OUTLOOK THERAPEUTICS

# Corporate Presentation

**October 2021**

NASDAQ: OTLK

outlooktherapeutics.com

# 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.

OUTLOOK THERAPEUTICS

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

# Investment Highlights

## ONS-5010 (bevacizumab-vikg)[1] Targeting $13.1 Billion Global Ophthalmic Anti-VEGF Market[2]

### Differentiated Drug Product

- Designed to meet stringent standards required for FDA ophthalmic approval
- Eliminates risks associated with off-label repackaged bevacizumab
- 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

### 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 DME and BRVO

OUTLOOK THERAPEUTICS

1. ONS-5010 / LYTENAVA™ (bevacizumab-vikg) is an investigational ophthalmic formulation of bevacizumab
2. Guidehouse Triangulation of Global Data, Market Scope and Investor Forecasts (2020)

AMD = Age-Related Macular Degeneration; DME = Diabetic Macular Edema ; BRVO = Branch Retinal Vein Occlusion

# Goal of ONS-5010 (Bevacizumab-vikg) Program

**Provide Physicians and Patients an Ophthalmic FDA Approved Alternative of a Drug Adopted from IV Use in Other Specialties**

Deliver cGMP formulation to ensure essential drug strength, quality, and purity

Eliminate potential impurities and particulates from legacy re-packaging processes

Create a product offering with a differentiated ophthalmic drug solution and delivery system to enhance physician ease of use

Provide an economically elegant anti-VEGF solution for patients, payers and doctors

# Leadership Team: Global Ophthalmic Development and Commercial Launch Excellence

**C. RUSSELL TRENARY III**
President, CEO and Director

INNFOCUS · G&H ORTHODONTICS · AMO · Allergan

**LAWRENCE KENYON**
Chief Financial Officer and Director

ARNO THERAPEUTICS · TAMIR · PAR PHARMACEUTICAL

**JEFF EVANSON**
Chief Commercial Officer

NOVARTIS · Alcon · Medtronic · NAVIGANT

**TERRY DAGNON**
Chief Operating Officer

NOVARTIS · Johnson & Johnson · Alcon · DOHMEN

**RANDY THURMAN**
Executive Chairman of the Board

**MARK HUMAYUN, MD, PhD**
Medical Advisor

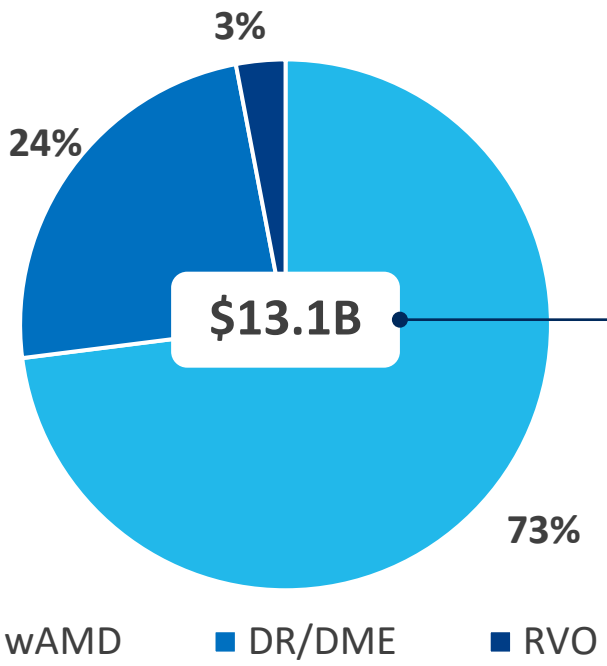
# Wet AMD Landscape
## *Current and Future*

