	\$680	\$625	\$625	\$625	\$620	+2% - Slight decline due to generic competition
% Growth		+29%	+4%	-12%	-2%	-1%	+0%	+0%	-1%	
Total U.S. Glaucoma Market Annual Prescriptions ('000)	14,828	14,799	14,875	14,820	14,850	14,855	14,880	14,885	14,920	
ESTIMATED U.S. OPHTHALMIC STEROID TREATMENT MARKET / OTX-OP ESTIMATED SALES										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
OTX-OP U.S. Sales										
Average Cost					\$110	\$110	\$110	\$110	\$110	- ASP price
Sales (\$MM)					\$3.6	\$96.0	\$80.0	\$165.0	\$195.0	- Post-operative indication expected in mid-2016;
% of Estimated U.S. Ophthalmic Steroid Market					0.2%	2.3%	5.0%	8.5%	12.0%	- Allergic conjunctivitis indication to follow in 2017

Source: Cowen and Company; Company Reports

Figure 4 U.S. Ophthalmic Antibiotic Market Model

ESTIMATED U.S. OPHTHALMIC ANTIBIOTIC TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Total U.S. Ophthalmic Antibiotic Market Sales (MM)	\$650	\$641	\$645	\$665	\$685	\$720	\$745	\$770	\$780	+2%
% Growth		-1%	+1%	+3%	+3%	+4%	+3%	+3%	+1%	
ESTIMATED U.S. OPHTHALMIC ANTIBIOTIC TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Vigamox U.S. Penetration Of Ophthalmic Antibiotic Market (NWS/Acon)	43%	43%	44%	43%	44%	43%	43%	44%	44%	- Generic not expected until 2019
Average Price Per Prescription	\$99	\$115	\$115	\$115	\$120	\$120	\$120	\$125	\$125	
Annual Prescriptions ('000)	2,826	2,400	2,450	2,500	2,550	2,600	2,650	2,700	2,750	
Estimated Sales U.S. (\$MM)	\$281	\$275	\$282	\$288	\$306	\$312	\$318	\$338	\$344	+3%
Besivance U.S. Penetration Of Ophthalmic Antibiotic Market (VRXB-IL)	6%	9%	10%	10%	11%	11%	11%	12%	12%	- Long duration of patent protection
Average Price Per Prescription	\$78	\$90	\$95	\$100	\$105	\$110	\$115	\$120	\$120	
Annual Prescriptions ('000)	514	653	650	675	695	715	730	740	750	
Estimated Sales U.S. (\$MM)	\$40	\$59	\$62	\$68	\$73	\$79	\$84	\$89	\$90	+11%
Zymar U.S. Penetration Of Ophthalmic Antibiotic Market (AGN)	11%	8%	6%	5%	4%	3%	3%	2%	2%	- Generic launched in 2013 by Lupin
Average Price Per Prescription	\$108	\$122	\$125	\$125	\$130	\$130	\$130	\$135	\$135	
Annual Prescriptions ('000)	666	410	300	250	210	185	160	140	127	
Estimated Sales U.S. (\$MM)	\$72	\$50	\$38	\$31	\$27	\$24	\$21	\$19	\$17	-16%
Moxeza U.S. Penetration Of Ophthalmic Antibiotic Market (NWS/Acon)	5%	5%	6%	6%	6%	6%	6%	6%	6%	- Earliest generic is 2019
Average Price Per Prescription	\$90	\$94	\$95	\$95	\$100	\$100	\$100	\$105	\$105	
Annual Prescriptions ('000)	346	372	380	400	415	430	440	450	460	
Estimated Sales U.S. (\$MM)	\$31	\$35	\$36	\$38	\$42	\$43	\$44	\$47	\$48	+6%
Generic/Other U.S. Estimated Penetration Of Ophthalmic Antibiotic Market	35%	35%	35%	37%	35%	36%	37%	36%	36%	
Average Price Per Prescription	\$18	\$17	\$17	\$18	\$18	\$19	\$20	\$20	\$20	
Annual Prescriptions ('000)	12,861	13,055	13,300	13,500	13,650	13,800	13,900	14,000	14,080	
Estimated Sales U.S. (\$MM)	\$226	\$222	\$226	\$243	\$246	\$262	\$278	\$280	\$282	+3%
Total U.S. Ophthalmic Antibiotic Market Sales (MM)	\$650	\$641	\$645	\$665	\$685	\$720	\$745	\$770	\$780	+2% - Steady growth despite generics due to patent protection
% Growth		-1%	+1%	+3%	+3%	+4%	+3%	+3%	+1%	
Total U.S. Ophthalmic Antibiotic Market Annual Prescriptions ('000)	17,213	16,890	17,080	17,325	17,520	17,730	17,880	18,030	18,185	
ESTIMATED U.S. OPHTHALMIC ANTIBIOTIC TREATMENT MARKET / OTX-MP ESTIMATED SALES										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
OTX-MP U.S. Sales										
Average Cost							\$90	\$90	\$90	- In-line or discount pricing to other branded ophthalmic antibiotics; ASP price
Sales (\$MM)							\$18.0	\$40.0	\$76.0	
% of Estimated U.S. Ophthalmic Antibiotic Market							0.3%	2.5%	4.6%	

Source: Cowen and Company; Company Reports

Figure 5 ReSure Sealant U.S. And International Market Model

ESTIMATED WW CATARACT PROCEDURES MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
ReSure U.S. Penetration Of Cataract Procedures Market	\$0.0	\$0.0	\$1.5	\$8.5	\$18.0	\$30.0	\$40.0	\$50.0	\$60.0	+69%
% Growth			+487%	+88%	+88%	+83%	+25%	+20%		
ReSure International Penetration Of Cataract Procedures Market	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0	\$18.0	\$35.0	\$45.0	\$60.0	+45% Similar dynamics to the U.S. market
% Growth					+500%	+84%	+28%	+23%		
Total Worldwide ReSure Market Sales (MM)	\$0.0	\$0.0	\$1.5	\$8.5	\$19.0	\$48.0	\$75.0	\$95.0	\$120.0	+69%
% Growth			+487%	+124%	+153%	+60%	+27%	+26%		

ESTIMATED WW CATARACT PROCEDURES MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
ReSure U.S. Sales										
Average Cost			\$75	\$75	\$75	\$75	\$75	\$75	\$75	- ASP Price
Cataract Procedures ('000)	3500	3500	3661	3771	3884	4001	4121	4244	4372	- Steady increase in cataract procedures
% of Estimated U.S. Cataract Procedures Market	0%	0%	0.6%	3.0%	5.5%	10.0%	13.0%	15.7%	18.3%	- Approved and launched in 2014; sales ramp up in 2015
% Growth			+445%	+463%	+462%	+300%	+21%	+17%		
Sales (\$MM)	\$0.0	\$0.0	\$1.5	\$8.5	\$18.0	\$30.0	\$40.0	\$50.0	\$60.0	+69%
ReSure International Sales										
Average Cost			\$70	\$70	\$70	\$70	\$70	\$70	\$70	- ASP Weighted Price Average (EU and Japan)
Cataract Procedures ('000)	4800	4800	4985	5071	5172	5272.0	5375	5472	5572	- Steady increase in cataract procedures
% of Estimated International Cataract Procedures Market	0%	0%	0.0%	0.0%	0.8%	4.9%	9.3%	11.8%	15.4%	- Approved and launched in 2016; sales ramp up in 2017
% Growth					+495%	+91%	+27%	+21%		
Sales (\$MM)	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0	\$18.0	\$35.0	\$45.0	\$60.0	+45%
Total Worldwide ReSure Sales	\$0.0	\$0.0	\$1.5	\$8.5	\$19.0	\$48.0	\$75.0	\$95.0	\$120.0	+39% - Stable revenue growth
% Growth			+487%	+124%	+153%	+60%	+27%	+26%		

Source: Cowen and Company; Company Reports

Valuation Indicates Higher Levels From Here Are Possible

As stated previously, our base case valuation model assumes approval for OTX-TP and U.S. peak sales reaching approximately \$450MM a conservative penetration of roughly 5% of U.S. glaucoma prescriptions by 2020. We also assume modest ex-U.S. sales for OTX-TP with a peak sales value of ~\$150MM. For OTX-DP, we assume a successful approval in 2015 with steady growth and total peak sales of \$300MM across all indications. We also expect growth for ReSure to be stable with total worldwide peak sales of approximately \$150MM. Finally, we assume Ocular moves forward with OTX-MP and the product is launched in 2018/2019. Our peak sales estimate for the product is slightly above \$100MM. This would result in a DCF value of \$40 per share, which is the basis of our price target. Importantly, this valuation does not attribute any value to the long-duration anti-VEGF hydrogel which if successful, could suggest at least a 2-3x multiple on our base case valuation.

Figure 6 Ocular Therapeutix Base Case DCF Indicates \$40 Per Share

Assumptions:		Output:	
Increase in WC	5.0%	Equity Value	\$790.0
Discount Rate	14.5%	Estimated Share Price	\$40.00
Shares Outstanding	21.0	Net Cash	\$15.0
		Enterprise Value	\$805.0

OCULAR THERAPEUTIX DCF																					
	2011P	2012P	2013P	2014P	2015P	2016P	2017P	2018P	2019P	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	
Total Revenues			\$0.0	\$1.5	\$8.5	\$22.5	\$83.0	\$280.0	\$530.0	\$765.0	\$875.0	\$955.0	\$1,025.0	\$1,090.0	\$1,075.0	\$1,075.0	\$1,080.0	\$1,095.0	\$1,090.0	\$345.0	
% Change					+467%	+165%	+269%	+237%	+89%	+44%	+14%	+9%	+7%	+6%	-1%	+0%	+0%	+1%	-0%	-68%	
Cost of Goods			\$0.0	\$0.5	\$3.5	\$2.5	\$18.0	\$55.0	\$105.0	\$115.0	\$130.0	\$145.0	\$155.0	\$165.0	\$160.0	\$160.0	\$160.0	\$165.0	\$165.0	\$50.0	
Gross Profit			\$0.0	\$1.0	\$5.0	\$20.0	\$65.0	\$225.0	\$425.0	\$650.0	\$745.0	\$810.0	\$870.0	\$925.0	\$915.0	\$915.0	\$920.0	\$930.0	\$925.0	\$295.0	
Gross Margin - Total			NM	65.0%	80.0%	80.0%	80.0%	80.0%	80.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	
SG&A			\$2.4	\$7.0	\$10.0	\$15.0	\$60.0	\$90.0	\$120.0	\$150.0	\$175.0	\$190.0	\$175.0	\$190.0	\$200.0	\$205.0	\$210.0	\$215.0	\$210.0	\$150.0	
% of Revs			NM	466.7%	117.6%	66.7%	72.3%	32.1%	22.6%	19.6%	20.0%	19.9%	17.1%	17.4%	18.6%	19.1%	19.4%	19.6%	19.3%	43.5%	
R&D			\$10.5	\$20.0	\$20.0	\$20.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$20.0	\$20.0	\$20.0	\$15.0	\$15.0	\$15.0	
% of Revs			NM	1333.3%	235.3%	88.9%	30.1%	8.9%	4.7%	3.3%	2.9%	2.6%	2.4%	2.3%	1.9%	1.9%	1.9%	1.4%	1.4%	4.3%	
Operating Expenses			\$12.9	\$27.0	\$30.0	\$35.0	\$85.0	\$115.0	\$145.0	\$175.0	\$200.0	\$215.0	\$200.0	\$215.0	\$220.0	\$225.0	\$230.0	\$230.0	\$225.0	\$165.0	
% of Revenues			NM	1800.0%	352.9%	155.6%	102.4%	41.1%	27.4%	22.9%	22.9%	22.5%	19.5%	19.7%	20.5%	20.9%	21.3%	21.0%	20.6%	47.8%	
Operating Income			(\$12.9)	(\$26.0)	(\$25.0)	(\$15.0)	(\$20.0)	\$110.0	\$280.0	\$475.0	\$545.0	\$595.0	\$670.0	\$710.0	\$695.0	\$690.0	\$690.0	\$700.0	\$700.0	\$130.0	
% Operating Margin			NM	NM	NM	NM	NM	39.3%	52.8%	62.1%	62.3%	62.3%	65.4%	65.1%	64.7%	64.2%	63.9%	63.9%	64.2%	37.7%	
Other Income			0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Adjusted EBIT			(\$12.9)	(\$26.0)	(\$25.0)	(\$15.0)	(\$20.0)	\$110.0	\$280.0	\$475.0	\$545.0	\$595.0	\$670.0	\$710.0	\$695.0	\$690.0	\$690.0	\$700.0	\$700.0	\$130.0	
% of Revs			NM	NM	NM	NM	NM	39.3%	52.8%	62.1%	62.3%	62.3%	65.4%	65.1%	64.7%	64.2%	63.9%	63.9%	64.2%	37.7%	
Taxes								\$38.5	\$98.0	\$166.3	\$190.8	\$208.3	\$234.5	\$248.5	\$243.3	\$241.5	\$241.5	\$245.0	\$245.0	\$45.5	
Income 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%	35.0%	
NOPAT			(\$12.9)	(\$26.0)	(\$25.0)	(\$15.0)	(\$20.0)	\$71.5	\$182.0	\$308.8	\$354.3	\$386.8	\$435.5	\$461.5	\$451.8	\$448.5	\$448.5	\$455.0	\$455.0	\$84.5	
Adjustments:																				Terminal	
Capex			(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	
Depreciation & Amortization			\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	
Change In Working Capital			(\$5.0)	(\$5.3)	(\$5.5)	(\$5.8)	(\$6.1)	(\$6.4)	(\$6.7)	(\$7.0)	(\$7.4)	(\$7.8)	(\$8.1)	(\$8.6)	(\$9.0)	(\$9.4)	(\$9.9)	(\$10.4)	(\$10.9)	(\$11.5)	
Free Cash Flow			(\$22.9)	(\$36.3)	(\$35.5)	(\$25.8)	(\$31.1)	\$60.1	\$170.3	\$296.7	\$341.9	\$374.0	\$422.4	\$447.9	\$437.8	\$434.1	\$433.6	\$439.6	\$439.1	\$68.0	\$469.2

Source: Company Reports; Cowen and Company

Our low case valuation model helps illustrate the support level for Ocular shares. In this scenario, we assume poor uptake for OTX-TP with U.S. peak sales of approximately \$200MM. We also assume lower penetration for Ocular's other products. In this low case scenario, our DCF suggests \$15 per share, which is still above the current share price.

Figure 7 Ocular Therapeutix Low Case DCF Indicates A Floor Of \$15 Per Share

Assumptions:		Output:	
Increase in WC	5.0%	Equity Value	\$285.0
Discount Rate	14.5%	Estimated Share Price	\$15.00
Shares Outstanding	21.0	Net Cash	\$15.0
		Enterprise Value	\$300.0

OCULAR THERAPEUTIX DCF																					
	2011P	2012P	2013P	2014P	2015P	2016P	2017P	2018P	2019P	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	
Total Revenues			\$0.0	\$1.5	\$5.0	\$16.0	\$65.0	\$180.0	\$330.0	\$490.0	\$565.0	\$615.0	\$655.0	\$695.0	\$665.0	\$690.0	\$670.0	\$660.0	\$650.0	\$250.0	
% Change					+233%	+220%	+306%	+177%	+83%	+48%	+15%	+9%	+7%	+6%	-4%	+4%	-3%	-1%	-2%	-62%	
Cost of Goods			\$0.0	\$0.5	\$0.0	\$1.0	\$15.0	\$35.0	\$65.0	\$75.0	\$85.0	\$90.0	\$100.0	\$105.0	\$100.0	\$105.0	\$100.0	\$100.0	\$95.0	\$35.0	
Gross Profit			\$0.0	\$1.0	\$5.0	\$15.0	\$50.0	\$145.0	\$265.0	\$415.0	\$480.0	\$525.0	\$555.0	\$590.0	\$565.0	\$585.0	\$570.0	\$560.0	\$555.0	\$215.0	
Gross Margin - Total			NM	65.0%	80.0%	80.0%	80.0%	80.0%	80.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	
SG&A			\$2.4	\$7.0	\$10.0	\$15.0	\$60.0	\$90.0	\$120.0	\$150.0	\$175.0	\$190.0	\$175.0	\$190.0	\$200.0	\$205.0	\$210.0	\$215.0	\$210.0	\$150.0	
% of Revs			NM	466.7%	200.0%	93.8%	92.3%	50.0%	36.4%	30.6%	31.0%	30.9%	26.7%	27.3%	30.1%	29.7%	31.3%	32.6%	32.3%	60.0%	
R&D			\$10.5	\$20.0	\$20.0	\$20.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$20.0	\$20.0	\$20.0	\$15.0	\$15.0	\$15.0	
% of Revs			NM	1333.3%	400.0%	125.0%	38.5%	13.9%	7.6%	5.1%	4.4%	4.1%	3.8%	3.6%	3.0%	2.9%	3.0%	2.3%	2.3%	6.0%	
Operating Expenses			\$12.9	\$27.0	\$30.0	\$35.0	\$85.0	\$115.0	\$145.0	\$175.0	\$200.0	\$215.0	\$200.0	\$215.0	\$220.0	\$225.0	\$230.0	\$230.0	\$225.0	\$165.0	
% of Revenues			NM	1800.0%	600.0%	218.8%	130.8%	63.9%	43.9%	35.7%	35.4%	35.0%	30.5%	30.9%	33.1%	32.6%	34.3%	34.8%	34.6%	66.0%	
Operating Income			(\$12.9)	(\$26.0)	(\$25.0)	(\$20.0)	(\$35.0)	\$30.0	\$120.0	\$240.0	\$280.0	\$310.0	\$355.0	\$375.0	\$345.0	\$360.0	\$340.0	\$330.0	\$330.0	\$50.0	
% Operating Margin			NM	NM	NM	NM	NM	16.7%	36.4%	49.0%	49.6%	50.4%	54.2%	54.0%	51.9%	52.2%	50.7%	50.0%	50.8%	20.0%	
Other Income			0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Adjusted EBIT			(\$12.9)	(\$26.0)	(\$25.0)	(\$20.0)	(\$35.0)	\$30.0	\$120.0	\$240.0	\$280.0	\$310.0	\$355.0	\$375.0	\$345.0	\$360.0	\$340.0	\$330.0	\$330.0	\$50.0	
% of Revs			NM	NM	NM	NM	NM	16.7%	36.4%	49.0%	49.6%	50.4%	54.2%	54.0%	51.9%	52.2%	50.7%	50.0%	50.8%	20.0%	
Taxes			\$10.5	\$42.0	\$84.0	\$98.0	\$108.5	\$124.3	\$131.3	\$120.8	\$126.0	\$119.8	\$126.0	\$119.8	\$115.5	\$115.5	\$115.5	\$115.5	\$115.5	\$17.5	
Income 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%	35.0%	35.0%	
NOPAT			(\$12.9)	(\$26.0)	(\$25.0)	(\$20.0)	(\$35.0)	\$19.5	\$78.0	\$156.0	\$182.0	\$201.5	\$230.8	\$243.8	\$224.3	\$234.0	\$221.0	\$214.5	\$214.5	\$32.5	
Adjustments:																					
Capex			(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	
Depreciation & Amortization			\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0	
Change In Working Capital			(\$5.0)	(\$5.3)	(\$5.5)	(\$5.8)	(\$6.1)	(\$6.4)	(\$6.7)	(\$7.0)	(\$7.4)	(\$7.8)	(\$8.1)	(\$8.6)	(\$9.0)	(\$9.4)	(\$9.9)	(\$10.4)	(\$10.9)	(\$11.5)	
Free Cash Flow			(\$23.9)	(\$37.3)	(\$36.5)	(\$31.8)	(\$47.1)	\$7.1	\$65.3	\$143.0	\$168.6	\$187.7	\$216.6	\$229.2	\$209.3	\$218.6	\$205.1	\$198.1	\$197.6	\$15.0	\$103.7

Source: Company Reports; Cowen and Company

Ocular Therapeutix: A New Approach To Ocular Disease

The Company's broad portfolio targets large, addressable segments within the ophthalmic market including glaucoma, inflammation, allergic and bacterial conjunctivitis, and wet AMD.

