

NASDAQ: OTLK outlooktherapeutics.com



Enhancing the standard of care for retinal disorders by working to achieve the first FDA approval for bevacizumab in ophthalmology



Disclaimer

This presentation contains forward-looking statements about Outlook Therapeutics, Inc. ("Outlook Therapeutics" or the "Company") based on management's current expectations, which are subject to known and unknown uncertainties and risks. Words such as "anticipated," "initiate," "expect," "intend," "plan," "believe," "seek," "estimate," "may," "will," and variations of these words or similar expressions are intended to identify forward-looking statements. These forward-looking statements include, among others, statements about ONS-5010's potential as the first FDA-approved ophthalmic formulation of bevacizumab-vikg, our expectations for ONS-5010 market exclusivity, the timing of BLA submission and commercial launch of ONS-5010, ONS-5010's ability to replace and address issues with off-label use of Avastin, other drug candidates in development, commercial drivers for ONS-5010 and its potential, the success of ongoing ONS-5010 trials for wet AMD and planned trials for ONS-5010 for DME and BRVO. Our actual results could differ materially from those discussed due to a number of factors, including, but not limited to, the risks inherent in developing pharmaceutical product candidates, conducting successful clinical trials, and obtaining regulatory approvals, as well as our ability to raise additional equity and debt financing on favorable terms, among other risk factors. These risks are described in more detail under the caption "Risk Factors" in our Annual Report on Form 10-K and other filings with the Securities and Exchange Commission ("SEC"). Moreover, Outlook Therapeutics operates in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. Moreover, any such risks may be heightened as a result of the ongoing COVID-19 pandemic. In light of these risks, uncertainties and assumptions, the forward-looking statements discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied.

Except as required by law, neither Outlook Therapeutics nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We are providing this information as of the date of this presentation and do not undertake any obligation to update any forward-looking statements contained in this presentation as a result of new information, future events or otherwise. This presentation contains trademarks, registered marks and trade names of Outlook Therapeutics and of other companies. All such trademarks, registered marks and trade names are the property of their respective holders.



Investment Highlights

ONS-5010 (bevacizumab-vikg)¹ Targeting \$13.1 Billion Global Ophthalmic Anti-VEGF Market²

Differentiated Drug Product

- Designed to meet stringent standards required for FDA ophthalmic approval
- Eliminates risks associated with off-label repackaged bevacizumab, including potential impurities and particulates from legacy repackaging processes
- Delivery through a convenient pre-filled syringe

Potential for 1st FDA Approved Bevacizumab

- Compelling pivotal data supports U.S. FDA BLA submission, targeted for calendar Q1 2022
- Launch anticipated Q1 2023
- Provide an economically elegant anti-VEGF solution for patients, payers and doctors

Attractive Market Opportunity

- Over 50% of the U.S. market available for conversion to ONS-5010 representing billions in yearly sales
- 12-years US regulatory exclusivity expected
- Label expansion opportunity into DMF and BRVO



