

Industry: Medical Device with Digital Personalization Platform

Co-Founders:

Eugenia Steingold, PhD (Princeton). CSO: Clinical psychologist, over 2 decades of experience working with autistic children.
Katya Sverdlov, CFA, Esq. CEO. Over 2 decades of experience in investment banking, legal services and start-ups.

Team and Advisory Board

Michael Hamblin, PhD: Associate Professor at Harvard Medical School. World leading specialist on photobiomodulation therapy.
Margaret Naeser, PhD: Research Professor of Neurology, Boston University School of Medicine. Leading neuroscientist on using photobiomodulation for conditions such as Stroke and TBI.

Ali Mostashari, PhD (MIT): CEO and Co-Founder of LifeNome, a wellness AI company. Member of World Economic Forum Futures Council.

Michael Ashikhmin, PhD Over 10 years of experience in building machine learning models, specialist in optics.

Nadine Maqac, MBA: Product Manager. Over 15 years at J&J, focused on program management in Medical Device division.

Eugenia Rutenberg, MBA: Sales & Marketing. Over 20 years of experience in precision medicine, computational research and product launches.

Ella Averbukh, MS, SLP-CCC Speech language pathologist. 16 years of experience working with ASD children in school and clinical settings.

Anita Saltmarche: Extensive experience in product development, regulatory affairs, clinical protocols and marketing related to laser & light therapy.

Financing:

To Date: 6 angels, \$350K.
Sought: \$3MM
Use of Funds: Manufacturing-ready prototype, clinical trial, R&D for Product 2, legal and regulatory costs, salaries for team, commercialization.

Executive Summary: Autism (ASD) rates are increasing globally and parents are desperate. JelikaLite is developing Cognilum™, a data-device feedback system that combines a home based (1) therapeutic wearable device with near infrared light therapy and sensors with (2) an intelligent personalization platform that provides data collection, analysis, and training. The benefit is expected to be a 1/3 permanent improvement of child's autism symptoms, as demonstrated by gains in communication and daily living skills, resulting in over \$1MM in lifetime savings in individual's cost of autism.

Market Opportunity / Unmet Need: 1 in 54 children is diagnosed with ASD in the US. Lifetime costs per individual are approximately \$3.6 million, by 2025 total costs in US are projected to rise to \$461 billion. There are 1MM children living with ASD in US now. Cognilum™ may also be used for other pediatric neurological diseases, such as depression (2MM), anxiety (4MM), developmental delays (10MM) and sleep disorders (15MM).

Product / Technology / Intellectual Property:

- The non-invasive wearable device delivers treatment through transcranial photobiomodulation. Infrared light, delivered through LEDs, reduces brain inflammation and increases connectivity. Device has sensors for data collection.
- The software platform provides initial assessment of the child, captures ongoing data (from wearable device, use of platform's learning modules, and parents' input of qualitative information), and, through data analysis, provides progress reports and personalized recommendations.
- 2 Patent applications have been filed.

Competition

- Popular ASD treatments are Applied Behavioral Analysis (ABA) therapy and medication.
 - ABA costs \$30K-\$60K a year, requires 3-4 years of treatment, one-on-one instruction for 20-40 hours a week, and does not work for all children.
 - Medications for autism - risperidone and aripiprazole – treat irritability but do not treat underlying autism characteristics (communication difficulties and social challenges). They also have side effects.
- Existing Online Platform Cognoa is offered through few employers and ABA centers.

Competitive Advantage

- Cognilum wearable tPBM device treats the underlying cause of autism and collects physical data. The software platform enables analysis, evaluation, training and personalization. The combination of the wearable device with the platform will enable on-going data collection from multiple sources. The resulting analysis and personalization will create a competitive advantage that will be difficult to replicate.
- Cognilum will enable children to integrate into society, parents to receive a home-based cost-effective treatment, therapists to track progress and efficacy of existing interventions, payors to spend less money on an effective treatment and government to spend less money on special education and lifelong residential care.

Commercial / Technical Milestones. Market research with parents and therapists. Beta version of physical device. Initial assessment for platform developed. Patent applications filed. Received FDA NSR designation and full IRB approval for clinical trial.

Financial Projections: Revenue consists of Product 1 (children above 2 years of age), Product 2 (children below 2) and Software Platform. Software Platform may be used independently of the physical device. Revenue for Product 1 and Software Platform begins in 2021, for Product 2 revenue begins in 2022. Profits are expected in 2025.

	2022	2023	2024	2025	2026
Gross Revenue (\$, MM)	1.5	6.0	25.8	77.7	144.3
EBITDA (\$, MM)	(1.9)	(2.1)	(0.1)	16.6	50.1

Valuation: Based on multiples of other medical device companies: **\$11MM**