ONWARD™

EMPOWERING MOVEMENT™

Company Deck

November 2022

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.

Problem

Large unmet need:
There is no cure for spinal cord injury (SCI)

Devastating

Paralysis & loss of sensation + infection, incontinence, loss of sexual function, etc.

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

Global[2]

Prevalence ~7,000,000

Incidence ~768,000

Costly

Avg lifetime cost (paraplegic)

€2.5M / $2.5M

Avg lifetime cost (tetraplegic)

€5.0M / $5.0M

[1] NSCISC Annual Report, US and Europe only – with 25 years old patients, World Health Organization Fact Sheet, November 2013, estimate 40-80 cases per million.
[2] Kumar et al. 2018, Traumatic Spinal Injury: Global Epidemiology and Worldwide Volume – Traumatic spinal injury may be broader than traumatic spinal cord injury.

What do we hope to achieve?

Vision

Empowered by movement, people with spinal cord injury will enjoy life in every way that matters to them

ONWARD ARC™ Therapy

Solution

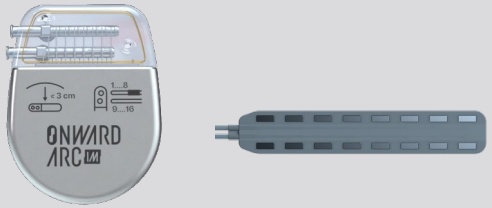
Targeted, programmed electrical stimulation of the spinal cord to restore movement, independence, and health in people with spinal cord injury.

Our Solution

One technology platform with shared components provides opportunity to target multiple indications

Implantable & External Devices

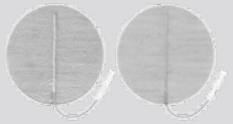
ARC IM



IPG and Lead

ARC EX

ARC^{EX}



Electrodes

Common Hardware & Software Platform

Remote Manager

Smart Watch

Programmer

Multiple Indications

Current Pipeline

- Upper limb function
- Blood pressure & trunk
- Walking and standing

Future Pipeline (TBD)

- Bladder control
- Sexual function
- Parkinson's disease
- Brain-Spine Interface

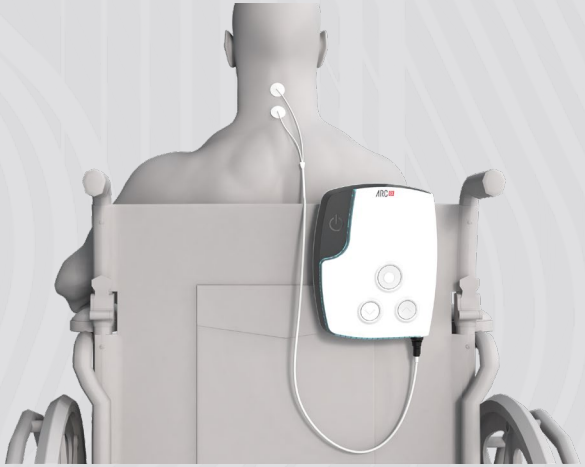
Two new indications and five in total, including all three indications in our current business plan

FDA Breakthrough Device Designation

Components & Mechanism of Action

ARC EX

External platform designed for periodic use in the clinic or home



Mechanism of Action

Proprietary waveform: Strength to deliver current to the spinal cord without causing pain or discomfort