Leadership Team: Global Ophthalmic Development and Commercial Launch Excellence



C. RUSSELL TRENARY III
President, CEO and Director



AMO







LAWRENCE KENYONChief Financial Officer and Director









JEFF EVANSON
Chief Commercial Officer







NAVIGANT



TERRY DAGNON
Chief Operating Officer









RANDY THURMANExecutive Chairman of the Board



MARK HUMAYUN, MD, PhD
Medical Advisor



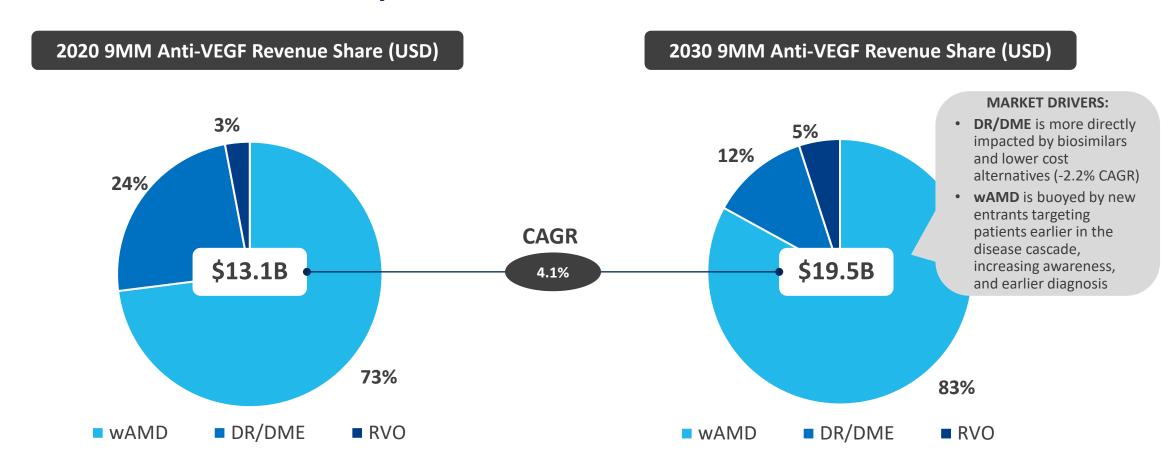


Wet AMD Landscape Current and Future



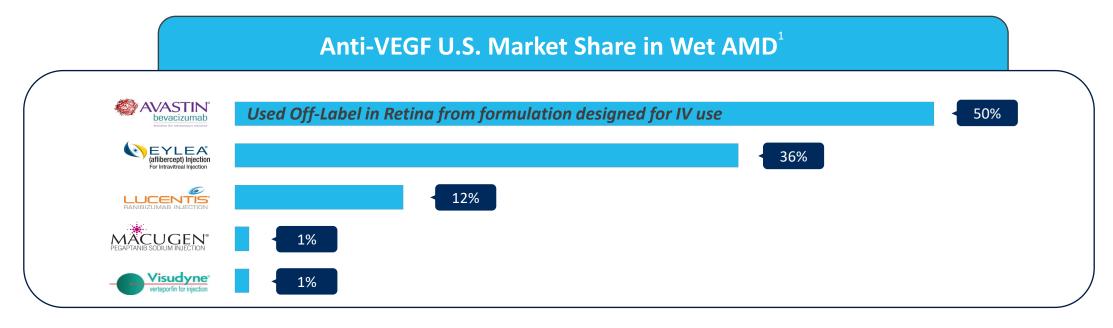
Targeting Large and Growing Ophthalmic Markets

ONS-5010, If Approved, Will Be a Significant Therapy In the Retinal Anti-VEGF Market, Currently Estimated To Be In Excess of \$13.1 Billion Worldwide





Unapproved Bevacizumab Represents 50% of U.S. Wet AMD Market Injections



Expected Drivers to Compete Across All Ophthalmic Anti-VEGF Therapeutics, if Approved by FDA

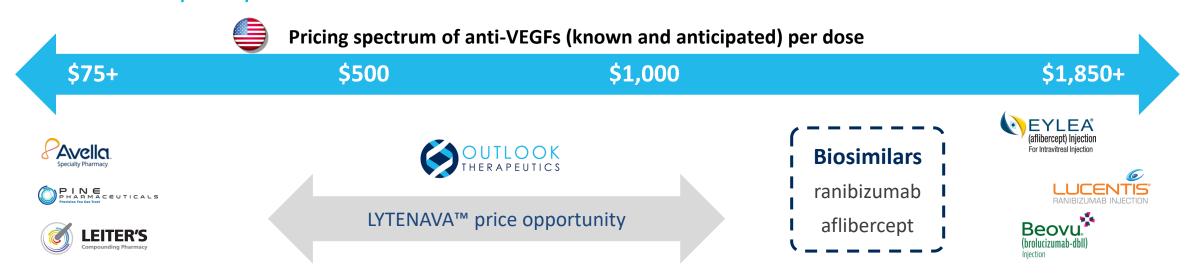
- Provide cost-effective FDA approved ophthalmic bevacizumab
- 2 Become first-line "step-edit" drug of choice

- 3 12 years market exclusivity
- 4 Penetrate EU and developing markets



LYTENAVA™ Pricing Opportunity

Optimize Uptake: Compounding product prescribers while creating separation from biosimilars and other branded price points



Compounded Avastin (off-label)	LYTENAVA TM	Biosimilars to ranibizumab and/or aflibercept	Branded Premium Priced
Cost of compounded Avastin is increasing due to quality issues including syringe failures.	Pricing Strategy: Price low enough to move off-label users to branded LYTENAVA TM , while still creating significant margin and value compared to	Biosimilars, if approved, are likely to price at a 10-30% discount to the branded WAC.	WAC (list) price for Lucentis is \$1,950/dose, both Beovu and Eylea are priced at \$1,850/dose.
Cost per dose could increase to \$100/dose+	any biosimilar and significantly less than the premium branded products.	Mylan, Coherus and Biogen have thus far discounted ~20-30% from WAC in other biologic areas where they have launched biosimilars.	Practice rebates based on volume expected to continue.



