

ONMARD MEDICAL

Company Deck August 2024

















Forward Looking Statements

This Presentation may include statements, including the Company's financial and operational medium-term objectives, that may be deemed to be "forward-looking statements". These forward-looking statements may be identified by the use of forward-looking terminology, including the terms "believes", "aims", "forecasts", "continues", "estimates", "plans", "projects", "anticipates", "expects", "intends", "may", or "or, in each case, their negative or other variations or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. Forward-looking statements may and often do differ materially from actual results. Any forward-looking statements reflect the Company's current view concerning future events and are subject to risks relating to future events and other risks, uncertainties, and assumptions relating to the Company's business, results of operations, financial position, liquidity, prospects, growth, or strategies. Forward-looking statements speak only as of the date they are made.



ONWARD® Medical at a Glance

Key Facts

- o Founded in 2015
- o ~100 FTEs
- HQ in the Netherlands
- Science and Engineering Center in Switzerland
- Growing US presence
- IPO 2021, Euronext Brussels and Amsterdam
- Followed by Stifel, Bryan, Garnier & Co, KBC Securities, Degroof Petercam and Kepler Cheuvreux

- **Technology**: 3 purpose-built neuromodulation platforms
 - o **ARC**^{EX®} delivers ARC Therapy[™] externally through the skin
 - o ARC^{IM®} delivers ARC Therapy via a fully implanted system
 - o ARC^{BCI™} pairs ARC^{IM} with an implanted brain-computer interface to restore thought-driven movement via a wireless DigitalBridge[™]
- Innovation: 10 FDA Breakthrough Device Designations; 270+ issued patents¹
- Clinical Success:
 - Safety and effectiveness of ARC^{EX} Therapy for upper limb mobility demonstrated in Up-LIFT clinical trial; results published in *Nature Medicine*, May 2024
 - o **Positive interim results** for ARC^{IM} Therapy to improve blood pressure regulation
 - Market Opportunity: \$20B+ / €19B+ total addressable market with limited competition
- Commercialization: First revenues expected 2H 2024 with ARCEX launch



There are no cures nor effective therapies for spinal cord injury (SCI)

Unmet Need

Devastating

Not only paralysis & loss of sensation; frequently also infection, incontinence, blood pressure instability, loss of sexual function, and other challenges

Assistance required to support activities of daily life

Quality of life can be poor

Prevalent

US & Europe^{1,2}
Prevalence ~650,000
Incidence ~50,000

Global²

Prevalence **~7,000,000** Incidence **~768,000**

Costly

Avg Lifetime Cost³ (paraplegic)

Avg Lifetime Cost³ (tetraplegic) \$5.1M / €4.6M

Note: 1 EUR = 1.1 USD

¹ NSCISC Annual Report, US and Europe only, World Health Organization Fact Sheet, November 2013, estimate 40-80 cases per millio

² Kumar et al. 2018. Traumatic Spinal İnjury: Global Epidemiology and Worldwide Volume

NSCISC Traumatic Spinal Cord Injury Facts and Figures at a Glance (2023 SCI Data Sheet); estimated lifetime costs for a person aged 25 at the time of injury with injury seventy AIS ABC; costs for a tetraplegic person calculated as the average cost for a person with high tetraplegia and a person with low tetraplegia

Targeted, programmed electrical stimulation of the spinal cord to restore movement, function, and independence in people with spinal cord injury

Our Technology















Note: Investigational devices, not available for commercial use. The ARCBCI graphical representation includes ONWARD Medical's ARCIM with CEA Clinatec's WIMAGINE® brain-computer interface.

ARC

Reach commercial stage by year-end, then expand labeling and platforms

Company Focus

Short Term 2024

Medium Term 2026 Long Term
2026+

Commercialize external platform (ARCEX)

First indication: Upper Limb

Population: SCI

Generate revenue and develop market for ARCIM



Commercialize implantable platform (ARCIM)

First indication: Blood Pressure

Population: SCI

Enter traditional medtech IPO/M&A window



Expand labeling and platforms

New indications and platforms to be assessed such as BCI

Populations: SCI, Parkinson's, Stroke



9 indications under clinical or pre-clinical evaluation, with 3 in current roadmap