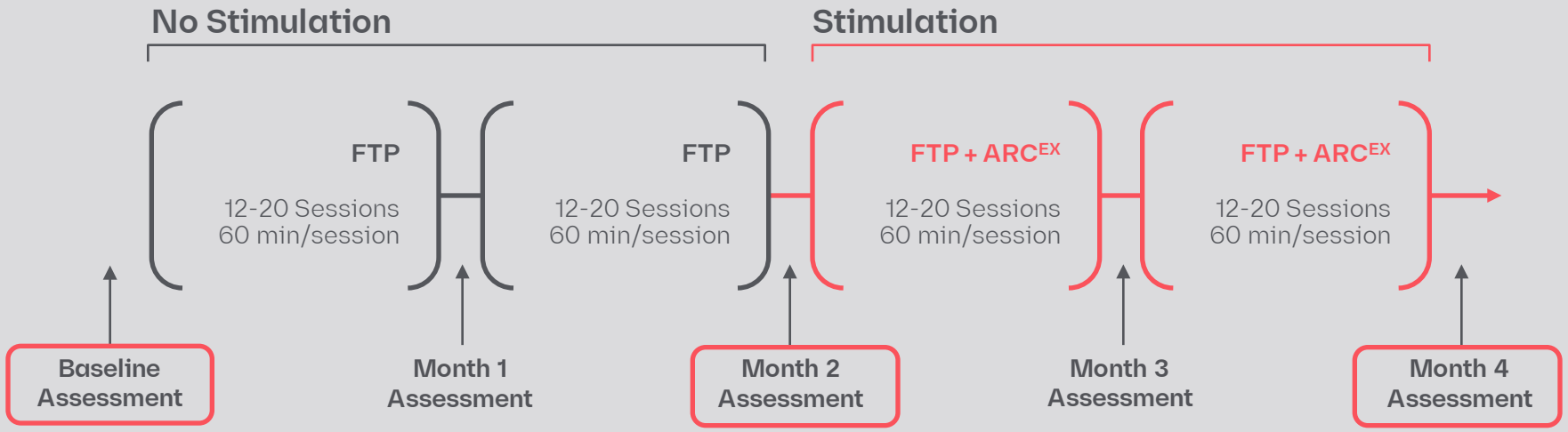
Therapy

Designed to restore function in conjunction with rehabilitation

Intended to be used periodically during up to 60-minute sessions delivered in the clinic or at home

Met primary endpoint: Clinically meaningful improvement in upper extremity strength and function

UPLIFT Pivotal Study



FTP = Functional Task Practice Assessments used to establish endpoint data

Study Goal

To demonstrate statistically significant improvement in the strength and function of the hands and arms after spinal cord injury

Positive top line data announced September 2022

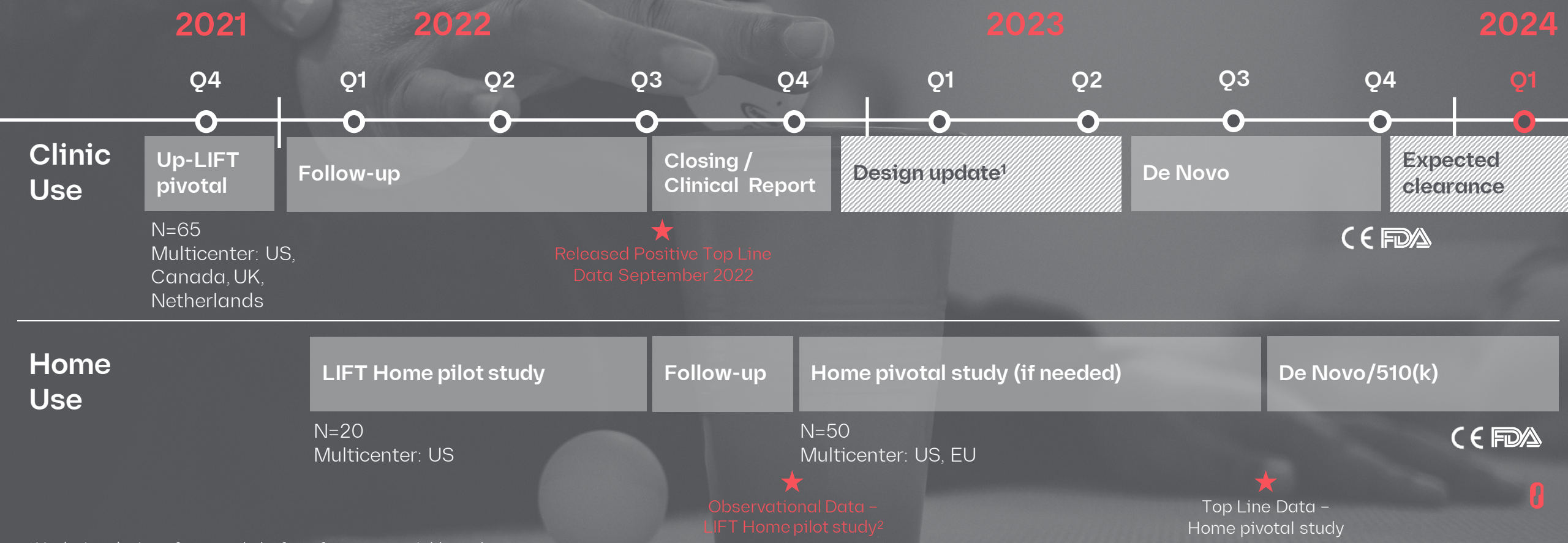
The **first large-scale trial** of non-invasive spinal cord stimulation (n=65)

