Empowering Neuroplasticity
Disruptive Technology for Healthcare

(NASDAQ:HSDT | TSX:HSM)
Legal Disclaimers

This presentation contains forward-looking statements, including statements about: statements regarding the Company's future strategic and operational execution, the next phase of the Company's market development activities, clinical and regulatory development plans for the PoNS device, and the timing and success of the Company's commercialization efforts in the United States. These statements involve substantial 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. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make.

Risk Factors:

Factors that may cause actual results to differ materially from any future results expressed or implied by any forward looking statements uncertainties regarding the Company’s capital requirements to achieve its business objectives, the impact of the COVID-19 pandemic, the Company’s ability to secure contracts with rehabilitation clinics, the Company’s ability to obtain national Medicare coverage and to obtain a reimbursement code so that the PoNS device is covered by Medicare and Medicaid, the Company’s ability to obtain FDA clearance for stroke, the Company’s ability to build internal commercial infrastructure, market awareness of the PoNS device, future clinical trials and the clinical development process, manufacturing and supply chain risks, potential changes to the MCIT program, the product development process and FDA regulatory submission review and approval process, other development activities, ongoing government regulation, and other risks described in the “Risk Factors” section of Company’s Annual Report on Form 10-K for the year ended December 31, 2020, its Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 as well as those set forth from time to time in the Company’s other filings with the securities and exchange commission and the Canadian securities regulators available at http://www.sec.gov or www.sedar.com

The forward-looking statements in this presentation represent our views as of the date of this presentation. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this presentation.

Certain data in this presentation was obtained from various external sources. Neither the Company nor its affiliates, advisers or representatives have verified such data with independent sources. Accordingly, neither the Company nor any of its affiliates, advisers or representatives make any representations as to the accuracy or completeness of that data or commits to update such data after the date of this presentation. Such data involves risks and uncertainties and is subject to change based on various factors.

The Company’s first product, PoNS, is indicated for use in the United States as a short term treatment of gait deficit due to mild-to-moderate symptoms from multiple sclerosis (MS) and is to be used as an adjunct to a supervised therapeutic exercise program in patients 22 years of age and over by prescription only. The PoNS device is authorized for sale in Canada as a class II, non-implantable, medical device intended as a short term treatment (14 weeks) of gait deficit due to mild and moderate symptoms from MS, and chronic balance deficit due to mild-to-moderate traumatic brain injury (mmTBI) and is to be used in conjunction with physical therapy. The PoNS device is an investigational medical device in the European Union (“EU”) and Australia (“AUS”). It is currently under premarket review by the AUS Therapeutic Goods Administration.
The Portable Neuromodulation Stimulator “PoNS™” Device

The first and only patented treatment combining trigeminal nerve neurostimulation via the tongue with physical therapy to reduce symptoms of neurological disease or trauma.

Authorized in the US for gait deficit due to mild to moderate symptoms of multiple sclerosis (“MS”)

FDA Breakthrough Designation granted for the treatment of gait deficit due to symptoms of MS

FDA Breakthrough Designation granted for the treatment of dynamic gait and balance deficits following a stroke

Authorized in Canada for the treatment of gait deficit due to mild and moderate symptoms of MS and chronic balance deficit due to mild and moderate traumatic brain injury (“mmTBI”)
A Path to Commercialization: FDA Breakthrough Designation

**May 2020**
- Breakthrough Designation granted for the treatment of gait deficit due to symptoms of MS

**March 2021**
- Received FDA marketing authorization
- Only medical device cleared in the U.S. for this indication

**August 2021**
- Breakthrough Designation granted for the treatment of dynamic gait and balance deficits following a stroke

Next Milestones
- Pivotal trial
- Potential FDA marketing authorization
**Large Potential Addressable Markets**

**U.S. Clinical Progress and Future Opportunities**

**Indication and Target Population - US**

- **Multiple Sclerosis** (1M People)
  - FDA Breakthrough Designation
  - Authorized for gait deficit due to symptoms of MS
- **Stroke** (7M People)
  - FDA Breakthrough Designation
  - Pilot Study Conducted
  - Additional Study in Development
- **Traumatic Brain Injury** (6.8M People)
  - Potential for Future Development
  - Studies Completed; Additional Study Planned
- **Cerebral Palsy** (764K People)
  - Pilot Studies Conducted
- **Parkinson’s Disease** (1M People; 60K new each year)
  - Future Studies Needed
- **Balance Maintenance in Baby Boomers** (78M people)
  - Ongoing Evaluation
- **Neurological Wellness** (1 billion people)
- **Human Performance**

- **Future Studies Needed**
- **Ongoing Evaluation**
- **Potential for Future Development**
  - **Traumatic Brain Injury**
  - **Parkinson’s Disease**
Recent Milestones and Anticipated Value Creation Events

- Authorized in the US for gait deficit due to symptoms of MS
- Closed on $11m public offering
- MCIT strategy submitted to CMS

- Initiate inventory build for commercial launch
- Establish total of 40 clinics in Canada
- Initial outreach with KOLs and strategic partners
- Expected MCIT rule determination / Other reimbursement opportunities

- GMED Audit / Maintained ISO13485:2016 and MDSAP Certifications
- Enhanced and expanded senior leadership team
- Achieved 85% of state licensure for product distribution