OUTLOOK THERAPEUTICS

# Targeting Large and Growing Ophthalmic Markets

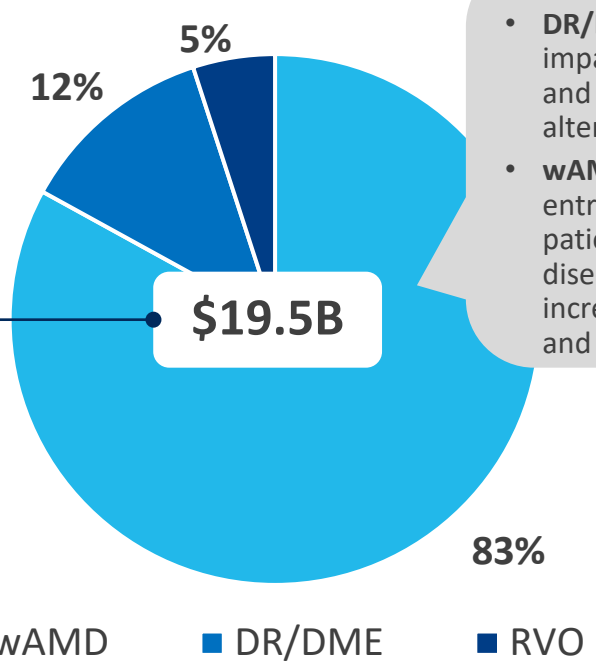
## ONS-5010, If Approved, Will Be a Significant Therapy In the Retinal Anti-VEGF Market, Currently Estimated To Be In Excess of $13.1 Billion Worldwide

**2020 9MM Anti-VEGF Revenue Share (USD)**




CAGR 4.1%

**2030 9MM Anti-VEGF Revenue Share (USD)**



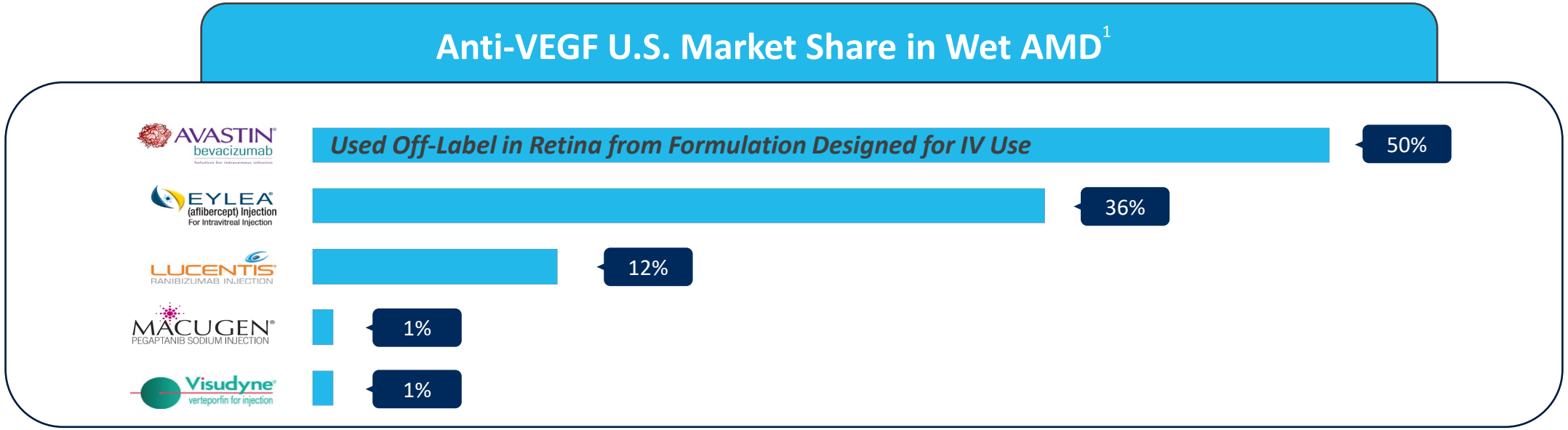

**MARKET DRIVERS:**

- **DR/DME** is more directly impacted by biosimilars and lower cost alternatives (-2.2% CAGR)
- **wAMD** is buoyed by new entrants targeting patients earlier in the disease cascade, increasing awareness, and earlier diagnosis

