

ONWARD™

EMPOWERING MOVEMENT

Investor Webcast
2023 Full Year Results
April 25, 2024



Forward Looking Statements

This Presentation may include statements, including the Company's financial and operational medium term objectives that are, or 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 with respect to 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.

Speaking Today



Dave Marver CEO



Khaled Bahi Interim CFO

Introduction

ONWARD[®] at a Glance

Key Facts

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

- Technology - 2 purpose-built neuromodulation platforms that stimulate the spinal cord via implantable (ARC^{IM}[®]) or external (ARC^{EX}[®]) technologies
- Innovation - 10 FDA Breakthrough Device Designations and 240+ issued patents¹
- Clinical Success - One pivotal study completed with positive top line results reported for ARC^{EX}; positive interim results also reported for ARC^{IM} blood pressure indication
- Market Opportunity - Large total addressable market (\$20B+ / €19B) with limited competition
- Commercialization - ONWARD expects to launch its first product and realize its **first revenues in 2H 2024**
-

Note: 1 EUR = 1.1 USD; FTE and patent figures as of end of Q4 2023

¹ Includes EP country validations

Vision

Empowered by movement, people with spinal cord injury will enjoy life in ways that matter to them

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

Our Technology



Reach commercial stage by year-end, then expand

Company Focus

Short Term 2024

Medium Term 2026

Long Term 2026+

Commercialize external platform (ARC^{EX})

First indication: Upper Limb

Population: SCI

Commercialize implantable platform (ARC^{IM})

First indication: Blood Pressure

Population: SCI

Expand labeling and platforms

New indications and platforms to be assessed such as BCI

Populations: SCI, Parkinson's, Stroke



Note: Investigational devices, not available for commercial use; SCI = Spinal Cord Injury

2024 comprises key value inflection points for ONWARD

2024 Strategic Priorities

2024



ARC^{EX} commercial launch (upper limb)

- FDA De Novo request submission (COMPLETED)
- FDA clearance
- First commercial sale



ARC^{IM} pivotal study first participant enrollment (blood pressure)

- IDE submission
- IDE approval
- First participant enrollment



Continue clinical studies¹ and strengthen unique position in BCI field (upper limb and mobility)

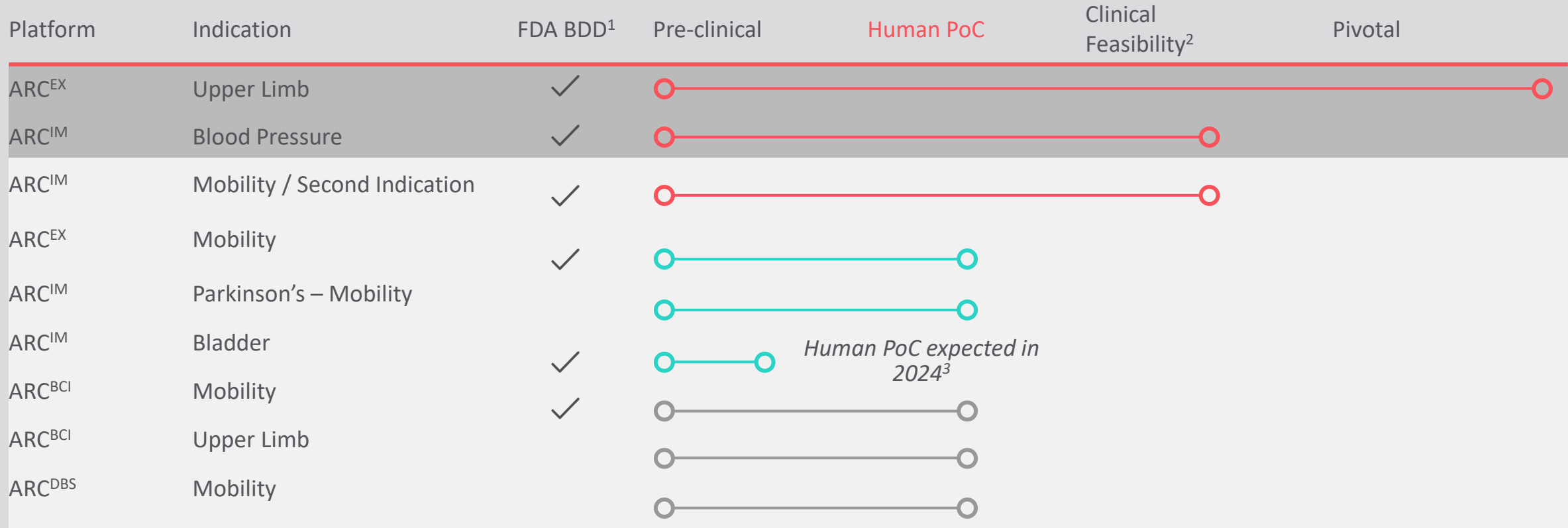
Note: Investigational devices, not available for commercial use

