Advancing Personalized Medicine in Ophthalmology

OIS @ AAO

Quinton Oswald, CEO
Evolving Ophthalmology Landscape Creates New Challenges for Patients and Physicians

AGING PATIENT POPULATION increasing

REIMBURSEMENT evolving

DIABETES PREVALENCE increasing

RW VISION OUTCOMES do not replicate pivotal trials

TREATMENT BURDEN average 5 IVT injections in year 1

NOVEL DELIVERY MODALITIES may increase unmonitored intervals
Large Unmet Needs in Ophthalmology

**DRY AMD**
- No current treatment
- 60+ year old diagnostics

**3.8M Patients**
$2.9B US Market

**WET AMD**
- $5B anti-VEGF drugs with suboptimal outcomes
- Long-term intensive care
- Frequent office visits and injections

**1.5M Patients**
Home OCT
$2.7B US Market

**DIABETIC MACULAR EDEMA**

**RETINAL VEIN OCCLUSIONS**

$5.6B Addressable US Market
Fresh Approach Needed to Pioneer an Integrated Patient Engagement Platform

Cloud-Based Monitoring

Digital Health

Payer Relations & Billing

Customer Service & Education

Data Transfer/EMR Integration

Data Analytics

AI / Machine Learning
Notal’s Ecosystem Is the Foundation for Delivering Personalized Medicine

**ECOSYSTEM**

- AI / Machine Learning
- Cloud-Based Monitoring
- Data Analytics
- Data Transfer/EMR Integration
- Customer Service & Education
- Digital Health
- Payer Relations & Billing
- PATIENT + PHYSICIAN

**HOME-BASED DEVICES**

**NOTAL VISION DIAGNOSTIC CLINIC**

Subscription Business Model
Devices Enable Near-Term and Viable Personalized Medicine Solutions

Notal Portfolio for Personalized Detection and Diagnosis

PATIENT

Early Wet AMD

Home OCT

Retinal Vascular Diseases

PHYSICIAN
Using Artificial Intelligence to Personalize and Optimize Retinal Disease Management

**Notal OCT Analyzer (NOA)**
Validated Machine Learning Algorithms Perform Automated Analysis

![Image of OCT Analyzer with labels ILM, IRF, SRF, RPE, PED, N, T]

Automated Identification of Lesion Activity in Neovascular Age-Related Macular Degeneration

92% Sensitivity and 93% specificity compared to 3-retina specialist reading center
AI Driven Home OCT Creates a Decision Support Solution

- Spectral Domain OCT
- Easy-to-use, self-installed and self-operated
- Less than 10 seconds per eye
- Wirelessly uploads B-scans to cloud
- B-scans viewable by physician
- AI algorithm analyzes B-scans for fluid
- Change reports sent to physician
Home Monitoring Optimizes Current and Emerging Treatment Modalities

<table>
<thead>
<tr>
<th>SUSTAINED DELIVERY DEVICES</th>
<th>TOPICAL AND ORAL THERAPY</th>
<th>LONG-ACTING FORMULATIONS</th>
<th>EXTENDED BILATERAL WET REGIMEN</th>
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</thead>
<tbody>
<tr>
<td>Most Advanced: Phase 3</td>
<td>Most Advanced: Phase 2</td>
<td>Most Advanced: Post Phase 3</td>
<td>Up to 42% are Bilateral by 3 Years</td>
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<tr>
<td>• Implant decision requires patient qualification</td>
<td>• Turns dosing over to patient</td>
<td>• Validation of drug response</td>
<td>Extended regimens not feasible – lack of synchronization creates two follow-up schedules in absence of monitoring for recurrence of fluid</td>
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<tr>
<td>• Eliminating visits requires confirmation of ongoing drug response</td>
<td>• Eliminates visits</td>
<td>• Interval is adequate for a specific patient, and</td>
<td></td>
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<td>• Compliance and drug response confirmation required</td>
<td>• Recurrence of fluid has not occurred</td>
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Most Advanced: Phase 3

Up to 42% are Bilateral by 3 Years

Extended regimens not feasible – lack of synchronization creates two follow-up schedules in absence of monitoring for recurrence of fluid
Retinal Specialists Extremely Receptive to Home OCT Concept

Believe reduction in fluid residence time will benefit patients

Excited about potential to reduce patient and physician treatment burden

Welcome ability to individualize patient treatment

Interested and eager to try the device in their own practices

Agree Home OCT will add no extra burden to their practice
Payers Willing to Cover Home OCT

1. **View retinal diseases as significant cost burden**
   - Expected scrutiny of spending in ophthalmology space to increase within next 5-10 years

2. **Consider vision to be a critical disease area**
   - Believe Home OCT has potential to enhance individualized patient care to optimize outcomes

3. **Value collection of outcomes-based data**
   - Key value proposition; additional clinical data will further strengthen this position
Regulatory and U.S. Clinical Plan Support 2020 Launch

**REIMBURSEMENT**
- Category 3 Q1 ‘20 before launch
- Category 1 by Q3 ‘21

**CLINICAL**
- NOA and Home OCT Device development ongoing

**REGULATORY**
- NOA and Home OCT device clearance for Q2 ‘20 launch
- *(May have breakthrough designation to add here by OIS)*
Moving from Aspiration to Reality

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