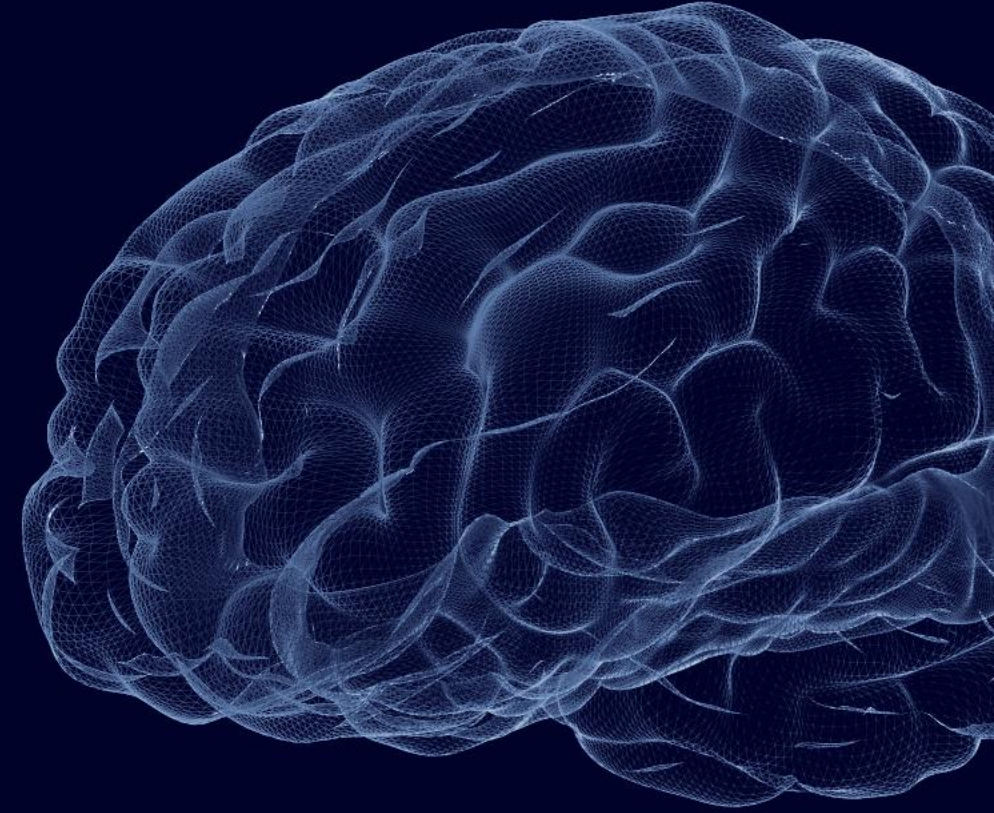




NeuroOne® Medical Technologies Corporation



Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Except for statements of historical fact, any information contained in this presentation may be a forward-looking statement that reflects NeuroOne's current views about future events. In some cases, you can identify forward-looking statements by the words "may," "might," "will," "could," "would," "should," "expect," "intend," "plan," "upcoming," "target," "objective," "anticipate," "believe," "estimate," "predict," "project," "potential," "target," "seek," "contemplate," "continue" and "ongoing," or the negative of these terms, or other comparable terminology. Forward-looking statements may include statements regarding the development of the Company's ablation electrode technology program, applications for, or receipt of, regulatory clearance, the timing and extent of product launch and commercialization of our technology, expected milestone payments, clinical and pre-clinical testing, what the future may hold for electrical stimulation and NeuroOne's potential role, business strategy, market size, potential growth opportunities, future operations, future efficiencies, and other financial and operating information. Our actual future results may be materially different from what we expect due to known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements, including risks that the partnership with Zimmer Biomet may not facilitate the commercialization or market acceptance of our technology; risks that our sEEG electrodes may not be ready for commercialization in a timely manner or at all, whether due to supply chain disruptions and the impact of COVID-19, or otherwise; risks that our technology will not perform as expected based on results of our pre-clinical and clinical trials; risks related to uncertainties associated with the Company's capital requirements to achieve its business objectives and ability to raise additional funds; the risk that the COVID-19 pandemic will continue to adversely impact our business; the risk that we may not be able to secure or retain coverage or adequate reimbursement for our technology; uncertainties inherent in the development process of our technology; risks related to changes in regulatory requirements or decisions of regulatory authorities; that we may not have accurately estimated the size and growth potential of the markets for our technology; risks relate to clinical trial patient enrollment and the results of clinical trials; that we may be unable to protect our intellectual property rights; and other risks, uncertainties and assumptions, including those described under the heading "Risk Factors" in our filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date of this presentation and NeuroOne undertakes no obligation to revise or update any forward-looking statements for any reason, even if new information becomes available in the future.

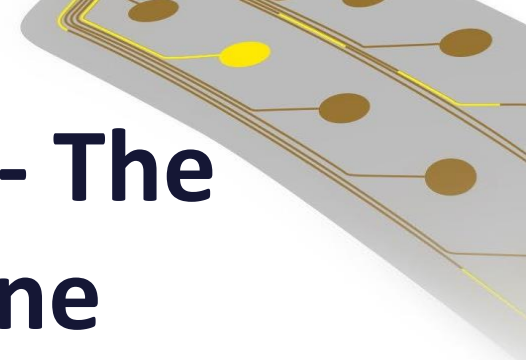
This presentation also contains estimates and other statistical data made by independent parties and by us relating to market share and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates.