OUTLOOK THERAPEUTICS

Sources: Guidehouse Triangulation of Global Data, Market Scope and Investor Forecasts (2020)
AMD = Age-Related Macular Degeneration; DME = Diabetic Macular Edema ; BRVO = Branch Retinal Vein Occlusion

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



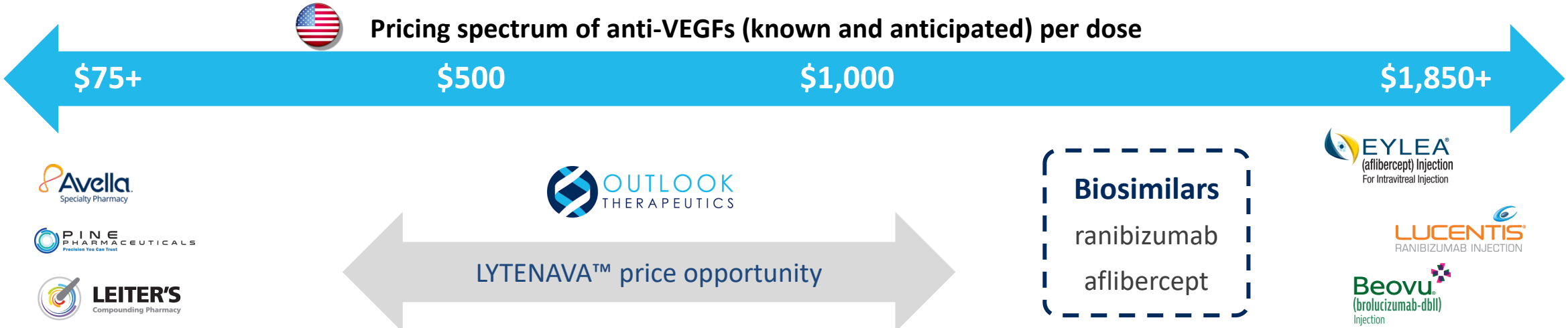

## Expected Drivers to Compete Across All Ophthalmic Anti-VEGF Therapeutics, if Approved by FDA

1. 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

1. Estimates from Global Data and ASRS PAT Surveys

# LYTENAVA™ Pricing Opportunity

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




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

# ONS-5010

OUTLOOK THERAPEUTICS

# ONS-5010 Ophthalmic Bevacizumab Target Product Profile

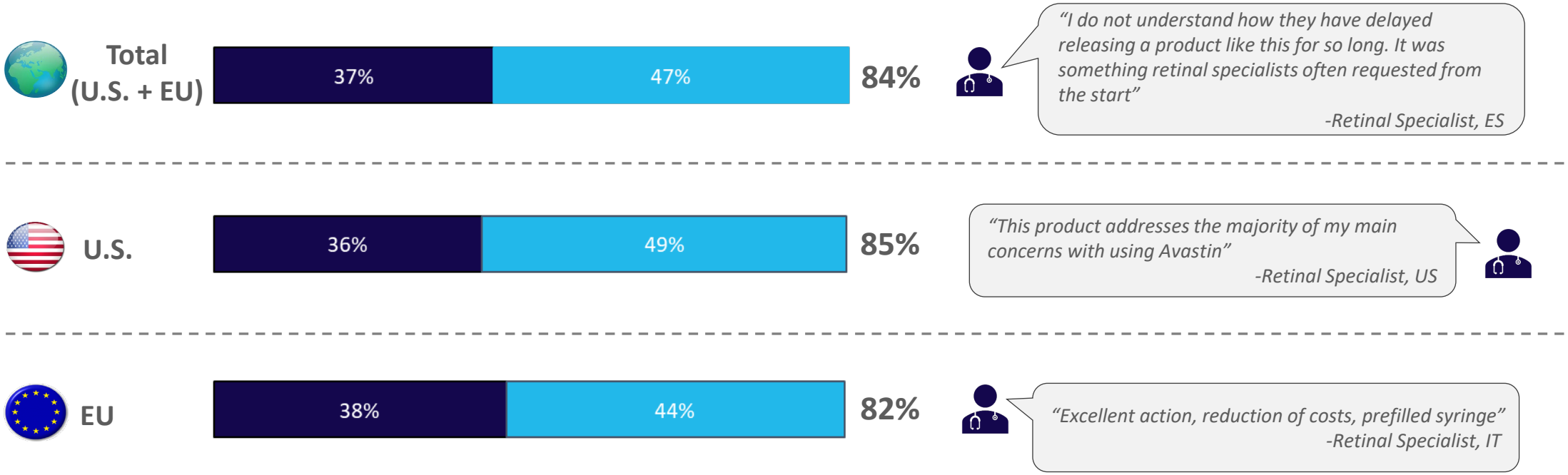
| ONS-5010 (bevacizumab-vikg) | |
|---|---|
| **Patient Population** | • Patients diagnosed with **wet AMD, DME, or BRVO** |
| **Description** | • Anti-VEGF **bevacizumab designed for ophthalmic indications** wet AMD, DME, and BRVO<br>• Known high affinity to bind to all isoforms of VEGF A |
| **Dosing 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<br>• Comparable to data from the National Eye Institute (NEI) Comparison of Age-Related Macular Degeneration Treatments Trials (CATT) study as equivalent to LUCENTIS® |