Ocular Therapeutix, is focused on the development and commercialization of ophthalmic products for both the front and back of the eye. Using its proprietary hydrogel platform technology, the Company already has one FDA approved product, ReSure Sealant, as well as a promising pipeline, including an extensive collection of drug-eluting punctum plugs and a long-duration intravitreal anti-VEGF hydrogel depot. The Company's broad portfolio targets large, addressable segments within the ophthalmic market including glaucoma, inflammation, allergic and bacterial conjunctivitis, and wet AMD. Furthermore, the product candidates have the potential to overcome many of the limitations of existing topical therapies for ophthalmic diseases by replacing the current standard of care regimen of daily eye drops to treatments that can last for weeks or months and in some cases only require a single administration. In general, our consultants suggest that this is where the current treatment paradigm is headed and Ocular's approach fits well within this overarching theme.

The foundation of Ocular's products is a proprietary polyethylene glycol-based (PEG) bioresorbable hydrogel technology designed to provide steady and sustained delivery of drug to the eye. PEG is currently used in many pharmaceutical products and is widely considered to be safe and biocompatible. The hydrogel is naturally broken down in the body into non-toxic, water-soluble compounds that are easily cleared. The hydrogel can also be highly customized, including the integrated compound, route of administration, and duration of therapy. We believe this flexibility is inherent in Ocular's strategic use of the 505(b)(2) regulatory pathway for all of its products in development, since the therapeutic agents being integrated are already FDA approved.

In February 2014, Ocular launched its first commercial product, ReSure Sealant. The hydrogel-based ophthalmic wound sealant is indicated to close corneal incisions following cataract surgery. The product was approved by the FDA in January 2014, and demonstrated a superior ability to minimize post-operative leaks with a leakage rate of 4.1% compared to 34.1% with suture closure. Furthermore, while not actively compared, ReSure also demonstrated much lower leakage rates compared to self-sealing, the most common approach used for cataract surgery.

OTX-DP is a dexamethasone punctum plug in Phase III clinical development for post-surgical ocular inflammation and pain and Phase II studies for allergic conjunctivitis. OTX-TP is a travoprost punctum plug in Phase II development for glaucoma and ocular hypertension.

Along with ReSure, Ocular's lead development products are OTX-DP and OTX-TP. OTX-DP is a dexamethasone punctum plug in Phase III clinical development for post-surgical ocular inflammation and pain and Phase II studies for allergic conjunctivitis. OTX-TP is a travoprost punctum plug in Phase II development for glaucoma and ocular hypertension. Ocular has also completed Phase I trials for OTX-MP, a moxifloxacin punctum plug for the prevention/treatment of bacterial conjunctivitis after cataract surgery. Finally, the Company is conducting pre-clinical studies in collaboration with several pharmaceutical companies to develop a long-duration intravitreal anti-VEGF hydrogel depot. Clearly, the total number of products (marketed and pipeline) is larger than most companies of Ocular's size.

Figure 8 Product Pipeline And Development Status

Product / Program	Indication	Description (Therapeutic Agent)	Pre-clinical	Phase 1	Phase 2	Phase 3	Regulatory Approval	Next Milestone
Approved Product								
ReSure Sealant	Cataract incision closure	Ocular Sealant	<div></div>				FDA Approved; Launched in U.S.	
Late Stage Product Candidates								
OTX - DP	Post-surgical ocular Inflammation / pain	Punctum Plug (Dexamethasone)	<div></div>					Phase 3 data 1Q 2015
OTX - TP	Glaucoma	Punctum Plug (Travoprost)	<div></div>					Initiate Phase 2b 2H 2014
Earlier Stage Product Candidates								
OTX - DP	Allergic conjunctivitis	Punctum Plug (Dexamethasone)	<div></div>					Phase 2 data 4Q 2014
OTX-MP	Bacterial conjunctivitis	Punctum Plug (Moxifloxacin)	<div></div>					
Intravitreal Hydrogel Depot	Wet AMD	Hydrogel depot (Anti-VEGF compounds)	<div></div>					Complete feasibility end of 2014

Source: Company Reports; Cowen and Company

IP Protection For Most Of Ocular's Portfolio Extends Beyond 2030

Ocular also has strong IP protection for its pipeline and proprietary platform technology. The Company currently has 18 issued U.S. patents, along with 5 pending U.S. patent applications and foreign counterparts for several of these patents. Ocular owns the WW rights to all of its products and estimates it will have patent protection for most of its portfolio until at least 2030. The Company also has a seasoned management team with significant experience developing and commercializing medical products using bioresorbable hydrogel technology. Members of the team

have previously worked at several leading companies including: Confluent Surgical, Covidien, Boston Scientific, Genzyme, Alcon, and many others. Management has also navigated several hydrogel-based products to FDA approval including DuraSeal Dural Sealant, DuraSeal Xact, and Mynx. Finally, several top tier investment firms have also committed capital to the Ocular including Ascension Ventures, Polaris Venture Partners, Sparta Group LLC, SV Life Sciences, Versant Ventures, and Baxter.

Ocular's Hydrogel Technology Is A Safe, Effective, and Flexible Way To Deliver Drug Over A Sustained Period Of Time

When the PEG and cross-linked molecules are mixed, a mesh-like network spontaneously forms that when combined with water, forms a hydrogel. The hydrogel is then combined with a therapeutic agent and microspheres form that encapsulate the drug.

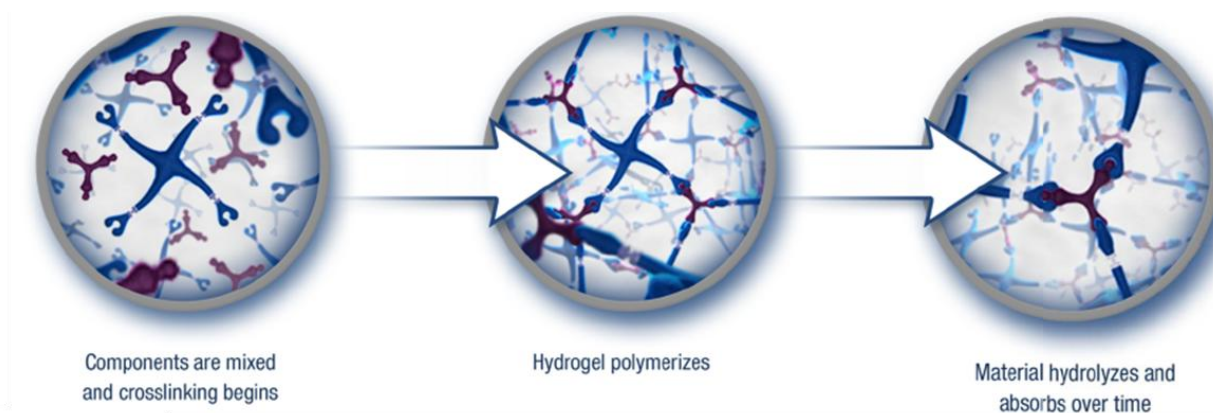
The foundation of Ocular's product portfolio is its proprietary polyethylene glycol (PEG) hydrogel technology. This unique technology is the basis of ReSure Sealant, the punctum plug products, and the intravitreal hydrogel depot. The hydrogel itself is developed by the cross-linking of PEG molecules with a second molecule to form a mesh-like network. The PEG molecules are branched, with four to eight branches that contain a reactive site on the end. The second cross-linked molecule contains four arms with complimentary reactive sites also on the end. When the PEG and cross-linked molecules are mixed, a mesh-like network spontaneously forms that when combined with water, forms a hydrogel. When the hydrogel is combined with a therapeutic agent, microspheres form that encapsulate the drug. These microspheres slowly degrade, thus creating a steady release of the drug. After the therapeutic agent has been completely released, the remaining hydrogel degrades via normal biological processes and does not require any type of removal.

The steady release produced by the hydrogel is a product of the biodegradable linkages that form between the PEG and the cross-linked molecule. These linkages hydrolyze in the presence of water, which is abundant in the human body, and results in a slow and sustained release of drug. Furthermore, the number of arms on the PEG molecule that form a linkage with the cross-linked molecule can be varied, allowing the rate of bioresorption and drug release to be customized. Specifically, the hydrogel can bioresorb over just a few days or last several months, depending on the composition of the molecule. Also, since the water in the human body is at a constant temperature and pH level, this rate of hydrolysis is predictable and reproducible. Finally, the materials composing the hydrogel degrade into non-toxic, water-soluble compounds that are safely cleared through normal biological processes.

Members of the Company's management team have previously used the same hydrogel technology to develop multiple FDA approved and currently marketed products including DuraSeal Dural Sealant and DuraSeal Xact (Integra Lifesciences), both sealants for cranial and spine surgery, and Mynx (AccessClosure), a sealant for femoral artery punctures after angiography and angioplasty.

Ocular has strong technical capabilities including a deep understanding of the polymer chemistry of PEG-based hydrogels and the design of the highly specialized manufacturing process required to produce a pure, reliable, and preservative-free product. Additionally, the hydrogel technology has already been utilized in a wide variety of therapeutic areas. Members of the Company's management team have previously used the same hydrogel technology to develop multiple FDA approved and currently marketed products including DuraSeal Dural Sealant and DuraSeal Xact (Integra Lifesciences), both sealants for cranial and spine surgery, and Mynx (AccessClosure), a sealant for femoral artery punctures after angiography and angioplasty.

Figure 9 Platform Hydrogel Technology



Source: Company Reports; Cowen and Company

Ocular Has Retained Worldwide Rights And Has Long-Duration Assets

The Company also has robust intellectual property protection in place for its portfolio of products. Currently, there are a total of 18 U.S. patents and 5 U.S. patent applications, including foreign counterparts for some of the established patents and patent applications.

Ocular has worldwide rights to the ReSure Sealant product and all of the assets in development. The Company also has in place robust intellectual property protection for the portfolio of products. Currently, the Company has a total of 18 U.S. patents and 5 U.S. patent applications, including foreign counterparts for some of the established patents and patent applications. The patents are in-licensed from Incept, LLC, an intellectual property holding company. 10 of the 18 established U.S. patents along with 4 of 5 U.S. patent applications protect the hydrogel platform technology that establishes the foundation for the entire portfolio. For the punctum plug products, Ocular has protection via 4 U.S. patent families (6 established patents and 1 application). The key patent family is the first, which covers composition and method claims specific to the design and drug delivery of punctum plugs and expires in 2030. For the E.U. and some other ex-U.S. locations, there are three patent families (2 established patents and 9 applications) related to the punctum plugs. Most importantly, there are six patent applications that, if granted, will expire in 2030 and covers composition and method claims specific to the design and drug delivery of punctum plugs, in combination with the hydrogel composition. Regarding the intravitreal hydrogel depot, the Company has coverage from 3 U.S. patent families (1 established patent and 2 applications). The critical patent for this product is an application that if granted, will expire in 2032 and covers the process of producing the hydrogel depot with its drug release features and the resultant compositions. For the E.U. and some other ex-U.S. locations, there are two patent families (3 applications) that protect the hydrogel composition and certain drug-release feature of the hydrogel depot. Finally, for ReSure Sealant, Ocular has two U.S. patent families (5 established patents and 1 application). The key patent in this group covers the process of producing and using the composition of the hydrogel and will expire in 2025.

Ocular expects that all current patent applications will be granted and once these products are approved by the FDA and foreign regulatory agencies, the Company expects to pursue patent term extensions that may provide greater duration for the assets. Furthermore, the patent protection described above does not factor in any additional market exclusivity that may be granted upon product approval. Lastly, given the unique nature of the hydrogel platform technology and the complexity of

manufacturing these products, there will be a very high barrier to entry even independent of the intellectual property.

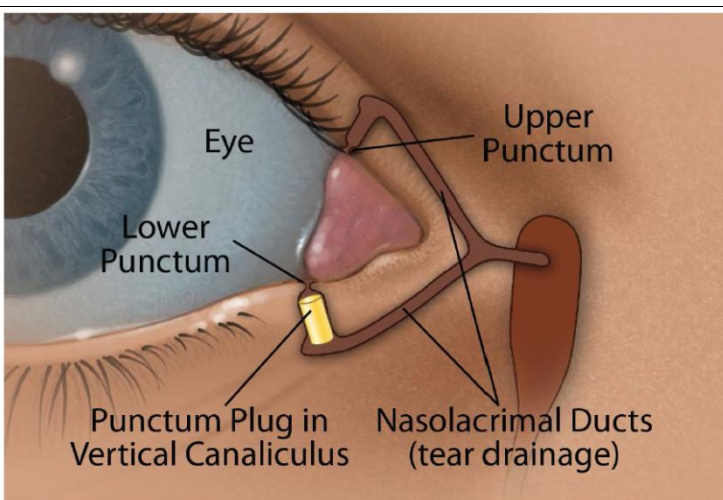
A Novel Approach To The Standard Punctum Plug

Ocular's drug-eluting anterior punctum plugs are designed to be inserted into the lacrimal punctum and remain in place until the drug has been completely released. The lacrimal puncta are natural openings located in the inner portion of the eyelid. The upper and lower eyelids each contain a punctum, which are part of a system for producing and draining tears. The lacrimal glands, which are underneath the skin of the upper eyelids, are the source of tear production. When the eyelid blinks, the tear production is spread across the eye and keeps it moisturized. The tears then drain through the two puncta which each open into a nasolacrimal duct and drain the fluid away from the eye. Every time the eye blinks, some tear fluid is drained out of the eye through the puncta and into the nasolacrimal duct.

Our consultants note that punctum plug insertion is a simple procedure that all ophthalmologists are trained to do as part of their basic training. Our consultants also highlighted that these plugs are comfortable for patients.

Currently, punctum plugs are commonly used to treat dry eye by physically blocking the drainage system described above. Our consultants note that punctum plug insertion is a simple procedure that all ophthalmologists are trained to do as part of their basic training. Our consultants also highlighted that these plugs are comfortable for patients, as they can barely be felt, and are extremely safe.

Figure 10 Anterior Punctum Plug Placement



Source: Company Reports; Cowen and Company

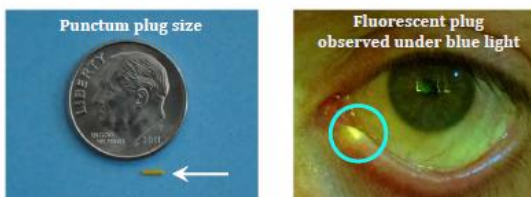
Prior to insertion, the Ocular punctum plug is a thin dry rod, allowing it to be easily inserted into the punctum. Once the plug is inserted, it is designed to absorb water, which causes it to swell, soften, and conform to the size of the opening, hence securing the plug in place. Since punctum plugs stay in constant contact with the tear production system, they are well-suited to provide sustained delivery of drug across the surface of the eye. Once the drug has been completely released, the punctum plugs naturally dissolve and are cleared through the nasolacrimal duct. As mentioned previously, Ocular is able to customize the punctum plug in terms of how long it lasts and the rate at which the drug is released. If for any reason the punctum plug needs to be removed, it can easily be taken out by simply pushing the soft plug back through the punctum opening. The plug also contains a fluorescent label to facilitate

Where Ocular has excelled in its development of drug-eluting punctum plugs and other companies have failed is in the specific design of the plug. Companies that previously attempted to develop drug-eluting punctum plugs used a hard shell that was not absorbable. The hard shell was uncomfortable for patients and limited the drug capacity and rate of release for the therapeutic agent.

visualization. A patient or healthcare professional can apply a blue light near the punctum opening and easily spot the fluorescent colored plug to determine if it is correctly in place.

Where Ocular has excelled in its development of drug-eluting punctum plugs and other companies have failed is in the specific design of the plug. Companies that previously attempted to develop drug-eluting punctum plugs used a hard shell that was not absorbable. The hard shell was uncomfortable for patients and limited the drug capacity and rate of release for the therapeutic agent. Many of these plugs extended outside of the punctal opening and had to be secured using an external cap. The external cap was in constant contact with the surface of the eye and often caused irritation and discomfort for the patient. Some other previous designs also required a plug to be inserted in both the upper and lower punctum. In addition to being a cumbersome procedure for physicians, this approach also increased the risk for excessive tearing. All of these designs utilized non-absorbable material, so when a new plug needed to be inserted, the previous one had to be removed. Plug removal was uncomfortable for the patient, time-consuming for the physician, and increased the risk of complications.

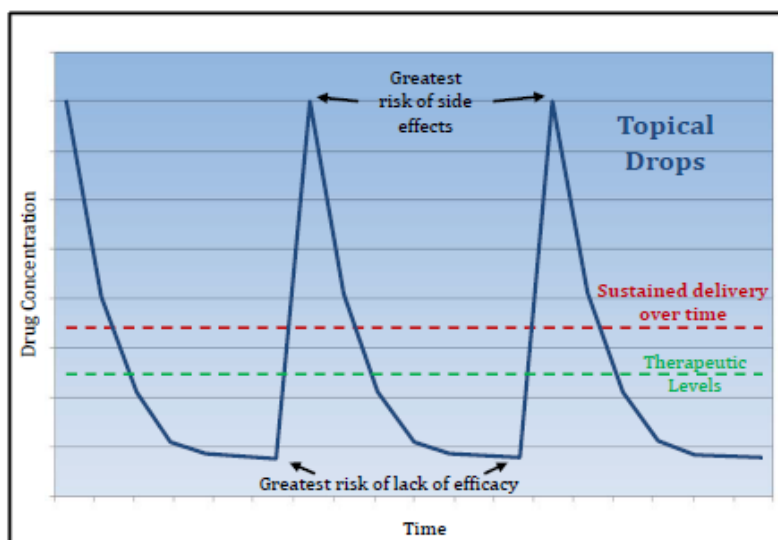
Figure 11 Ocular's Anterior Punctum Plug



Source: Company Reports; Cowen and Company

If successful, the punctum plug approach being utilized by Ocular provides several key advantages. First, it reduces the burden of administration. Many topical ophthalmic treatments require multiple daily applications which can be very challenging and burdensome for patients. Secondly, the extended duration of the plugs has the potential to improve compliance, which is a major concern in several ophthalmic conditions, such as glaucoma. Finally, the sustained release minimizes significant fluctuations in drug concentration that increase the risk of both side effects and inadequate efficacy. Our consultants found the approach to be "quite elegant" and noted that the plugs ability to provide concentrations of drug would make it a compelling option.

Figure 12 Drug Concentration With Sustained Delivery Versus Topical Drops



Source: Company Reports; Cowen and Company

OTX-TP Directly Targets Poor Compliance For The Treatment Of Glaucoma

The product has the potential to address several key issues with current topical glaucoma treatments including: (1) challenging administration; (2) poor patient compliance; and (3) the need to utilize high concentrations of drug to ensure therapeutic levels.