The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of such products.

Caution: Federal law restricts this device to sale by or on the order of a physician



Neurological Disorders - The Next Frontier In Medicine



“Neuroscience is the next great frontier in medicine”

“I think we’re on the cusp of some major breakthroughs in this space”

Casper Hoogenraad, Genentech (VP, Neuroscience) June 2021

- **Growing epidemic of neurological disorders: epilepsy, Parkinson’s Disease, chronic back pain, depression, essential tremors etc.**
- **Lack of innovation in electrode technology has slowed insights and progress toward better treatment alternatives**
- **NeuroOne has developed a breakthrough thin-film electrode**

Unlocking The Brain

We think, feel, move and sense through a web of 80+ billion neurons in the brain which communicate through electrical signals

Electrodes are used to:

- Detect, record and monitor neurological activity
- Stimulate or ablate tissue to regulate brain activity

Key Company Highlights

Highly disruptive – Step change technological improvement

Platform technology with broad diagnostic and therapeutic applications

Strategic Partnerships with Zimmer Biomet (NYSE:ZBH, ~\$30B Mkt Cap) and Mayo Clinic

Leveraging Zimmer Biomet scale and reach to efficiently commercialize diagnostic electrodes¹ (\$100M+ Market²)

Multi-billion market opportunity for combination devices³



Key Partnerships





MAYO CLINIC



ZIMMER BIOMET

Technology Value Proposition

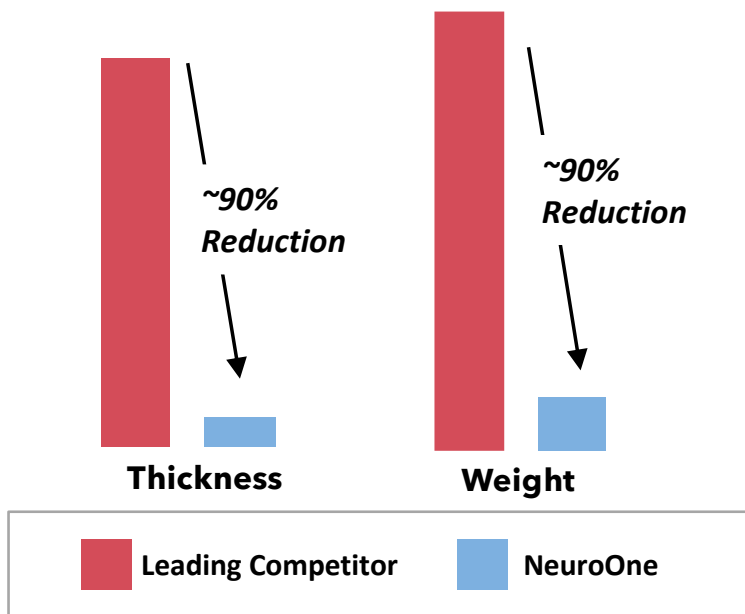
Highly Disruptive Thin-Film Technology with Superior Competitive Advantages

 Precision	<ul style="list-style-type: none">▪ Ultra High-definition technology increases signal clarity via lower impedance¹ (noise)▪ May enable ablation or stimulation of the targeted tissue with better precision▪ May have ability to detect micro-seizures² and treat prior to seizure progression
 Thin-Film	<ul style="list-style-type: none">▪ Highly flexible design provides new options for surgical placement and potentially smaller borings/incisions▪ Lower inflammation compared to more bulky electrodes²
 Combination Device	<ul style="list-style-type: none">▪ Enables pairing of diagnostic and therapeutic into combination product▪ Potential to be used in an MRI machine - current electrodes can't be used in MRI▪ <u>Potential to eliminate an entire surgical procedure and improve outcomes</u>
 Cost & Manufacturing	<ul style="list-style-type: none">▪ Cost competitive to current electrode technology▪ Fast fulfillment – automated / scalable process▪ High reliability – no soldering / consistent manufacturing process

1) Worrell G A et al. COMMERCIAL SCALE PRODUCTION OF THIN-FILM ELECTRODE ARRAYS FOR CLINICAL INTRACRANIAL EEG AES abstracts (Abst. 1.154), 2019

