

A high-resolution system requires high-resolution tools - Translational Optogenetics ushers a new era of precision

Yotam Eldar Company name: Modulight Biotherapeutics Website: www.modulight.bio

CEO name: Yotam Eldar

CATEGORY: Biotech/Pharma SESSION: "Beyond Neuropharma and Neurotech: Integrated Brain Control."

- Executive Summary / Investment Rational: Briefly describe the company's technology or therapeutic focus; the market opportunity, progress made to date, key partnerships or joint ventures, investment to date; and management strengths. Modulight.bio is pioneering a precision optogenetic neuromodulation platform for severe neurological disorders. Backed by \$13 million in seed funding, we've achieved in vivo proof-of-concept across multiple disease models. With strategic partnerships at Mayo Clinic, ARC, among others, and backed by world-class advisors and a seasoned leadership team, Modulight.Bio is positioned to transform treatment in high-value, underserved markets.
- Core Technology: What is the technology, its uniqueness, and its value proposition? Modulight.bio's core technology is a proprietary optogenetic neuromodulation platform that enables precise, light-driven rebalancing of specific dysfunctional brain circuits. Our lead therapeutic agent, a novel light-sensitive protein (opsin) has unparalleled sensitivity and kinetics, and is uniquely suited for clinical applications. Our scalable precision neuromodulation platform targets major unmet clinical needs in neuropathic pain, drug-resistant epilepsy, and movement disorders.
- Product Profile/Pipeline: Briefly describe the company's product/pipeline, status, and market potential. Discuss milestones, potential collaborations, and partnerships. Modulight's diverse pipeline is led by our trigeminal neuropathic pain program. Neuropathic pain represents an enormous unmet need with a multi-billion dollar market opportunity for differentiated, nonopioid therapies. We have already demonstrated strong proof-of-concept efficacy and safety in animal models, and are advancing toward IND-enabling studies, leveraging partnerships with strong clinical and academic collaborators in the US, Europe, and Israel.
- Business Strategy: Briefly describe how the company will apply its core technology, generate short-term and long-term revenues.
- Our first leading indication is a severe, orphan neurological pain indication to enable an expedited regulatory pathway and early clinical validation. Success will position the platform for expansion to larger markets. Revenue will be generated through strategic partnerships, out-licensing, and eventually commercialization. Ongoing innovation will drive pipeline growth and support long-term value creation across multiple therapeutic areas.
- What's Next? R&D, Preclinical / Clinicals, Organizational Plans, Financial Plans Modulight.Bio is currently in preclinical development, pursuing IND approval for clinical trials. We are gearing up to launch a series A to fund First-in-Human studies. It is our privilege to advance transformative treatments with the potential to restore health and quality of life for millions affected by severe neurological disorders