Short and medium term focus

Current Pipeline

Clinical Indication **Human PoC Platform** FDA BDD¹ Pre-clinical Pivotal Feasibility² ARCEX Upper Limb Pivotal expected to ARCIM **Blood Pressure** start early 2025 Mobility / Second ARCIM Indication ARCEX Mobility ARCIM Parkinson's - Mobility Human PoC ARCIM Bladder expected in 2024³ ARCBCI Mobility ARCBCI Upper Limb ARCDBS Mobility ✓ BDD¹ Granted O Current Roadmap Compared to the compared to O Platform Expansion

Note: The company may modify the pipeline based on clinical progress and marketplace considerations

¹ BDD = FDA Breakthrough Device Designation. ONWARD has been granted four additional BDDs for ARC^{EX} Bladder, ARC^{EX} Blood Pressure, ARC^{EX} Spasticity and ARC^{IM} Spasticity

² Includes both early feasibility (typically before device design finalized) and feasibility (near-final or final device design) studies

³ Funded by Christopher & Dana Reeve Foundation grant

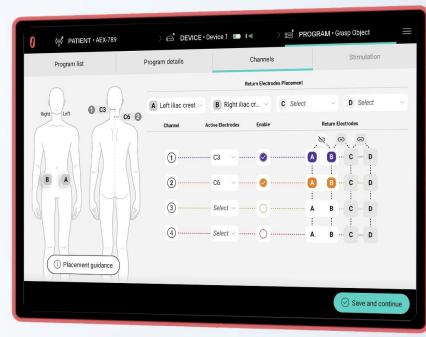
Funded primarily through grants and research partners



External system for non-invasive, programmed stimulation of the spinal cord



External Platform



ARCEX® PRO & myARCEX® app

via ARC^{EX®} Programmer



ARC^{EX®} Therapy

Individual stimulation parameters can be optimized for each patient's unique needs



Note: For investigational use only

ARC^{EX®} Therapy

Programmed transcutaneous electrical stimulation to the spinal cord

Designed to restore movement, function, and independence in people with SCI



ARCEX® Stimulator



Met all primary and secondary endpoints, demonstrating safety and effectiveness in improving upper limb function after SCI

Pivotal Trial Results for ARC^{EX} Therapy

(n=65, 14 trial sites globally)

90%

Improved in at least one primary strength or function assessment

87%

Reported improvement in overall

quality of life

34 yrs

Improvements demonstrated up to 34 years post-injury

Improved hand function



Improved quality of life



- No serious device-related adverse events
- Study participants also reported reduced spasm frequency, improved sleep, and improved upper body sensation, including the sense of touch
- o Examples of functional progress made by ARC^{EX} Therapy users include lifting filled cups, pushing a button on a remote control, and picking up objects with a fork

Moritz, Chet, et al. "Non-invasive spinal cord stimulation for arm and hand function in chronic tetraplegia: a safety and efficacy trial." *Nature Medicine*. 2024. Smaby, Niels, et al. "Identification of key pinch forces required to complete functional tasks." *Journal of Rehabilitation Research and Development*. 2004. Kirshblum, Steven C, et al. "International standards for neurological classification of spinal cord injury (revised 2011)." *The Journal of Spinal Cord Medicine*. 2011

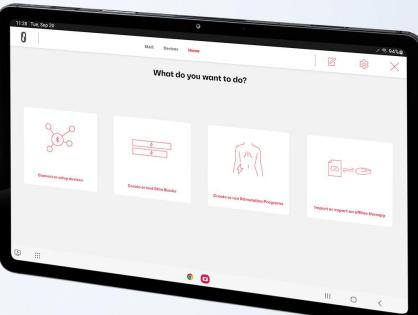


IPG and leads for direct, programmed stimulation of the spinal cord



Implantable Platform





ARCIM® PRO App via ARCIM® Programmer

0

(IPG)



Prioritizing highly commercially viable therapy as first indication

Blood Pressure Indication

ONWARD Medical is pursuing a therapy for **hemodynamic instability**:

- High commercial viability
- Cardiac dysfunction is leading cause of death among people with SCI¹
- Highly prevalent, affecting almost 75% of people with SCI (nearly 500,000 people in the US & Europe)
- Now includes Orthostatic Hypotension (OH) and Autonomic Dysreflexia (AD); expansion of pivotal study scope to include AD expected to result in increased awareness and clinical acceptance