OUTLOOK THERAPEUTICS

Anti-VEGF - Anti–vascular endothelial growth factor therapy ; AMD – Age-related macular degeneration; DME – Diabetic macular edema; BRVO – Branch retinal vein occlusion; CATT – National Eye Institute, Comparison of Age-related Macular Degeneration Treatments Trials, 2011

# 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




Source: Navigant Quantitative Survey (n=152), 2019, **Respondents who have interest or high interest in ONS-5010**
*Other survey options not shown were "neutral, not likely to use, and not interested at all"

# ONS-5010 Ophthalmic Bevacizumab Value Proposition

## ONS-5010 (bevacizumab-vikg)

**Potential Value Proposition**

- Potential FDA approved bevacizumab for the treatment of wet AMD
- **Priced to allow a cost-effective FDA approved option for first-line**
- Ability for **bilateral administration with malpractice insurance coverage**
- **Addresses compounding pharmacy quality control issues** causing potential AEs, product shortages, and liability risks associated with off-label repackaged IV Avastin®
  - Ensures cGMP quality and delivery system designed for retinal disorders

# 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 |

OUTLOOK THERAPEUTICS

1: USP general Chapter <771> OPHTHALMIC PRODUCTS—QUALITY TESTS USP40-NF35, second supplement, June 1, 2017; 2: Aldrich, Dale S., Bach, Cynthia M., Brown, William, Chambers, Wiley, Fleitman, Jeffrey, Hunt, Desmond, Marques, Margareth R. C., Mille, Yana, Mitra, Ashim K., Platzer, Stacey M., Tice, Tom, Tin, George W.; Ophthalmic Preparations USP STIMULI TO THE REVISION PROCESS Vol. 39(5) [Sept.–Oct. 2013]; 3: Missel PJ, Lang JC, Rodeheaver DP, Jani R, Chowhan MA, Chastain J, Dagnon T. Design and evaluation of ophthalmic pharmaceutical products. In: Florence, AT, Siepmann J. Modern Pharmaceutics—Applications and Advances. New York: Informa; 2009:101–189.