Thin Film Value Proposition

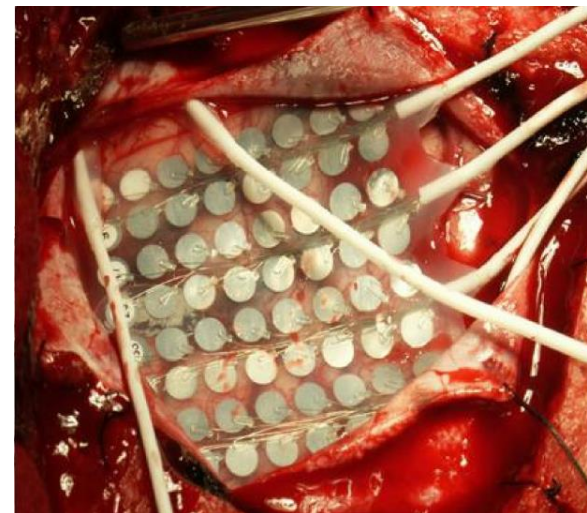
Thin Film vs. Competitive Electrodes¹



Legacy Electrode Technology

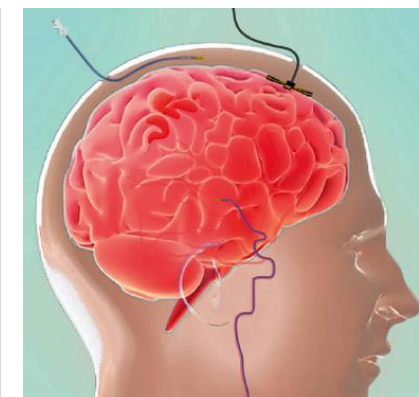
- Developed in 1960's
- Limited resolution
- Large, bulky
- Rely on manual labor
- High manufacturing costs
- Frequent backorders

Competitive Electrodes Are Invasive







Thin-Film Advantage: Less Invasive

- Amenable to minimally invasive procedures
- Printed / Ultraflexible²— can be rolled, bent, inserted percutaneously without fear of breaking solder joints

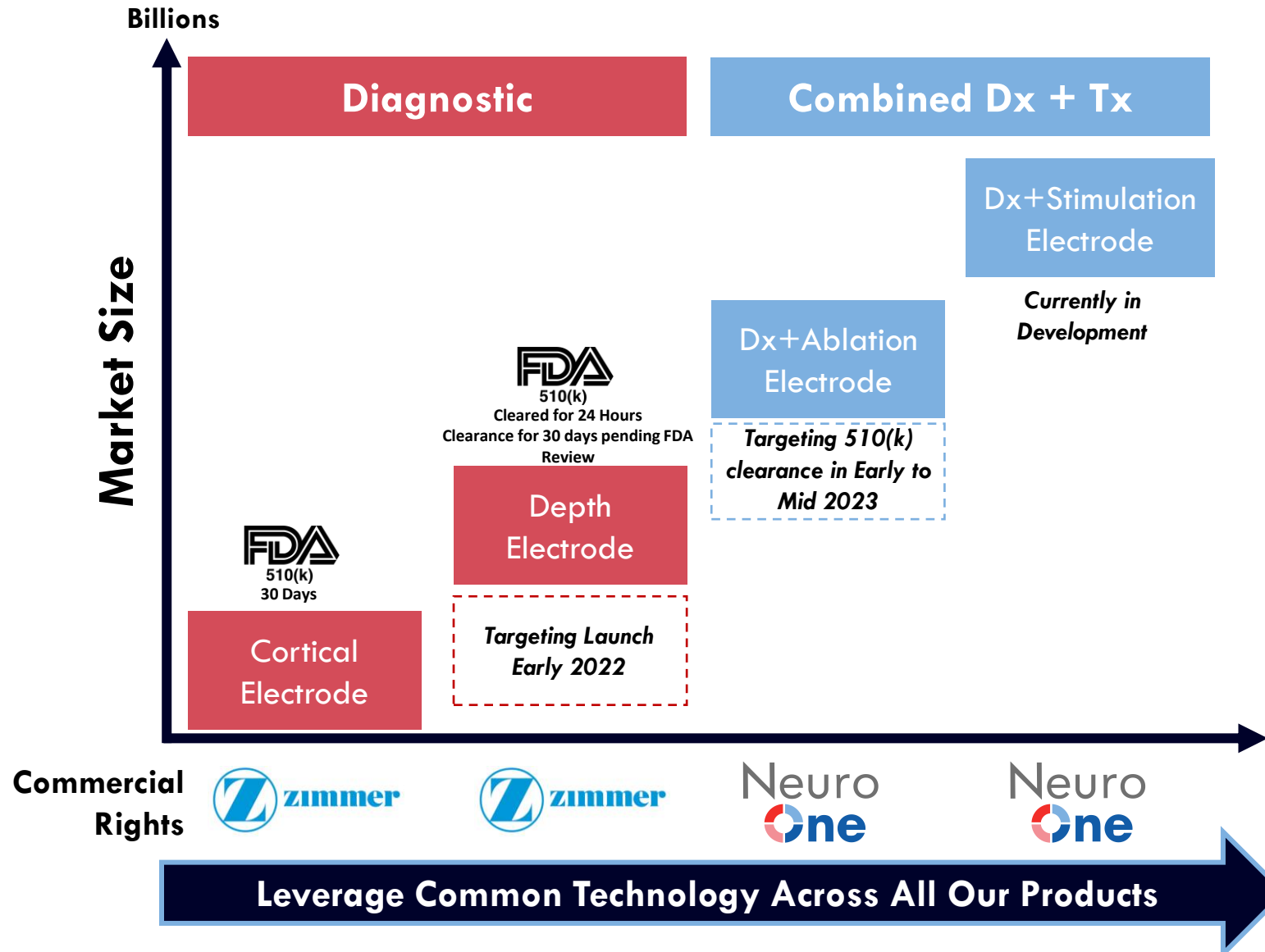


Product Portfolio

	Product	Name	Use Case
Diagnostic		Evo® Cortical Electrodes*	Recording brain activity Placed on surface of brain
		Evo® sEEG Depth Electrodes*	Recording brain activity Placed Deeper Into the Brain
Combined: Diagnostic & Therapeutic		Ablation Electrodes	Recording and Ablating Brain Tissue Placed Deeper Into the Brain
		Electrodes for Chronic Use	Recording Activity Chronic Stimulation