Ocular's most anticipated pipeline product is OTX-TP, a travoprost punctum plug for the treatment of glaucoma and ocular hypertension. The Company has developed OTX-TP to provide a sustained release of therapeutic levels of travoprost for up to three months, thus eliminating the need for daily dosing with topical drops. The product has the potential to address several key issues with current topical glaucoma treatments including: (1) challenging administration; (2) poor patient compliance; and (3) the need to utilize high concentrations of drug to ensure therapeutic levels.

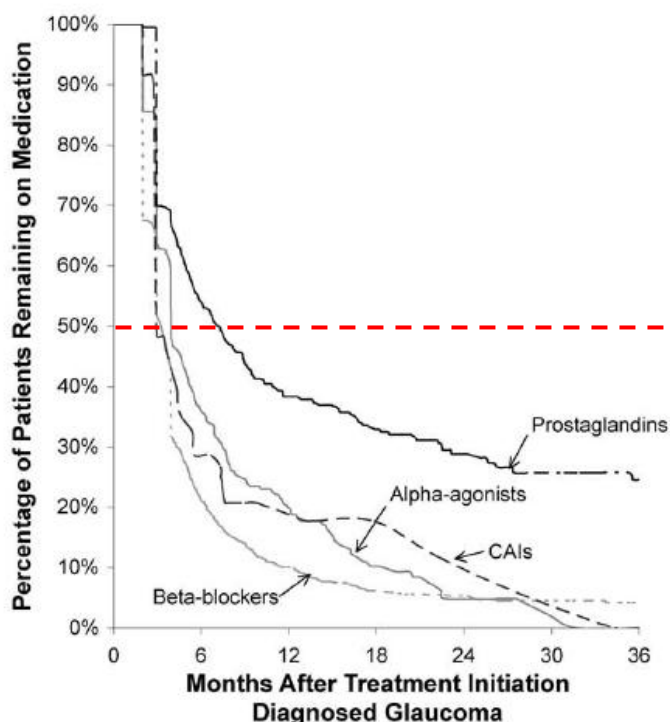
Administration of OTX-TP has demonstrated the potential to provide therapeutic levels of travoprost for 60-90 days. If successful, this provides a major improvement over current topical treatment options, which require a minimum of once daily dosing, with several therapies requiring multiple daily dosing. This routine can be very challenging for glaucoma patients, who are generally older. Many of these patients have difficulty administering the drops into the eye and may require assistance from a caretaker. This can create significant burden for both patients and families. Moreover, our consultants provided feedback that a punctum plug that needed to be administered every 2-3 months could be a "game changer." They noted that most glaucoma patients are seen by their ophthalmologist every 3-6 months, with more severe patients requiring evaluation closer to every 3 months. As a result, the 2-3 month duration of OTX-TP would fit well into the currently established glaucoma protocol. They also commented that about 50% of patients eventually move to combination therapy and that despite the number of glaucoma products currently available, that there was still significant room in the market for another product, especially one that has the potential to improve compliance such as OTX-TP.

The less frequent administration also has the potential to improve compliance, which is major issue in the management of glaucoma. At 6 months, less than half of patients are compliant with treatments requiring multiple daily drops.

The less frequent administration also has the potential to improve compliance, which is major issue in the management of glaucoma. At 6 months less than half of patients are compliant with treatments requiring multiple daily drops. Compliance is improved with the once-daily PGAs, but still has less than 50% patient compliance at 7 months. Of note, the shift from multiple daily drops to once daily drops did create a notable

improvement in compliance. This trend can be seen in the graph below, which demonstrates that the gap between PGAs and other topical options widens over time. Supported by feedback from our consultants, this trend suggests that a glaucoma treatment option that requires administration every 2-3 months could have a profound impact on compliance.

Figure 13 Glaucoma Compliance With Current Topical Treatments



Source: Company Reports; Cowen and Company

Along with poor compliance, current topical treatment options require extremely high concentrations of drug to penetrate the corneal membrane and achieve therapeutic levels. OTX-TP provides a sophisticated alternative, as the punctum plug provides a steady and continuous release of travoprost and eliminates the large spike in drug concentration that occurs with topical treatments. This reduces the risk of adverse events and also helps ensure that a therapeutic level of drug is available at all times throughout the day.

The clinical program for the product includes a recently completed Phase IIa study along with two earlier pilot studies. Ocular is utilizing the 505(b)(2) regulatory pathway for development, and since travoprost is already an FDA approved API, the Company was not required to conduct Phase I studies.

Travoprost was specifically selected as the therapeutic agent for OTX-TP for several key reasons: (1) the molecule's strong efficacy; (2) physical properties that complement well with the hydrogel platform; (3) the expected patent expiration of Novartis/Alcon's branded Travatan /Z in December 2014; and (4) high availability for ease of manufacturing. The clinical program for the product includes a recently completed Phase IIa study along with two earlier pilot studies. Ocular is utilizing the 505(b)(2) regulatory pathway for development, and since travoprost is already an FDA approved compound, the Company was not required to conduct Phase I studies.

Ocular Recently Reported Positive Phase IIa Data For OTX-TP

In May of 2014, Ocular completed a Phase IIa randomized, double-blind, multi-arm, active-controlled clinical study for OTX-TP. The study evaluated the safety and efficacy of two dosing options for OTX-TP and was not powered to evaluate statistical significance. It was conducted in South Africa across four sites and a total enrollment of 41 total patients (82 treated eyes). The first plug (OTX-TPa) was designed to release travoprost for approximately 60 days at a rate of 3.5 µg/day (282 µg total drug load), and the second plug (OTX-TPb) was designed to release drug at a rate of 2.8 µg/day (279 µg total drug load) for up to 90 days. Patients in the active arms had one of the OTX-TP punctum plugs inserted and also received placebo eye drops twice daily. Patients in the control arm received a placebo vehicle punctum plug along with two daily doses of timolol. Patients were randomized with 11 in the OTX-TPa arm, 17 in the OTX-TPb arm, 13 patients in the timolol control arm. One patient randomized into the timolol group was excluded because the investigator had difficulty placing the plug. Timolol is the most common non-PGA topical treatment for glaucoma and has been used as the active comparator in pivotal studies for numerous approved glaucoma treatments.

Key primary endpoints for the study were: (1) mean IOP (mmHg); (2) mean change in IOP (mmHg) from baseline; and (3) mean % change in IOP from baseline. Patients were evaluated on Days 3, 15, 30, 45, 60, 75, and 90 for the following measurements: (1) mean IOP at 8:00am on each evaluation day; (2) mean IOP at 12:00pm and 4:00pm on Days 30, 60, and 90; (3) mean change in IOP from baseline at all measured time points; and (4) retention of the punctum plug at each evaluation day. At each visit, patients were also evaluated for safety and tolerability including visual acuity, inflammation, and any other adverse events.

Enrollment in the study was restricted to patients that were at least 18-years-old and with a documented diagnosis of ocular hypertension or open-angle glaucoma. While both eyes were treated, only the eye with the higher baseline IOP was included in the efficacy analysis. Patients with a history of inadequate response to treatment with beta-blockers or PGAs were excluded. Patients that were under treatment at the time of screening were required to have a drug washout period before starting the trial.

Among the patients in the OTX-TPa treatment arm, mean IOP was maintained at or below 21.1 mmHg at all measured time points from days 15 through 75 from a baseline IOP of 25.8 mmHg. Mean reduction in IOP ranged from 3.2 mmHg to 6.0 mmHg. For patients in the OTX-TPb treatment arm, mean IOP was maintained at or below 23.4 mmHg at all measured time points from day 15 to 90 from a baseline IOP of 26.4 mmHg. Mean reduction in IOP ranged from 2.0 mmHg to 5.4 mmHg. Finally, for patients in the timolol control group, mean IOP was maintained at or below 21.3 mmHg at all measured time points from day 15 to 75 from a baseline IOP of 26.1 mmHg. Mean reduction in IOP ranged from 3.2 mmHg to 6.4 mmHg.

Figure 14 OTX-TP Phase IIa Efficacy Results

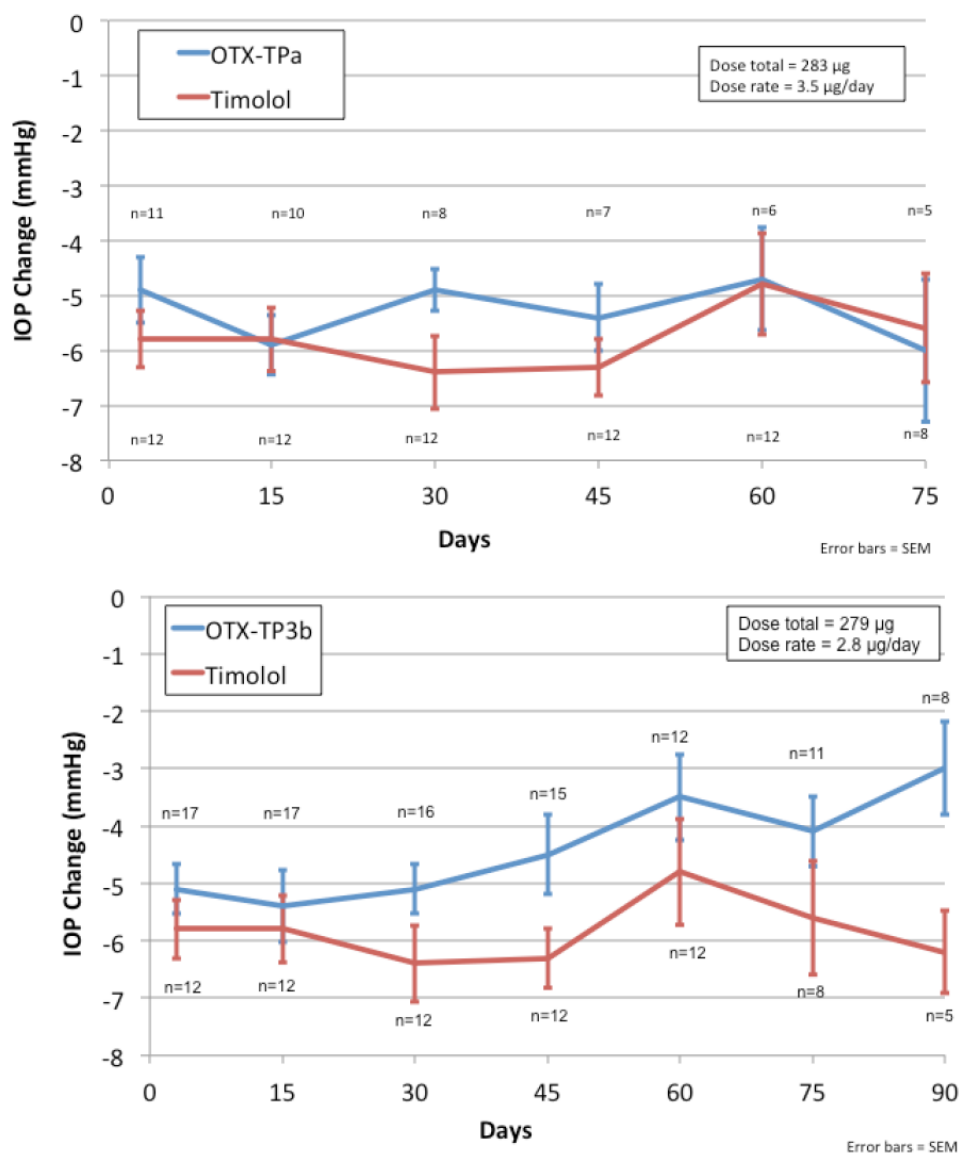
	Duration	Rate of Release (µg/day)	Baseline IOP (mmHg)	Max. Treatment IOP (mmHg)	IOP Reduction Range (mmHg)
OTX-TPa	75	3.5	25.8	21.1	3.2 – 6.0
OTX-TPb	90	2.8	26.4	23.4	2.0 – 5.4
Timolol	-	-	26.1	21.3	3.2 – 6.4

Source: Company Reports; Cowen and Company

Unsurprisingly, the patients in the OTX-TPa experienced greater efficacy than those in OTX-TPb with the higher drug release rate.

Unsurprisingly, the patients in the OTX-TPa experienced greater efficacy than those in OTX-TPb with the higher drug release rate. While the study was not powered to evaluate statistical significance, patients in the OTX-TPa group demonstrated comparable efficacy to the timolol group, while treatment with OTX-TPb appeared to be slightly less effective.

Figure 15 Comparison Of Efficacy Results For OTX-TPa and OTX-TPb



Source: Company Reports; Cowen and Company

As highlighted in the table below, both OTX-TPa and OTX-TPb were well-tolerated with no serious adverse events. The most common side effect was inflammation, which was seen in five patients. However, all reported adverse events were temporary and had resolved by the end of the trial. There was no significant change in hyperemia scores from baseline to day 90.

Figure 16 OTX-TP Phase IIa Safety Results

Adverse Ocular Event	N=82 eyes (%)	Outcome	Severity
Epiphora	2 (2.4%)	Recovered/Resolved	Mild
Tearing with Mucopurulent Discharge	1 (1.2%)	Recovered/Resolved	Mild
Inflammatory Reaction	5 (6.1%)	Recovered/Resolved	Mild (3) Moderate (2)
Perforation of/or Trauma to the Punctum and/or Surrounding Tissues	4 (4.9%)	Recovered/Resolved (2) Recovered/Resolved with Sequelae (2)	Mild
Stenosis of the Punctum	2 (2.4%)	Recovered/Resolved	Mild
Other (Ocular pain, Swollen punctum, Dry eye)	6 (7.3%)	Recovered/Resolved	Mild

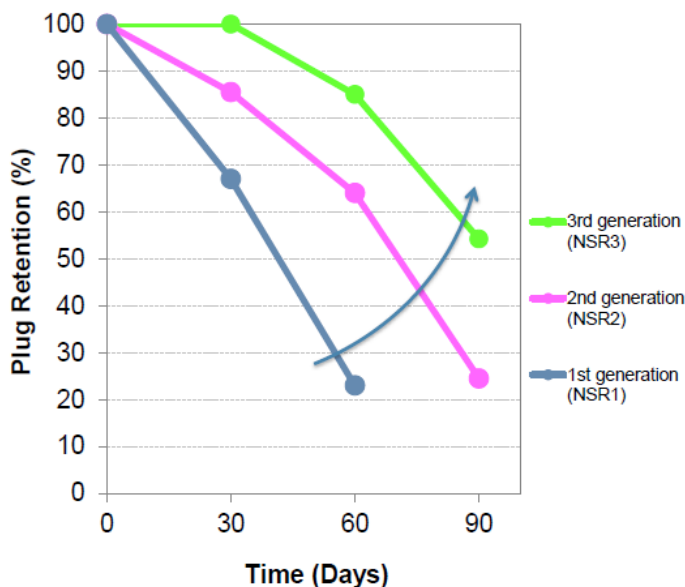
Source: Company Reports; Cowen and Company

Plug Retention For OTX-TP Is Steadily Improving

Our consultants commented that with the current compliance challenges in glaucoma, even if the plug didn't last 90 days but was closer to 60-75 days, it was a major improvement over currently available options.

Plug retention rates during the study with the NSR2 second generation plug were ~65% at 60 days and ~45% at 75 days as seen in the graph below. While we had some concerns that a treatment lasting closer to 60-75 days may have difficulty gaining traction, our consultants commented that with the current compliance challenges in glaucoma, even if the plug didn't last 90 days but was closer to 60-75 days, it was a major improvement over currently available options. Management provided similar commentary, specifically noting that initial discussions with the FDA were very positive and that the duration of the plug was not a major concern. Furthermore, Ocular has continued to conduct Non-Significant Risk (NSR) Trials and has made substantial progress with each generation of plugs. For the upcoming OTX-TP Phase IIb studies, a third generation NSR3 plug will be used which offers an increased diameter from 0.63mm to 0.72 mm and minor structural changes. The updated plug has already demonstrated substantially better retention in the NSR study with 100% retention after 30 days, 85% retention after 60 days, and 54% retention at 90 days. A similar size plug was used in the Phase I OTX-MP (moxifloxacin) study in post-operative cataract surgery patients. The investigator in the study was able to easily insert the plug and patients found the plug to be comfortable. Plugs of this size are currently already used in patients with dry eye with minimal difficulty. Prior to the start of the Phase IIb study in the second half of this year, another NSR study will be conducted to ensure ease of use and patient comfort with the slightly larger plug. NSR studies will continue on an ongoing basis to help facilitate continued improvement on the plug design.

Figure 17 Plug Retention Rates By Generation



Source: Company Reports; Cowen and Company

Previous Pilot Studies For OTX-TP

In 2012, Ocular conducted two pilot studies to evaluate the safety and efficacy of OTX-TP over a 30 and 60-day period. The first pilot study was conducted in Singapore across 2 sites and enrolled 17 patients (26 treated eyes). The prospective, single arm, open label clinical study evaluated the efficacy and safety of a one-month version of OTX-TP. Key endpoints for the study were (1) mean IOP (mmHg); (2) mean change in IOP (mmHg) from baseline; and (3) plug retention. Patients were evaluated on days 3, 10, 20, and 30 for the following measurements: (1) mean IOP at 8:00am on each day; (2) mean IOP at 12:00pm and 4:00pm on days 10, 20, and 30; (3) mean change in IOP from baseline at all measured time points; and (4) retention of the punctum plug at days 10, 20, and 30. At each visit, patients were also evaluated for safety and tolerability including visual acuity and slit lamp examinations.

Enrollment of glaucoma patients for the study was similar to the Phase IIa trial but was restricted to patients that were at least 21-years-old. Also like the Phase IIa study, if patients were affected bilaterally, both eyes were treated, but only the eye with the higher baseline IOP was included in the efficacy analysis. Patients that were under treatment at the time of screening were required to have a drug washout period before starting the trial. But unique to the pilot studies, if a patient's IOP was high despite treatment with OTX-TP, rescue medication was available to the patient.

A clinically meaningful reduction in IOP was observed during the 30-day trial. Mean IOP was maintained at or below 22.0 mmHg at all measured time points for each evaluation day. Mean reduction in IOP ranged from 5.3 mmHg to 8.2 mmHg. No serious adverse events and one adverse event of bilateral epiphora (excess tearing) was reported, which was transient and completely resolved after plug removal. No major changes in hyperemia scores or notable observations with slit lamp examination were seen during the study.

Ocular conducted a second pilot study in South Africa during 2012. The prospective, single arm, open label clinical was very similar to the first pilot study but evaluated the efficacy and safety of a two-month version of OTX-TP. Enrollment criteria were the same as the previous pilot study except the minimum patient age was reduced to 18. A total of 20 patients (36 eyes) were enrolled across two sites in South Africa. Measured endpoints remained exactly the same along with study protocol except patients were now evaluated on days 3, 15, 30, 45, and 60 at the same time points as before.

Efficacy was once again observed during the 60-day trial. Mean IOP was maintained at or below 22.0 mmHg at all measured time points on day 15 and beyond. Mean reduction in IOP ranged from 5.0 mmHg to 7.1mmHg. In two cases, IOP remained high despite treatment and the investigator prescribed rescue medication at the end of the visit. It is possible that the two patients were resistant to PGA-based treatment. Safety results were also similar with no serious adverse and three adverse events of inflammation, which again was transient and completely resolved by the end of the trial. No major changes in hyperemia scores or notable observations with slit lamp examination were seen during the study.

A Phase IIb Study Is Enrolling And Will Begin In The Second Half Of This Year

The investigator will evaluate plug presence at each visit and will also immediately replace any plugs that are reported as absent prior to day 60.

This new component of the protocol will help improve consistency of dosing throughout the study.

