### **NEXALIN** TECHNOLOGY

Investor Presentation December 2024

### Nexalin Forward Looking Statement

This presentation material includes forward-looking statements that reflect our current views with respect to future events. These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include all statements that do not relate solely to historical or current facts, and can be identified by the use of words such as "expect," "intend," "plan," "believe," "does not believe," "aim," "project," "anticipate," "seek," "will," "likely," "assume," "estimate," "may," "continue," "guidance," "objective," "outlook," "trends," "future," "could," "would," "should," "target," "on track" and similar expressions of a future or forward-looking nature. All forward-looking statements address matters that involve risks and uncertainties, many of which are beyond the control of Nexalin Technology, Inc. We base these statements on particular assumptions that we have made in light of our industry experience, the stage of product and market development as well as our perception of historical trends, current market conditions, current economic data, expected future developments and other factors that we believe are appropriate under the circumstances. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in such statements and, therefore, you should not place undue reliance on any such statements. We believe that these factors include, but are not limited to: we have incurred significant losses since our inception and we expect to continue to incur significant expenses and operating losses over the next several years; we have a limited operating history, which may make it difficult for you to evaluate our current business and predict our future success and viability; we are required to make applications with, and obtain clearance from, the FDA and other government agencies prior to marketing and selling our devices, and the delay or failure in obtaining such approvals may adversely affect our business and ability to generate revenue; we depend to a large degree on the success of our existing and future products, some of which are in clinical development but have not completed advanced clinical trials; public health threats, including those related to COVID-19, could adversely impact our operations and especially our research and development efforts; our reliance on third parties to provide us with supplies and to help us develop and commercialize our products expose us to various risks if they fail to perform in accordance with our expectations or at all; our commercial success will continue to depend on attaining significant market acceptance of our technologies and existing and future products; if adequate reimbursement remains unavailable in connection with the use of our products and for healthcare providers, physicians and clinicians to provide services for patients treated with our products, it could diminish our sales and/or affect our ability to sell our products profitably; if we are unable to obtain, maintain and protect our intellectual property rights for our technologies and our products, or if our intellectual property rights are inadequate, our competitive position could be harmed, and our ability to commercially market products could be adversely affected; our proposed foreign operations through our proposed joint venture arrangement will pose additional risks, including obtaining approval from foreign regulatory authorities, or with respect to FDA accepting data from trials conducted in foreign jurisdictions; and we may face difficulties relating to compliance with various laws, including those relating to health and safety, and from changes to current and future legislation, both in the U.S. as well as in other foreign jurisdictions including China where we or our proposed joint venture may be operating.

The foregoing factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included herein and elsewhere, including the risk factors included in our Registration Statement and prospectus included therein and subsequent reports on Form 10-K and Form 10-Q and other documents of Nexalin Technology, Inc. on file with or furnished to the U.S. Securities and Exchange Commission from time to time. Any forward-looking statements made in this investor presentation are qualified by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by Nexalin Technology, Inc. will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, Nexalin Technology, Inc. or its businesses or operations. Except as required by law, Nexalin Technology, Inc. undertakes no obligation to update publicly or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.



### **Company Snapshot**



Our mission at Nexalin Technology is to design and market FDA Class II & III neuro-stimulators for the treatment of: Anxiety – Depression - Insomnia – Dementia – Addiction – TBI / PTSD





### **Investment Highlights**

#### **Approved treatment indications:**

- FDA: Anxiety, Insomnia and Depression (Gen-1)
- NMPA (China FDA): Depression and Insomnia (Gen-2)



#### Innovative Digital Treatment with Virtual Digital Distribution

Patented digital frequency stimulation offers innovative treatment distributed and monitored within a digital virtual clinic



### Initial Global Strategy

Established Joint Venture in China that will provide multimarket access with limited investment risk

#### **Near-Term Growth**

Nexalin's Gen-3 medical device released for manufacturing Q1 2024, USA is already in development and regulatory planning stages