¹ Funded by European Innovation Council and Christopher & Dana Reeve Foundation grants

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

Current Pipeline

Short and medium term focus
 Funded primarily through grants and research partners



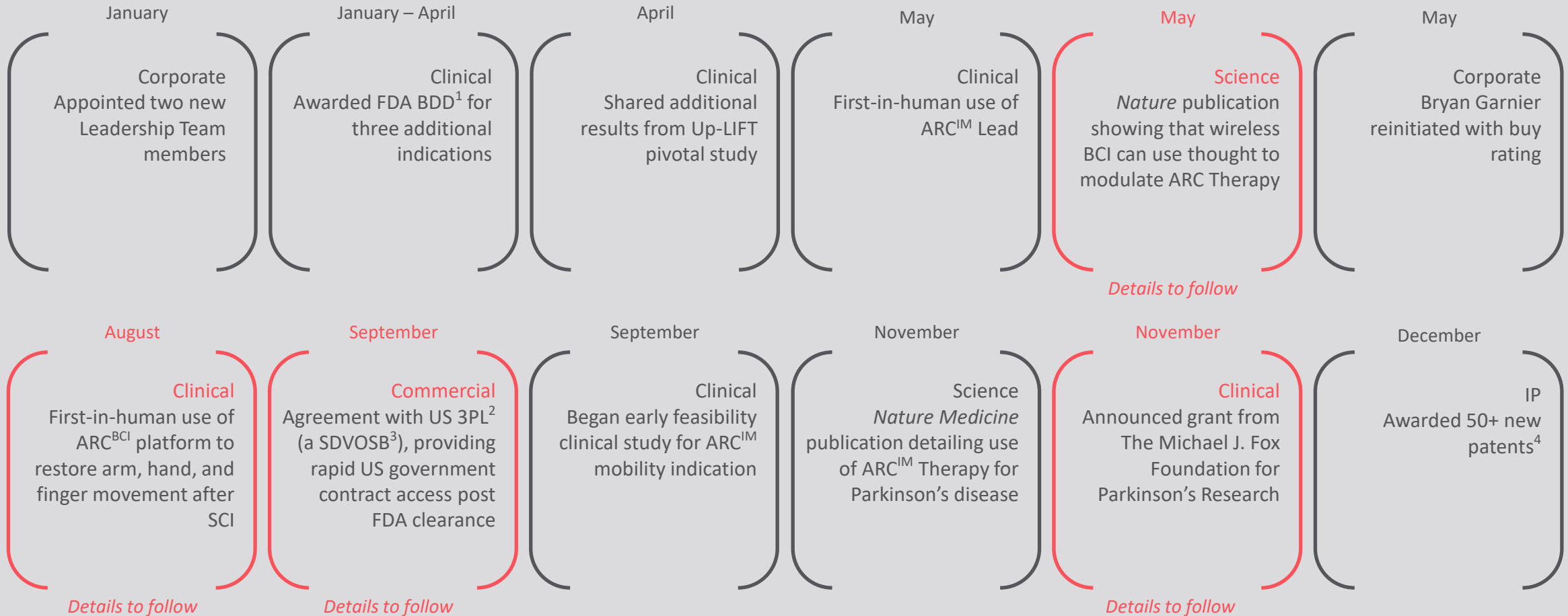
✓ BDD¹ Granted
 ○ Current Roadmap
 ○ Label Expansion
 ○ Platform Expansion

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

2023 Business Update

Major achievements, including BCI publication and FIH, new commercial partnership and Parkinson's grant

2023 Publicly Disclosed Achievements



¹ Breakthrough Device Designation, ² 3PL = Third-party logistics, ³ Service-Disabled Veteran-Owned Small Business, ⁴ Patents added to the ONWARD portfolio in 2023 (between January and December), including EP country validations



Think

An intention to move originates in the brain.