In the second half of this year, Ocular plans to initiate a Phase IIb clinical trial using the improved NS3 version of the plug. The Phase IIb randomized, double-blind, parallel-arm, active controlled clinical study will be conducted across 15 sites in the U.S. The study will enroll approximately 80 patients (up to 160 eyes) who will be randomized 1:1 to receive either OTX-TP and twice daily placebo drops or a vehicle control punctum plug along with twice daily timolol. The OTX-TP plug will release travoprost at a rate of 3.5 µg/day, same as the OTX-TPa arm in the Phase IIa study. The primary endpoint for the study will be mean change in IOP from baseline at day 60. The study will be designed to evaluate clinically meaningful response to treatment, but not powered to measure statistical significance. Like the previous trials, patients under treatment will be required to have a washout period before treatment begins. Patients will be evaluated on days 4, 15, 30, 45, 60, 75, and 90. Mean IOP and change in IOP from baseline will be measured at 8:00am on days 4, 15, 45, and 75. Measurements will also be taken at 8:00am, 12:00pm, and 4:00pm on days 30, 60, and 90. The study is also designed to collect data on plug presence by the patient and the investigator. Patients will assess presence of the plug on a daily basis and will immediately report if the plug is absent. This will help evaluate the accuracy of patient self-examination of plug presence. The investigator will evaluate plug presence at each visit and will also immediately replace any plugs that are reported as absent prior to day 60. This new component of the protocol will help improve consistency of dosing throughout the study. We believe the new design will increase the likelihood that OTX-TP meets its primary endpoints as patients will not go without drug for extended periods of time.

The OTX-TP Phase IIb study is expected to be completed in the first half of next year followed by an IND submission for the Phase IIIa and IIIb studies. Two Phase III studies are required as part of the 505(b)(2) regulatory pathway and will need a total enrollment of 500 patients. The Phase III studies are expected to be completed in 2016 with an NDA submission in early 2017 and if approved, a potential launch in late 2017. With two Phase II studies being conducted before the Phase III trials, we will have good insight about what to expect in the pivotal studies. If the retention rates continue to improve as expected with the next generations of plugs, OTX-TP has the potential to provide significant upside for shareholders.

Potential competitors for OTX-TP include Allergan's bimatoprost ocular implant and QLT/ForSight Vision 5's Helios insert. The Allergan implantable product has a potential duration of 4-6 months, but our consultants provided feedback that this would only be used for select patients since it requires an injection and may leave residual materials at the site of the implant. These attributes could significantly increase safety concerns among physicians. Regarding QLT/ForSight Vision 5, one of our consultants worked closely with the development of the Helios insert and noted that the product has gone through numerous redesigns with marginal improvement and that the product has not made any recent progress.

Glaucoma Is a Progressive Disease

Worldwide sales of pharmaceutical treatments for glaucoma were an estimated \$3.4B (-5% Y/Y) in 2013. Despite solid continued prescription growth, generic competition to Allergan's Alphagan/P, Merck's Cosopt and Pfizer's Xalatan has pressured sales growth. Offsetting some of the potential U.S. declines are continued growth and utilization in international markets. An estimated 2-3MM people in the U.S. and 5-6MM people outside the U.S. are treated for glaucoma each year. An even greater number of people likely have elevated intraocular pressure, a glaucoma risk factor. Our physician consultants estimate that only approximately 50% of people in the U.S. suffering from glaucoma are diagnosed and receiving treatment. Early diagnosis and aggressive treatment to lower IOP are increasingly important components of effective glaucoma management.

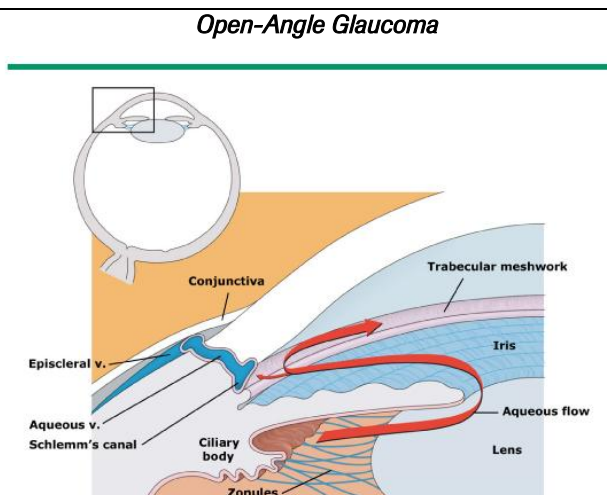
Open-angle glaucoma, the most prevalent type, is characterized by progressive peripheral visual field loss followed by central field loss. This is usually in the presence of elevated IOP, likely related to increased aqueous production and decreased outflow from the anterior chamber.

Glaucoma is caused by damage to the optic nerve, resulting in a gradual narrowing – and ultimate loss of the visual field and irreversible blindness. Glaucoma may result from a variety of different conditions; with elevated IOP believed to be the primary cause, although some patients with normal IOP may still have optic nerve damage. Glaucoma can be differentiated into several forms, depending on the anterior chamber angle and the underlying abnormality. In a normal eye, a watery fluid called aqueous humor fills the void between the cornea and iris, nourishing the cornea and the lens and providing the front of the eye its form and shape. Open-angle glaucoma, the most prevalent type, is characterized by progressive peripheral visual field loss followed by central field loss. This is usually in the presence of elevated IOP, likely related to increased aqueous production and decreased outflow from the anterior chamber. Angle-closure glaucoma, which is less common, presents as a painful red eye and must be treated within 24 hours to prevent permanent blindness. It is caused by narrowing or closure of the anterior chamber angle, which provides drainage for the aqueous humor. Inadequate drainage leads to elevated intraocular pressure and damage to the optic nerve. Angle-closure glaucoma occurs in eyes with a certain anatomical predisposition. Both open-angle and angle-closure glaucoma can be divided into primary and secondary forms and can also be categorized based on timing (i.e., acute, subacute, and chronic). Congenital glaucoma affects people under thirty years of age and also has infantile and juvenile forms.

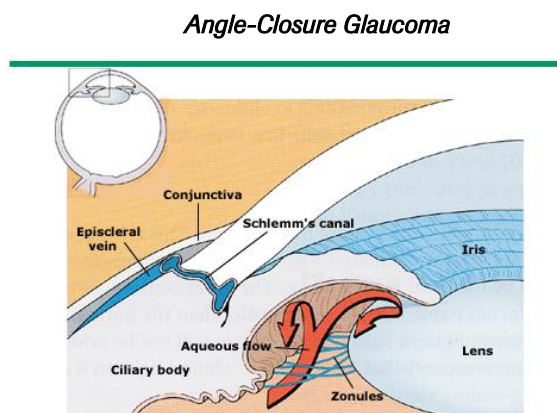
After cataracts, glaucoma is the second leading cause of blindness in the world. Major risk factors for developing open-angle glaucoma include age, black race, family history, and elevated IOP. Open-angle glaucoma is more common among people of European or African descent, whereas angle-closure glaucoma is more common among people of Asian descent. Open-angle glaucoma composes approximately 80% of all glaucoma cases. Estimates suggest there are around 45MM people worldwide with open-angle glaucoma and that this number will increase to 58MM by 2020. It is estimated there are 2.8MM people in the U.S. with open-angle glaucoma and that the

number will increase to 3.4MM by 2020. In the U.S., approximately one-sixth of patients with otherwise characteristic open-angle glaucoma will have a consistently normal IOP.

Figure 18 Open-Angle Versus Angle-Closure Glaucoma



The exact pathophysiology of open angle glaucoma is not known, but may be related to decreased aqueous outflow and/or increased aqueous production.



The pupillary margin blocks the passage of aqueous from the posterior chamber to the anterior chamber (pupillary block), ballooning the iris forward (iris bombe), causing the iris root to occlude the trabecular meshwork and completely obstruct drainage of aqueous fluid from the anterior chamber (angle closure). The resulting rapid elevation of intraocular pressure requires urgent intervention to prevent permanent visual loss.

Source: UpToDate: Cowen

Elevated Intraocular Pressure Is Believed To Be The Primary Cause

Open-angle glaucoma results from increased resistance in the aqueous humor outflow tract and the accompanying increase in ocular pressure.

The cornea, a clear transparent layer, lies in front of and protects the eye. The iris, the circular pigmented band within the eye, widens and narrows to different light intensities. Aqueous humor fills the void between the cornea and the iris. Aqueous humor is produced constantly and an elaborate outflow mechanism allows for drainage. Aqueous humor leaves the eye via the canal of Schlemm, but first must pass

through a porous group of cells called the trabecula. Open-angle glaucoma results from increased resistance in the aqueous humor outflow tract and the accompanying increase in ocular pressure. The constriction could lie in the trabecula, the canal of Schlemm, or vessels draining the canal. Aqueous humor production continues at a steady rate, despite slowing outflow, causing a buildup of pressure within the eye. As pressure rises, the optic nerve may be damaged, causing compromised vision. This type of glaucoma follows a chronic, progressive course. Individuals with open-angle glaucoma rarely experience early symptoms. Thus, open-angle glaucoma is generally detected incidentally during an ophthalmic examination. Initial symptoms may occur late in the course of the disease. A defect in dark adaptation during night driving, such as a slow recovery of vision when oncoming headlights disturb adaptation, may be the first sign. As the disease progresses, patients may experience additional vision problems, but the narrowing of the visual field may be so gradual as to be little noticed until imminent blindness. There is no loss of visual acuity as long as central vision is preserved. The mean progression rate from a full field of vision to blindness takes approximately 25 years if left untreated. This is in stark contrast to angle-closure glaucoma in which patients present with symptoms and signs including pain, loss of visual acuity, conjunctival erythema, and corneal edema. Blindness can occur in 24 hours if the condition is left untreated.

Types of Glaucoma Summary

Types Of Glaucoma Summary	
Type	Description
1.) Open-Angle	Open-angle glaucoma accounts for 80% of all glaucoma cases. It is a chronic condition with no noticeable symptoms. Elevated IOP is the main risk factor and usually goes unnoticed. If IOP remains too high too long, this can cause damage to the optic nerve and may result in progressive visual field loss.
2.) Acute Angle-Closure	Rare and considered a medical emergency. Acute angle-closure glaucoma happens when IOP rapidly increases to an excessively high level. This type of glaucoma has severe symptoms such as severe eye pain, and patients may experience nausea, vomiting, sweating, severe headaches, slow heart rate, and blurred or "halo" vision. Patients may also have moderate symptoms such as dilated pupils, cloudy corneas, and very red eyes.
3.) Subacute Angle-Closure	Similar to acute angle-closure glaucoma but is considered to be less severe. Patients with subacute angle-closure glaucoma may have a series of minor attacks characterized by blurry or "halo" vision, but without the severe eye pain or redness associated with acute angle-closure glaucoma.
4.) Chronic Angle-Closure	A long-term disease and is the least severe form of angle-closure glaucoma. Patients may have some symptoms ranging from mild to severe. Some patients may have no symptoms at all.
5.) Secondary	Caused by an injury to, or inflammation, of the eye. It can also be caused by a complication of an underlying disease such as diabetes, high blood pressure, or cataracts. Even though there are over 60 different possible causes for secondary glaucoma, this type of glaucoma is still considered to be uncommon.

Source: Lumigan web site

Source: Lumigan web site

Drug Therapies Target Intraocular Pressure (IOP)

While the exact pathology of open-angle glaucoma is not well-understood, lowering (IOP) has been shown to reduce the risk of progression of visual field loss and/or optic disc changes and is the primary goal of therapy

While the exact pathology of open-angle glaucoma is not well-understood, lowering (IOP) has been shown to reduce the risk of progression of visual field loss and/or optic disc changes and is the primary goal of therapy. If diagnosed early, optic nerve damage and vision loss from glaucoma can be minimized. Because increased intraocular pressure (IOP) usually precedes the optic nerve damage and visual field changes by several years, early reduction of intraocular pressure can preserve ocular health and vision.

Normal IOP generally ranges between 12-22mmHg, but there is no clear consensus regarding the threshold IOP for initiating treatment. There are patients with IOP >22mmHg who have thicker corneas and healthy optic nerves by field testing and do not require treatment. Most clinicians initiate treatment for a patient with two instances of IOP >25mmHg, while some more conservative physicians would do so for IOP >22mmHg. Alternatively, a patient with an IOP of 18 mmHg who has visual field loss should also be treated for glaucoma. Treatment options for glaucoma include drug therapy, laser therapy, and/or surgery. Most patients are usually initiated on drug therapy and consider other treatment options if the disease progresses.

Drug therapy for open-angle glaucoma usually begins with a single first-line agent gradually titrated to the maximum tolerated dose. Additional agents may be added to the treatment regimen to augment IOP control. An estimated 50% of glaucoma patients eventually require combination treatment to control elevated IOP.

Drug therapy for open-angle glaucoma usually begins with a single first-line agent gradually titrated to the maximum tolerated dose. Additional agents may be added to the treatment regimen to augment IOP control. An estimated 50% of glaucoma patients eventually require combination treatment to control elevated IOP. Topical medications are the treatment of choice, as they minimize the systemic side effects common with oral administration. If drug therapy fails to adequately control IOP levels associated with open-angle glaucoma, surgery is typically performed to reduce IOP levels.

Glaucoma drugs act by either decreasing the rate of aqueous humor production or by increasing the rate of aqueous humor drainage. Topically administered beta blockers historically were the preferred first-line glaucoma treatment and continue to be used as a first-line option. Timolol (Merck's Timoptic/XE and multiple generics) is effective in reducing aqueous humor production and, to a lesser extent, also increases aqueous humor outflow. However, timolol has been associated with a number of side effects consistent with the beta blocker class, including decreased heart rate and cardiac output, and asthma exacerbation. Prostaglandin (PGA)-based therapies, led by Pfizer's Xalatan (and generics), currently are the preferred first-line agents. Because PGA-based therapies have a complementary mechanism of action to timolol, the drugs are often used in combination with one another if a patient's IOP is not sufficiently reduced with just one of them. Xalatan's strong efficacy, good safety profile, and once-daily dosing have increased its first-line use and have made lantanoprost the most widely prescribed glaucoma treatment. Allergan's Lumigan and Novartis/Alcon's Travatan also are PGA-based glaucoma therapies and their use continues to be marginally affected by the Xalatan generics. Allergan's Alphagan P (and generics), an alpha2-receptor agonist, is also a widely prescribed glaucoma treatment. Alphagan P is believed to reduce IOP by limiting aqueous humor production and by easing aqueous humor outflow. Alphagan P is predominantly used as second-line therapy, although once-daily dosing for many patients has led to increased first-line use. Carbonic anhydrase inhibitors, such as Merck's Trusopt (dorzolamide) and Alcon's Azopt (brinzolamide) decrease aqueous humor secretion by the ciliary epithelium. Merck also markets Cosopt, a combination of dorzolamide and timolol; generics to Cosopt entered the market in 2009. Pilocarpine, a mitotic (pupil contraction), may also

be used as additive therapy, but requires multiple doses per day, which limits its use to the more severe IOP patients.

Timolol Plus Xalatan Is the Standard Of Care

Therefore, physicians are beginning to adopt lower IOP targets. Drug therapy also is focused on higher efficacy regimens, providing the greatest level of IOP reduction. Standard first-line treatment of glaucoma has historically been twice-daily timolol, but is shifting to once-daily prostaglandins.

The average IOP in a healthy individual is in a range of 14 to 20 millimeters of mercury (mmHg). IOP of 22 mmHg or higher generally is considered abnormal and treatment is usually initiated, even in absence of signs of visual field loss or nerve damage. While it generally is believed that stabilizing IOP below 20 mmHg may prevent glaucoma and the resulting visual field loss, our consultants indicate that many patients may develop visual field loss at IOP levels below 20 mmHg. Large-scale studies of glaucoma patients suggest that greater stability in visual fields can be achieved with lower IOPs. Therefore, physicians are beginning to adopt lower IOP targets. Drug therapy also is focused on higher efficacy regimens, providing the greatest level of IOP reduction. Standard first-line treatment of glaucoma has historically been twice-daily timolol, but is shifting to once-daily prostaglandins. Monotherapy treatment with timolol reduces IOP by 6-7mmHg; this is the comparative basis for all new glaucoma treatments. The package insert for Xalatan indicates that once-daily dosing reduces IOP by 6-8mmHg, similar to Timolol. However, physicians believe that Xalatan is superior to timolol in clinical practice. For more difficult to treat patients, timolol dosed in the morning combined with an evening dose of Xalatan has emerged as the preferred standard-of-care glaucoma treatment.

Currently Available Glaucoma Treatments

Topical Medications	Brand	Ocular Side Effects	Systemic Side Effects
Beta Blockers – Nonselective			
Timolol Maleate	Generics Merck's Timoptic Merck's Timoptic-XE	Stinging; transient blurred vision; photophobia; conjunctivitis; blepharitis; punctate keratitis; eyelid erythema	Decreased heart rate; bronchospasm; hypotension; depression; decreased libido; impotence; worsened lipid profile; decreased stress response to hypoglycemia
Levobunolol	Allergan's Betagan	Increased relative to timolol	Same as timolol
Carteolol	Ocupress	Same as timolol	Same as timolol
Beta Blockers – Selective			
Betaxolol	Alcon's Betoptic /S	Increased relative to timolol	Rare; fewer cardiopulmonary side effects than timolol
Miotics			
Pilocarpine	Isopto Carpine Ocusert Pilo	Burning; blurred vision; difficulty with night vision; miosis or accommodative spasm; lens opacity (rare); retinal detachment (rare); precipitation of angle-closure glaucoma (rare)	Sweating; salivation; urinary frequency; nausea; diarrhea; bronchospasm; biliary colic; mental status change; variable cardiovascular response
Carbonic Anhydrase Inhibitors			
Dorzolamide	Merck's Trusopt	Burning; punctate keratitis; ocular allergies; increased ocular side effects relative to timolol	Bitter taste; headache; nausea; asthenia; kidney stones (rare)
Brinzolamide	Alcon's Azopt	Possibly decreased ocular side effects compared with dorzolamide; blepharitis; foreign-body sensation	Bitter taste; headache; rhinitis sensation
Sympathomimetics – Epinephrine-like			
Dipivefrin	Propine	Burning; follicular conjunctivitis; macular edema in patients who are aphakic	Increased blood pressure; arrhythmias; tremor
Sympathomimetics – Clonidine-like			
Brimonidine	Allergan's Alphagan/P	Conjunctival blanching; ocular allergy	Headache; fatigue; variable blood pressure response
Apraclonidine	Lopidine	Allergic/local reaction; transient change in visual activity	Increased CNS effects change visual activity
Prostaglandin And Like Analogs			
Latanoprost	Pfizer's Xalatan	Burning; iris pigmentation; hyperemia	Headache; upper respiratory infection
Unoprostone	Novartis's Rescula	Burning; iris pigmentation; hyperemia	Headache; upper respiratory infection
Bimatoprost	Allergan's Lumigan	Hyperemia, burning/stinging	Headache; upper respiratory infection
Travoprost	Alcon's Travatan	Burning; iris pigmentation; hyperemia	Headache; upper respiratory infection
Tafluprost	Merck/Akorn's Zioptan	Burning; iris pigmentation; hyperemia	Headache; upper respiratory infection
Combination Therapy			
Brimonidine + Timolol	Allergan's Combigan	Same as timolol and brimonidine	Same as timolol and brimonidine
Dorzolamide + Timolol	Merck's Cosopt	Same as dorzolamide and timolol	Same as dorzolamide and timolol
Brinzolamide + brimonidine	Novartis/Alcon's Simbrinza	Same as brinzolamide and brimonidine	Same as brinzolamide and brimonidine

Source: American Academy of Family Physicians and Cowen and Company

Therefore, without accounting for market growth, Xalatan brand and generics combined have gained more than 10% additional share of the market than just the brand alone prior to genericization.