*All FDA cleared products are Rx only

Product Development Roadmap



Market Opportunity

Diagnostic¹
 >\$100 Million Market

Combination Dx + Tx
 Multi-Billion Market²

Ablation
Spinal cord stimulation
Deep Brain Stimulation

Zimmer Development Agreement

- Zimmer to exclusively commercialize and distribute NeuroOne's Evo[®] electrode technology
- Agreement signed in July 2020, \$2 million upfront payment with additional milestones
- Zimmer is a worldwide leader in robotic technology used in minimally invasive neurosurgeries
- Evo[®] electrode product line complementary to Zimmer's ROSA ONE[®] Brain platform
- Partnership enables efficient deployment into the market
- Allows NeuroOne to focus on development and pursue additional applications for technology

Evo[®] sEEG electrodes represent incremental revenue per procedure not including other accessories required for the procedure



Development and Distribution
Agreement with Zimmer
Biomet, one of the world's
most highly respected medical
device manufacturers

Mayo Clinic Partnership

- Mayo Clinic began testing technology in pre-clinical models and clinical research in 2015
- Mayo Clinic leading neurologist, Dr. Worrell, chairs the NeuroOne Scientific Advisory Board
- First commercial human use of Evo® Cortical Electrodes performed at Mayo Clinic in November 2020
- Mayo Clinic partnership with NeuroOne began in 2017

Mayo Clinic Board Representation



Greg Worrell MD, PhD, Chairman of the Scientific Advisory Board

World renowned neurologist at Mayo Clinic. Recognized by the American Epilepsy Society (AES), the American Academy of Neurology (AAN), the American Neurological Association (ANA), and the Citizens United in Research for Epilepsy (CURE) Foundation for his contributions to the field of epilepsy research. Dr. Worrell is a frequent keynote speaker at neurology conferences and has published 90 papers.



Jamie Van Gompel, MD

Neurosurgeon practicing at Mayo Clinic, specializing in epilepsy surgery utilizing minimally invasive techniques. Since 2008, Dr. Van Gompel has authored or co-authored 87 papers on clinical outcome projects centered on neurological conditions. Dr. Van Gompel works collaboratively with colleagues from Mayo Clinic's Epilepsy and Neurophysiology lab, engaging in clinical work relative to brain stimulation as a viable restorative therapy for epilepsy over current treatment methodologies.



Mayo Clinic serves as a critical partner to NeuroOne and as a top shareholder of the Company

Evo[®] Cortical Electrode



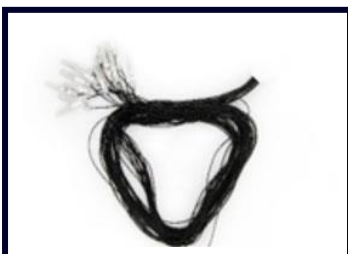
Greater Precision

The single substrate allows for lower impedance to improve signal quality. ¹
Contact size and shape of electrodes may be customizable per neurosurgeon's request in the future.



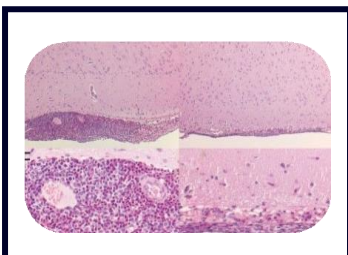
Thin Film Design

The thin film, flexible design provides new options for surgical placement.
Single thin tail has less bulk while tunneling through the scalp and less incisions for possible infections.



Disposable Cables

Disposable cables eliminate the need to sterilize cables and saves the surgical staff time, allowing them to focus on other important tasks.
Disposable cables save the hospital resources by not having staff manage the sterilization of electrode cables.



Clinical Evidence

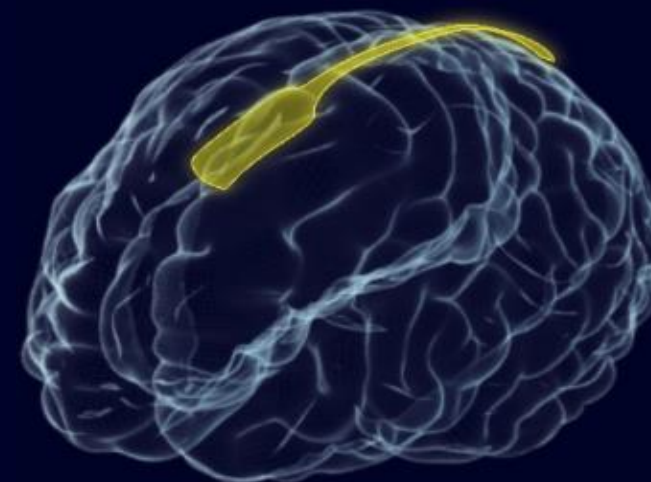
Study conducted by the Mayo Clinic found our electrodes created less tissue inflammation on the brain after being implanted for 7 days. ²