ONS-5010



Compounded Bevacizumab Compared to FDA Approved

Ophthalmic Solution Requirement	Off-Label Compounded Repackaged IV Solution	FDA Approved Ophthalmic Solution for Intravitreal Injection	
Sterile USP <71>1	?	Yes	
FDA approved ophthalmic package consistent with USP <771>1	No	Yes	
FDA reviewed stability data supporting shelf life ^{2,3}	No	Yes	
Particulates per USP <789> for ophthalmic solutions ¹	?	Yes	
pH FDA approved and consistent with USP <771>1,2,3	No	Yes	
Potency FDA approved specifications for shelf life ^{2,3}	No	Yes	
Osmolarity specification for ophthalmic solution ^{2,3}	No	Yes	
Bacterial endotoxins USP <85>1	?	Yes	
GMP ^{2,3}	?	Yes	



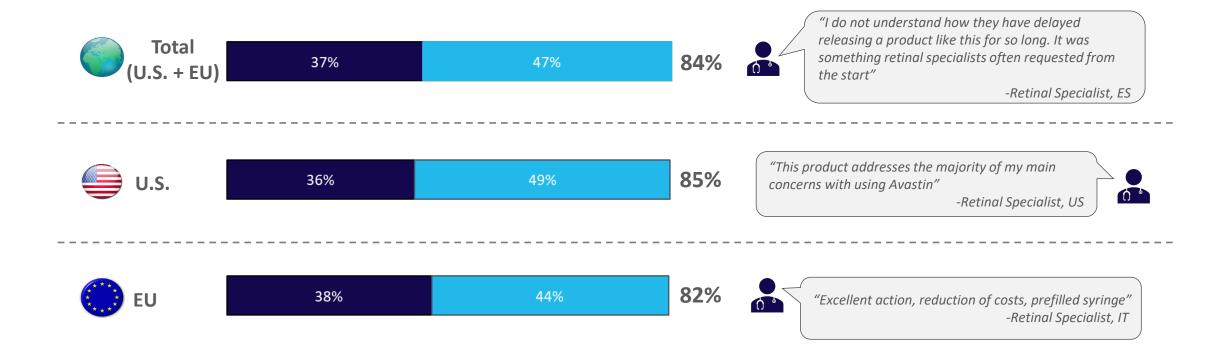
ONS-5010 Ophthalmic Bevacizumab Target Product Profile

ONS-5010 (bevacizumab-vikg)				
Patient Population	Patients diagnosed with wet AMD, DME, or BRVO			
Description	 Anti-VEGF bevacizumab designed for ophthalmic indications wet AMD, DME, and BRVO Known high affinity to bind to all isoforms of VEGF A 			
Dosing and Administration	 Supplied either as pre-filled ophthalmic syringe for intravitreal 1.25 mg injection administered once monthly, or in a glass vial 			
Efficacy, Safety, and AEs	 Demonstrated significant efficacy and safety in NORSE ONE, TWO, and THREE trials Comparable to data from the National Eye Institute (NEI) Comparison of Age-Related Macular Degeneration Treatments Trials (CATT) study as equivalent to LUCENTIS® 			



Do Physicians Want an Ophthalmic Approved Bevacizumab?

>80% of Retinal Specialists Express Interest/High Interest In an FDA-Approved Ophthalmic Bevacizumab to Treat Wet AMD, DME and BRVO





Unmet Medical Needs Due To Repackaged and Off-Label Use of Bevacizumab Designed for Other Specialties and Delivery Systems

Variability in Potency¹

JAMA Ophthalmology

- 81% of samples had lower protein concentrations than required
- Samples had statistically significant variations in protein concentration among samples

Safety and Sterility Adverse Events²



- Unvalidated hold times in syringes
- Patients have lost eyesight due to infections
- Multiple unapproved repackaged IV bevacizumab recalls due to unsterile compounding practices