Generic Xalatan Use Growing Steadily

Pfizer's Xalatan (latanoprost), the leading molecule for glaucoma, was hit by generics in March 2011. Since then brand's share has declined significantly: as of December 2013, Xalatan held a 0.6% total U.S. prescription share of the glaucoma market, down from approximately 25.0% in February 2011 ahead of its patent expiration and subsequent generic competition. Xalatan is indicated for the first-line treatment of glaucoma. Xalatan generics account for 35.4% of the overall market. Therefore, without accounting for market growth, Xalatan brand and generics combined have gained more than 10% additional share of the market than just the brand alone prior to genericization. The generic is continuing to gain share driven by managed care. Xalcom, a fixed combination dose of Xalatan and timolol, has been launched in Europe; however, it appears unlikely that it will reach the U.S. market given Xalatan's patent expiry and because the FDA has already issued three "approvable" letters for the product. The FDA has been reluctant to approve fixed dose combination therapies for glaucoma, indicating that filers need to demonstrate superiority of the combination product over treating patients with the two component drugs separately.

AGN's Lumigan Holding Share Despite Increased Xalatan Generic Use

Lumigan (bimatoprost ophthalmic solution) is a synthetic structural analog of prostaglandin (prostanoid) and is marketed globally for the treatment of open-angle glaucoma and for the reduction of intraocular pressure. Lumigan reduces intraocular pressure by increasing the outflow of aqueous humor from the inner chambers of the eye. The FDA approved Lumigan for second-line use in 2001 and for first line use in 2006. In 2002, Lumigan was approved in Europe. Lumigan was initially expected to be a formidable competitor to Xalatan given its greater perceived efficacy, comparable price, room-temperature stability, and a two-month prescription option. However, side-effect issues, primarily hyperemia (irritation/red-eye), capped Lumigan use. One of the most often discussed issues regarding Lumigan is the potential impact on the franchise from the generic introduction of the category leader Xalatan, which occurred in March 2011. So far the impact appears muted, as the Lumigan franchise total prescription share of the U.S. glaucoma market increased modestly since March 2011. As of December 2013, Lumigan held 12.0% total U.S. prescription share of the glaucoma market, down 60bps Y/Y. In November 2012, Allergan received a positive European Commission decision for a new preservative-free formulation of Lumigan 0.03% in single-dose containers.

The sustained release is achieved via an implant in the eye that lasts approximately 4-6 months. During an R&D update presentation on June 30, 2014, Allergan indicated that it was getting IOP decreases similar to topical Lumigan with a duration of 4-6 months.

In addition, Allergan is developing a sustained-release formulation that recently completed Phase II efficacy and safety studies. Allergan indicates that compliance is a big issue for glaucoma patients and estimates 40% of patients do not take their drops in an adequate manner. The sustained release is achieved via an implant in the eye that lasts approximately 4-6 months. During an R&D update presentation on June 30, 2014, Allergan indicated that it was getting IOP decreases similar to topical Lumigan with a duration of 4-6 months. Allergan has shared this Phase II bimatoprost sustained-release implant data with the FDA and the FDA is supportive of the company's decision to advance to Phase III clinical trials. These Phase III clinical trials will be initiated by the end of 2014.

Lumigan Demonstrates Efficacy Advantage Versus Xalatan

During the Lumigan development, Allergan conducted a three-month, head-to-head trial comparing Lumigan with Xalatan. The trial was a randomized, blinded comparison of Lumigan 0.3% (119 patients) and Xalatan 0.005% (113 patients) each

dosed once daily (at night) over three months. Trial patients had baseline IOPs ranging from 22 to 34mmHg, averaging 25.7mmHg at entry. The endpoints included mean IOP at 8:00am, percentage of patients achieving pressure of 17mmHg at 8:00am, and diurnal pressure at 8:00am, 12:00pm, 4:00pm and 8:00pm. Patients on Lumigan achieved a lower mean IOP than the patients on Xalatan at 8:00am on all days measured. This difference was not statistically significant, although the lack of statistical significance was attributed to the small number of patients in the study. The number of patients achieving a target pressure of 17mmHg was not statistically different in the Lumigan and Xalatan groups. At lower target pressures of 13-15mmHg, a statistically greater number of Lumigan patients achieved target IOP levels. Importantly, patients on Lumigan achieved consistently lower diurnal pressures, and the pressures were statistically lower at 12:00pm and 4:00pm relative to Xalatan. While Lumigan was associated with statistically more hyperemia (eye irritation) than Xalatan, Xalatan was associated with more stinging and headache. Given that it appears that the eye irritation was the most significant hindrance to greater uptake for Lumigan, the launch of the 0.01% formulation could drive additional use. Our consultants have stated that as a result of the comparative trial, physicians commonly consider Lumigan (bimatoprost) as the most efficacious prostaglandin option.

Novartis/Alcon's Travatan Z Facing Modest Decline Following Generic Xalatan

Alcon's Travatan also is a prostaglandin-based glaucoma therapy, launched in the U.S. concurrent with Lumigan in April 2001. In October 2006, Alcon launched Travatan Z, a benzalkonium chloride-free formulation of Travatan. The benzalkonium chloride was replaced with Sofzia, a proprietary ionic buffered preservative system that is gentler on the ocular surface and reduces the negative effects associated with long-term use of the drug (e.g., dry eye). Overall market share gains for the Travatan franchise initially accelerated following the launch of Travatan Z but have stabilized over the past 12 months. As of December 2013, the Travatan franchise held an 11.4% total of the U.S. prescription share of the glaucoma market (vs. 13.0% share in December 2012). Similar to Lumigan, Travatan has only seen modest declines with the entry of generic Xalatan, with Travatan Z accounting for almost all of the Travatan branded franchise.

Travatan Compares Favorably To Xalatan/Timolol

Alcon sponsored an 800-patient study comparing Travatan with timolol and Xalatan. Mean IOP at baseline was similar for the three groups. Patients received either timolol twice per day, Xalatan once per day, or Travatan once per day. IOP was measured at 8:00am, 10:00am and 4:00pm on eight different days during the 12-month study. At the 8:00am measurement, Travatan patients recorded a mean IOP 1.0mmHg below that of the timolol patients. At 4:00pm, the difference increased to 1.6mmHg. Travatan and Xalatan were found to be equally effective in lowering IOP at 8:00am. However, mean IOP in the Travatan group was 1.0mmHg lower than that of the Xalatan group at 4:00pm. In Phase III studies, Travatan also provided an additional 1.8mmHg of IOP lowering in African-American patients beyond that observed in other patients. Alcon is promoting Travatan as the first prostaglandin analog to demonstrate increased efficacy in African-American patients.

Allergan's Combigan Making Steady Gains

In October 2007, Allergan received FDA approval of its combination glaucoma treatment, Combigan (Alphagan plus timolol), which was designed to improve dosing convenience and patient compliance. Combigan is dosed as an eye drop, twice a day, and is available as a solution containing 2mg/mL Alphagan and 5mg/mL timolol.

Having initially received an “approvable” letter, we believe the FDA sought to see clinical evidence of a synergistic effect when dosing the drugs in combination versus separately. In the 12-month pivotal trials, Combigan significantly reduced mean IOP up to 7.6 mmHg from baseline and was well tolerated. Studies found that Combigan provided an additional IOP lowering versus either brimonidine or timolol. Combigan administered twice a day provided an additional 1 to 3 mmHg decrease in IOP over brimonidine treatment three times a day and an additional 1 to 2 mmHg decrease over timolol treatment twice a day. In December 2013, Combigan had 6.7% share of the glaucoma market, holding steady in its share from a year ago.

Our consultants believe that Combigan is a differentiated product. While specialists appear to be more reluctant to prescribe combination products, they acknowledge that combinations like Combigan have gained widespread acceptance. Additionally, our consultants believe that Combigan should continue to grow despite the presence of generics to Alphagan 0.15%.

Combigan should benefit as the glaucoma market is increasingly moving towards combination therapy. Allergan has noted that it expects Combigan growth to come (1) from ophthalmologists who want to move patients from two prescription regimens of Alphagan and timolol to a single prescription, and (2) from cases where patients on prostaglandins alone are not reaching the desired intraocular pressure. Combigan has a method-of-use patent that expires in 2022.

OTX-DP Provides A Single Administration Option For Post-Operative Pain And Inflammation Following Cataract Surgery

Similar to OTX-TP, the two Phase III studies for the product are required for the 505(b)(2) regulatory pathway that the Company is pursuing for the product.

Ocular’s most advanced pipeline product is the OTX-DP dexamethasone punctum plug. The Company is pursuing a primary indication for post-operative ocular inflammation and pain along with a secondary indication for allergic conjunctivitis. Ocular has successfully completed a Phase II trial for post-operative ocular inflammation and pain and has started two Phase III trials for the indication. Similar to OTX-TP, the two Phase III studies for the product are required for the 505(b)(2) regulatory pathway that the Company is pursuing for the product. Regarding the allergic conjunctivitis indication, Ocular has initiated a Phase II trial to evaluate the safety and efficacy of OTX-DP.

Ocular estimates 3.65MM cataract procedures are expected in the U.S. in 2014. The current treatment paradigm for treating post-operative inflammation and pain following cataract surgery consists mainly of topical ophthalmic steroid drops and in some cases combination with a topical ophthalmic NSAID. Treatment generally lasts 30 days and requires 4-6 daily administrations of the steroid drop alone. Similar to OTX-TP for the treatment of glaucoma, patients requiring cataract surgery tend to be older and unsurprisingly, can have difficulty with the current cumbersome treatment protocol. OTX-DP has been designed to provide steady therapeutic levels of dexamethasone for 30 days based on a one-time administration of the punctum plug. Allergic conjunctivitis is also a significant opportunity for OTX-DP as steroids have already been demonstrated to be highly efficacious in treatment. However, current topical ophthalmic steroids are highly concentrated and have demonstrated prominent spikes in drug concentration after each administration. Chronic use with high steroid drug concentrations has raised concerns among physicians, especially for drug-induced glaucoma. As a result, steroids are not highly utilized for allergic conjunctivitis despite their efficacy. However, because of its steady drug release profile, OTX-DP has demonstrated the ability to deliver therapeutic levels of dexamethasone without

significantly increasing the risk of side effects, which may allow the product to gain share in a market that is currently significantly underpenetrated by steroids.

Statistical Significance Not Seen On Day 8, But Seen On Days 14 And 30

In 2013, Ocular completed a Phase II randomized, double-blind, parallel-arm, controlled clinical study for OTX-DP in the treatment of post-operative ocular pain and inflammation following cataract surgery. 60 patients were enrolled across four sites in the U.S. Patients were randomized 1:1 and received either OTX-DP or a placebo vehicle punctum plug. One patient randomized into the OTX-DP was excluded because the investigator had difficulty placing the plug.

Evaluating for absence of inflammatory cells and flare in the anterior chamber of the eye is done via a slit lamp examination. The inflammatory cells look like floating dust specks on the surface of the eye. Flare occurs when protein in the aqueous humor increases due to inflammation. The increased protein content causes a scattering of light during the slit lamp examination.

Primary endpoints for the study were: (1) absence of inflammatory cells in the anterior chamber of the eye and (2) absence of pain in the eye; both measured on day 8 following surgery. Key secondary measures included absence of flare in the anterior chamber of the eye on evaluation day along with absence of inflammatory cells and pain on each evaluation day other than day 8. Finally, patients were also evaluated for retention of the OTX-DP on each evaluation day. Patients were evaluated on days 1, 4, 8, 11, and 14 following surgery. Evaluating for absence of inflammatory cells and flare in the anterior chamber of the eye is done via a slit lamp examination. The inflammatory cells look like floating dust specks on the surface of the eye. Flare occurs when protein in the aqueous humor increases due to inflammation. The increased protein content causes a scattering of light during the slit lamp examination.

Figure 19 Presence Of Inflammatory Cells During Slit Lamp Examination



Source: Davis AS, Syed NA, University of Iowa Ophthalmology and Visual Sciences

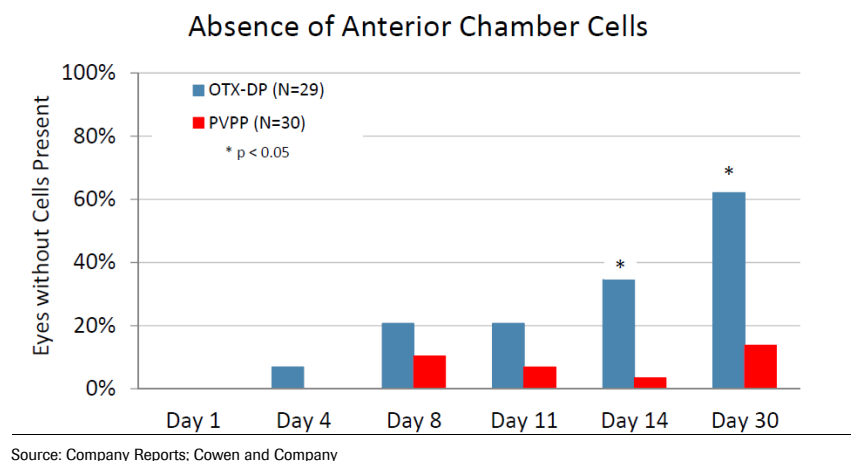
OTX-DP did not meet the primary endpoint for absence of inflammatory cells in the anterior chamber on day 8 following cataract surgery. However, a clear efficacy trend was seen with statistically significant absence of anterior chamber cells at days 14 ($p < 0.0027$) and 30 ($p < 0.0002$).

Enrollment in the study was restricted to patients that were at least 21-years-old that were scheduled to undergo clear corneal cataract surgery in a single eye. Patients were excluded if inflammation and pain were present before the surgery or if patient had glaucoma or ocular hypertension.

OTX-DP did not meet the primary endpoint for absence of inflammatory cells in the anterior chamber on day 8 following cataract surgery. However, a clear efficacy trend

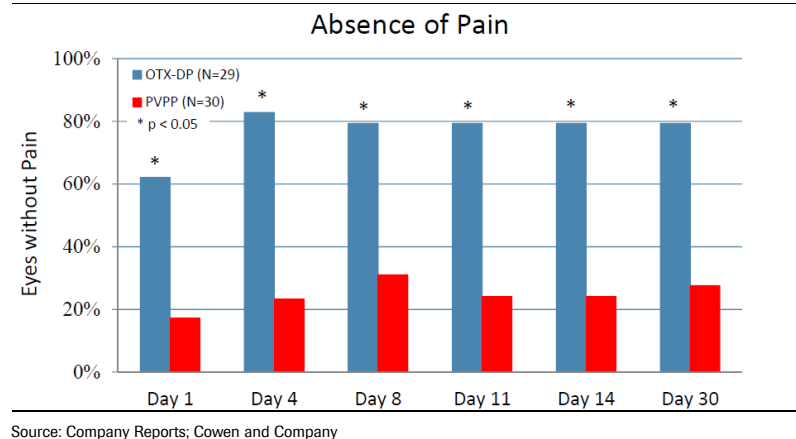
was seen with statistically significant absence of anterior chamber cells at days 14 ($p < 0.0027$) and 30 ($p < 0.0002$). Based on the information learned from the Phase II study, the primary endpoint being evaluated in both ongoing Phase III studies is absence of anterior chamber cells on Day 14. Furthermore, several other approved topical ophthalmic steroids have used absence of anterior chamber cells on Day 14 as the primary endpoint for their pivotal studies.

Figure 20 OTX-DP Absence Of Anterior Chamber Cells Outcomes



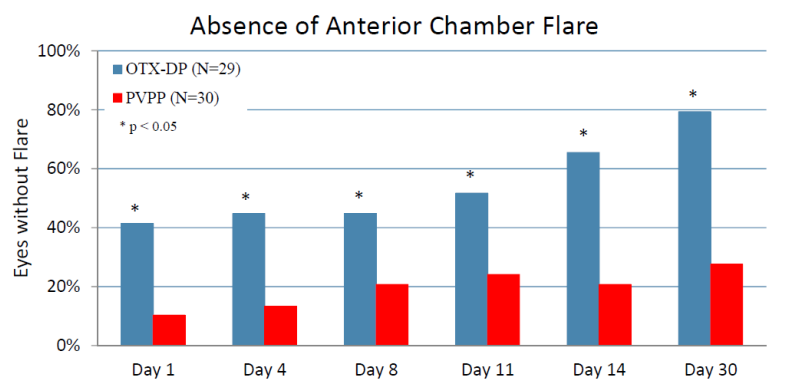
For absence of pain, statistical significance was seen on day 8 ($p < 0.0001$) and also on all other measured days ($p < 0.0002$).

Figure 21 OTX-DP Absence Of Pain Outcomes



Furthermore, statistical significance was also seen for absence of anterior chamber flare on all measured days ($p < 0.0251$).

Figure 22 OTX-DP Absence Of Anterior Chamber Flare

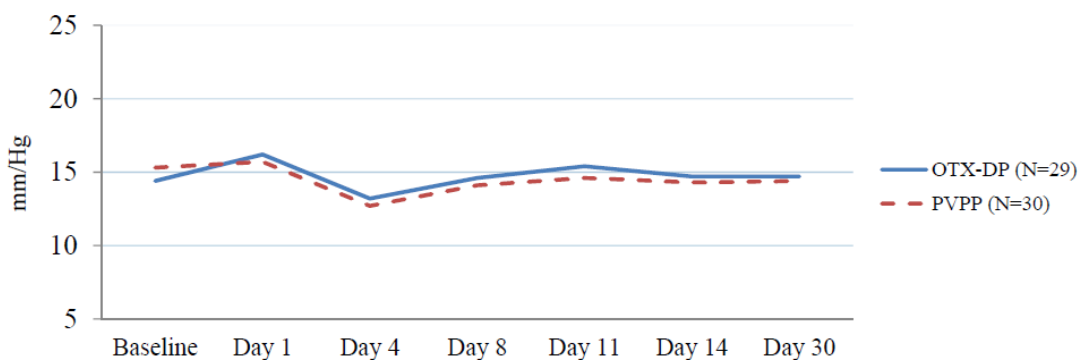


Source: Company Reports; Cowen and Company

Importantly, no spikes or fluctuations in IOP were demonstrated at any point in the study with OTX-DP. The IOP of patients in the OTX-DP arm and the vehicle placebo arm were nearly equivalent.

In totality, the efficacy of OTX-DP for treatment of post-operative ocular inflammation and pain looks very promising. During the trial, three serious adverse events were reported (fainting, bacterial skin infection, and intracranial hemorrhage), but none were determined to be related to the study treatment since they were not ocular in nature. In total, there were 19 adverse events in the OTX-DP and 30 adverse events in the vehicle control group. All adverse events were transient and completely resolved by the end of the trial. Importantly, no spikes or fluctuations in IOP were demonstrated at any point in the study with OTX-DP. The IOP of patients in the OTX-DP arm and the vehicle placebo arm were nearly equivalent. The limited impact on IOP is very promising for the steroid-based product, especially as Ocular pursues an indication for allergic conjunctivitis.