Validation

Paper detailing our approach was published January 2021

ONWARD and partners receiving up to \$36M grant

Grigorean et al, J Med Life, 2009

Reported December 2022, 10 participants across studies in Canada and Switzerland

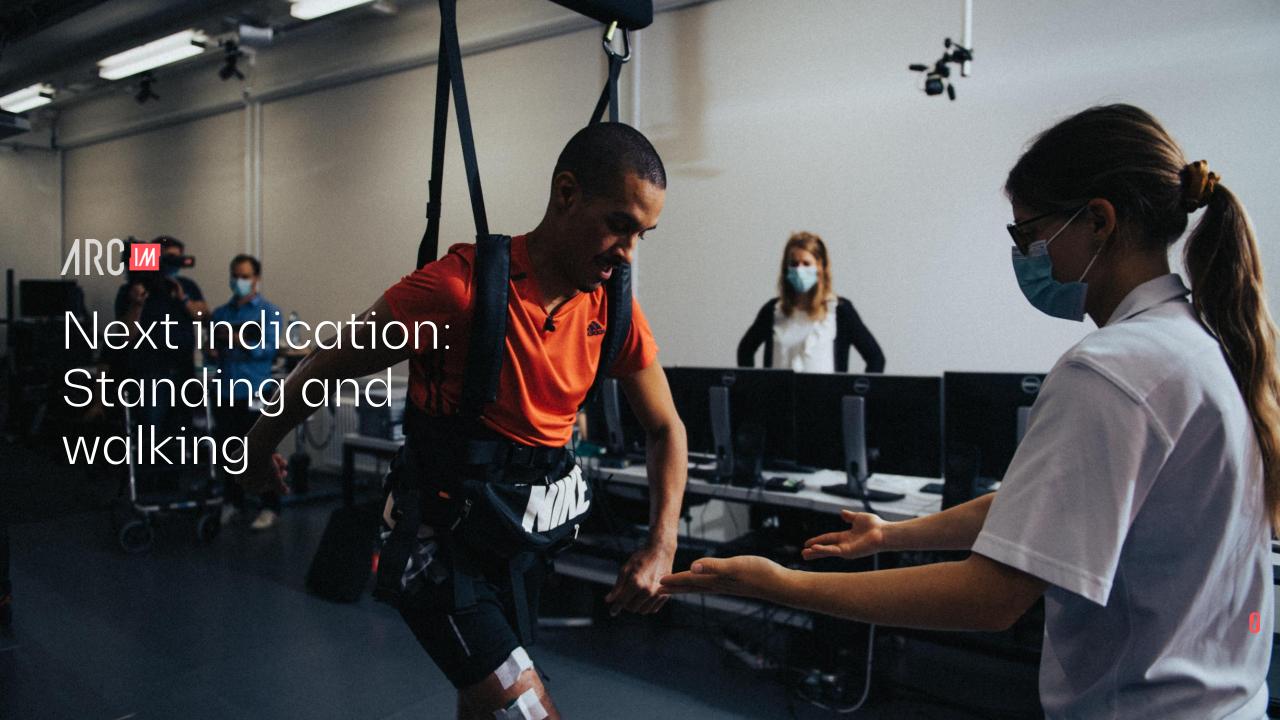
Summary Results

- All participants had increased blood pressure with stimulation
- All participants who were on anti-hypotensive medication reduced dosage or stopped medication completely
- All participants reported reduction of orthostatic hypotension in daily life, feeling more energized and less dizzy
- Partners report higher levels of energy and increased participation in social interaction, during meals and family time
- All participants use stimulation actively in daily life, several during the entire waking day (>10h per day)
- Quality of Life improved in all participants

ARCIM Interim Blood Pressure Results

"My outlook on life has become more positive. I feel more awake and less tired and dizzy. I have a lot more appetite for life" 1

Publication of peer-reviewed interim results for blood pressure indication expected in toptier scientific journal in 2024