Decode

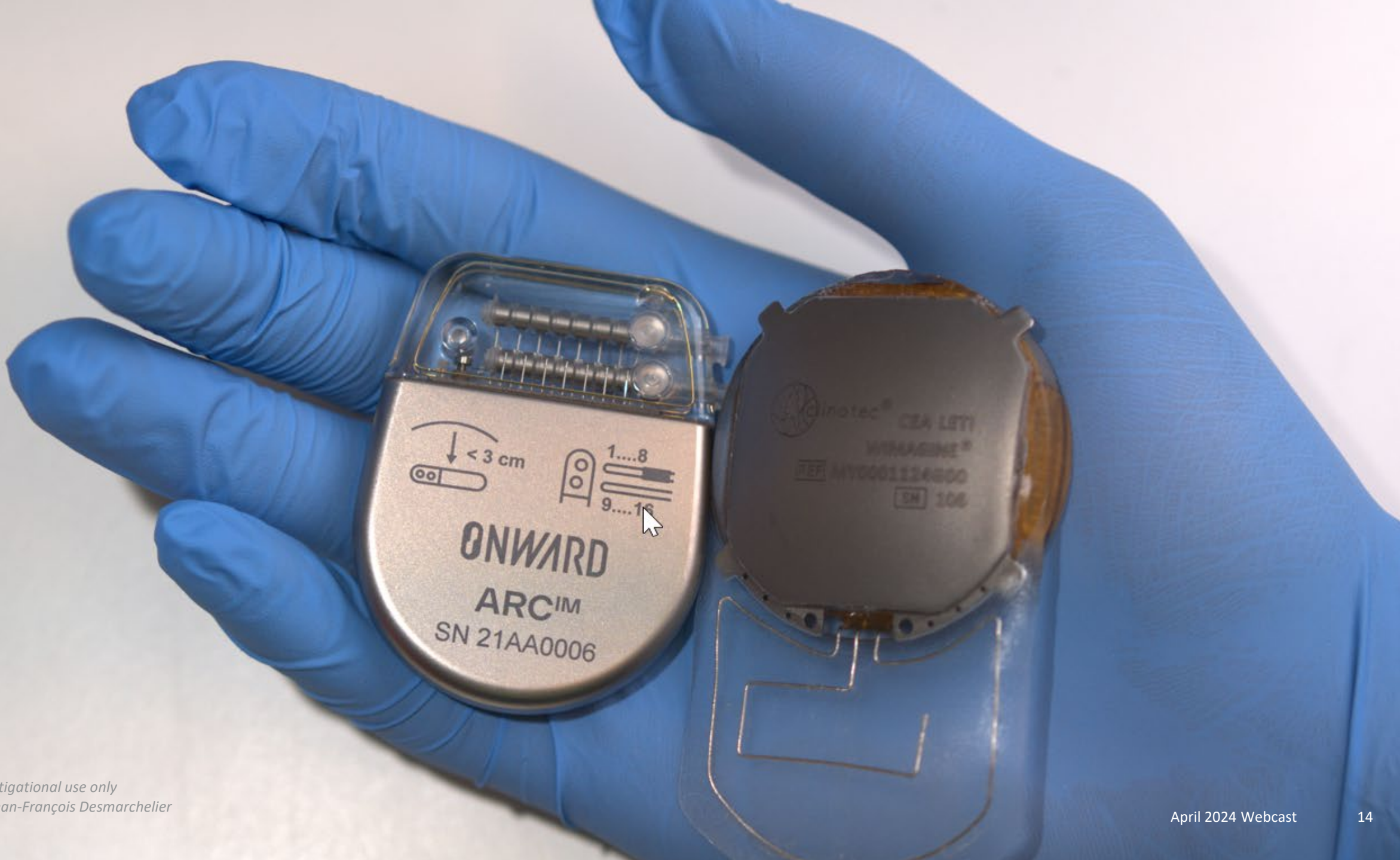
The brain-computer interface uses AI to decode that intention.



Move

The ONWARD ARC™ platform then converts that decoded information into precise stimulation of the spinal cord, resulting in thought-driven movement.

ARC BCI™



Note: For investigational use only
Photo credit: Jean-François Desmarchelier

ONWARD 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
- All these companies are focused on recording brain signals to establish the capability to control computers with thought



ONWARD differentiation

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

Note: For investigational use only

Global media coverage for *Nature* publication detailing *thought-driven* ARC Therapy

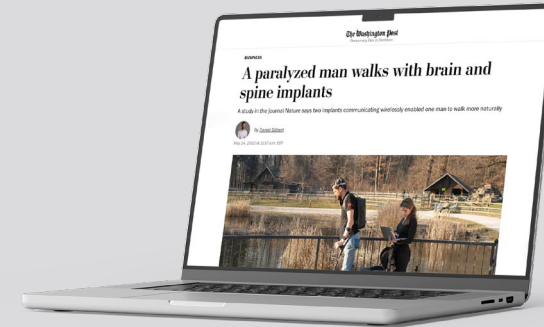
Major BCI Publications



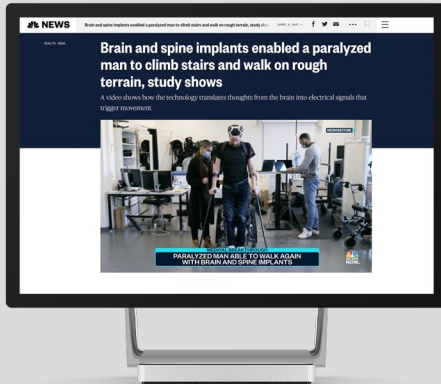
Artificial intelligence used in medical procedure to help paralyzed man walk