Figure 23 IOP Of Patients In The OTX-DP Phase II Study



Source: Company Reports; Cowen and Company

Phase III Trials For OTX-DP Are Enrolling

In February and April of 2014, Ocular initiated its Phase III studies for OTX-DP. Both studies are randomized, double-blinded, parallel-arm, controlled clinical studies and are being conducted across roughly 34 sites in the U.S. Each study is expected to enroll 240 patients that will be randomized 2:1 to receive either OTX-DP or the vehicle

control punctum plug. As of June 30, 2014 197 patients have been enrolled in the first study and 61 patients in the second. Patients will be evaluated on days 2, 4, 8, 14, 30, and 60 following surgery.

Primary endpoints for the studies are nearly identical to the Phase II study: (1) absence of inflammatory cells in the anterior chamber on Day 14 (switched from Day 8 based on Phase II findings) and (2) absence of pain in the eye on Day 8. Secondary endpoints are also nearly identical to the Phase II study, included absence of flare in the anterior chamber of the eye on each evaluation day and also absence of inflammatory cells and pain on each evaluation day other than day 14. Patients will also be assessed for retention of the OTX-DP plug at each visit. Inclusion criteria for the studies will be the same as the Phase II trial.

Significance in both primary endpoints will likely be needed for FDA approval. Based on the established efficacy of dexamethasone for this indication, results from the Phase II study, and our consultant feedback, we believe the likelihood of approval is high. Furthermore, data from the studies is expected as early as Q1 of 2015 with a potential 505(b)(2) NDA filing in Q2 if successful.

Icon Biosciences is also conducting Phase III trials for IBI-10090, a competitor product. IBI-10090 is a biodegradable injection of dexamethasone that is injected in the anterior chamber of the eye to treat post-operative inflammation following cataract surgery. Since OTX-DP does not involve an injection, we do not expect IBI-10090 to have a major impact on Ocular's punctum plug.

Steroid Use Is Currently Limited For Allergic Conjunctivitis

With an average onset age of 20 years, it mostly impacts young adults. Symptoms generally tend to decrease with age but some older adults continue having severe symptoms.

Allergic conjunctivitis currently affects at least 20% of the population and is expected to increase. With an average onset age of 20 years, it mostly impacts young adults. Symptoms generally tend to decrease with age but some older adults continue having severe symptoms. While uncommon, some patients even develop the condition for the first time as an adult.

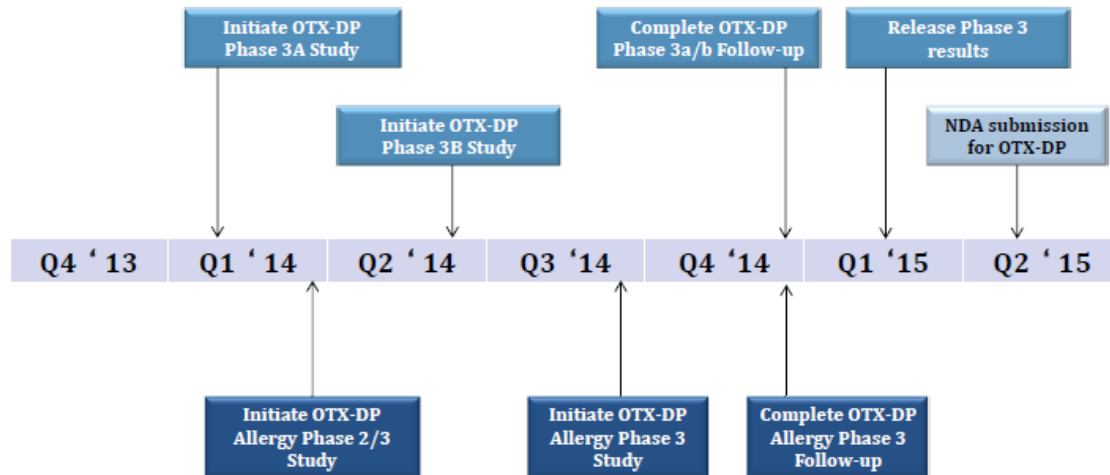
Allergic conjunctivitis occurs when allergens come in contact with the surface of the eye. Symptoms include redness, edema, itching, and increased tear production. The symptoms are a result of the release of histamine and is a classic Type I IgE-mediated hypersensitivity, making it similar to other atopic diseases. Generally both eyes are impacted, but it's possible for one eye to be more affected than another. Three forms of allergic conjunctivitis exist: 1) Acute, a sudden onset of symptoms within a few minutes or hours; 2) Seasonal, a more gradual onset and coincides with pollen seasons; 3) Perennial, a mild and chronic form that is present year-round and is generally due to indoor exposures.

In addition to avoiding the aggravating allergen, allergic conjunctivitis is generally managed using pharmacotherapy. Treatment options for patients with short-term symptoms include OTC antihistamine/vasoconstrictors (Opcon-A, Naphcon-A, Visine-A). These products help reduce redness and edema, but can cause rebound symptoms if used for an extended period of time. For patients with seasonal or perennial symptoms, a topical antihistamine with mast cell stabilizing properties are preferred (Patanol, Lastacaft, Optivar) and generally require treatment for more than two weeks. For patients with more severe symptoms, a topical steroid may be used to help control symptoms. Despite the efficacy of steroids in the treatment of allergic conjunctivitis, the treatment is generally restricted to patients with severe symptoms due to concerns about side effects.

Ocular Is Looking To Expand The Allergic Conjunctivitis Market With OTX-DP

For the treatment of allergic conjunctivitis, Ocular initiated a Phase II randomized, double-blind, parallel-arm, controlled clinical study in March 2014. The study will be conducted across two sites in the U.S. with an enrollment of 60 patients who will be randomized 1:1 to receive either OTX-DP or a vehicle control punctum plug. 41 patients have already been enrolled as of May 31, 2014. A Conjunctival Allergen Challenge (CAC) model will be utilized where the patient's eyes are directly exposed to a high transient dose of allergen. Three allergen challenges will be used in series based on the patient's specific allergic sensitivities. The key efficacy measures for the study will be ocular itching and conjunctival redness. The former will be graded by the patient and the later by the investigator. A 5-point scale from 0 to 4 will be used for both measures, with the primary endpoints being differences of at least 0.5 units between the two treatment groups on Day 14 following the three allergen challenges. Patients will also be evaluated on Days 28 and 42. Safety and tolerability will be evaluated including visual acuity, IOP, and any adverse events. Enrolled patients are at least 18-years-old, with a positive history of ophthalmic allergies and a positive skin test to allergen exposures. Patients will be excluded if they have ocular itching, an infection, or conjunctival redness at the time of the screening. The allergic conjunctivitis indication will also be pursued via the 505(b)(2) regulatory pathway with an sNDA to the original filing.

Figure 24 OTX-DP Development Timeline



Source: Company Reports; Cowen and Company

The Overall U.S. Topical Ophthalmic Steroid Market Is ~\$600MM

If approval is successful, Ocular will aggressively consider initiating additional Phase III studies for the treatment of other ocular inflammatory conditions, with the intent of securing a steroid class labeling for OTX-DP. This would allow the product to be broadly used for inflammatory conditions for the front of the without requiring clinical studies for each condition.

In 2013, IMS data reported approximately 14.1MM prescriptions were filled for topical ophthalmic steroids, representing a market of ~\$600MM. Importantly, if initial approval for OTX-DP is successful, Ocular will aggressively consider initiating additional Phase III studies for the treatment of other ocular inflammatory conditions, with the intent of securing a steroid class labeling for the product. This would allow the product to be broadly used for inflammatory conditions for the front of the without requiring clinical studies for each condition. The steady-release profile of OTX-DP

already provides potential for the product to gain traction in conditions where steroid use is currently limited due to concerns about side effects (i.e., allergic conjunctivitis). A potential class label provides even more upside for OTX-DP as steroids are well-established at treating a wide range of inflammatory conditions.

Bacterial Conjunctivitis Provides An Additional Opportunity

Bacterial conjunctivitis presents with the rapid onset of conjunctival redness, edema, and mucopurulent discharge. Severe crusting of the infected eye and surrounding skin may occur. Symptoms usually present in one eye but the infection may spread to the second eye as it is highly contagious. Treatment consists of 7-10 days of ophthalmic antibiotics. 2013 IMS data showed about 16.9MM U.S. prescriptions for ophthalmic antibiotics with a market size of approximately \$650MM.

The last punctum plug in Ocular's portfolio is OTX-MP (moxifloxacin) for bacterial conjunctivitis. OTX-MP has been designed to provide therapeutic levels of moxifloxacin for up to two weeks and completely resorb within 30 days. Ocular has completed a Phase I, single arm, open label trial evaluating the safety and pharmacokinetic profile of OTX-MP following cataract surgery. The study was conducted at a single site in Singapore with a total enrollment of 10 patients. Patients were evaluated on Days 1, 3, 7, 10, 20, and 30 following surgery and insertion of the OTX-DP plug. Key measures included moxifloxacin level in tear fluid and retention of the plug at all evaluation days. Findings demonstrated that the mean concentration level of moxifloxacin at each evaluation through Day 10 was above the MIC90 potency threshold, which is the concentration of drug required to inhibit the growth of 90% of bacterial strains from patients. The plug was present in 100% of patients at Day 10 and was completely resorbed in all patients by Day 30 with no detectable levels of drug. No adverse events were reported during the study. Based on feedback from the FDA, the next step for OTX-DP would be a Phase II study for bacterial conjunctivitis in both adults and pediatric patients. If successful, two subsequent Phase III studies would need to be completed to for approval via the 505(b)(2) regulatory pathway.

Ocular Already Has Approval For A Hydrogel Product, ReSure

ReSure Sealant was approved by the FDA in January 2014 and launched the following month in February. ReSure is topical liquid hydrogel sealant to prevent leakage from the clear corneal incision following cataract surgery, which can reduce the risk of complications. The product is able to produce a lower leakage rate than suture closure and self-sealing. Also, compared to suture closure, ReSure naturally dissolves after the incision has sealed and does not require a follow-up removal. The product was previously marketed in Europe, but Ocular stopped selling it in 2012 to focus their efforts on the clinical development for an FDA approval. Ocular had to withdraw its initial application for ReSure which was submitted with a 510(k) application because the FDA determined the product was not comparable to a predicate device. The Company then filed an IDE application to conduct a pivotal trial and subsequently received premarket approval (PMA) as a class III medical device based on the outcomes of the study.

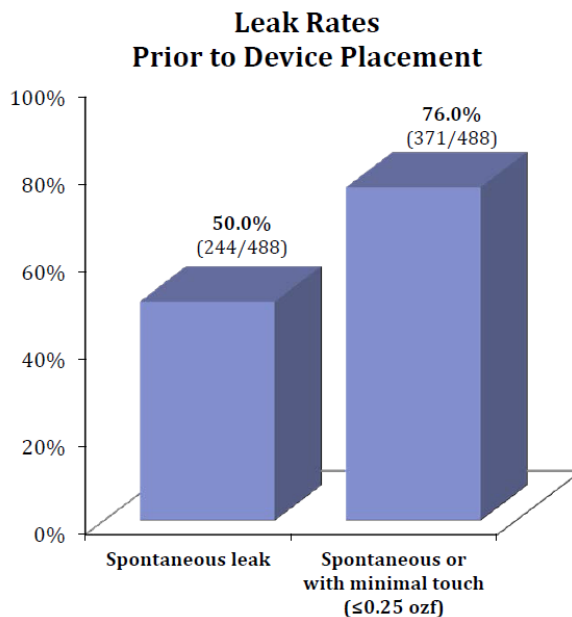
Ocular's pivotal trial for ReSure was a randomized, controlled, parallel arm, single-blind study completed in 2013 across 24 sites in the U.S. 488 patients were enrolled and were randomized 5:3 with 304 patients receiving treatment with ReSure and another 183 treated with sutures. A single patient was excluded because the surgeon was unable to achieve a dry ocular surface to apply the ReSure sealant. 295 patients treated with ReSure and 176 patients receiving suture closure completed study follow-up. The primary endpoint for the study was non-inferiority of ReSure compared to

During the study, 50% of total patients had a spontaneous leak and that percentage was increased to 76% with minimal pressure applied (≤ 0.25 ounces of force). These values are notable because currently the most common method of closure used after clear corneal incision cataract surgery is to simply leave the incision open and allow it to close on its own.

sutures in leakage rates within the first 7 days following cataract surgery with clear corneal incisions. The non-inferiority margin for the study was a difference in leakage rates of 5% or less.

During the intraoperative evaluation prior to incision closure with ReSure Sealant or suture, patients were evaluated for leak using a Seidel test. The Seidel Test is a common test used to evaluate presence of anterior chamber leakage in the cornea. During the test, a 10% fluorescein strip is applied topically near the incision and is examined with a cobalt blue filter. Using the filter, the fluorescein appears green in color and any changes to the color indicates the presence of a leak. During the study, 50% of total patients had a spontaneous leak and that percentage was increased to 76% with minimal pressure applied (≤ 0.25 ounces of force). These values are notable because currently the most common method of closure used after clear corneal incision cataract surgery is to simply leave the incision open and allow it to close on its own. Incision leaks are associated with complications, some of which may significantly compromise a patient's eyesight. Such high leakage rates suggest that patients may benefit from incision closure.

Figure 25 Rate Of Leakage Prior To Incision Closure



Source: Company Reports; Cowen and Company

The same technique used to evaluate leakage prior to incision closure was also used after the incision was sealed with either ReSure Sealant or suture. The roughly 8 to 1 difference in leakage rates was statistically significant with 34.1% of suture patients demonstrating a leak and only 4.1% of ReSure patients doing the same ($p < 0.0001$). Hence, ReSure demonstrated non-inferiority and even superiority relative to suture closure within the first seven days after surgery. Furthermore, ReSure had statistically significant lower adverse events with a rate of 1.6% versus 30.6% for suture closure ($p < 0.0001$). ReSure was well-tolerated among patients with only a single patient out of 299 (0.3%) assessed as having wound healing outside of normal limits at Day 7. No patients were assessed as being outside normal limits at Day 28. Finally, 94.1% of ophthalmologists in the trial evaluated ReSure as being "very easy" or "easy" to use.

Data from patients in this study will be linked to a Medicare database to determine if any patients treated with ReSure sealant develop endophthalmitis within 30 days after the procedure. Ocular is currently working to obtain a Medicare tracking code for ReSure Sealant.

As part of the FDA approval for ReSure Sealant, Ocular has also agreed to two additional post-approval studies. The first study is a multicenter observational registry that will evaluate if ReSure can be safely and effectively used by ophthalmologists in a standard cataract surgery practice including evaluating the incidence of the most common adverse events reported during the pivotal trial. The study will be conducted at up to 40 U.S. sites a total enrollment of at least 598 patients and maximum enrollment of 120 patients at any single site. In a second multicenter observational study, Ocular will collect data on the incidence of endophthalmitis when ReSure is used. Endophthalmitis is inflammation of the internal coats of the eye and can be a complication of all intraocular surgeries including cataract surgery. The study will be conducted at up to 100 U.S. sites a total enrollment of at least 4,857 patients. Data from patients in this study will be linked to a Medicare database to determine if any patients treated with ReSure sealant develop endophthalmitis within 30 days after the procedure. Ocular is currently working to obtain a Medicare tracking code for ReSure Sealant.

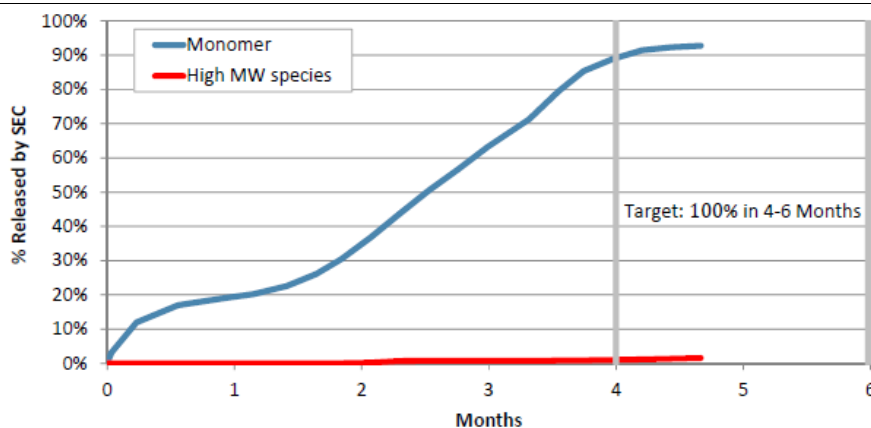
In addition to its FDA approval, Ocular will also seek CE Mark approval for ReSure Sealant to commercialize in the EU. An application submission is expected in H2:14 and if successful, may be used to support product registrations in Australia, Japan, and other ex-U.S. markets. While competition in the U.S. is expected to stay limited for ReSure, Beaver Visitec is commercializing a competitor product, OcuSeal, outside of the U.S. The product is designed to create a protective hydrogel barrier to help stabilize ocular wounds.

While Still Early-Stage, Ocular's Anti-VEGF Hydrogel Depot Is Interesting And Has Blockbuster Potential

Ocular has been able to successfully incorporate anti-VEGF compounds into the hydrogel depot and demonstrate an in-vitro duration of 4-6 months. The released anti-VEGF proteins have been stable and have not demonstrated any chemical or functional changes, hence providing support to proceed into animal models.

The last product currently in Ocular's development portfolio is a long-duration anti-VEGF hydrogel depot for the treatment of wet AMD. The soft PEG-based hydrogel depot contains embedded protein particles of an anti-VEGF compound and can be easily injected into the vitreous chamber of the eye using syringes and needles similar to those used for currently available anti-VEGF treatments (Lucentis and Eylea). Ocular is currently conducting pre-clinical studies in collaboration with several pharmaceutical companies to evaluate the feasibility of integrating their anti-VEGF compound into the intravitreal hydrogel depot. To date, Ocular has been able to successfully incorporate anti-VEGF compounds into the hydrogel depot and demonstrate an in-vitro duration of 4-6 months. The released anti-VEGF proteins have been stable and have not demonstrated any chemical or functional changes, hence providing support to proceed into animal models. To demonstrate feasibility, the product will require an acceptable pharmacokinetic profile and tolerability in animal models.

Figure 26 In Vitro Duration For Anti-VEGF Hydrogel Depot



Source: Cowen and Company, Macular Degeneration Foundation

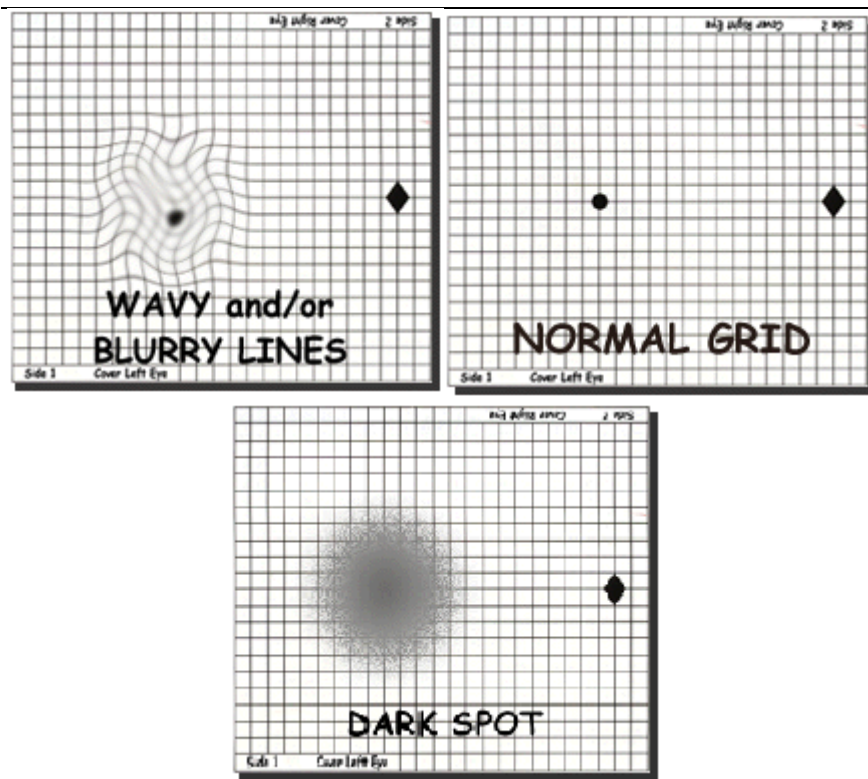
AMD Is A Leading Cause Of Blindness

The disorder is difficult to treat because of the location of the diseased tissue (back of the eye) and limited understanding of the pathogenesis of the condition. Currently, the most common treatment options include intravitreal anti-VEGF therapy, photodynamic therapy (PDT) and laser photocoagulation.