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

## Variability in Potency[1]

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 Events[2]

Warning Letter FDA

- 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 Events[3]

ASRS American Society of Retina Specialists

- 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*



1: JAMA Ophthalmol. 2015 Jan;133(1):32-9. doi: 10.1001/jamaophthalmol.2014.3591; 2: Goldberg, Roger A et al. "An outbreak of streptococcus endophthalmitis after intravitreal injection of bevacizumab." American Journal of Ophthalmology vol. 153,2 (2012): 204-208.e1. doi:10.1016/j.ajo.2011.11.035; 3: ASRS Member Alert, April 2019

# 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." – FDA***[6]

- "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." – FDA[6]

- "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." – FDA[6]

- ***"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***[6]

OUTLOOK THERAPEUTICS

1. Food Drug and Cosmetic Act 503A snd 503B & Drug Quality and Security Act of 2013; 2. Repackaging of Certain Human Drug Products by Pharmacies and Outsourcing Facilities; Guidance for Industry; DHHS, FDA; January 2017; 3. Mixing, Diluting, or Repackaging Biological Products Outside the Scope of an Approved Biologics License Application Guidance for Industry; DHHS, FDA; January 2018; 4. Current Good Manufacturing Practice—Guidance for Human Drug Compounding Outsourcing Facilities Under Section 503B of the FD&C Act; DHHS, FDA; Draft Guidance: January 2020; 5. Compounded Drug Products That Are Essentially Copies of Approved Drug Products Under Section 503B of the Federal Food, Drug, and Cosmetic Act Guidance for Industry; DHHS, FDA: January 2018; 6. Source: Compounding Laws and Policies | FDA www.fda.gov

# 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

NORSE TWO

# 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

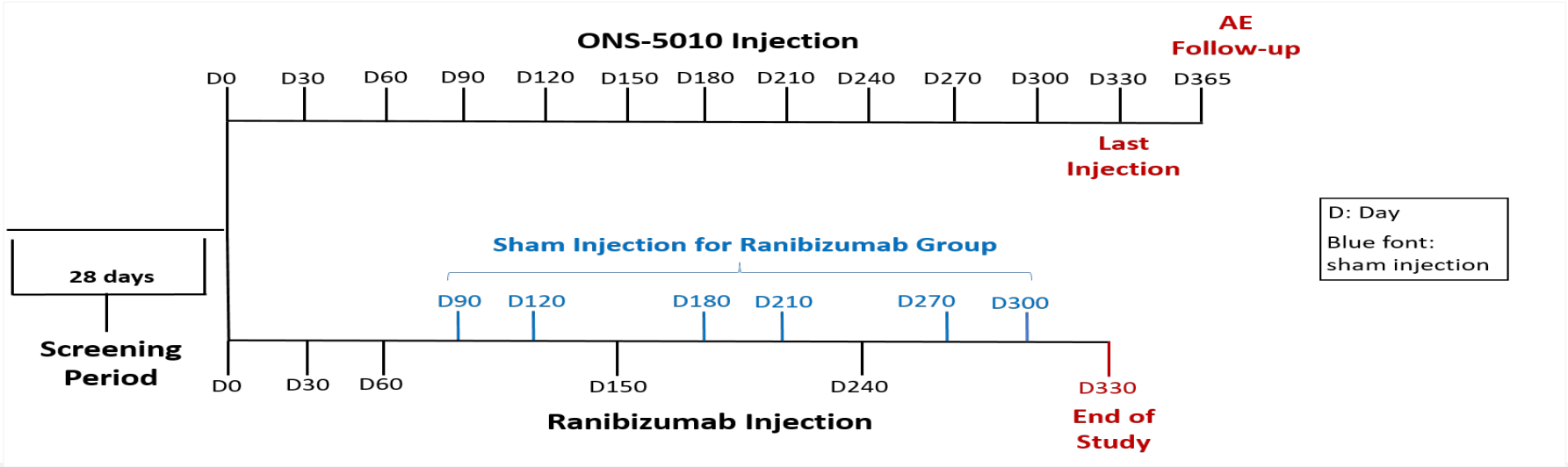
# NORSE TWO Pivotal Trial Design

Randomized masked controlled trial with 228 subjects

ONS-5010 (bevacizumab-vikg) administered monthly X 12

LUCENTIS dosing arm (PIER dosing) – Three initial monthly injections followed by fixed quarterly dosing with sham injections at monthly intervals in between

Primary endpoint difference in proportion of subjects gaining 15 letters of BCVA at Day 330