Syringe Adverse Events³



- Variability in repackaging can lower quality of syringe products, resulting in adverse events
- Silicone oil droplets may be released from the syringe into the eye

Not Held to FDA Ophthalmic Quality Standards When Repackaged



400 mg/16 mL, single-use vial; 100 mg/4 mL, single-use vial





U.S. Law and FDA Regulations for Compounding and Repackaging

- The Food Drug and Cosmetic Act (FD&CA) and Drug Quality and Security Act of 2013 define what is legal for 503A and 503B Compounding Pharmacies.¹
 - Once a drug or biologic is FDA approved and commercially available compounding is no longer authorized.^{2,3,4,5}
 - 503A Compounding pharmacies are regulated by federal regulations and state laws and can only compound or repackage for individual prescriptions in limited quantities and cannot distribute across state lines for > 5% of business.
 - 503B Compounding pharmacies / outsourcing facilities must comply with CGMP regulations, are inspected by FDA and must adhere to reporting requirements.
 - Neither 503A nor 503B pharmacies can compound or repackage commercially available drugs unless they appear on the official FDA drug shortage list.
- "Compounded drug products are not FDA-approved, which means they have not undergone FDA premarket review for safety, effectiveness, and quality." FDA⁶
- "The restrictions on making drugs that are essentially copies ensure that pharmacists and physicians do not compound drug products under the exemptions for patients who could use a commercially available drug product." FDA⁶
- "Such a practice would create significant public health risks because patients would be unnecessarily exposed to drug products that
 have not been shown to be safe and effective and that may have been prepared under substandard manufacturing conditions." FDA⁶
- <u>"Under the statutory scheme, only very rarely should a compounded drug product that is essentially a copy of a commercially available drug product be offered to a patient." FDA</u>⁶



Pathway Towards Potential FDA Approval in Wet AMD – NORSE TWO Top-Line Results Recently Unveiled

U.S. BLA Submission Targeted Calendar Q1 2022

✓ Positive Signals



Clinical Experience Trial

1st Registration Trial

✓ Positive Top-Line Data



Pivotal Trial

2nd Registration Trial

√ Completed



Open-Label Safety Study Supports BLA Requirements





Pivotal Trial

2nd Registration Trial



Trial Highlights:

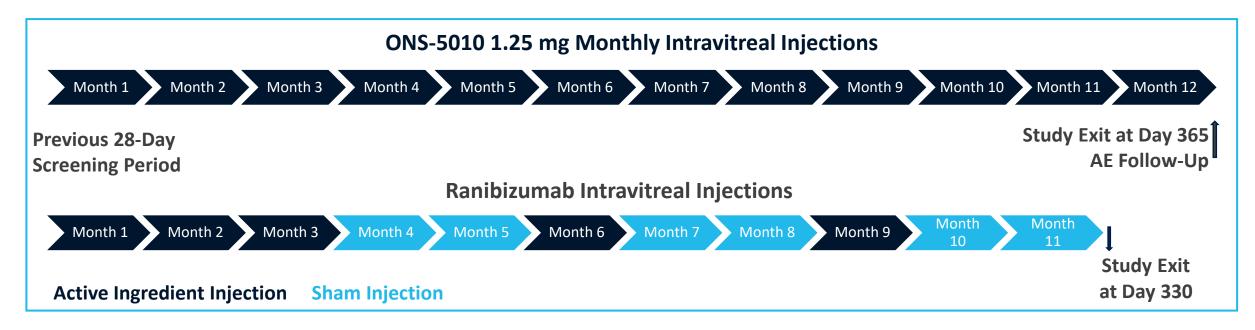
- Randomized masked controlled trial
- ONS-5010 (bevacizumab-vikg) vs LUCENTIS® (ranibizumab)
- 228 patients enrolled
- Trial conducted in the United States
- Trial arms included >95% treatment-naïve patients
- Safety & efficacy data support planned U.S. BLA submission in calendar Q1 2022





Superiority Phase 3 Pivotal Study Design

12-Month Study of Safety and Efficacy of ONS-5010 in Subjects with Wet AMD Study Design and Statistical Analysis Plan Agreed to by U.S. FDA



Study Eye Characteristics

- Active, primary CNV due to wet AMD
- Treatment-naïve
- BCVA: 20/50 20/320

Key Study Outcomes

- Proportion of subjects who gain ≥15 letters in BCVA
- Mean change in BCVA from baseline to Month 11
- Frequency and incidence of AEs