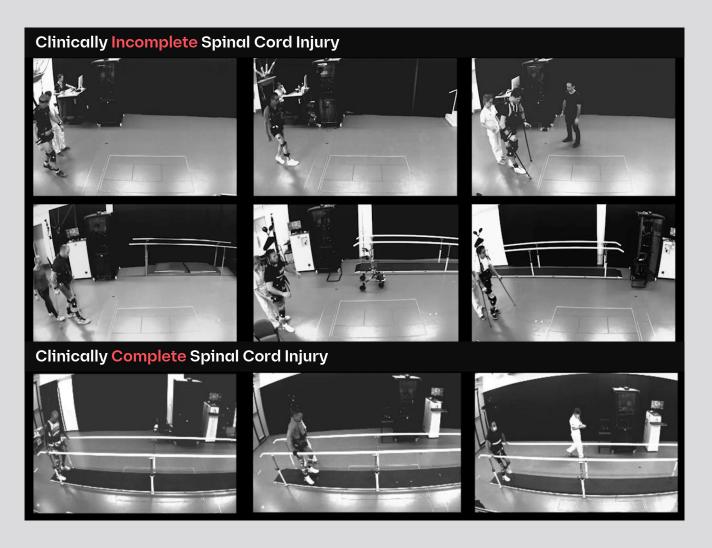


Ability to stand and walk restored in 9 participants with chronic injuries; even those with AIS-A severity

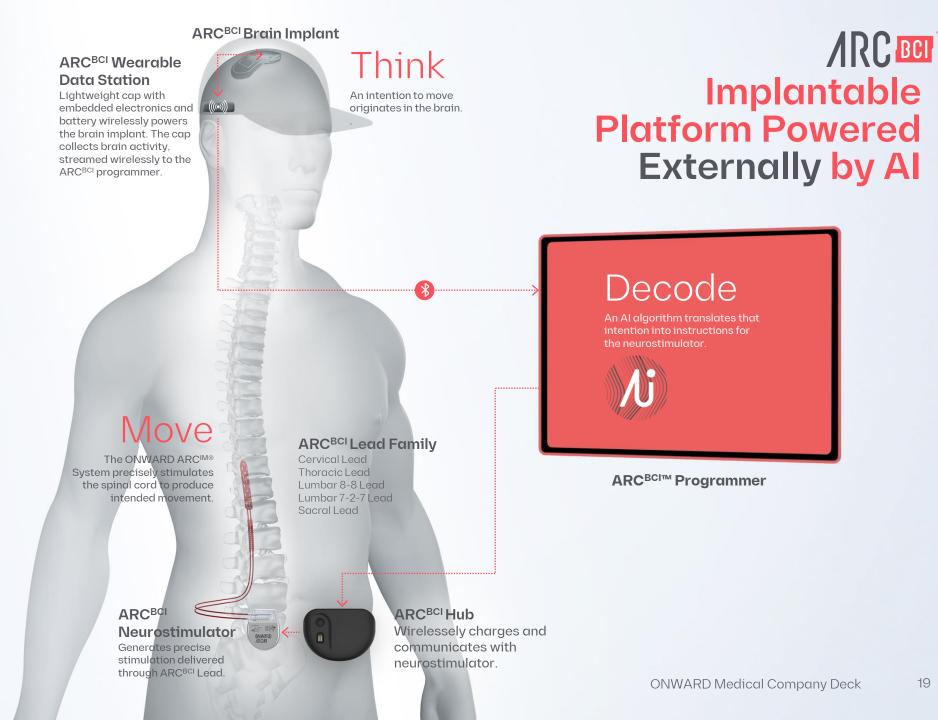
www.nature.com/nm/January 2022 Vol. 28 No. 1 nature medicine Targeting lipoprotein(a) with siRNA

ClinicalTrials.gov Identifier: NCT02936453

Mobility - STIMO Trial



Brain and spinal cord are reconnected by a **DigitalBridge™ to** restore thoughtdriven movement





ONWARD Medical is strategically well positioned to benefit from advances in BCI technology

Brain Computer Interface (BCI)

BCI landscape

- Multiple companies racing to develop implanted brain recording devices
- o All these companies are focused on recording brain signals to establish the capability to **control** computers with thought









ONWARD Medical differentiation

- Advancing BCI technology to restore movement of the **human body** using our ARC^{IM} spinal cord stimulation therapy
- ARCIM platform is "BCI-ready" (i.e. designed to receive wireless signals from a BCI)
- Unique capabilities and flexible technology platform means ONWARD Medical could eventually partner with other BCI companies or develop its own BCI using in-licensed technology