Applications

- Epilepsy surgery
- Intraoperative mapping

Competitors

- Ad-Tech
- Integra
- PMT
- Cortec



1) Worrell G A et al. COMMERCIAL SCALE PRODUCTION OF THIN-FILM ELECTRODE ARRAYS FOR CLINICAL INTRACRANIAL EEG AES abstracts (Abst. 1.154), 2019

2) Bower R, et al. December 2017. Development of Polyimide electrodes for high-resolution intracranial EEG recordings. (Abst. 1.060) American Epilepsy Society. Washington, D.C

3) In November 2019, we received 510(k) clearance for our Evo Cortical Electrode technology for temporary (less than 30 days) recording, monitoring, and stimulation on the surface of the brain

Thin-Film Depth Electrode

Can be used in Combination with ROSA ONE®

NeuroOne Potential Advantages:

- Increase signal clarity / reduced noise.
- Better tactile feedback during insertion into brain tissue
- Faster order fulfillment due to manufacturing process.

Product Development/Commercial Launch:

- ☒ FDA 510K for 24-hour use
- ☐ FDA 510(k) for 30-day – Q4'21-Q1'22
- ☐ Commercial Launch – Early '22²



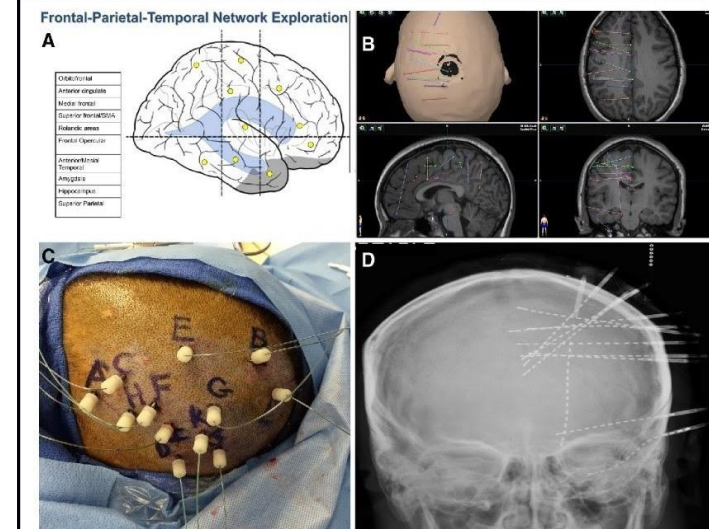
Market > \$100M¹

Applications

- Epilepsy surgery
- Awake Brain Mapping Procedures

Competitors

- Ad-Tech
- Integra
- PMT
- DIXI



All products are Rx only

Platform Technology:

Diagnostic + Ablation Depth Electrode

Applications:

- Remove brain tumors
- Remove lesions causing seizures

Competitors:

- Medtronic
- Monteris Medical

NeuroOne Advantages vs Current Laser Technology:

- Leverages current NeuroOne sEEG technology.
- One procedure for diagnostic and therapeutic expected to save time, money and intended to improve patient outcomes.
- May provide bedside treatment capability thereby saving significant time and cost.
- Uses well established RF energy to ablate tissue.
- Overcomes inherent laser drawbacks such as heat dissipation, need for MRI facility




NeuroOne sEEG Electrode





RF Generator
w/ Temperature Sensing


Ablation Advisory Board


 Dr. Daniel Couture
Wake Forest Baptist Health

 Dr. Zachary Levine
Holy Cross Health
George Washington University

 Dr. Gerald Grant
Stanford University Medical
Center

 Dr. Guy McKhann
New York Presbyterian
Hospital
Columbia University

 Dr. Bob Gross
Emory University

 Dr. Jamie Van Gompel
Mayo Clinic

Spinal Cord Stimulation System

NeuroOne Advantages:

- Ability to place permanent electrodes percutaneously
- Expandable midsection allows electrode to extend without displacement.
- **“Scalability”** of electrodes offer greater precision of targeted stimulation area.
- Design allows for use in trial period and permanent placement thereby reducing two procedures to one.
- Electrodes currently in testing for 5 year use; data expected in Q1 2022

WW Market > \$3B¹



Competitive solutions

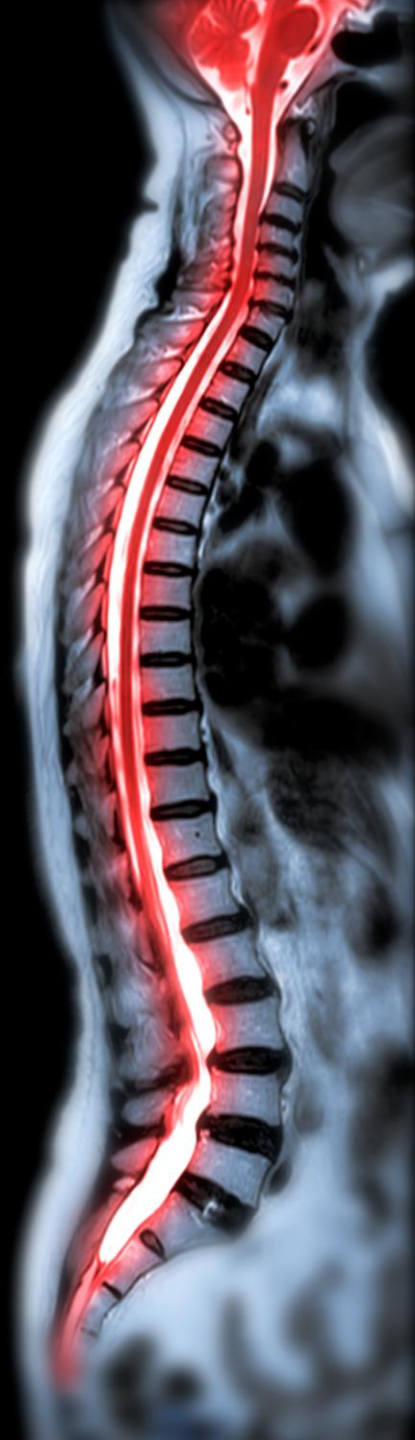
Paddle and cylinder electrodes which are placed via two different procedures.