Leading Research Collaborators

CRAIG · Shepherd Center · THE MIAMI PROJECT TO CURE PARALYSIS · UBC · NHS Greater Glasgow and Clyde · VA · ARC EX

Multicenter pivotal trial complete with positive top line results

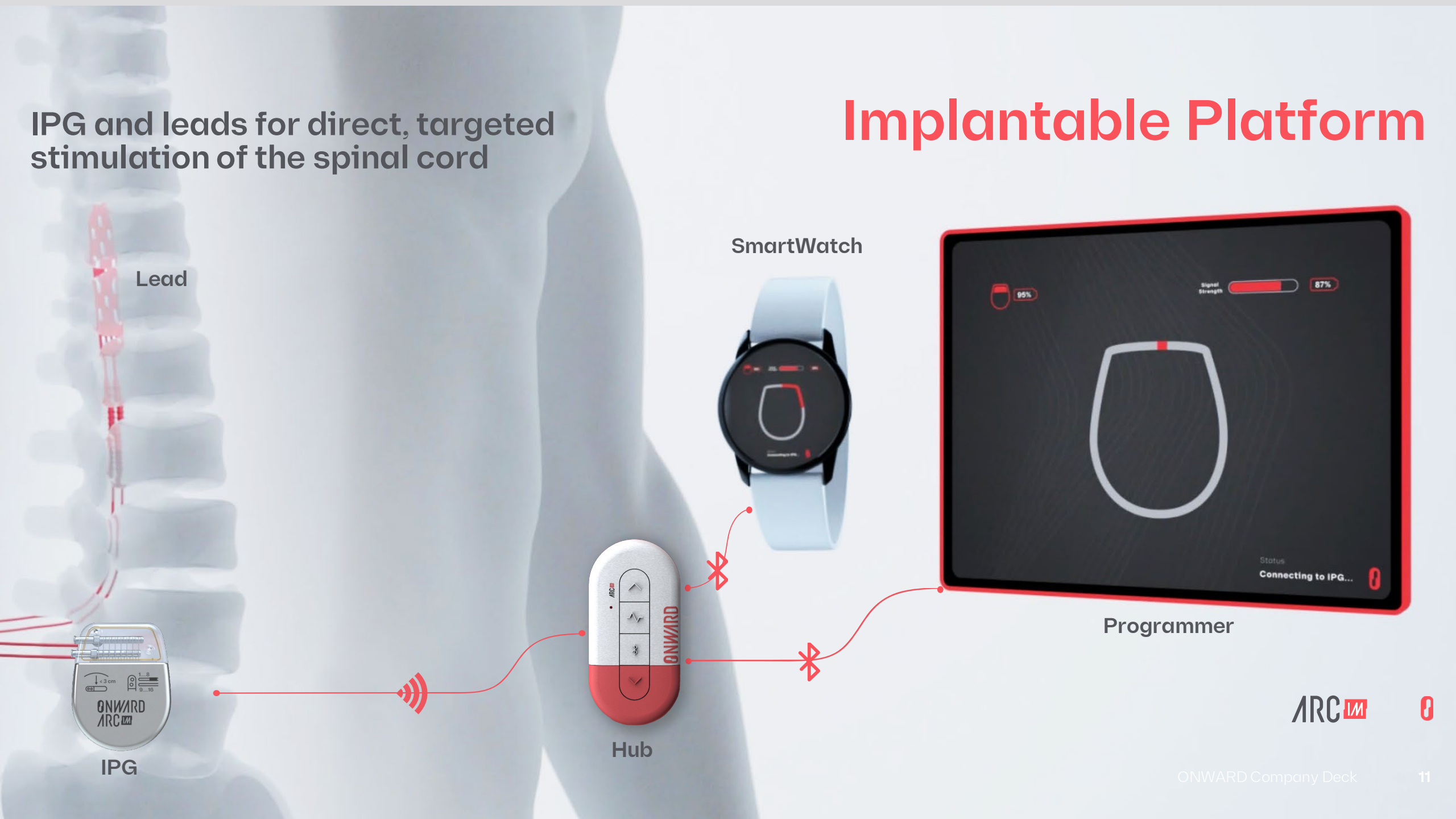
ARC^{EX} Upper Limb Regulatory Pathway



[1] Updating design of external platform for commercial launch
[2] Study outcomes (no endpoints, just observations)