Note: For investigational use only

ONWARD Medical has already achieved several groundbreaking BCI milestones

BCI Achievements

Achievements

- o In conjunction with EPFL and CEA-Clinatec, **successfully implanted humans with investigational BCIs** to facilitate mobility (walking) in 2021 and upper extremity movement in 2023
- Approach published in Nature, May 2023
- Awarded European Innovation Council and Christopher & Dana Reeve Foundation grants to study BCI technology in at least eight additional humans to recover hand/arm function and mobility
- Awarded FDA Breakthrough Device Designation (BDD) to restore thought-driven lower limb mobility after SCI
- Accepted to FDA's new TAP Program, providing early and frequent strategic engagement from the FDA, patients, providers and payers
- o Exclusive license to BCI IP from EPFL

Next steps

Additional implants expected for upper limb and mobility indications in 2024

BCI activities provide opportunity for brand and awareness building

Upper Limb



FOX NEWS

Progress for paralyzed patients: First implanted device is placed to restore arm, hand and finger movement



engadget

The ARC nerve-stimulation system could help quadriplegic patients move their arms again



Al implants help paralyzed patient move arms, hands



BARRON'S

Brain implants could restore paralyzed patients' arm movements



KANAAL Z

BEKIJK - Uitzending Z-Nieuws woensdag



+MASS DEVICE

How Onward uses spinal cord stimulation — and perhaps BCI — to restore movement

Mobility





Artificial intelligence used in medical procedure to help paralyzed man walk



Paralyzed man able to walk again with brain and spine implants



The Washington Yost

A Paralyzed Man Walks with Brain and Spine Implants





Brain Implants Allow Paralyzed Man to walk Using His Thoughts





Brain and spine implants enabled a paralyzed man to climb stairs and walk on rough terrain, study shows



ВВС

Brain implants help paralyzed man to walk

Documentaries



Bloomberg

Progress for paralyzed patients: First implanted device is placed to restore arm, hand and finger movement



Al implants help paralyzed patient move arms, hands

Other Mentions



BCI Media Coverage

Bloomberg

Elon Musk's Neuralink performs its first human implant





Elon Musk's Neuralink implants brain chip into human brain



USA TODAY

Musk touts Neuralink's first patient as a big step. Experts say it's part of long leacey



Daily **Mail**

Rage against the machine: Americans warn Elon Musk to 'stop creating cyborgs' after he revealed the first human has had Neuralink's brain chip





Wat zit er in De 7 vandaag?



Increasingly robust evidence and visibility to clinical outcomes across both platforms and multiple indications

ARC Therapy Evidence

	Indication	Key Takeaways		
∕IRC EX	 SCI Upper Limb (n=121) 10 pilot studies¹ (n=56) Up-LIFT pivotal study (n=65) LIFT Home (n=17) 	Statistically significant improvement in strength and function	Supporting safe use in home setting	No device related serious adverse events
∕IRC ™	 SCI Blood Pressure (n=18)³ Squair et al 2022⁴ (n=1) STIMO-HEMO: unpublished, ongoing (n=6) HemON CH: unpublished, ongoing (n=8) HemON NL: unpublished, ongoing (n=3) 	Reduced orthostatic hypotension and improved quality of life	Optimal stimulation location confirmed (hemodynamic hotspot)	ONWARD IPG (n=11) and lead (n=7) successfully implanted
	 SCI Mobility (n=12)⁵ STIMO study (n=10); Wagner et al 2018⁶ Includes BCI study (n=1); Lorach et al 2023⁷ BoxSwitch: unpublished, ongoing (n=1) 	Recovery of standing, walking and other activities	Neurological recovery persists even without EES ²	Closed-loop control through brain interface appears promising
	Parkinson's Disease Mobility ⁸ (n=2)	Improved balance and reduced falls	Reduced freezing of gait	Improved walking endurance and symmetry

Visibility to clinical outcomes available for both ARC^{IM} and ARC^{EX} technology platforms (as of 31 July 2024)

Note: For investigational use only 1 Not all pilot studies investigated upper extremity function, 2 EES = Epidural electrical stimulation, 3 Positive interim results released in December 2022, 4 Squair et al. N Engl J Med 2022, 5 One participant implanted in both STIMO and BCI study and one participant implanted in both STIMO and BoxSwitch study, 6 Wagner et al. Nature 2013, 8 Rowald et al. Nat Med 2022, 9 Milekovic et al. Nat Med 2023, 10 Based on findings for 1 patient,