#### Expanding Indications

Clinical trials in USA and China on the next generation (Gen-3) medical device for patients with Depression, Dementia, Opioid Use Disorder and PTSD. Interim data is expected in 2024

#### **Tele-Med Advantage**

F I Nexalin will introduce athome treatment in a virtualclinic model to reduce costs for patients and doctors while fitting seamlessly into our increasingly virtual-care system

#### Growing Market – Mental Health Epidemic

Nexalin provides an advanced digital treatment method that delivers a safe and effective treatment to patients



### Large and Growing Treatment Markets

#1

### Everyone Likely Knows Someone That Needs Help



Of reporting adults in the US have experienced short sleep duration (< 7 hours).<sup>2</sup>



Depression is the leading cause of disability in the US among ages 15-44.<sup>3</sup>



### \$210.5 Billion

Lost earnings per year due to serious mental illness.<sup>3</sup>



>46% Of US adults will experience mental illness during their lifetime.<sup>1</sup>



>43 Million

People in the US experience a mental illness in any one year.<sup>1</sup>



Of people in the US who had a mental disorder in the past year received professional health care or other services.<sup>1</sup>

Mental First Aid <u>Report</u>
CDC Short Sleep Duration Among US Adults <u>Report</u>
National Network of Depression Centers <u>Report</u>



### The Global Mental Health Epidemic



#### Insomnia

40 million Americans suffer from chronic insomnia. Some worldwide studies show Insomnia affects 60% of Global population. 40% of people with insomnia are believed to also be affected by a mental health disorder.<sup>1</sup>

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#### Anxiety

An estimated 31.1% of adults experience an anxiety disorder at some time in their lives. An estimated 19.1% of adults had any anxiety disorder in the past year, but only about a third seek treatment.<sup>2</sup>



#### Alzheimer's

There are over 55 million people worldwide living with dementia in 2020. This number will almost double every 20 years, reaching 78 million in 2030. and 139 million in 2050.<sup>3</sup>



#### Addiction

284 million people aged 15-64 used illegal drugs worldwide in 2020.<sup>4</sup> The estimated number of people using opioids globally has doubled from 26-36 million people in 2010 to 61.3 million in 2020.<sup>5</sup>



#### Depression

World Health Organization (WHO) reports 280 million people worldwide have depression. 21 million U.S. adults had at least one major depressive episode in 2021. An estimated 60% of people who have depression don't seek treatment due to the stigma of depression.<sup>6</sup>

- (1) National Library of Medicine
- (2) National Institute of Mental Health
- (3) Alzheimer's Disease International
- (4) UNODC World Drug Report
- (5) International Overdose Awareness
- (6) Healthline



- 6 out of 10 people in need of mental health care will not receive it <sup>1</sup>

- Those that do receive care, are usually given medication



of patients experience moderately severe side effects<sup>2</sup> <50%

remission rate for the most common medications<sup>3,4</sup> 75%

of participants across studies prefer a non-drug alternative<sup>5</sup>

- 1. Terlizzi, E. P., & Zablotsky, B. (2020). Mental Health Treatment Among Adults: United States, 2019. (380), 1-8.
- 2. Demyttenaere, K., Albert, (2005). Journal of Clinical Psychiatry, 66(7), 859-863.
- 3. Pillai, V., Roth, T., Roehrs, T., Moss, K. (2017). Effectiveness of benzodiazepine receptor agonists in the treatment of insomnia: an examination of response and remission rates
- 4. Rickels, K., & Rynn, M. (2002). Pharmacotherapy of generalized anxiety disorder. Journal of Clinical Psychiatry, 63, 9-16

5. McHugh, R. K., Whitton, S. W., Peckham, A. D., Welge, J. A., & Otto, M. W. (2013). Patient preference for psychological vs pharmacologic treatment of psychiatric disorders: a meta-analytic review. The Journal of clinical psychiatry, 74(6)