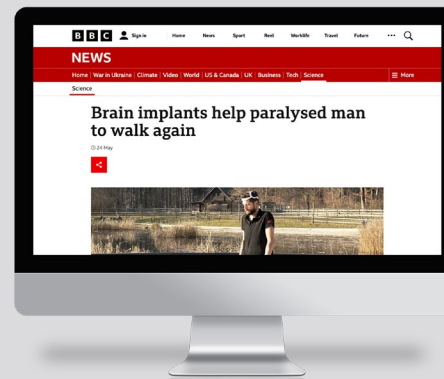
Paralyzed man able to walk again with brain and spine implants



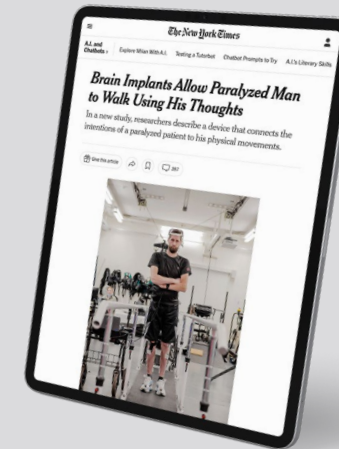
A Paralyzed Man Walks with Brain and Spine Implants



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



Brain implants help paralysed man to walk again



Brain Implants Allow Paralyzed Man to Walk Using His Thoughts

Forged agreement with US logistics and fulfillment partner in September 2023

New Commercial Partnership

Service-Disabled Veteran-Owned Small Business (SDVOSB) will serve as our Veterans Administration (VA) sales partner

- ONWARD promotes therapy and maintains customer relationship (sales and training)
- 3PL partner manages logistics and fulfillment to federal government and commercial customers in the US
- Relationship gives ONWARD access to US government purchasing vehicles shortly after FDA clearance



Potential expansion into large, adjacent population with same technology platform and therapy

Parkinson's Disease Opportunity



A spinal cord neuroprosthesis for locomotor deficits due to Parkinson's disease, *Nature Medicine*, Nov 2023

Proof of concept published in *Nature Medicine*, to be followed by early feasibility study

- Supported by \$1M grant* from Michael J. Fox Foundation for Parkinson's research
- Six participants to be implanted with ONWARD ARC^{IM} System in 2024
- One year follow-up; study expected to be completed by end of 2025



*Awarded to .NeuroRestore; ONWARD will provide investigational ARC^{IM} systems and regulatory support