Current pipeline indications and potential pipeline opportunities

Total Addressable Market

	Indication	Injury severity / level	US & EU eligible population ¹	Total addressable market ²			
Current roadmap							
/RCEX	Upper Limb	AIS B-D / lesion C2 - C8	199,000 * 34% of SCI cases ¹	\$6.0B / €5.5B			
∕IRC™	Blood Pressure	AIS A-D / lesion C3 - T6	215,000 37% of SCI cases ¹	\$7.3B / €6.6B			
∕IRC™°	Mobility	AIS B-D / lesion C3 - T10	222,000 38% of SCI cases ¹	\$7.6B / €6.9B			
Potential future indications							
ARC™ ARC™ ARC™	Potential future indications ³		~3,845,000 ** Prevalence	~\$120B / ~€110B			
* Primarily driven by home use opportunity (vs. clir **Patients may benefit from more than one therap)	>4,000,000**	>\$140B / ~€130B			

^{**}Patients may benefit from more than one therapy (e.g. Blood Pressure and Upper Limb function) Note: 1 EUR = 1.1 USD

¹ Company data, epidemiology data from 2022 NSCISC Annual Statistical Report Complete Public Version

² Assumes pricing in alignment with value in comparison to existing rehabilitation therapies

³ Includes a selection of potential future indications for ARCEX (Bladder, Stroke Mobility and Stroke Upper Limb), ARCIM (Bladder, Cervical and Parkinson's Mobility) and ARCEX (Mobility and Cervical)

Enthusiasm from leading patient advocacy organizations and eagerness from SCI community

High Awareness and Pent-Up Demand

What they are saying...







"Functional recovery once deemed impossible may now be in reach"

"I have been following this closely for over 20 years, nothing like this has been brought to the clinical setting"

"This is our most visible success!"

Marco Baptista, Ph.D.
Chief Scientific Officer
Christopher & Dana Reeve Foundation

Kevin Schultes
Chairman of the Executive Board
German Spinal Injuries Association (FGO)

Anita Gerhardter CEO Wings for Life

Strong relationships with **leading patient advocacy organizations** to drive awareness and market access

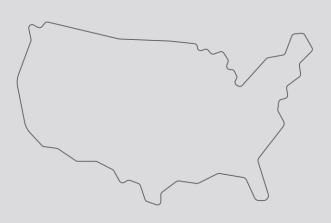
2500+ people with SCI or their family members have reached out to ONWARD Medical to inquire about our therapies since 2020

Pursue highly concentrated customer base with direct field organization

Call Points

~330 (2023)

US



Geographical focus

US and select European markets with sophisticated neurorehabilitation infrastructure, clinical partnerships, and/or favorable reimbursement for medical innovation

~250

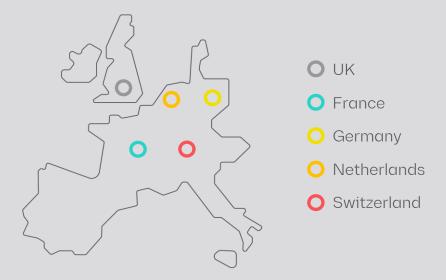
Tier 1 and Tier 2 specialist rehab centers

Initial focus: ~50 Tier 1 accounts including VA SCI hub centers, Up-LIFT investigational sites and other US flagship SCI clinics

Sales force deployment: Expect to start with 6-10 Sales Reps in first year of sales

Commercial Strategy

Europe





Specialist rehab centers

Initial focus: ~30 accounts including DMGP member paraplegia centers in Germany, chiefly BG SCI Kliniks

Sales force deployment: Expect to start with 2-5 Sales Reps in Europe and UK

Reimbursement pathways open immediately upon commercial launch



US Europe



Initially target Veterans Affairs beneficiaries, Workers' Compensation opportunities, and self-pay market to establish pricing history, while capturing real-world data to support pursuit of new CMS HCPCS code.

Initial plan to commercialize in **Germany, UK, France, Netherlands, and Switzerland**; focus will be on clinic vs. home sales. Target markets selected based on reimbursement environment for new technologies and sophistication of SCI rehabilitation infrastructure.

CMS has indicated its desire to identify an accelerated path to coverage for Breakthrough therapies (TCET).