Age-Related Macular Degeneration (AMD) is one of the leading causes of blindness in the developed world. Approximately 15MM people in the U.S. have AMD, of which 10% have the wet subtype. The disorder is difficult to treat because of the location of the diseased tissue (back of the eye) and limited understanding of the pathogenesis of the condition. Currently, the most common treatment options include intravitreal anti-VEGF therapy, photodynamic therapy (PDT) and laser photocoagulation.

AMD gradually destroys a person's central vision function. The early stages of the disease may be barely noticeable to some, but symptoms can vary. Sometimes only one eye loses vision and the other maintains good vision for many years. Some patients have milder symptoms in both eyes that may not impair vision significantly for many years. Other frequent symptoms include distortion, or when straight lines look wavy, such as the lines on an Amsler grid (an ophthalmic diagnostic tool in the picture below) or if a doorframe or blinds look bent. Sometimes colors don't look quite right or there may be a purple or gray spot in the center vision. (See figure below.)

Figure 27 AMD & Amsler Grid Diagnostic Tool



Source: Cowen and Company, Macular Degeneration Foundation

Upon onset of macular degeneration, many people have trouble adjusting quickly between bright sunlight or dim light or shadows. This may be especially dangerous when driving in bright sunlight and then entering the shade or vice versa. Whereas a normal retina takes 3-5 minutes to adjust from bright light to dim (when entering a movie theater, for example), a person with macular degeneration may take 8-12 minutes or longer.

Based on striking results from pan-VEGF inhibition therapy with Roche's Lucentis, it is clear that VEGF is an important driver of new blood vessel formation in the retina and conversion from dry to wet AMD.

Any number of factors, including genetics, age, race, gender, menopause, nutrition, smoking, and exposure to sunlight, may cause AMD. Based on striking results from pan-VEGF inhibition therapy with Roche's Lucentis, it is clear that VEGF is an important driver of new blood vessel formation in the retina and conversion from dry to wet AMD. Research is ongoing to identify additional molecules that drive the wet AMD process and to better understand the pathophysiologic processes that result in VEGF overexpression.

The Anti-VEGF Market Opportunity Will Continue To Expand

Roche's Lucentis/Avastin has been the dominant brand of anti-VEGF therapy several years. However, Regeneron's Eylea (launched in late 2011) is providing stiff competition to Lucentis by virtue of a less frequent injection schedule, and now holds 50% share of the branded anti-VEGF market in wet AMD. Additionally, Allergan's anti-VEGF DARPIn (abicipar pegol) recently demonstrated positive data in its Stage 3, Phase II study. While the study was not powered to evaluate significance with a total enrollment of 64 patients, findings suggest 2mg abicipar pegol is at least as effective as monthly Lucentis, but with a potential duration of 12 weeks. We estimate the U.S.

AMD market opportunity at \$3B+, with a similar opportunity ex-U.S. The market opportunity for wet AMD drugs may be further expanded by penetration into other back-of-the-eye conditions such as diabetic retinopathy or central retinal vein occlusion. As the population ages, the prevalence of vision loss associated with AMD is expected to nearly double by 2020.

Figure 28 U.S. And International Glaucoma Treatment Market Model

ESTIMATED WW GLAUCOMA TREATMENT MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Total U.S. Glaucoma Market Sales (MM)	\$1,787	\$1,821	\$1,825	\$1,715	\$1,835	\$1,575	\$1,535	\$1,510	\$1,485	-2%	Growth expected to slow, clipped by generics
% Growth		+8%	+0%	-11%	-5%	-4%	-3%	-2%	-2%		
Total U.S. Glaucoma Market Annual Prescriptions ('000)	26,087	26,748	26,750	26,100	25,905	25,780	25,610	25,440	25,190	-0%	
Total International Glaucoma Market Sales (MM)	\$1,900	\$1,700	\$1,870	\$1,710	\$1,700	\$1,690	\$1,680	\$1,670	\$1,660	-2%	Similar dynamics to the U.S. market
% Growth		-11%	-2%	+2%	-1%	-1%	-1%	-1%	-1%		
Total International Glaucoma Market Annual Prescriptions ('000)	58,400	57,250	56,240	57,887	57,250	56,913	56,576	56,240	55,903	-1%	
Total Worldwide Glaucoma Market Sales (MM)	\$3,687	\$3,521	\$3,695	\$3,425	\$3,535	\$3,265	\$3,215	\$3,180	\$3,145	-2%	
% Growth		-2%	-1%	-5%	-3%	-2%	-2%	-1%	-1%		
Total Worldwide Glaucoma Market Annual Prescriptions ('000)	84,487	83,998	82,990	83,987	83,155	82,703	82,186	81,680	81,093	-1%	
ESTIMATED U.S. PROSTAGLANDIN MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Lumigan (bimatoprost) U.S. Penetration Of Estimated Glaucoma Market (AGN)	26%	26%	25%	24%	23%	23%	22%	21%	21%		- Superior efficacy to Xalatan; patent protection to 2027
Average Price Per Prescription	\$140	\$153	\$155	\$155	\$160	\$160	\$165	\$165	\$165		- Generic Xalatan reduces growth
Annual Prescriptions ('000)	3,286	3,216	3,065	2,710	2,375	2,219	2,030	1,939	1,848		- High incidence of hyperemia has tempered some growth
Estimated Sales U.S. (\$MM)	\$460	\$492	\$475	\$420	\$380	\$355	\$335	\$320	\$305	-5%	- Once daily dosing
Travatan (travoprost) U.S. Penetration Of Estimated Glaucoma Market (NVS/Aicon)	25%	23%	23%	17%	15%	13%	12%	11%	10%		- Generic Travatan expected as early as 2014
Average Price Per Prescription	\$133	\$146	\$145	\$145	\$145	\$145	\$150	\$150	\$150		- Includes Travatan Z formulation
Annual Prescriptions ('000)	3,381	3,038	3,034	2,069	1,724	1,448	1,233	1,100	1,000		- Similar efficacy to Xalatan
Estimated Sales U.S. (\$MM)	\$448	\$445	\$440	\$300	\$250	\$210	\$185	\$165	\$150	-13%	- Once daily dosing
Xalatan (latanoprost) U.S. Penetration Of Estimated Glaucoma Market (PFE)	2%	1%	1%	1%	1%	1%	1%	1%	1%		- Generic Xalatan available since 2011
Average Price Per Prescription	\$122	\$153	\$155	\$155	\$155	\$155	\$155	\$155	\$155		- Increased competition from branded products
Annual Prescriptions ('000)	282	185	161	65	65	65	65	65	65		- Lower efficacy than Lumigan
Estimated Sales U.S. (\$MM)	\$35	\$28	\$25	\$10	\$10	\$10	\$10	\$10	\$10	-14%	
Zioptan U.S. Penetration Of Estimated Glaucoma Market (MRK/AKRXX)	0%	1%	1%	1%	1%	1%	1%	1%	1%		
Average Price Per Prescription	\$138	\$131	\$135	\$135	\$135	\$135	\$140	\$140	\$140		
Annual Prescriptions ('000)	45	141	148	148	148	148	143	143	143		
Estimated Sales U.S. (\$MM)	\$6	\$19	\$20	\$20	\$20	\$20	\$20	\$20	\$20	+16%	
Generic/Others U.S. Estimated Penetration Of Glaucoma Market	5%	6%	6%	9%	10%	10%	12%	12%	13%		- Generic Xalatan reduces growth
Average Price Per Prescription	\$10	\$12	\$13	\$14	\$14	\$14	\$15	\$15	\$16		- Generic Pricing
Annual Prescriptions ('000)	8,488	9,482	9,500	10,500	11,200	11,700	12,100	12,300	12,400		
Estimated Sales U.S. (\$MM)	\$87	\$115	\$124	\$147	\$157	\$164	\$182	\$185	\$198	+11%	- Use remains steady
Total U.S. Prostaglandin Market Sales (MM)	\$1,038	\$1,099	\$1,085	\$895	\$815	\$760	\$730	\$700	\$685	-5%	- Steady decline due to generics, combinations, and improved therapies
% Growth		+8%	-1%	-18%	-9%	-7%	-4%	-4%	-2%		
Total U.S. Prostaglandin Annual Prescriptions ('000)	15,402	16,062	15,910	15,490	15,510	15,580	15,670	15,545	15,455	-0%	
ESTIMATED U.S. COMBINATION MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Combigan U.S. Penetration Of Estimated Glaucoma Market (AGN)	11%	12%	12%	14%	16%	17%	18%	19%	20%		- Combination of Alphagan (brimonidine) and timolol
Average Price Per Prescription	\$110	\$125	\$130	\$130	\$135	\$135	\$140	\$140	\$145		- Patent coverage until 2022
Annual Prescriptions ('000)	1,724	1,782	1,810	1,845	1,890	1,925	1,961	2,000	2,000		- Growth impacted by generic Alphagan
Estimated Sales U.S. (\$MM)	\$189	\$223	\$235	\$240	\$255	\$260	\$275	\$280	\$290	+5%	
Cocept U.S. Penetration Of Estimated Glaucoma Market (AKRXX)	1%	1%	1%	2%	2%	2%	2%	2%	2%		
Average Price Per Prescription	\$154	\$165	\$165	\$165	\$170	\$170	\$175	\$175	\$175		
Annual Prescriptions ('000)	91	133	150	165	175	185	190	195	200		
Estimated Sales U.S. (\$MM)	\$14	\$22	\$25	\$27	\$30	\$31	\$33	\$34	\$35	+12%	
Simbrinza U.S. Penetration Of Estimated Glaucoma Market (NVS/Aicon)	0%	0%	0%	1%	1%	1%	1%	1%	1%		
Average Price Per Prescription	\$110	\$110	\$110	\$110	\$110	\$115	\$115	\$115	\$115		
Annual Prescriptions ('000)	59	75	90	102	108	116	122	127	127		
Estimated Sales U.S. (\$MM)	\$7	\$8	\$10	\$11	\$12	\$13	\$14	\$15	\$15	+11%	
Total U.S. Combination Market Sales (MM)	\$208	\$252	\$270	\$275	\$295	\$305	\$320	\$330	\$340	+7%	- Steady growth due to favored use of combination therapy
% Growth		+24%	+7%	+2%	+7%	+3%	+5%	+3%	+3%		
Total U.S. Combination Annual Prescriptions ('000)	1,815	1,974	2,035	2,100	2,165	2,220	2,265	2,315	2,325	+8%	
ESTIMATED U.S. CARBONIC ANHYDRASE MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Carbonic Anhydrase Inhibitors (Branded) U.S. Penetration Of Estimated Glaucoma Market	7%	7%	7%	7%	7%	7%	7%	7%	7%		- Includes Diamox (acetazolamide), Neptazane (methazolamide), Trusopt (dorzolamide), Azopt (brinzolamide)
Average Price Per Prescription	\$130	\$149	\$150	\$150	\$155	\$155	\$160	\$160	\$160		
Annual Prescriptions ('000)	936	911	933	840	790	750	710	680	650		
Estimated Sales U.S. (\$MM)	\$122	\$136	\$140	\$126	\$122	\$116	\$110	\$109	\$104	-3%	
Carbonic Anhydrase Inhibitors (Generic) U.S. Penetration Of Estimated Glaucoma Market	5%	5%	5%	5%	5%	5%	6%	6%	6%		
Average Price Per Prescription	\$53	\$53	\$50	\$50	\$50	\$50	\$50	\$50	\$50		
Annual Prescriptions ('000)	1,620	1,715	1,800	1,800	1,760	1,730	1,720	1,700	1,680		
Estimated Sales U.S. (\$MM)	\$85	\$91	\$90	\$90	\$88	\$87	\$86	\$85	\$84	-0%	
Total U.S. Carbonic Anhydrase Market Sales (MM)	\$207	\$227	\$230	\$216	\$210	\$205	\$196	\$195	\$190	-1%	- Steady decline due to generics, combinations, and improved therapies
% Growth		+9%	+1%	-7%	-2%	-2%	-5%	+0%	-3%		
Total U.S. Carbonic Anhydrase Inhibitor Annual Prescriptions ('000)	2,556	2,628	2,735	2,640	2,550	2,480	2,430	2,380	2,330	-1%	

Source: Cowen and Company; Company Reports

Figure 29 U.S. And International Glaucoma Treatment Market Model (Continued)

ESTIMATED U.S. BETA BLOCKER MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Beta Blocker (Branded) U.S. Penetration Of Estimated Glaucoma Market	4%	4%	4%	4%	4%	4%	3%	3%	3%		- Includes Betagan (levobunolol), Betoptic (betaxolol),
Average Price Per Prescription	\$149	\$180	\$180	\$180	\$180	\$185	\$185	\$185	\$185		- Betimol (timolol hemihydrate), Istalol (timolol maleate),
Annual Prescriptions ('000)	497	378	390	360	330	300	270	240	220		- OptiPranolol (metipranolol), Ocupress (carteolol)
Estimated Sales U.S. (\$MM)	\$74	\$68	\$70	\$65	\$59	\$56	\$50	\$44	\$41	-7%	- Timoptic (timolol maleate gel)
Beta Blocker (Generic) U.S. Penetration Of Estimated Glaucoma Market	4%	3%	3%	3%	3%	3%	3%	3%	3%		
Average Price Per Prescription	\$15	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13		
Annual Prescriptions ('000)	4,158	4,180	4,200	4,100	4,000	3,920	3,840	3,780	3,730		
Estimated Sales U.S. (\$MM)	\$63	\$54	\$55	\$53	\$52	\$51	\$50	\$49	\$48	-3%	
Total U.S. Beta Blocker Market Sales (MM)	\$137	\$122	\$125	\$120	\$110	\$105	\$100	\$95	\$90	-5%	- Steady decline due to generics, combinations, and improved therapies
% Growth		-11%	+2%	-4%	-8%	-5%	-5%	-5%	-5%		
Total U.S. Beta Blocker Annual Prescriptions ('000)	4,655	4,558	4,590	4,460	4,330	4,220	4,110	4,020	3,950	-2%	
ESTIMATED U.S. ALPHA AGONIST AND CHOLINERGIC MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Alphagan U.S. Penetration Of Estimated Glaucoma Market (AGN)	11%	11%	11%	12%	12%	13%	12%	12%	12%		- Includes Alphagan P
Average Price Per Prescription	\$128	\$145	\$145	\$150	\$150	\$155	\$155	\$160	\$160		- Majority of franchise converted to Alphagan P
Annual Prescriptions ('000)	1,558	1,518	1,470	1,400	1,340	1,280	1,225	1,170	1,120		- Patent coverage until 2022
Estimated Sales U.S. (\$MM)	\$200	\$220	\$213	\$210	\$201	\$198	\$190	\$187	\$179	-1%	
Cholinergic U.S. Penetration Of Estimated Glaucoma Market	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Average Price Per Prescription	\$190	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200		
Annual Prescriptions ('000)	21	10	10	10	10	10	10	10	10		
Estimated Sales U.S. (\$MM)	\$4	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	-8%	
Total U.S. Alpha Adrenergic Agonist and Cholinergic Market Sales (MM)	\$204	\$222	\$215	\$210	\$205	\$200	\$190	\$190	\$180	-2%	- Steady decline due to generics, combinations, and improved therapies
% Growth		+9%	-3%	-2%	-2%	-2%	-5%	+0%	-5%		
Total U.S. Alpha Adrenergic Agonist Annual Prescriptions ('000)	1,579	1,528	1,480	1,410	1,350	1,280	1,235	1,180	1,130	-4%	
Total U.S. Glaucoma Market Sales (MM)	\$1,787	\$1,921	\$1,925	\$1,715	\$1,635	\$1,575	\$1,535	\$1,510	\$1,485	-2%	
% Growth		+8%	+0%	-11%	-5%	-4%	-3%	-2%	-2%		
Total U.S. Glaucoma Market Annual Prescriptions ('000)	26,087	26,748	26,750	26,100	25,905	25,790	25,610	25,440	25,190	-0%	
ESTIMATED U.S. GLAUCOMA TREATMENT MARKET / OT-TXP ESTIMATED SALES											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
OTX-TP U.S. Sales											- In-line pricing to branded prostaglandins annual cost (\$1500)
Average Cost							\$250	\$250	\$250		- Assuming a duration of 2 months (1/6*1500 = \$250); ASP price
Sales (\$MM)							\$95.0	\$100.0	\$260.0		
% of Estimated U.S. Glaucoma Market Prescriptions							1.5%	3.0%	4.4%		
OTX-TP International Sales											
Average Cost							\$170.0	\$170.0	\$170.0		- Weighted ASP price estimate (EU: \$120, JP: \$270)
Sales (\$MM)							\$15.0	\$50.0	\$95.0		
% of Estimated International Glaucoma Market Prescriptions							0.2%	0.5%	1.0%		
Total WW OTX-TP Sales (MM)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$110.0	\$240.0	\$375.0	+17%	- Stable growth should continue
% Growth								+118%	+86%		
ESTIMATED WW GLAUCOMA TREATMENT MARKET											
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR	Comments
Total U.S. Glaucoma Market Sales (MM)	\$1,787	\$1,921	\$1,925	\$1,715	\$1,635	\$1,575	\$1,535	\$1,510	\$1,485	-2%	
% Growth		+8%	+0%	-11%	-5%	-4%	-3%	-2%	-2%	+0%	
Total U.S. Glaucoma Market Annual Prescriptions ('000)	26,087	26,748	26,750	26,100	25,905	25,790	25,610	25,440	25,190	-0%	
Total International Glaucoma Market Sales (MM)	\$1,900	\$1,700	\$1,670	\$1,710	\$1,700	\$1,690	\$1,680	\$1,670	\$1,660	-2%	- Similar dynamics to the U.S. market
% Growth		-11%	-2%	+2%	-1%	-1%	-1%	-1%	-1%	+0%	
Total International Glaucoma Market Annual Prescriptions ('000)	58,400	57,250	58,240	57,587	57,250	56,813	56,578	56,240	55,893	-1%	
Total Worldwide Glaucoma Market Sales (MM)	\$3,687	\$3,621	\$3,595	\$3,425	\$3,335	\$3,265	\$3,215	\$3,180	\$3,145	-2%	- Growth expected to slow, clipped by generics
% Growth		-2%	-1%	-5%	-3%	-2%	-2%	-1%	-1%	+0%	
Total Worldwide Glaucoma Market Annual Prescriptions ('000)	84,487	83,998	82,990	83,687	83,155	82,703	82,188	81,680	81,093	-1%	