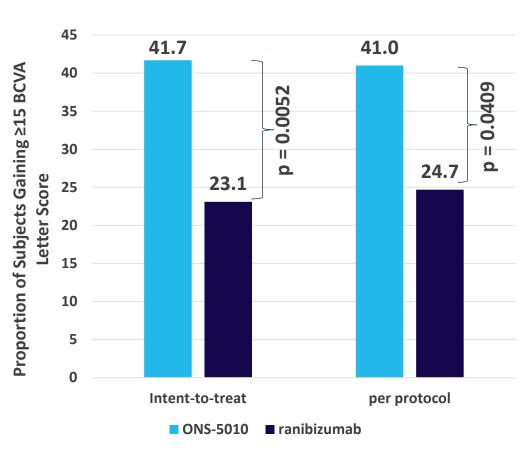




Primary Endpoint Met with Statistically Significant, Clinically Relevant Results¹

Characteristic	Statistic	ONS-5010 (n=113)	Ranibizumab (n=115)	
Intent-to-Treat Pop.				
Number of Subjects	n/N (%)	45/108 (41.7)	24/104 (23.1)	
Risk Difference	0.1859			
95% CI	(0.0442,0.3086)			
p-value		0.0052		
Per Protocol Pop.				
Number of Subjects	n/N (%)	34/83 (41.0)	18/73 (24.7)	
Risk Difference		0.1631		
95% CI		(0.0120, 0.3083)		
p-value		0.0409		

Difference in % Subjects Gaining 3 Lines Vision



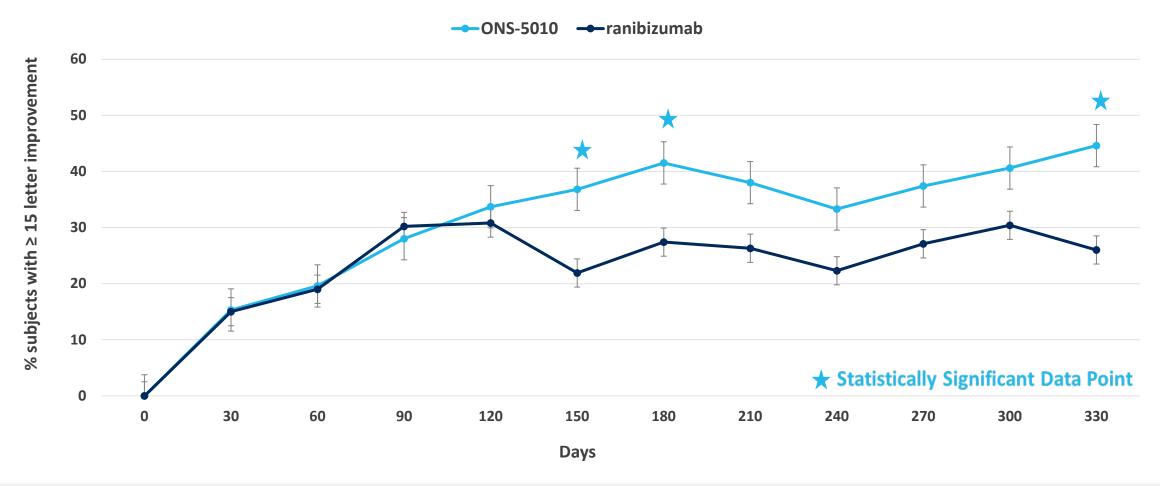


1. Primary endpoint at Month 11



ONS-5010 Rapid Onset of Action with Sustained Significance Over Time

≥ 15 Letter Gainers (± SE) Over Time

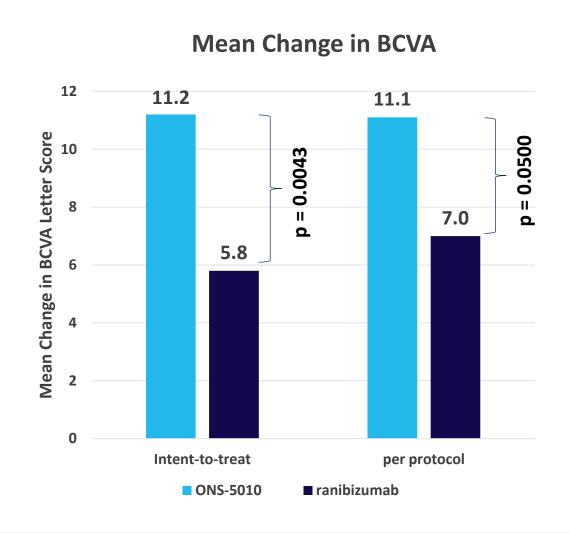






Key Secondary Endpoints Met with Highly Statistically Significant, Clinically Relevant Results