Apply for new Category III CPT code to facilitate billing from day 1, with evidence generation plan to build case for new Category I code over time.

Leverage eligibility for incremental payment in outpatient (TPT) and inpatient (NTAP) settings in interim.

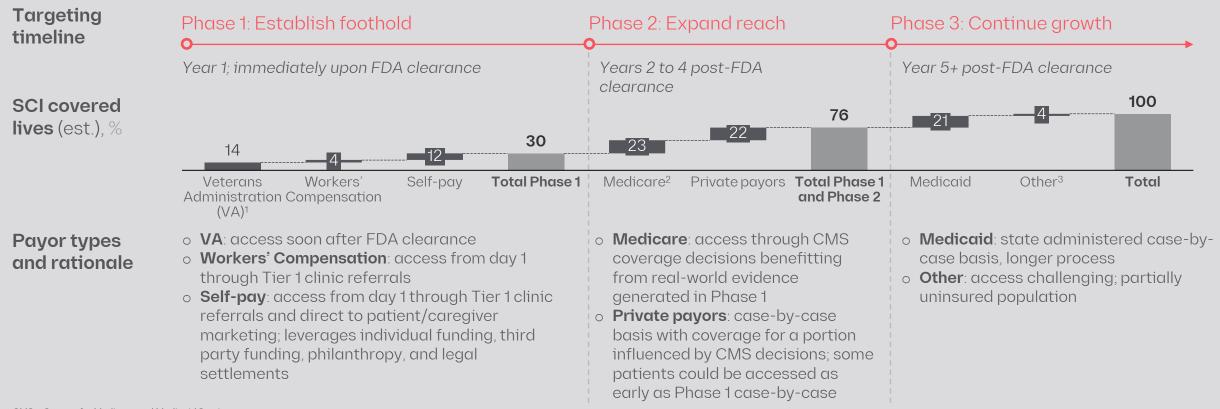
Breakthrough Designation satisfies "substantial clinical improvement" for outpatient (TPT) and inpatient (NTAP) addon payments and "newness" requirements for NTAP.

In largest European market (Germany), diagnosis (ICD) and procedural (OPS) codes are in place for planned indications, and a pathway exists to negotiate supplemental fee to cover ARC^{IM} procedure at a rate commensurate with the new, differentiated procedure.



Phased targeting approach: Establish foothold and pricing history, while generating required evidence for CMS

ARC^{EX} US Payor Strategy and Timeline



CMS = Centers for Medicare and Medicaid Services

Note: Assumes 300k people with SCI in the US, out of which 42k are potential VA patients; assumes primary payor breakdown as per NSCISC 2021 Annual Report 5 years post-injury for remaining 258k non-VA patients; assumes patients who can be accessed through self-pay represent 20% of "private payors" pool, 20% of "workers' compensation" pool, 15% of "Medicare" pool and 5% of "Medica

¹ Includes veterans with SCI who are not currently seen at VA centers but who may be eligible for VA coverage

² Medicare covered lives are split 50/50 between fee-for-service (CMS administered) and Medicare Advantage (private payor (MAC) administered). CMS decisions affect coverage for all, but private payors set payment for Medicare Advantage covered lives and are not required to follow CMS payment assignments.

³ Includes other government, no pay, private funds and other payor categories from NSCISC 2021 Annual Report (may include people uninsured or not covered) Source: Company estimates; VA; NIH National Center for Biotechnology Information (NCBI); NSCISC 2021 Annual Report

Current competition is standard of care: 3-6 months of rehab followed by costly support for activities of daily life

Competition





- Intellectual property controlled by UCLA and ONWARD Medical
- Limited funding raised to date¹
- Academic management teams





No Direct Competitors

Potential future competition from spinal cord stimulators for pain and other existing indications

- Currently supporting academic research with existing technology
- Several years required to reach parity with ONWARD Medical and market a competing technology
- Likely to enter space via M&A, leveraging balance sheets











High-growth market segment with successful peers reaching significant valuations

Neurostimulation Comps

Size

\$14.8B

(2030E)

CAGR

12.2%

(2023E - 2030E)

Comparable Companies

Company	HQ	Exit Year	Exit Type	Market Cap (\$)	EV/Sales Multiple
Axonics		2024	ABM	3.7B	~7.7x
\$\limes\$\limes\$\rightarrow\$\limes\$		2018	IPO	5.7B	n/a