### Industry Approach - Competition

Current treatment options for common mental health illnesses present more obstacles than solutions for the patient



#### Handheld - tDCS (internet)

- Low Efficacy (<2 mA)
- Unregulated usage
- \$400 price (patient)



### Pharmaceutical - Drugs & Pills

- Low Efficacy
- Side Effects
- Addiction
- Lifetime of medication



### Transcranial Magnetic Stimulation rTMS

- Low Efficacy
- Side Effects
- \$200,000 price (provider)



### Nexalin Approach

- High efficacy (4 -15 mA)
- Regulated
- Safe
- Nonaddictive
- Supported by solid clinical data



#### **Features and Benefits**

- Low Risk Profile 4/15 milliamps (safe)
- Non-Invasive (low ancillary needs)
- 77.5 htz Frequency (proprietary)
- Symmetric Square Wave (no voltage)
- Disrupts deviant EEG patterns (trauma networks)
- Activates endorphin production (immune activation)
- Activates natural opiate system (mood control)





### Halo Clarity | The Future

- Unchanged proprietary technical features
  - 77.5 Hz @15 milliamps
- Unchanged clinical efficacy
- FDA Premarket De Novo application
- State of the art design and electronics
- Home and office Use (removes stigma associated with receiving mental health treatment in clinical setting)
- Distributed through virtual clinic
- Veterans and active military use (combat theater)



HALO Clarity Headset

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HALO Remote Control



### **Global Funded Clinical Trial Partnerships**

## UC San Diego









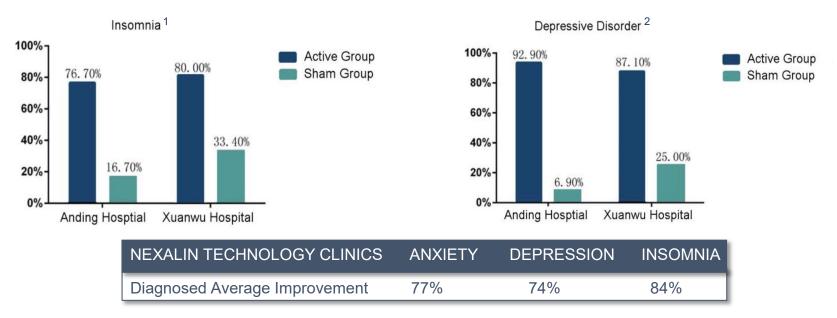


### 首都医科大学宣武医院

Xuanwu Hospital Capital Medical University



Nexalin Technology providers report 75% of patients treated have over 70% improvement and 90% had over 50% improvement of their reported symptoms



1. Insomnia Clinical Trial -Effect of Transcranial Alternating Current Stimulation for the Treatment of Chronic Insomnia: A Randomized, Double-Blind, Parallel-Group, Placebo-Controlled Clinical Trial. <u>https://pubmed.ncbi.nlm.nih.gov/31846980/</u>

2. Depression Clinical Trial - Transcranial alternating current stimulation for treating depression: a randomized controlled trial. <u>https://pubmed.ncbi.nlm.nih.gov/35353887/</u>



### Clinical Trial Results | TBI/PTSD (combat related)

MEG Source Imaging Reveals Neuronal Changes in Combat-related Mild Traumatic Brain Injury after Transcranial Electrical Stimulation using Nexalin

#### **Objectives:**

- To understand the neural mechanisms of biomarkers associated with combat-related mild traumatic brain injury (mTBI), specifically hyperactivity in delta (1-4 Hz) and gamma (30-80 Hz) bands.
- To examine the efficacy of mTBI treatment using tACS electrical stimulation with the Nexalin device with its pulse strength and repetitive frequencies.

#### **Results**:

- Veterans in the active treatment group showed significant (corrected p<0.01) reduction in
  - delta-band activity mainly from the frontal pole and inferior frontal gyri
  - abnormal gamma-band activity mainly from the frontal pole, orbital frontal cortex, and posterior parietal regions, suggesting improvement in GABA-ergic inhibitory interneuron functions.