Implantable Platform

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



Purpose-Built IPG & Lead Portfolio

IPG Designed for SCI Indications

- Closed-loop, low latency, and low power consumption
- Stimulation parameters can be adjusted in real-time
- 16 independent currents and stimulation frequencies
- Proprietary waveforms
- Advanced recharging

Purpose-Designed Lead Family

- Leads designed for cervical, thoracic, lumbar and sacral use
- Optimized for specific deployment along the spinal column

On 9 May 2022, the ARC^{IM} neurostimulator was implanted in a human for the first time

First-in-Human

- Purpose-designed technology now available for clinical trials and eventual commercialization*
- First patient enrollment in the HemON Study, assessing ARC Therapy for orthostatic hypotension
- New era in spinal cord stimulation for SCI and other movement-related challenges

Not currently available for commercial sale; regulatory authorization required

Blood Pressure Indication

Precisely controlled hemodynamics are critical for the SCI population

Hemodynamic instability is highly prevalent, affecting almost 75% of people with SCI (nearly 500,000 people in the US & Europe)

The approach is also **potentially applicable to those with Parkinson's disease**

No rehabilitation is required

nature

DARPA

Paper detailing our approach was published January 2021

ONWARD and partners to receive up to $36M grant

Trunk Movement & Stability

Bonus: The lead placement for blood pressure offers improved trunk movement and stability, impacting > 80% of people with SCI (over 500,000 people)

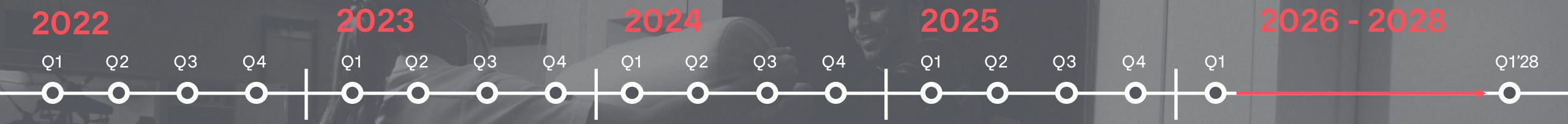
Patients with cervical and thoracic injuries have impaired control of their trunk muscles, leading to poor control and movement of their upper bodies.

These limitations impact their ability to grab objects in their direct surroundings and their capacity to stand or sit straight and/or comfortably.

This condition leads to back pain and pressure sores in the chronic phase.

Studies have commenced for blood pressure and trunk control and a pragmatic clinical plan is in place for mobility

ARC^{IM} Roadmap



PoC

N=8
Lausanne and Calgary

HemOn – Early feasibility

N=16
Lausanne & Nijmegen, NL

★ Interim Data – HemON and STIMO-HEMO

IDE

PULSE feasibility

N=15
5-6 sites in EU & US

PULSE pivotal

N=75
15 sites in EU & US

F/U

Closing / Clinical report

FDA
CE

Mobility v1.0* (standing, steps, leg function, spasticity, etc.)

Early feasibility

2-3 centers, TBD
N=8

F/U

IDE

HDE

6 centers, TBD
N=25

F/U

Closing, Clinical Report

FDA
CE

Mobility v2.0 (full walking)

IDE

HDE

10 centers, TBD
N=40

F/U

Closing

FDA
CE

F/U = Follow-up
IDE = Investigational Device Exemption
HDE = Humanitarian Device Exemption

*Lower leg function, i.e. swinging legs during transfers, lifting legs and feet to don socks, tie shoes, check for skin issues, and other activities of daily living