Major vendors in this market include: Medtronic, Boston Scientific, Abbott.



NeuroOne's solution

A paddle implanted like a cylinder electrode so only one procedure is needed to implant the electrode.



Deep Brain Stimulation System

NeuroOne Advantages:

- Utilizes current electrode design
- Our high-definition electrodes have been shown to detect micro seizures¹ which may improve responsive stimulation algorithms
- Additional technology applications may be suitable for drug delivery
- Targeted stimulation for movement, psychiatric and cognitive disorders
- Electrodes currently in testing for 5-year use; data expected in Q1 2022

1. Bower R, et al. December 2017. Development of Polyimide electrodes for high-resolution intracranial EEG recordings. (Abst. 1.060) American Epilepsy Society. Washington, D.C.
 2. Market Insights, Neurostimulation Devices. Published September 11, 2020, by Sophie Quraishi

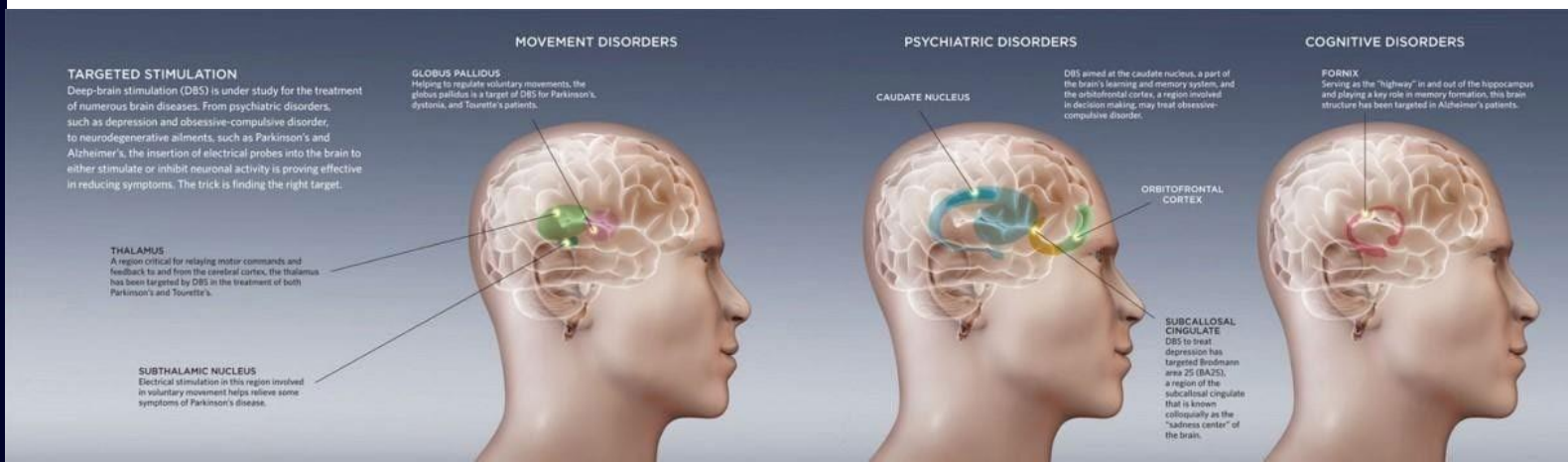
Currently a \$500M WW market
with potential of \$6B²

Applications

- Parkinson's Disease
- Epilepsy
- Essential Tremors

Competitors

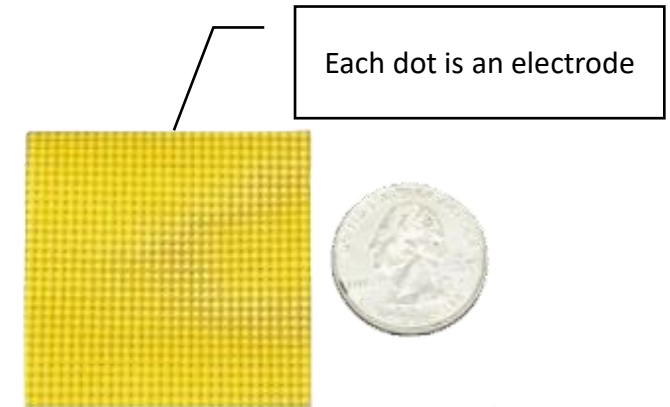
- NeuroPace
- Medtronic
- Abbott
- Boston Scientific



Bridging the Gap

Artificial Intelligence (A.I.)

