

THE PROBLEM

Eysz is building a digital health platform to enable personalized medicine for neurological disorders starting with epilepsy. Epilepsy, which is characterized by recurrent seizures, is one of the most common and expensive neurological disorders. The goal of epilepsy treatment is to stop seizures with minimal side effects as quickly as possible. However, doctors do not have the reliable data they need to accurately measure treatment outcomes. Current standard of care for epilepsy treatment outcomes is to rely on patient-report data, which is < 50% accurate - resulting in a prolonged trial-and-error treatment cycle. For people with epilepsy, this cycle results in poor quality of life, poor treatment adherence, and excessive costs and most importantly contributes to the fact there has been no significant improvement in epilepsy outcomes in the last 30 years.

70M Patients with Epilepsy (PWE) Globally	3.4M PWE in the USA	150K New diagnosis annually in the US	\$28B Annual Direct Costs in the US	70% PWE can live Seizure Free if Diagnosed and Treated
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SOLUTION

- Our AI-based clinical decision support software system analyzes passive eye-movements from off-the-shelf eye-tracking systems to identify patterns related to seizure burden and neurocognitive side effects and outputs a report containing personalized dose response and natural history data to assist clinicians in the determination of optimal dosing for treatments and the monitoring of therapies.

POTENTIAL BENEFITS

- Measure all loss of consciousness events including seizures and fainting for daytime and nighttime
- Optimize clinical trials and accelerate new therapies for pharma and med device companies
- Decrease time to seizure freedom and epilepsy surgery
- Decrease hospital related costs -> admissions, stays

MARKET

- US Provider Market Opportunity: \$1.7B (TAM), \$1.35B (SAM), \$180M (SOM)
- Competition: 2 primary competitors focused only on convulsive seizure detection are FDA Approved, < 20% of seizures types
- Business Model: SaaS for providers, fixed fee for pharma

MILESTONES

- ✓ Completed: Successful Proof of Concept Study under IRB
- ✓ Completed: NSF Market Validation Study (n=150)
- ✓ Completed: Meet with FDA: Reg Pathway, Study
- ✓ Completed: Initiate Clinical Study with UCSD, CHOC, UCSF, Wake Forest, Texas Child Neurology
 - Q3 2022: Meet with FDA: Validation Study
 - Q4 2022: Initiate Validation Study
 - Q3 2023: Submit to FDA

FUNDRAISING

We are currently raising 2.5M USD of which we have secured:

- 1.9M USD from investors via SAFE
- Notable Investors: **UCB Pharma, Plug and Play Ventures, Sand Hill Angels**

We expect to use the proceeds to help us achieve our milestones, specifically: 36% R&D and Regulatory, 37% Clinical Study, 5% Commercialization, 22% Administrative

TEAM



RACHEL KUPERMAN, MD
Founder & CEO

UCSF Faculty, Led Peds Epilepsy Program for 10+ years



BIKRAMJIT SARKAR, PhD
Co-Founder

15+ Years Computer Science, AI/ML, Signal Processing Experience



PARTH AMIN
Co-Founder

15+ Years Medical Device Experience: Business Development - Alliances, Prod & Project Mgmt



NON-DILUTIVE FUNDING and AWARDS

- 2021 NSF SBIR Phase 1 Grant (\$256K)
- 2021 NIH Diversity Supplement Grant (\$138K)
- 2020 NIH NINDS SBIR Phase 1 Grant (\$656K)
- 2020 Greenwich Biosciences Grant (\$25K)
- 2019 CTIP - FDA Sponsored Ped. Dev. Accelerator (\$50K)
- 2019 Epilepsy Foundation Shark Tank - 1st Place (\$150K)
- 2019 National Science Foundation I-Corps (\$50K)

COMPANY INFO

- Founded in 2018 in Bay Area, California
- Advisors: Robert Fisher, MD PhD; Hal Blumenfeld, MD PhD; Peter Milford, PhD; Nicole Napier PsyD;
Board of Directors: Randy Berholtz JD, MBA; Rachel Kuperman, MD
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