Total Addressable Market

Current pipeline indications and potential pipeline opportunities

	Indication	Injury Severity / Level	Eligible Population[1]	Total Addressable Market[2]
Current Roadmap				
ARC EX	**Upper Limbs**	AIS B-D / lesion above C8	217,000* 34% of SCI cases[1]	**$2.6Bn**
ARC IM	**Blood Pressure & Trunk**	AIS A / lesion above T6 AIS A-C / lesion C1 - C8	262,000 41% of SCI cases[1]	**$9.2 Bn**
ARC IM	**Walking & Standing**	AIS B-D / lesion above T11	265,000 41% of SCI cases[1]	**$9.3 Bn**
Near-Future				
ARC IM	**Near-future Indications**	Blood pressure and mobility for Parkinson's disease and stroke	2,300,000 Patient prevalence	**$80.4 Bn**
			>2,394,000**	**>$100 Bn**

* >95% of opportunity is for home use (vs. clinic use)

**Patients can benefit from one or more therapies, i.e. Blood Pressure and Upper Limb function

[1] Company data, epidemiology data from 2020 NSCISC Annual Statistical Report Complete Public Version
[2] Assumes pricing typical of existing therapies

Commercial Strategy

Highly concentrated customer base

Call Points

~200

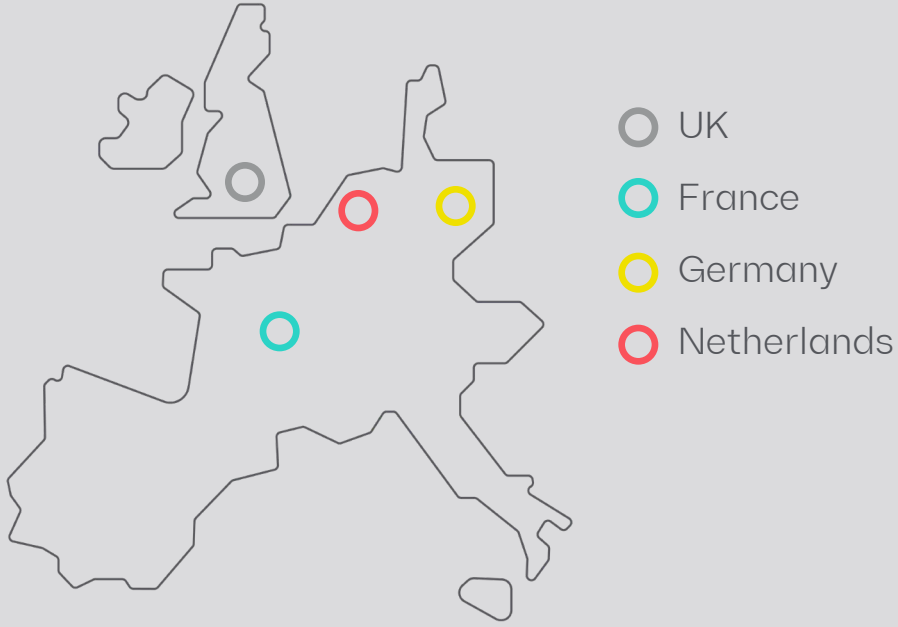
(2019)

US

105

Specialized rehabilitation clinics

Europe



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Specialized rehabilitation clinics

Source: Company estimates

Well positioned to use existing codes + add-on payments or an accelerated pathway TBD

Economics

US

ARC EX

HCPCS codes for similar devices

Miscellaneous codes to establish our pricing (common for DME products)

ARC IM

Existing ICD-10 Codes for insertion of IPG and neurostimulator leads

Pass-through and/or add-on payments to establish our own(higher) pricing

Breakthrough Designation satisfies the "substantial clinical improvement" and "newness" requirements for inpatient (NTAP) and outpatient (TPT) add-on payments.

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

Europe

Initial plan to commercialize in several markets: **UK, Germany, France, Netherlands**

Selected based on reimbursement environment for new technologies and sophistication of SCI rehabilitation infrastructure

NTAP = New Technology Add-on Payment
TPT = Transitional Passthrough payment
CMS = Centers for Medicare and Medicaid Services
TCET = Transitional Coverage for Emerging Technologies

Competition

Standard of care is 3-6 months of rehab followed by costly support for activities of daily life