# NORSE TWO: Positive Efficacy Data

## Unprecedented 41% ONS-5010 with 3-Line Gainers[1]

## Statistically Significant Difference Across Both Primary and Key Secondary Endpoints

| | ONS-5010 (bevacizumab-vikg) | LUCENTIS® (ranibizumab) | p-value |
|---|---|---|---|
| **Primary Endpoint:** Difference in subjects who gained at least 15 letters in the best corrected visual acuity (BCVA) at 11 months[2] | | | |
| **Intent-to-Treat (ITT) Primary Dataset** | **41%** | **23%** | **p = 0.0052** |
| **Secondary Per-Protocol (PP) Dataset** | **41%** | **24%** | **p = 0.04** |
| **Key Secondary Endpoint:** Mean change in the BCVA through 11 months[2] | | | |
| **Intent-to-Treat (ITT) Primary Dataset** | **11.2 letters** | **5.8 letters** | **p = 0.0043** |
| **Secondary Per-Protocol (PP) Dataset** | **11.1 letters** | **7.0 letters** | **p = 0.05** |

OUTLOOK THERAPEUTICS

1. When considering adequate and well-controlled registration studies
2. Participants in the trial were treated for 12 months

# NORSE TWO Safety Results:

## Consistent with Previously Reported Results from NORSE ONE and NORSE THREE

### In All Three Studies Only One Subject Has Reported Ocular Inflammation

| Characteristic | Statistic | ONS-5010 (Masked Data) (N=113) | Ranibizumab (N=115) | Overall (Masked Data) (N=228) |
|---|---|---|---|---|
| At Least 1 TEAE | n (%) | 83 (73.5) | 88 (76.5) | 171 (75.0) |
| At Least 1 Related TEAE | n (%) | 6 (5.3) | 2 (1.7) | 8 (3.5) |
| Maximum Severity | | | | |
| CTCAE Grade 1 Mild | n (%) | 46 (40.7) | 45 (39.1) | 91 (39.9) |
| CTCAE Grade 2 Moderate | n (%) | 23 (20.4) | 30 (26.1) | 53 (23.2) |
| CTCAE Grade 3 Severe | n (%) | 11 (9.7) | 9 (7.8) | 20 (8.8) |
| CTCAE Grade 4 Life-threatening | n (%) | 0 | 2 (1.7) | 2 (0.9) |
| CTCAE Grade 5 Death | n (%) | 3 (2.7) | 2 (1.7) | 5 (2.2) |
| At Least 1 Ocular TEAE | n (%) | 55 (48.7) | 60 (52.2) | 115 (50.4) |
| At Least 1 Ocular TEAE in Study Eye | n (%) | 47 (41.6) | 47 (40.9) | 94 (41.2) |
| At Least 1 Non-Ocular TEAE | n (%) | 55 (48.7) | 57 (49.6) | 112 (49.1) |
| At Least 1 >= Grade 3 Related TEAE | n (%) | 2 (1.8) | 1 (0.9) | 3 (1.3) |
| At Least 1 Serious TEAE | n (%) | 14 (12.4) | 16 (13.9) | 30 (13.2) |
| At Least 1 Related Serious TEAE | n (%) | 2 (1.8) | 1 (0.9) | 2 (0.9) |
| At Least 1 TEAE Leading to Study Withdrawal | n (%) | 2 (1.8) | 4 (3.5) | 6 (2.6) |

# NORSE ONE and NORSE THREE Results

## NORSE ONE — 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

## NORSE THREE — 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
- Zero cases of ocular inflammation

# 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

- Mission is to enhance the standard of care
- Plan is to be the first FDA approved bevacizumab in ophthalmology
- Market opportunity is billions in yearly sales with potential for significant momentum upon approval
- Data are compelling and statistically significant
- Aim is to launch directly in the U.S. and consider OUS licensing

# Company Summary

- **Targeting $13.1 billion global ophthalmic anti-VEGF market[1]**
  - *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*

- **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**

1. Guidehouse Triangulation of Global Data, Market Scope and Investor Forecasts (2020)