Backed by excellent long-only and specialist investors Lower Description RVO Loan & Series A Series A Extension & Initial Public Offerina Convertible Note Capital Increase Debt Facility €36M / \$40M NRT Acquisition €30M / \$33M €80M / \$88M €20M / \$22M €52.5M / \$58M €10M / \$11M RVO loan of €10M / \$11M Series A extension of All current institutional Believed to be the Accelerated bookbuild Tranched growth Several of Europe's €5M / \$5.5M from investors participated largest early-stage offering including fully capital with availability with €7M / \$8M medtech IPO in subscribed upsize tied to business leading life science existing shareholders NRT acquisition brought option and separate venture capital firms New investors European history achievements and invested €26M / \$29M €5M / \$5.5M in fresh contributed €23M / Outstanding valuation public offering milestones capital and shareholder \$25M despite weakening relationship with a market leading global patient Very strong book of advocacy organization long-only and specialist



Gimv

inkef capital wellingtonpartners



CHRISTOPHER & DANA

INVESTAL





investors Öhman



RUNWAY

Experienced, global management team with the expertise to commercialize

Team













Dave Marver

Seasoned medical technology executive with 30 years of global experience. Nearly 15 years with Medtronic in a variety of Vice President roles in the US and Europe. Has served as CEO of listed companies on NASDAQ and Euronext; raised over \$200M in capital via IPO and private financings; companies have developed three Time Magazine Best Invention awards.

Julien Camisani
VP Engineering

Over 20 years of experience with proven leadership across R&D, manufacturing, IP and product management for companies like Cytiva, GE Healthcare and Biosafe. Holds dual master's degrees in Embedded Systems from the University of Lugano, collaborating with ETH Zurich and Politecnico di Milano and an MBA from the University of Cumbria.

Erika Ross Ellison, PhD VP Clinical, Regulatory and Quality

Former Leader of Abbott
Neuromodulation's Clinical
function. Former
neuroscience director at
Cala Health, a
neuromodulation device
company. Former professor
of Neurosurgery at Mayo
Clinic. PhD in Neuroscience
from Mayo Clinic, BS in
Biology and MSc in
Molecular Biology from the
University of Denver.

Grégoire Courtine, PhD CSO

PhD in Experimental
Medicine and trained in
Mathematics, Physics, and
Neurosciences. **Professor at EPFL**. Awards include
Schellenberg Prize, Rolex
Award, Chancellor Award,
and Fellowship from the
European Research Council.
Preeminent researcher with
over 120 publications in top
peer-reviewed journals.

Sarah Moore VP Global Marketing

Over 20 years of healthcare Marketing, Sales and Business Development experience, including 20+ product launches. Former Global Marketing Leader at Nevro, a neuromodulation company. Nearly 15 years with J&J as Business Unit and Marketing leader. MBA from Duke University.

Bob OdellVP Operations

Decades of medtech leadership experience including Class II and Class III devices for hospitals, clinics and home use. Former President & COO of Cardiac Insight and former COO of Cardiac Science. Leadership roles with GE Healthcare, Siemens, Philips and Medtronic.



Several important catalysts expected in the next 12 months

Upcoming Milestones and News Flow

ARCEX

Regulatory clearance submission

Upper limb

COMPLETED

ARCEX

Up-LIFT pivotal study manuscript publication

Upper limb

COMPLETED

ARCEX

FDA clearance

Upper limb

ARCEX

First commercial sale (US)

Upper limb

ARCIM

First participant enrollment¹

Early feasibility study Parkinson's mobility

ARCIM

Interim results publication

Blood pressure

ARCIM

IDE submission

Empower BP pivotal study Blood pressure

ARCIM

IDE approval

Empower BP pivotal study Blood pressure

ARCIM

First participant enrollment

Empower BP pivotal study Blood pressure

ARCIM

First-in-human²

Bladder

ARCBCI

Additional implants³

Upper limb and Mobility

Note: All platforms and therapies are for investigational use only

¹ Funded by Michael J. Fox Foundation for Parkinson's Research grant

² Funded by Christopher & Dana Reeve Foundation grant

³ Funded by European Innovation Council and Christopher & Dana Reeve Foundation grants