ARC EX

ARC IM

Similar Pre-Commercial Technologies

spinex

cosyma
РЕАБИЛИТАЦИЯ ДВИЖЕНИЯ

ANEUVO
pathways to new horizons

Intellectual property controlled by UCLA and ONWARD

No Direct Competitors

- Exoskeletons
- Biological Repair
- Spinal Cord Stimulator for Pain

IP Portfolio

First-mover advantage has allowed ONWD to build formidable IP estate

Issued or Pending Patents

>330

Exclusive Licenses

Caltech

EPFL

UNIVERSITY of LOUISVILLE

THE UNIVERSITY OF CALIFORNIA UCLA

UNIVERSITY OF MINNESOTA

UBC THE UNIVERSITY OF BRITISH COLUMBIA

UNIVERSITY OF CALGARY

Note: Portfolio size September 2022

Advocacy

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

Christopher & Dana Reeve Foundation
TODAY'S CARE. TOMORROW'S CURE.®

PRAXIS
Spinal Cord Institute

Wings for Life

Opportunities for Engagement

- Drive awareness in the SCI community
- Reach patients and their families directly
- Shared media and government advocacy
- Support for clinical research
- Sources of non-dilutive funding

Grants & Subsidies

~€8.3M
Grants since inception

Now targeting VA, US Congress and other large sources of US-based funding

Neurostimulation

High-growth market segment with strong performing public peers

Size

$8.7B

(2028E)

CAGR

12.5%

(2022 – 2028E)

Comparable Companies

Company	HQ	Year of IPO	Share Price Since IPO (as of 04 Nov 22)	Market Cap ($)
Axonics		2018	+315%	3.08B
Inspire		2018	+731%	5.99B
nevro		2014	+62%	1.44B

Sources: Global News Wire – Vantage Market Research – Global Neurostimulation Devices Market Size
Market Cap data is as of 04 November 2022

Multiple platforms and indications expected to fill news flow pipeline

Numerous Milestones to Drive Value

2022

Top Line Data ARC^{EX}
Up-LIFT Pivotal Study (with Positive Topline Results)

Interim Data ARC^{IM}
STIMO HEMO (Blood Pressure)
HemON Early Feasibility (Blood Pressure)

Publications in Peer-Reviewed Journals ARC^{IM}
STIMO Bridge
Parkinson's Multiple System Atrophy

IPG First-in-Human Use ARC^{IM}

Lead First-in-Human Use ARC^{IM}

2023

Regulatory Approval ARC^{EX}
Clinic Use - US & Europe

First Commercial Sale ARC^{EX}
Clinic Use - US & Europe

Top Line Data ARC^{EX}
Home Pivotal

First Patient Enrollment ARC^{IM}
PULSE Feasibility Trial

First Patient Enrollment ARC^{IM}
Early Feasibility Mobility Trial

Publications in Peer-Reviewed Journals ARC^{IM}
TBD

2024

First Patient Enrollment ARC^{IM}
Pivotal Study (Blood Pressure)

Completion of Enrollment ARC^{IM}
Pivotal Study (Blood Pressure)

Top Line Data ARC^{IM}
PULSE Feasibility Study (Blood Pressure)

First Patient Enrollment ARC^{IM}
HUD Study (Mobility)