- Damaged neurons can cause a break in neuron-to-neuron connectivity: etiology for many neurological disorders.
- Successful treatments achieved by implanting small wires to record and reintroduce the natural signal.
- Elon Musk and others have started companies to try to implant millions of wires in the brain.
- NeuroOne's high-definition thin film platform could allow for recording and stimulation of the neurons to bridge these gaps more effectively.
- NeuroOne technology is scalable allowing thousands of contacts to be implanted.



Management Team



Dave Rosa

President and Chief Executive Officer

An entrepreneur with three decades of experience in the medical device industry spanning a variety of technologies and products. In addition to CEO roles with early-stage medical device companies, Mr. Rosa's background also includes senior roles with C.R. Bard Inc., Boston Scientific Inc., and St. Jude Medical, where his responsibilities included marketing, product development and business development. He has been named as an inventor on multiple medical device patents, has served on seven corporate boards, and has raised \$200M in the capital markets. Mr. Rosa holds an MBA from Duquesne University, and a BS in Commerce and Engineering from Drexel University.



Ron McClurg

Chief Financial Officer

Mr. McClurg has over 30 years of financial leadership experience with private and public companies. Prior to joining NeuroOne, Mr. McClurg was Chief Financial Officer of Incisive Surgical, Inc., a privately-held medical device manufacturer, and Chief Financial Officer and Treasurer of Wavcrest Corporation, a privately-held manufacturer of electronic test instruments. Mr. McClurg also served as Chief Financial Officer for several publicly-held companies, including Video Sentry Corporation, Insignia Systems, Inc., and Orthomet, Inc. He began his career in public accounting with Ernst & Young, where he earned his CPA certificate. He holds a Bachelor of Business Administration degree in Accounting from the University of Wisconsin - Eau Claire.



Steve Mertens

Chief Technology Officer

Prior to joining NeuroOne, Mr. Mertens was Sr. Vice President of R&D and Operations at NuVaira, a privately held lung denervation company developing minimally invasive products for obstructive lung diseases. Before that, he was a Senior Vice President of Research and Development for Boston Scientific, where he guided a wide range of technologies through product development for the cardiology, electrophysiology, and peripheral vascular markets. Mr. Mertens holds a Bachelor of Science degree in Chemical Engineering from the University of Minnesota and a master's degree in Business Administration from the University of St. Thomas.



Mark Christianson

Co-Founder, Business Development Director, Medical Sales Liaison

In excess of 15 years of executive sales, sales management, marketing, and project management experience with development stage companies. Prior to NeuroOne, Mr. Christianson held the positions of North American Sales Manager for Cortec Corporation, a manufacturer of specialty chemical products, and Regional Sales Manager for PMT Corporation, a leading manufacturer of products for neurosurgery, orthopedics and plastic surgery. He holds an accounting degree from Augsburg College.



Hijaz Haris

Vice-President of Marketing

Mr. Haris has more than 20 years of experience with Medtronic, the world's largest Medical Device company. Most recently he led Global Marketing for Medtronic's Brain Modulation business, where he helped refresh the Deep Brain Stimulation product pipeline and led the business through a period of new competitive entries, new product launches, brand refresh, and various distribution partnerships. Prior to that Hijaz held various roles of increasing responsibility across multiple business segments (Cardiac Rhythm Management, Neuroscience, Neuromodulation) and business functions (Product and Strategic Marketing, Corporate Sales, Sales Strategy, and Corporate Finance).



Camilo Diaz Botia

Director of Electrode Development

Dr. Camilo Diaz-Botia is a highly experienced neural engineer whose work has focused on the development of technologies for bidirectional communication with the nervous system. Most recently, Dr. Diaz-Botia worked for Neuralink where he led and mentored the process engineering team to deliver projects with unique microfabrication processes. Under his direction, the team built and designed novel processes for integration of thin film neural probes with brain machine interface systems. Dr. Diaz-Botia earned a B.S. in Electrical Engineering from Universidad Nacional de Colombia and a Ph.D. in Bioengineering from the joint program at the University of California Berkeley and the University of California San Francisco.

Scientific Advisory Board



Greg Worrell

MD PhD, Chairman of the Scientific Advisory Board

World renowned neurologist at Mayo Clinic. Recognized by the American Epilepsy Society (AES), the American Academy of Neurology (AAN), the American Neurological Association (ANA), and the Citizens United in Research for Epilepsy (CURE) Foundation for his contributions to the field of epilepsy research. Dr. Worrell is a frequent keynote speaker at neurology conferences and has published 90 papers.



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Greg Esper

MD, MBA

Associate Professor, Vice-President of Clinical Affairs, and Director of New Care Models in the Neurology Department at Emory University. Vice Chair of the Medical Economics and Management Committee for the American Academy of Neurology (AAN). Dr. Esper was Chair of the Navigating Health Reform Task Force for the AAN in 2012.



Joseph Madsen

MD

Director, Epilepsy Surgery; Associate, Department of Neurosurgery Professor, Harvard Medical School.



Justin Williams

PhD

Department Chair and Vilas Distinguished Achievement Professor at University of Wisconsin. Dr. Williams is credited with multiple publications, patents, and research in the field of thin-film electrodes for neurological recording, ablation, and stimulation.



