

#### Contact:

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Rebion (Boston, MA) is an early-revenue stage company commercializing a breakthrough technology called *Neural Performance Scanning* (NPS). This platform technology definitively identifies life-altering diseases that manifest from functional impairments in the brain, including our initial targets of *lazy eye* (amblyopia) and *traumatic brain injury* (TBI). Rebion's portable NPS devices provide a faster, more accurate and efficient way to triage people, making early detection, intervention, and treatment more widely accessible than ever before.

Rebion's first commercial product is the *blinq* vision scanner, a transformative device that in 3-sec measures eye fixation to detect lazy eye, the leading cause of pediatric blindness. *Blinq* launched in 2020 after receiving FDA clearance and a Current Procedural Practices Terminology (CPT) code for insurance payments.

Rebion's larger follow-on product uses the same hardware and architecture for the objective detection and monitoring of traumatic brain injury, including concussions. Rebion has held pre-submission meetings with FDA and is currently enrolling in its FDA trials, targeting a 2022 submission for market clearance.

## **Technology**

Neural Performance Scanning is a proprietary platform laser technology that measures signals between the eye and the brain. By measuring binocular eye fixation, Rebion's devices identify a host of brain function impairments including lazy eye, traumatic brain injury, chemical impairment, and neurodegenerative disorders. Rebion point-of-care devices are designed to lower the cost of care and increase the quality of outcomes. Rebion's devices are precise enough to detect disease, yet easy enough for a layperson to operate.

#### **Milestones**

- Commercially launched with sales (2020)
- Contract manufacturing partnership with Canon (2021)
- Clinical validation in peer-reviewed publications (2021)
- FDA clearance (amblyopia)
- CPT reimbursement code specific to technology

#### **Intellectual Property**

Rebion's patent portfolio includes 7 issued US patents, 19 issued international patents, and 42 total IP assets.

### **Bling Market Opportunity**

The US market for bling is \$890MM, with approximately 60,000 sales points. Lazy eye is the leading cause of preventable vision loss worldwide. When identified early in life, treatment is 95% curative through low-cost eyepatches and glasses. Approximately 50% of all cases are currently missed, and failure to detect leads to permanent vision impairment. Rebion's product can generate over \$15,000 in value per clinic per year.

# **TBI Market Opportunity**

TBI screening is a \$3.5Bn market in the US. It is the leading cause of long-term disability and death for individuals under the age of 35, with an annual worldwide cost of over \$60Bn. By rapidly (<60 seconds) assessing brain function as a result of injury, Rebion can provide a functional assessment at each touch point along the patient journey, ensuring that patients are protected during recovery.

### Competition

Rebion is competing against eye-tracking and refraction devices. Peer-reviewed, clinical publications show the unprecedented accuracy (sensitivity and specificity) of Rebion's technology over these other methods. Rebion's bling device is the *only* FDA-cleared device for the detection of amblyopia and strabismus.

## **Sales Strategy**

Rebion has a direct-sales team and exploring collaboration opportunities for global distribution.

### **Global Opportunities**

International *blinq* expansion is targeted for 2022. Followon devices for **other brain function impairments** will be judiciously assessed and introduced per regulatory clearances via rep networks and strategic partnerships.

#### Risks

Remaining risks include: manufacturing costs, sales/distribution cycles and efficiencies, CPT code fluctuations, and future regulatory policies. Additional human data must be collected for FDA-clearance of TBI and follow-on product offerings.

## **Funding**

Rebion to-date has raised over \$14.0MM, with \$3.5MM coming from NIH SBIR awards. Rebion is currently seeking \$7.5MM in Series B financing to expand the core team, support sales growth, and commercialize the TBI product.

# **Management Team**

Justin Shaka; CEO, Rebion Co-Founder Formerly at Boston Children's Hospital

Jeff Mortensen; VP Business Development Formerly VP Business Development, PediaVision (Welch Allyn)

Robert Winsor; *Chief Optical Scientist* NPS co-developer; author of 18 patents

David G. Hunter, MD, PhD; Chairman of the Board NPS co-inventor; Chief of Ophthalmology, Boston Children's Hospital; Vice-Chair of Ophthalmology Harvard Medical School