#### **Conclusion:**

• These findings demonstrate the efficacy of Nexalin's tACS in combat related TBI. Additionally, MEG is an objective functional imaging technique for assessing the efficacy of Nexalin

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### Nexalin Growth Strategy



### Virtual Clinic

#### Nexalin Technology:

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Brain Health Cyber Clinic App

Nexalin promotes and manages the physician/patient relationship in on-line portal



#### Physicians:

Physicians prescribe, monitor and evaluate treatment compliance and safety in physician portal

#### Patients:

Receive evaluation and treatment in privacy of home. Treatment is monitored by the physician with app and on-line portal



### **Expanding Indications**

2022

2031-32

\$16B

\$6.4B

\$60.1B

\$6.1B

\$7.2B

\$140B

\$9.7

•	Anxiety and Depression <sup>1</sup>	\$11.5B
•	Insomnia <sup>2</sup>	\$3.8B
•	Alzheimer's and Dementia <sup>3</sup>	\$5.1B
•	Substance Use Disorder <sup>4</sup> (SUD)	\$35.1B
•	Opiate Addiction <sup>5</sup>	\$3.3B
•	Concussion / TBI / PTSD <sup>6</sup>	\$3.3B
•	Chronic Pain <sup>7</sup>	\$69.1



- 1. Future Market Insights FMI
- 2. <u>Yahoo Finance</u>
- 3. Data Bridge Research
- 4. Fortune Business Insights
- 5. Fortune Business Insights
- 6. Global Market Insights
- 7. Spherical Insights



### US Department of Defense Partnership

- Goals
  - 1. Develop multisite veterans' study for TBI/PTSD
  - 2. To become a primary contractor 2-stage distribution
    - Veterans Hospital System (VA)
    - Active duty / Combat Theatre
- Actions taken
  - Nexalin America division created to deal with US Gov't (Dept of Defense & Dept of Veterans Affairs)
  - Nexalin America Advisory Board
  - Contracted federally registered lobbyist
  - Ongoing meetings with multiple members US Congress and Senate







Congressman Don Davis House Armed Services Committee



### **Global Expansion**

- Joint Venture (JV) formed in Hong Kong to advance the Asia Pacific distribution
- Nexalin ADI (Gen-2) approved by China NMPA in 2021
- JV has funded, conducted and published 6 clinicals studies to date
- Research performed in leading global psychiatric centers in Asia (funded by JV partner)
- Nexalin generates revenue through selling devices to the JV and when JV sell devices in Asia Pacific
- Expansion plans in development Brazil, Oman, Europe, India





### Revenue Creation | Gen-2 & Gen-3

- Chinese distributor is currently selling Gen-2 ADI Nexalin devices in China
- The Company will sell the Gen-2 and Gen-3 ADI Nexalin device to physicians (providers) in the USA
- Recurring Revenue | Nexalin Gen-2 ADI device requires single use disposable electrode
  - Electrodes are microchipped to prevent knockoffs
- Gen-3 Halo device for home use with physician supervision virtual clinic.
- Recurring revenue based on Halo sales and monthly subscription use.
- Strong Margins (65% 95%)







### Financial Snapshot as of September 30, 2024

Cash and Short-Term Investments	\$4.6M
Debt	\$0
Common Shares Outstanding	12.9M
Warrants Outstanding (avg \$4.15)	2.7M
Fully Diluted Shares Including Options	18.4M
Management/Director Ownership	24%



### **Executive Management Team**



Mark White ---President and Chief Executive Officer

Mr. White leads the executive team at Nexalin Technology. Prior to joining Nexalin, Mark owned and operated his own clinics and addiction centers. Mark is a pioneer digital medical market, the in specializing in the development and clinical implementation of neurostimulation technologies. He now provides leadership for a team of executives focused on the global marketing strategy, research. development, manufacturing and future treatment applications of Nexalin Technology.