Vanessa Tolosa

Recognized pioneer and highly respected thought leader throughout the industry. As an engineer with 10+ years of experience developing implantable neural devices, Vanessa has fostered collaborations, built organizations and taken technologies from proof-of-concept to reliable systems. Most recently, she served as director and co-founding member along with Elon Musk, of Neural Interfaces, Neuralink Corp., a company focused on developing a complete Brain-Machine Interface.

Board of Directors



Paul Buckman

Chairman of the Board

Mr. Buckman is currently the President of North America of LivaNova PLC, a London-based medical device manufacturer, publicly trading on the Nasdaq. The Company develops devices used for cardiac surgery, neuromodulation, and cardiac rhythm management. LivaNova was formed by a 2015 \$2.7 billion merger between Houston, Texas-based Cyberonics, Inc., and Milan, Italy-based Sorin S.p.a. Mr. Buckman has been a co-founder, president, or CEO of several medical device companies. He has led many of these companies to successful exits. He is currently on the board of several public and private medical device firms. Mr. Buckman received a Master's degree in Business Administration and Finance and a BA degree in Business Administration from Western Michigan University.



Jeffrey Mathiesen

Mr. Mathiesen is currently the Chief Financial Officer of Helius Medical Technologies, Inc. (Nasdaq: HSDT), a publicly traded medical device company. He has held executive positions with publicly-traded and privately-held companies dating back to 1993, including vice president and chief financial officer positions. Mr. Mathiesen also serves as a Director, Audit Committee Chairman and Nominating and Governance Committee Member of Panbela Inc., a publicly-traded clinical-stage biopharmaceutical company. He received a B.S. in Accounting from the University of South Dakota and is a Certified Public Accountant.



Dave Rosa

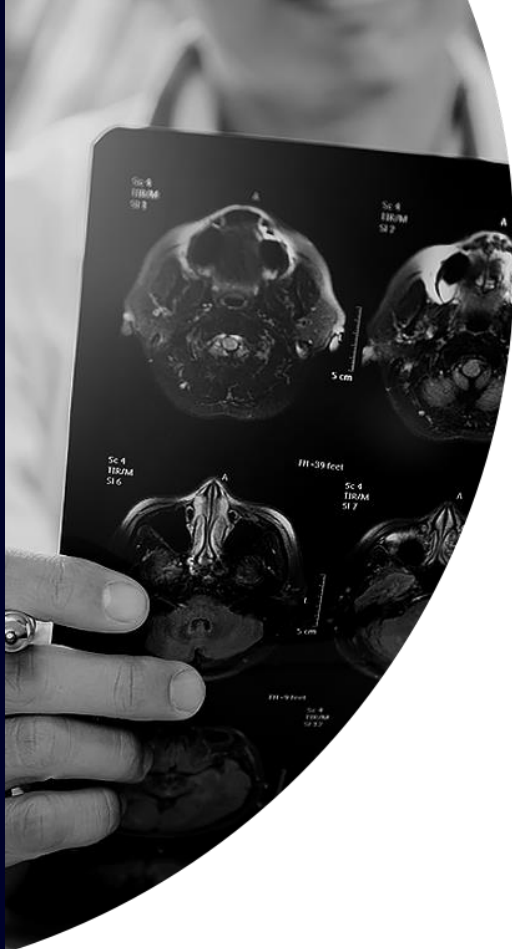
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Edward Andrie

Mr. Andrie most recently served as the General Manager of the Neuromodulation franchise at LivaNova PLC. Prior to LivaNova, Mr. Andrie served as Sorin's Vice-President of Strategy & Business Development. He also has previously held executive positions with Boston Scientific and Baxter, leading large product portfolios in both neuromodulation and cardiac devices. Mr. Andrie has been a co-founder and CEO for several early-stage medical device companies in both the neuromodulation and cardiovascular industries. In addition, he has also served on the board of many privately held medical device companies. Mr. Andrie received his MBA from Stanford Graduate School of Business and his B.S. in Chemical Engineering from the University of Notre Dame.



Financial Information

NASDAQ: NMTC	Financial Data
Price: ¹	\$1.94
90-Day Price Range: ¹	\$1.87 - \$4.23
Daily Volume – Last 30 Day Average: ¹	70,714
Market Capitalization: ¹	\$31.2 Million
Shares Outstanding: ¹	16.2 Million
Shares in Float: ¹	~ 12.0 Million
Warrants: ¹	6.75 Million (WAEP = \$6.14)
Stock Options: ¹	1.1 Million (WAEP = \$5.89)

¹ As of December 31, 2021

Key Takeaways

- Substantial market opportunity
- Disruptive, patented technologies
 - Address a significant and unmet need
 - Expectation - substantially improved outcomes
 - Meet the need to lower costs
 - Established reimbursement
- Two FDA cleared electrodes
- Majority of NeuroOne's products expect to utilize the FDA's 510(k) process
- Mayo and Cleveland Clinic have conducted preclinical studies, which have produced promising results utilizing our devices in humans and/or animals
- Zimmer Biomet commercial launch initiated in 2021
- Platform technology potential for multiple applications:
 - Diagnostic and therapeutic capabilities
 - Brain related disorders, spinal cord stimulation, and A.I.
- Experienced Management Team, Advisory Boards, and Board of Directors
- Growing patent portfolio

Key Partnerships:



ZIMMER BIOMET



Thank You

Dave Rosa

President and Chief Executive Officer

NeuroOne