Characteristic	Statistic	ONS-5010 (n=113)	Ranibizumab (n=115)
BCVA Score Change from Baseline to Month 11 (ITT)	n	104	96
	Mean (SD)	11.2 (12.19)	5.8 (14.80)
p-value		0.00	043
p-value BCVA Score Change from Baseline to Month 11 (PP)	n	0.00	68
BCVA Score Change from	n Mean (SD)		

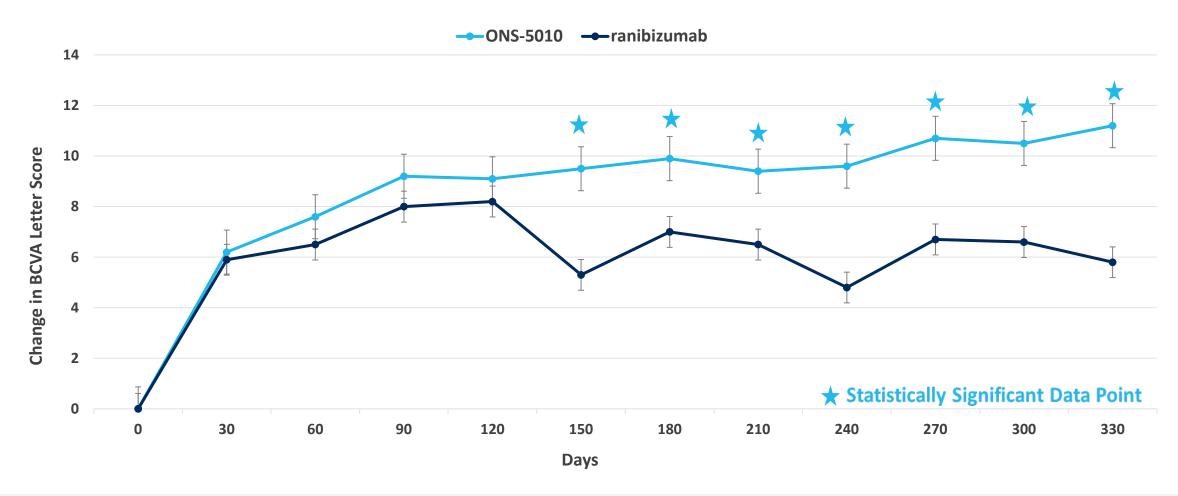






ONS-5010 Rapid Onset of Action with Sustained Significance Over Time

Mean (± SE) Change in BCVA Over Time



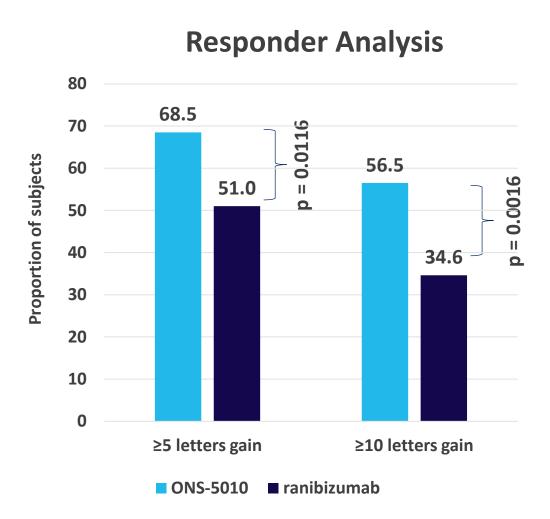




Statistically Significant, Clinically Relevant Secondary Endpoints

Characteristic	Statistic	ONS-5010 (n=113)	Ranibizumab (n=115)	
Subjects Gaining ≥5 letters				
Number of Subjects	n/N (%)	74/108 (68.5)	53/104 (51.0)	
Risk Difference	0.1756			
95% CI	(0.0315,0.3052)			
p-value		0.0116		
Subjects Gaining ≥10 letters				
Number of Subjects	n/N (%)	61/108 (56.5)	36/104 (34.6)	
Risk Difference	0.2187			
95% CI	(0.0726,0.3487)			
p-value	0.0016			