Marilyn Elson ---Controller

Ms. Flson has been a Certified Public Accountant for more than 35 vears. She is a member of U.S. Asian Consulting Group, LLC, which renders advice and consulting services, including services to the Company. Ms. Elson co founded and was a member of a boutique accounting firm. She served as Comptroller for a medical technology company, guiding the company through a public offering and listing on a stock exchange. Ms. Elson has a Bachelor of Arts degree in Accounting and a Masters Degree in Taxation.



David Owens M.D. ---Chief Medical Officer

Owens brings extensive Dr. experience in neuro-technologies and treatment methodologies gained over more than 30 years in neuroradiology and neuroimaging. He has a special interest in brain related imaging for PTSD and traumatic brain injury. In addition to his roles at Nexalin Technology, Dr. Owens is the Medical Director of Radiology Consultation Services, PC. Dr. Owens acquired his M.D. and holds two (2) degrees in Chemistry and Physics. He is also a senior member of the American Society of Radiology.



Carolyn Shelton ---Sr VP -Quality, Regulatory, Clinical

Mrs. Shelton is a seasoned medical device executive with over 30 years of experience leading global regulatory, quality, and clinical initiatives. She has a proven track record of success in navigating complex regulatory landscapes and ensuring compliance with FDA, EU, and other international standards. Her expertise and leadership are instrumental in driving Nexalin's mission to advance neuro health through innovative solutions.

### **Advisory Board**

#### John Patrick Claude – Engineering and Product Development (Co-Founder / waveform designer)

Mr. John Claude, in conjunction with Dr. Yakov Katsnelson, designed and developed the original tACS waveform that is marketed as Nexalin Technology. John now leads all engineering, research and development at Nexalin Technology. Additionally, John has an extensive background in regulatory, compliance and quality management. John graduated from the University of Notre Dame with a BS in Physiology. John then received an ME in Biomedical Engineering from the University of Virginia. John has designed and built advanced technologies for NASA, NIH, Stanford Medical Center and the Palo Alto Veterans Administration.

#### Tucker Andersen – Analyst , Public and Private Boards

Mr. Tucker Andersen is a current investor. Mr. Anderson spent twenty-seven years with the private investment partnership Cumberland Associates, including fifteen years as a co-managing partner of the firm. He is on several advisory and private company boards, including, Questech Corporation, Value Insight Partners, and Artificial Cell Technologies. Tucker is the recipient of both the Wesleyan Distinguished Alumnus Award and the Exeter Founder's Day Award. He is both a Chartered Financial Analyst and an Associate Member of the Society of Actuaries.

#### Leonard Osser – Investment Banking, Underwriting, China and Global Distribution

Mr. Leonard Osser is a current investor. Mr. Osser has been a Director of Milestone Scientific, Inc. since he founded that company in 1989. He served as Chief Executive Officer of Milestone Scientific from the time of its founding until 2021, other than twice during the last 20 years when he intended to retire from that position. He served as Chairman of Milestone Scientific from 1991 until September 2009 at which time he resigned as Chairman of Milestone Scientific but remained a director. Mr. Osser serves as Managing Member of U.S. Asian Consulting Group LLC, which provides various consulting services to the Company. Mr. Osser is a shareholder of the Company. He is a member of our non-medical Board of Advisors and serves as Director of China operations. Mr. Osser is the spouse of Marilyn Elson, our Chief Financial Officer.

#### Gian Domenico Trombetta - Global Strategy and Various Acquisition and investment

Mr. Gian Domenico Trombetta has been the President and CEO of Innovest S.P.A, an Italian corporation specializing in private equity and distressed assets since 1992. He was previously with Booz Allen & Hamilton Inc. focusing on strategy and acquisition services. Mr. Trombetta received B.A, from Luiss University in Rome in 1984. Mr. Trombetta is also a Director of Milestone Scientific Inc, a NYSE American listed company, on whose Board of Directors he has served since 2014.



# TECHNOLOGY

Thank You