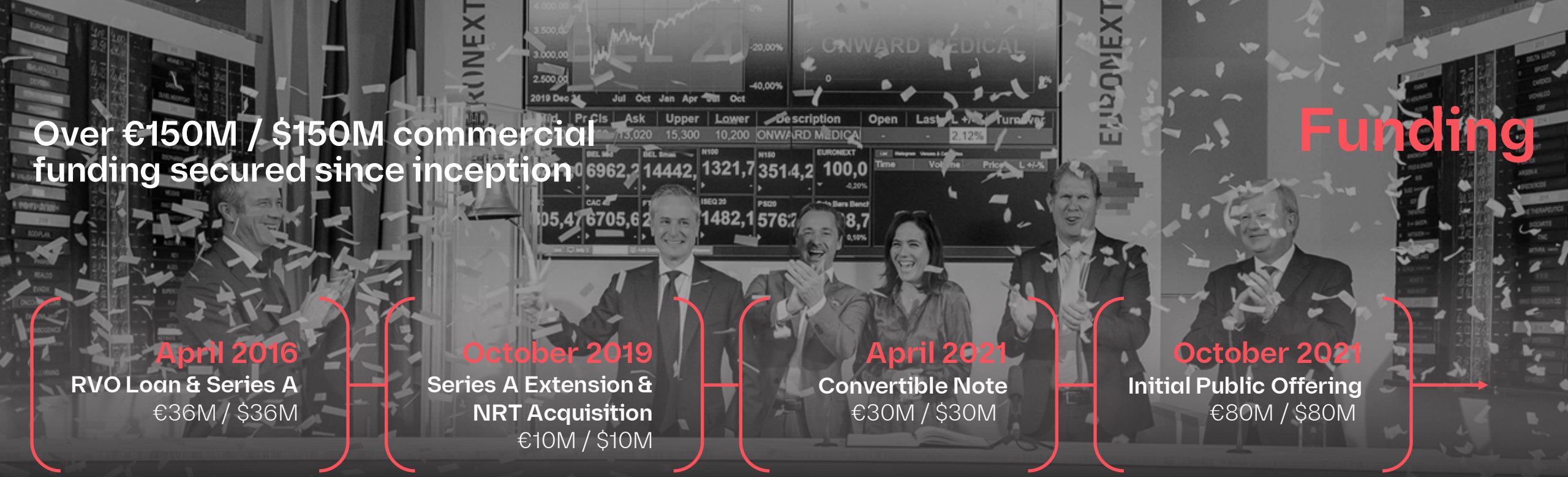
Completion of Enrollment ARC^{IM}
HUD Study (Mobility)

Top Line Data ARC^{IM}
Early Feasibility Mobility v1.0

Publications in Peer-Reviewed Journals ARC^{IM}
TBD

Funding

Over €150M / $150M commercial funding secured since inception



April 2016
RVO Loan & Series A
€36M / $36M

RVO loan of €10M / $10M

Several of Europe's leading life science venture capital firms invested €26M / $26M

EQT Life Sciences · inkef capital · wellingtonpartners · Gimv

October 2019
Series A Extension & NRT Acquisition
€10M / $10M

Series A extension of €5M from existing shareholders

NRT acquisition brought €5M in fresh capital and shareholder relationship with a leading global patient advocacy organization

Christopher & Dana Reeve Foundation — Today's Care. Tomorrow's Cure.®

April 2021
Convertible Note
€30M / $30M

All current institutional investors participated with €7M / $7M

New investors contributed €23M / $23M

INVESTNL · Onassis Foundation

October 2021
Initial Public Offering
€80M / $80M

Believed to be the largest early-stage medtech IPO in European history

Outstanding valuation despite weakening market

Very strong book of long-only and specialist investors

AXA · Öhman · Belfius Insurance

Note: IPO funding reflects net proceeds; gross proceeds were €86M prior to exercise of the over-allotment option

Experienced, global management team

Team

Dave Marver
CEO

Seasoned medical technology executive with over 25 years of experience in the US and Europe. Nearly 15 years with Medtronic in a variety of Vice President roles, CEO of Cardiac Science Corp (NASDAQ), and CEO/founder of two start-ups.

John Murphy, PhD
CTO

Over 25 years of experience leading the development of active medical implants and neurostimulation devices in the US and Europe for Medtronic, St. Jude Medical, and LivaNova.; Ph.D. from EPFL.

Grégoire Courtine, PhD
CSO

Ph.D. 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.

Lara Smith Weber
CFO

Led $240M NASDAQ IPO for MorphoSys AG and served as CFO of MorphoSys US Inc. Prior to this, held a variety of finance leadership positions at Telefonica Germany and worked as an associate with Booz Allen Hamilton. MBA from IMD and BS and MSc in Electrical Engineering from Stanford.

Hendrik Lambert, PhD
VP Clinical & Regulatory

Over 20 years of experience driving clinical and regulatory strategies for Class III medical devices. European Education and Field Clinical Leader at Guidant (now BSX) and VP Clinical and Regulatory at Endosense (now Abbott).

A compelling opportunity with large potential upside

Key Takeaways

>$20 Bn addressable market with current roadmap; **>$100 Bn with near-future indications**

One **pivotal trial complete with positive top line results;** several additional indications planned

Five **FDA Breakthrough Device Designation** awards

Comprehensive IP portfolio of **>330 issued or pending patents**

Experienced, international management team with proven track record

Successful IPO in October 2021 **and over $150M commercial funding** since inception

ONWARD™ EMPOWERING MOVEMENT™