2023 Full Year Results

FY 2023 Financial Review

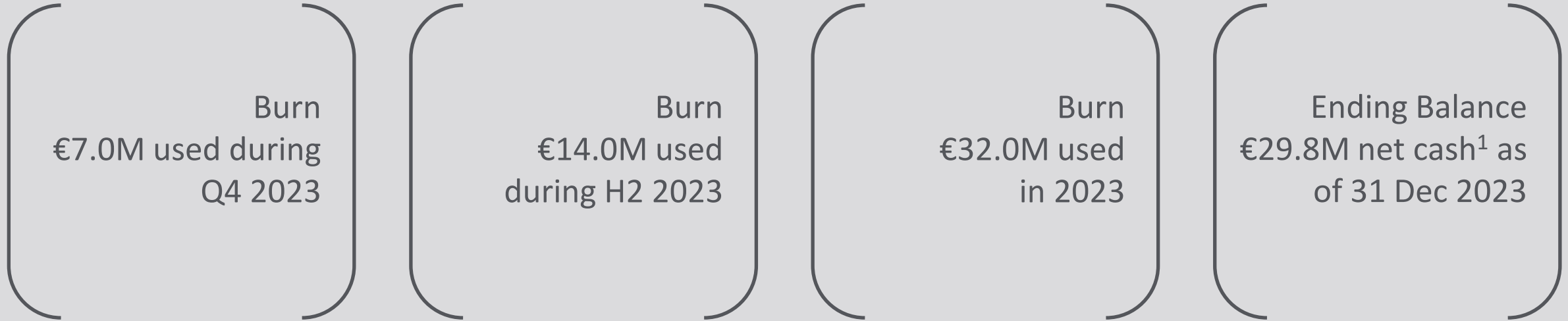
EUR Million

For the year ended, 31 December

	2023	2022
Total Revenues & Other Income	0.5	2.1
R&D Expenses (incl. Clinical & Regulatory)	(18.8)	(18.9)
Marketing & Market Access Expenses	(2.9)	(2.0)
Patent Fees & Related Expenses	(1.5)	(1.5)
Quality Assurance Expenses	(1.5)	(1.2)
General & Administrative Expenses	(11.3)	(10.6)
Total Operating Expenses	(36.0)	(34.2)
Operating loss for the period	(35.5)	(32.0)
Net Finance expenses	(0.6)	(1.5)
Income Tax Expense	(0.1)	0.8
Net loss for the period	(36.2)	(32.8)
At	31 December 2023	31 December 2022
Net cash position at end of period	29.8	61.8
Interest-bearing loans	(15.3)	(12.7)
Equity	17.9	52.5

FY 2023 Cash Update

Expect current cash position to fuel operations through mid 2025



With gross proceeds from capital raise, pro-forma ending balance is €49.8M

¹ Net cash is defined as the sum of cash and cash equivalents and fixed term deposits included in the current assets as included in consolidated statement of financial position in the Financial Statements.

2024 YTD Business Update

Important achievements disclosed in early 2024, including 10th FDA BDD¹ for BCI

2024 YTD Achievements

January

Clinical
Announced expansion of
ARC^{IM} clinical feasibility study
for blood pressure regulation
to the Netherlands

February

Corporate
KBC Securities research
coverage initiated with buy
rating

February

Clinical
Awarded 10th FDA BDD¹ for
Brain Computer Interface (BCI)

March

Clinical
Accepted to New US FDA TAP
Program
for development of BCI system

March

Corporate
Raised €20M in capital
increase by way of
accelerated bookbuild
offering and public offering in
France

April

Clinical
Submitted De Novo
application to FDA for ARC^{EX}
System

April

Corporate
Stifel research coverage
initiated with buy rating

Details to follow

Details to follow

Details to follow

¹ Breakthrough Device Designation

Successful €20M capital raise despite challenging market conditions

Capital Raise

Key takeaways

- €20M gross proceeds
- Fully subscribed upside option
- Separate public offering with retail investors in France
- Net proceeds expected to extend current cash runway into mid-2025

Expected use of net proceeds

- Fund research & development activities
- Establish commercial organization in preparation for expected US launch of ARC^{EX}
- Build quality, operations, and other infrastructure capabilities
- Fund working capital requirements

Regulatory submission to allow marketing of ARC^{EX} in the US for upper limb indication

ARC^{EX} FDA De Novo Submission



- ARC^{EX} is a breakthrough therapy
 - First spinal cord stimulation therapy to restore hand and arm function after SCI
 - First commercial product for ONWARD Medical
- Submitted De Novo application to FDA to allow marketing of ARC^{EX} system to improve or restore hand and arm function after spinal cord injury in the US
- FDA review expected to take 6-9 months
- ARC^{EX} commercial launch expected in the US in Q4 2024

Note: Investigational device, not available for commercial use

¹ Responder defined as participant who met or exceeded the minimally important difference criteria for at least one outcome of the strength domain and at least one outcome of the functional performance domain

2024 Outlook

Several important catalysts expected in 2024

Upcoming Milestones and News Flow

ARC^{EX}

Regulatory clearance submission
Upper limb
COMPLETED

ARC^{EX}

Up-LIFT pivotal study manuscript
publication
Upper limb

ARC^{EX}

FDA clearance
Upper limb

ARC^{EX}

First commercial sale (US)
Upper limb

ARC^{IM}

First participant enrollment¹ Early
feasibility study
Parkinson's mobility

ARC^{IM}

Interim results publication
Blood pressure

ARC^{IM}

IDE submission
Empower BP pivotal study
Blood pressure

ARC^{IM}

IDE approval
Empower BP pivotal study
Blood pressure

ARC^{IM}

First participant enrollment Empower
BP pivotal study
Blood pressure

ARC^{IM}

First-in-human²
Bladder

ARC^{IM} BCI

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

Q&A

The background features a complex pattern of wavy, overlapping lines. On the left side, there are thick, vibrant red lines that curve and flow downwards. The rest of the background is filled with thinner, light gray lines that create a dense, textured effect, similar to a wood grain or a woven fabric.

Thank you!

ONWARD[™] **EMPOWERING**
MOVEMENT[™]