Source: Cowen and Company; Company Reports

Figure 30 U.S. Ophthalmic Steroid Market Model

ESTIMATED U.S. OPHTHALMIC STEROID TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Total U.S. Ophthalmic Steroid Market Sales (MM)	\$461	\$501	\$615	\$640	\$680	\$625	\$625	\$625	\$620	+2%
% Growth		+29%	+4%	-12%	-2%	-1%	+0%	+0%	-1%	
Total U.S. Glaucoma Market Annual Prescriptions ('000)	14,828	14,799	14,875	14,820	14,850	14,855	14,880	14,885	14,920	
ESTIMATED U.S. OPHTHALMIC STEROID TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Lotemax U.S. Penetration Of Ophthalmic Steroid Market (VRXB-IL)	33%	30%	31%	22%	20%	19%	17%	16%	15%	- Generic expected in 2014/2015
Average Price Per Prescription	\$136	\$143	\$150	\$150	\$155	\$155	\$155	\$160	\$160	
Annual Prescriptions ('000)	1,102	1,231	1,265	800	700	630	580	540	500	
Estimated Sales U.S. (\$MM)	\$150	\$176	\$190	\$120	\$109	\$98	\$90	\$86	\$80	-8%
Durezol U.S. Penetration Of Ophthalmic Steroid Market (NWS/Acon)	19%	16%	16%	16%	15%	15%	15%	15%	14%	- Generic expected in 2019
Average Price Per Prescription	\$97	\$102	\$105	\$105	\$110	\$115	\$125	\$125	\$125	- Generic Lotemax impacts growth
Annual Prescriptions ('000)	897	920	930	800	740	690	650	615	590	
Estimated Sales U.S. (\$MM)	\$87	\$94	\$98	\$84	\$81	\$79	\$81	\$77	\$74	-2%
Alexx U.S. Penetration Of Ophthalmic Steroid Market (VRXB-IL)	10%	8%	7%	7%	6%	5%	5%	5%	4%	
Average Price Per Prescription	\$134	\$157	\$160	\$165	\$165	\$170	\$170	\$175	\$175	
Annual Prescriptions ('000)	335	287	280	220	190	165	150	140	130	
Estimated Sales U.S. (\$MM)	\$45	\$45	\$45	\$36	\$31	\$28	\$26	\$25	\$23	-8%
Ozurdex U.S. Penetration Of Ophthalmic Steroid Market (AGN)	5%	5%	6%	8%	9%	10%	11%	12%	13%	- Recently expanded label for DME
Average Price Per Prescription	\$164,179	\$193,750	\$195,000	\$195,000	\$195,000	\$200,000	\$200,000	\$200,000	\$200,000	
Annual Prescriptions ('000)	0.13	0.16	0.18	0.21	0.24	0.27	0.30	0.33	0.35	
Estimated Sales U.S. (\$MM)	\$22	\$31	\$35	\$41	\$47	\$54	\$60	\$65	\$70	+16%
Generic/Other U.S. Estimated Penetration Of Ophthalmic Steroid Market	34%	41%	41%	48%	50%	51%	51%	52%	53%	
Average Price Per Prescription	\$13	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	
Annual Prescriptions ('000)	12,194	12,361	12,500	13,000	13,200	13,350	13,500	13,600	13,700	
Estimated Sales U.S. (\$MM)	\$157	\$245	\$250	\$260	\$264	\$267	\$270	\$272	\$274	+7%
Total U.S. Ophthalmic Steroid Market Sales (MM)	\$461	\$501	\$615	\$640	\$680	\$625	\$625	\$625	\$620	+2% - Slight decline due to generic competition
% Growth		+29%	+4%	-12%	-2%	-1%	+0%	+0%	-1%	
Total U.S. Glaucoma Market Annual Prescriptions ('000)	14,828	14,799	14,875	14,820	14,850	14,855	14,880	14,885	14,920	
ESTIMATED U.S. OPHTHALMIC STEROID TREATMENT MARKET / OTX-OP ESTIMATED SALES										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
OTX-OP U.S. Sales										
Average Cost					\$110	\$110	\$110	\$110	\$110	- ASP price
Sales (\$MM)					\$3.6	\$96.0	\$90.0	\$155.0	\$195.0	- Post-operative indication expected in mid-2016;
% of Estimated U.S. Ophthalmic Steroid Market					0.2%	2.3%	5.0%	8.5%	12.0%	- Allergic conjunctivitis indication to follow in 2017

Source: Cowen and Company; Company Reports

Figure 31 U.S. Ophthalmic Antibiotic Market Model

ESTIMATED U.S. OPHTHALMIC ANTIBIOTIC TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Total U.S. Ophthalmic Antibiotic Market Sales (MM)	\$650	\$641	\$645	\$605	\$605	\$720	\$745	\$770	\$780	+2%
% Growth		-1%	+1%	-6%	-6%	+4%	+3%	+3%	+1%	
ESTIMATED U.S. OPHTHALMIC ANTIBIOTIC TREATMENT MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
Vigamox U.S. Penetration Of Ophthalmic Antibiotic Market (NWS/Acon)	43%	43%	44%	43%	44%	43%	43%	44%	44%	- Generic not expected until 2019
Average Price Per Prescription	\$99	\$115	\$115	\$115	\$120	\$120	\$120	\$125	\$125	
Annual Prescriptions ('000)	2,826	2,400	2,450	2,500	2,550	2,600	2,650	2,700	2,750	
Estimated Sales U.S. (\$MM)	\$281	\$275	\$282	\$288	\$306	\$312	\$318	\$338	\$344	+3%
Besivance U.S. Penetration Of Ophthalmic Antibiotic Market (VRXB-IL)	6%	9%	10%	10%	11%	11%	11%	12%	12%	- Long duration of patent protection
Average Price Per Prescription	\$78	\$90	\$95	\$100	\$105	\$110	\$115	\$120	\$120	
Annual Prescriptions ('000)	514	653	650	675	695	715	730	740	750	
Estimated Sales U.S. (\$MM)	\$40	\$59	\$62	\$68	\$73	\$79	\$84	\$89	\$90	+11%
Zymar U.S. Penetration Of Ophthalmic Antibiotic Market (AGN)	11%	8%	6%	5%	4%	3%	3%	2%	2%	- Generic launched in 2013 by Lupin
Average Price Per Prescription	\$108	\$122	\$125	\$125	\$130	\$130	\$130	\$135	\$135	
Annual Prescriptions ('000)	666	410	300	250	210	185	160	140	127	
Estimated Sales U.S. (\$MM)	\$72	\$50	\$38	\$31	\$27	\$24	\$21	\$19	\$17	-16%
Moxeza U.S. Penetration Of Ophthalmic Antibiotic Market (NWS/Acon)	5%	5%	6%	6%	6%	6%	6%	6%	6%	- Earliest generic is 2019
Average Price Per Prescription	\$90	\$94	\$95	\$95	\$100	\$100	\$100	\$105	\$105	
Annual Prescriptions ('000)	346	372	380	400	415	430	440	450	460	
Estimated Sales U.S. (\$MM)	\$31	\$35	\$36	\$38	\$42	\$43	\$44	\$47	\$48	+6%
Generic/Other U.S. Estimated Penetration Of Ophthalmic Antibiotic Market	35%	35%	35%	37%	35%	36%	37%	36%	36%	
Average Price Per Prescription	\$18	\$17	\$17	\$18	\$18	\$19	\$20	\$20	\$20	
Annual Prescriptions ('000)	12,861	13,055	13,300	13,500	13,650	13,800	13,900	14,000	14,080	
Estimated Sales U.S. (\$MM)	\$226	\$222	\$226	\$243	\$246	\$262	\$278	\$280	\$282	+3%
Total U.S. Ophthalmic Antibiotic Market Sales (MM)	\$650	\$641	\$645	\$605	\$605	\$720	\$745	\$770	\$780	+2% - Steady growth despite generics due to patent protection
% Growth		-1%	+1%	-6%	-6%	+4%	+3%	+3%	+1%	
Total U.S. Ophthalmic Antibiotic Market Annual Prescriptions ('000)	17,213	16,890	17,080	17,325	17,520	17,730	17,880	18,030	18,185	
ESTIMATED U.S. OPHTHALMIC ANTIBIOTIC TREATMENT MARKET / OTX-MP ESTIMATED SALES										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
OTX-MP U.S. Sales										
Average Cost							\$90	\$90	\$90	- In-line or discount pricing to other branded ophthalmic antibiotics; ASP price
Sales (\$MM)							\$18.0	\$40.0	\$76.0	
% of Estimated U.S. Ophthalmic Antibiotic Market							0.8%	2.5%	4.6%	

Source: Cowen and Company; Company Reports

Figure 32 ReSure Sealant U.S. And International Market Model

ESTIMATED WW CATARACT PROCEDURES MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
ReSure U.S. Penetration Of Cataract Procedures Market	\$0.0	\$0.0	\$1.5	\$8.5	\$18.0	\$30.0	\$40.0	\$50.0	\$60.0	+69%
% Growth			+467%	+88%	+88%	+83%	+25%	+20%		
ReSure International Penetration Of Cataract Procedures Market	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0	\$18.0	\$35.0	\$45.0	\$60.0	+45% Similar dynamics to the U.S. market
% Growth					+500%	+84%	+28%	+23%		
Total Worldwide ReSure Market Sales (MM)	\$0.0	\$0.0	\$1.5	\$8.5	\$19.0	\$48.0	\$75.0	\$95.0	\$120.0	+69%
% Growth			+467%	+124%	+153%	+60%	+27%	+26%		

ESTIMATED WW CATARACT PROCEDURES MARKET										
	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	CGR Comments
ReSure U.S. Sales										
Average Cost			\$75	\$75	\$75	\$75	\$75	\$75	\$75	- ASP Price
Cataract Procedures ('000)	3500	3500	3661	3771	3884	4001	4121	4244	4372	- Steady increase in cataract procedures
% of Estimated U.S. Cataract Procedures Market	0%	0%	0.6%	3.0%	5.5%	10.0%	13.0%	15.7%	18.3%	- Approved and launched in 2014; sales ramp up in 2015
% Growth			+445%	+43%	+62%	+30%	+21%	+17%		
Sales (\$MM)	\$0.0	\$0.0	\$1.5	\$8.5	\$18.0	\$30.0	\$40.0	\$50.0	\$60.0	+69%
ReSure International Sales										
Average Cost			\$70	\$70	\$70	\$70	\$70	\$70	\$70	- ASP Weighted Price Average (EU and Japan)
Cataract Procedures ('000)	4800	4800	4985	5071	5172	5272.0	5375	5472	5572	- Steady increase in cataract procedures
% of Estimated International Cataract Procedures Market	0%	0%	0.0%	0.0%	0.8%	4.9%	9.3%	11.8%	15.4%	- Approved and launched in 2016; sales ramp up in 2017
% Growth					+495%	+91%	+27%	+21%		
Sales (\$MM)	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0	\$18.0	\$35.0	\$45.0	\$60.0	+45%
Total Worldwide ReSure Sales	\$0.0	\$0.0	\$1.5	\$8.5	\$19.0	\$48.0	\$75.0	\$95.0	\$120.0	+39% - Stable revenue growth
% Growth			+467%	+124%	+153%	+60%	+27%	+26%		

Source: Cowen and Company; Company Reports

Figure 33 Ocular Therapeutix Base Case DCF Indicates \$40 Per Share

Assumptions:		Output:	
Increase in WC	5.0%	Equity Value	\$790.0
Discount Rate	14.5%	Estimated Share Price	\$40.00
Shares Outstanding	21.0	Net Cash	\$15.0
		Enterprise Value	\$805.0

OCULAR THERAPEUTIX DCF																					
	2011P	2012P	2013P	2014P	2015P	2016P	2017P	2018P	2019P	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	
Total Revenues			\$0.0	\$1.5	\$8.5	\$22.5	\$83.0	\$280.0	\$530.0	\$765.0	\$875.0	\$955.0	\$1,025.0	\$1,090.0	\$1,075.0	\$1,075.0	\$1,080.0	\$1,095.0	\$1,090.0	\$345.0	
% Change					+467%	+165%	+269%	+237%	+89%	+44%	+14%	+9%	+7%	+6%	-1%	+0%	+0%	+1%	-0%	-68%	
Cost of Goods			\$0.0	\$0.5	\$3.5	\$2.5	\$18.0	\$55.0	\$105.0	\$115.0	\$130.0	\$145.0	\$155.0	\$160.0	\$160.0	\$160.0	\$165.0	\$165.0	\$165.0	\$50.0	
Gross Profit			\$0.0	\$1.0	\$5.0	\$20.0	\$65.0	\$225.0	\$425.0	\$650.0	\$745.0	\$810.0	\$870.0	\$925.0	\$915.0	\$915.0	\$920.0	\$930.0	\$925.0	\$295.0	
Gross Margin - Total			NM	65.0%	80.0%	80.0%	80.0%	80.0%	80.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	
SG&A			\$2.4	\$7.0	\$10.0	\$15.0	\$60.0	\$90.0	\$120.0	\$150.0	\$175.0	\$190.0	\$175.0	\$190.0	\$200.0	\$205.0	\$210.0	\$215.0	\$210.0	\$150.0	
% of Revs			NM	466.7%	117.6%	66.7%	72.3%	32.1%	22.6%	19.6%	20.0%	19.9%	17.1%	17.4%	18.6%	19.1%	19.4%	19.6%	19.3%	43.5%	
R&D			\$10.5	\$20.0	\$20.0	\$20.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$20.0	\$20.0	\$20.0	\$15.0	\$15.0	\$15.0	
% of Revs			NM	1333.3%	235.3%	88.9%	30.1%	8.9%	4.7%	3.3%	2.9%	2.6%	2.4%	2.3%	1.9%	1.9%	1.9%	1.4%	1.4%	4.3%	
Operating Expenses			\$12.9	\$27.0	\$30.0	\$35.0	\$85.0	\$115.0	\$145.0	\$175.0	\$200.0	\$215.0	\$200.0	\$215.0	\$220.0	\$225.0	\$230.0	\$230.0	\$225.0	\$165.0	
% of Revenues			NM	1800.0%	352.9%	155.6%	102.4%	41.1%	27.4%	22.9%	22.9%	22.5%	19.5%	19.7%	20.5%	20.9%	21.3%	21.0%	20.6%	47.8%	
Operating Income			(\$12.9)	(\$26.0)	(\$25.0)	(\$15.0)	(\$20.0)	\$110.0	\$280.0	\$475.0	\$545.0	\$595.0	\$670.0	\$710.0	\$695.0	\$690.0	\$690.0	\$700.0	\$700.0	\$130.0	
% Operating Margin			NM	NM	NM	NM	NM	39.3%	52.8%	62.1%	62.3%	62.3%	65.4%	65.1%	64.7%	64.2%	63.9%	63.9%	64.2%	37.7%	
Other Income			0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Adjusted EBIT			(\$12.9)	(\$26.0)	(\$25.0)	(\$15.0)	(\$20.0)	\$110.0	\$280.0	\$475.0	\$545.0	\$595.0	\$670.0	\$710.0	\$695.0	\$690.0	\$690.0	\$700.0	\$700.0	\$130.0	
% of Revs			NM	NM	NM	NM	NM	39.3%	52.8%	62.1%	62.3%	62.3%	65.4%	65.1%	64.7%	64.2%	63.9%	63.9%	64.2%	37.7%	
Taxes								\$38.5	\$98.0	\$166.3	\$190.8	\$208.3	\$234.5	\$248.5	\$243.3	\$241.5	\$241.5	\$245.0	\$245.0	\$45.5	
Income 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%	35.0%	
NOPAT			(\$12.9)	(\$26.0)	(\$25.0)	(\$15.0)	(\$20.0)	\$71.5	\$182.0	\$308.8	\$354.3	\$386.8	\$435.5	\$461.5	\$451.8	\$448.5	\$448.5	\$455.0	\$455.0	\$84.5	
Adjustments:																				Terminal	
Capex			(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$10.0)	
Depreciation & Amortization			\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	
Change In Working Capital			(\$5.0)	(\$5.3)	(\$5.5)	(\$5.8)	(\$6.1)	(\$6.4)	(\$6.7)	(\$7.0)	(\$7.4)	(\$7.8)	(\$8.1)	(\$8.6)	(\$9.0)	(\$9.4)	(\$9.9)	(\$10.4)	(\$10.9)	(\$11.5)	
Free Cash Flow			(\$22.9)	(\$36.3)	(\$35.5)	(\$25.8)	(\$31.1)	\$60.1	\$170.3	\$296.7	\$341.9	\$374.0	\$422.4	\$447.9	\$437.8	\$434.1	\$433.6	\$439.6	\$439.1	\$68.0	\$469.2

Source: Company Reports; Cowen and Company

Valuation Methodology And Risks

Valuation Methodology

Pharmaceuticals/Specialty

For our valuation methodology, we arrive at fair value utilizing a discounted cash flow (DCF) approach to derive our 12-month price target.

Investment Risks

Pharmaceuticals/Specialty

Risks include: (1) growing competitive dynamics in the specialty pharmaceuticals space; (2) the ability of management to execute on external growth by successfully acquiring new strategic, accretive products; (3) the ability to grow organically and keep the product pipeline robust; (4) potential regulatory delays, rejections, or failures of pipeline products; (5) economic sensitivity of any self-pay products or weakening consumer demand; (6) domestic or international pricing pressures for marketed products; and (7) failure to execute on new product launches.

Risks To The Price Target

Ocular Therapeutix' valuation is primarily based upon its clinical development programs and failure of its late-stage development programs could have a significant negative impact on its valuation.

Addendum

Stocks Mentioned In Important Disclosures

Ticker	Company Name
ACT	Actavis
AGN	Allergan
OCUL	Ocular Therapeutix
TEVA	Teva Pharmaceutical

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Outperform (1): The stock is expected to achieve a total positive return of at least 15% over the next 12 months

Market Perform (2): The stock is expected to have a total return that falls between the parameters of an Outperform and Underperform over the next 12 months

Underperform (3): Stock is expected to achieve a total negative return of at least 10% over the next 12 months

Assumption: The expected total return calculation includes anticipated dividend yield

Cowen and Company Rating System until May 25, 2013

Outperform (1): Stock expected to outperform the S&P 500

Neutral (2): Stock expected to perform in line with the S&P 500

Underperform (3): Stock expected to underperform the S&P 500

Assumptions: Time horizon is 12 months; S&P 500 is flat over forecast period

Cowen Securities, formerly known as Dahlman Rose & Company, Rating System until May 25, 2013

Buy – The fundamentals/valuations of the subject company are improving and the investment return is expected to be 5 to 15 percentage points higher than the general market return

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Rating	Count	Ratings Distribution	Count	IB Services/Past 12 Months
Buy (a)	417	58.57%	94	22.54%
Hold (b)	279	39.19%	7	2.51%
Sell (c)	16	2.25%	0	0.00%

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Actavis Rating History as of 08/18/2014

powered by: BlueMatrix



Allergan Rating History as of 08/18/2014

powered by: BlueMatrix



Rating Change - 2/4/2010 - Rating Outperform

Ocular Therapeutix Rating History as of 08/18/2014

powered by: BlueMatrix



— Closing Price — Target Price

Teva Pharmaceutical Rating History as of 08/18/2014

powered by: BlueMatrix



— Closing Price — Target Price

Rating Change - 2/15/2007 - Outperform Rating

Legend for Price Chart:

I = Initiation | 1 = Outperform | 2 = Market Perform | 3 = Underperform | UR = Price Target Under Review | T = Terminated Coverage | \$xx = Price Target | NA = Not Available | S=Suspended

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