68.5% (p = 0.0116) ONS-5010 subjects gained ≥ 5 letters of vision 56.5% (p = 0.0016) ONS-5010 subjects gained ≥ 10 letters of vision 41.7% (p = 0.0052) ONS-5010 subjects gained ≥ 15 letters of vision





1. Primary endpoint at Month 11



Safety Results: Consistent with Previously Reported Results from NORSE ONE and NORSE THREE

Only One ONS-5010 Ocular Inflammation AE Reported in NORSE TWO (Iritis)

Characteristic	Statistic	ONS-5010 (n=113)	Ranibizumab (n=115)	Overall (n=228)
≥ 1 Adverse Event	n (%)	85 (75.2)	85 (73.9)	170 (74.6)
≥ 1 ocular Adverse Event	n (%)	59 (52.2)	61 (53.0)	120 (52.6)
≥ 1 non-ocular Adverse Event	n (%)	56 (49.6)	52 (45.2)	108 (47.4)
≥ 1 Serious Adverse Event	n (%)	14 (12.4)	16 (13.9)	30 (13.2)
≥ 1 ocular Serious Adverse Event	n (%)	1 (0.9)	0	1 (0.4)
≥ 1 non-ocular Serious Adverse Event	n (%)	13 (11.5)	16 (13.9)	29 (12.7)



1. Primary endpoint at Month 11

NORSE ONE and NORSE THREE Results



Completed Clinical Experience Trial

Demonstrated anticipated safety and efficacy signals consistent with previously published results for ophthalmic use of bevacizumab

Trial Highlights:

- Desired proportion of 3-line visual acuity gainers achieved
- Desired mean gain in visual acuity achieved
- Zero ocular inflammation observed
- Safety was comparable to published bevacizumab studies, such as CATT



Open-Label Safety Study

Positive safety profile reinforces previously reported safety data for ONS-5010 (bevacizumab-vikg)

Trial Highlights:

- Provided adequate number of patient exposure required for BLA submission
- No unexpected safety trends
- 7ero cases of ocular inflammation.



NORSE SEVEN

Pre-Filled Syringe

Vials Versus Pre-Filled Syringe



Trial Highlights:

- 3-month study to compare the safety of ONS-5010 in vials versus pre-filled syringe
- Enrolling ~120 subjects with visual impairment due to retinal disorders
 - Wet AMD
 - BRVO
 - DME



Manufacturing and Regulatory Progress Towards Commercialization







Manufacturing

Best-in-class cGMP manufacturing partners



Pre-Filled Syringes

Supply agreement for a convenient pre-filled ophthalmic syringe

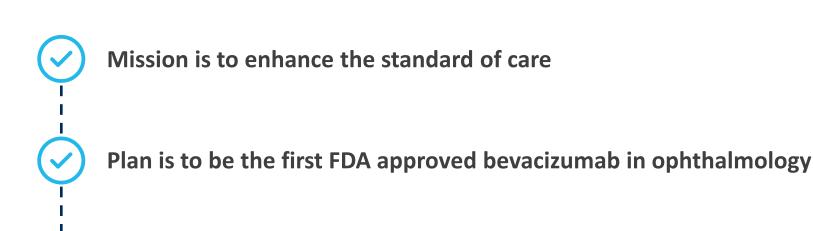


Regulatory

Achieved clinical requirements agreed upon with the FDA



The Outlook Therapeutics Opportunity for Patients, Physicians, and Payers



Market opportunity is billions in yearly sales with potential for significant momentum upon approval



Aim is to launch directly in the U.S. and consider OUS licensing



Targeting \$13.1 billion global ophthalmic anti-VEGF market¹

• Initial U.S. target segment worth potentially billions in yearly revenue are served by compounding pharmacies which by law should give way to Outlook Therapeutics' ONS 5010, if FDA approved



Company Summary

Potential for first FDA approved ophthalmic formulation of bevacizumab

• U.S. FDA BLA submission targeted for calendar Q1 2022 with anticipated approval to follow 9-12 months later

Management team with proven ophthalmic commercial launch expertise