- Private, Commercial and Government payer applications submitted
- Expansion of resources to support US commercialization (phase 2 hiring)*
  - Initiate pivotal trial in stroke

- Expansion of resources to support US commercialization*
  - Launch clinical adoption studies
  - FDA Breakthrough Designation granted for balance and gait deficits due to symptoms of stroke

- US commercial launch for MS
  - Deploy reimbursement strategies

- Subject to FDA authorization, targeted US commercialization for stroke

- GMED Audit / Maintained ISO13485:2016 and MDSAP Certifications
- Enhanced and expanded senior leadership team
- Achieved 85% of state licensure for product distribution

- GMED Audit / Maintained ISO13485:2016 and MDSAP Certifications
- Enhanced and expanded senior leadership team
- Achieved 85% of state licensure for product distribution

= Completed  = Target  = Ongoing
PoNS Treatment™
PoNS Treatment™
Mechanism of Action

Neuromodulation: modification of the nervous system by targeted stimuli

PoNS device designed to induce Trans lingual Neurostimulation: trigeminal nerve neuromodulation via the tongue

~25MM pulses per 20-minute session
Feels like champagne or carbonated water bubbles
PoNS™ Device

Empowering the brain and improvement during PoNS Treatment™

- Mouthpiece electrodes stimulate the tongue surface, sending signals to the brain
- The stimulation produced by PoNS is believed to help strengthen the neural connections associated with balance and walking when combined with physical rehabilitation
Comprehensive 14 Week PoNS Treatment™ Program

Base Assessments

Interim Assessments

Interim Assessments

Final Assessments

Initial Consultation

Week

In-Clinic Phase

At-Home Phase
PoNS Treatment™ for Symptoms Due to Stroke

*PoNS is not authorized to treat individuals with stroke
FDA Breakthrough Designation for Treatment of Symptoms Due to Stroke

• Announced receipt of FDA Breakthrough Designation on August 17, 2021

• Indication of use as a temporary treatment of dynamic gait and balance deficits due to symptoms from stroke

• PoNS Treatment to be used as an adjunct to a supervised therapeutic exercise program in patients 22 years of age and over

*PoNS is not authorized to treat individuals with stroke
Potential Addressable U.S. Opportunity in Stroke

7 million

Americans estimated to be living with complications of stroke¹

80%

Of those individuals have a gait impairment²

¹ PoNS is not authorized to treat individuals with stroke.

References:

PoNS Treatment™ for Symptoms of Multiple Sclerosis
Understanding the “MS” Market Opportunity in US

- **MS is a well-characterized chronic disease with a fast-growing diagnosed population.**

- **MS patients are cared for by neurologists, a relatively discrete group (approx. 16,000 in USA¹).**

- **Gait dysfunction is a common and distressing symptom experienced by MS patients.**

- **MS patients are vocal and connected on social media.**

- **MS patients actively seek out new and promising treatments.**

¹ American Academy of Neurology
Potential Addressable U.S. Opportunity in Multiple Sclerosis

1 million

Americans estimated to be affected by MS

41%

Report having difficulties walking, including 13% with an inability to walk at least 2x/week

1. Acorda Therapeutics Announces Pricing and Patient Assistance Programs for AMPYRA®; Exhibit 99.1; February 3, 2010
Clinical Evidence
Multiple Sclerosis Study – Mild and Moderate MS (EDSS score 3.5-6)

**Mean DGI***

Two groups (10 each):
1. “Active” PoNS + exercises
2. Placebo PoNS + exercises

100% Improvement in Dynamic Gait Index scores for the Active Group

** All 10 subjects in the active treatment group experienced at least a 4-point improvement from baseline to Week 14 in DGI. Mean average of 7.95.

** Only 3 of 10 (30%) subjects in the placebo control group experienced an improvement in DGI of at least 4 points from baseline to week 14. Mean average of 3.45.

Tyler et al. Journal of NeuroEngineering and Rehabilitation 2014, 11:22

* DGI = Dynamic Gait Index, a measure of the ability to walk

- Study entry
- 2 wks lab
- 4 wks home
- 8 wks home
- 12 wks home

<table>
<thead>
<tr>
<th>Weeks</th>
<th>10 Active</th>
<th>10 Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study entry</td>
<td>10 Active</td>
<td>10 Control</td>
</tr>
<tr>
<td>2 wks lab</td>
<td>4 wks home</td>
<td>8 wks home</td>
</tr>
</tbody>
</table>

Clinically significant
Clinical Evidence

fMRI Changes in Patients Treated with Active PoNS and PT vs non-stimulating Placebo PoNS and PT

VOIs BOLD signal vs. Healthy Controls

Group A: Active Arm
Group B: Placebo Arm


Mean and 95% quantile of healthy control’s BOLD signal change
Patients with MS treated with PoNS in Canada

42

Patients had achieved at least a 4-point improvement in their functional gait assessment (FGA)

58.3%

Currently evaluating additional data gathered on MS patients for commercial and medical insights and publication
Current Strategies for Managing Neurological Disorders

Prescription Drugs

Therapy

Surgery

Medical Devices
Commercialization and Reimbursement
• MCIT – Medicare Coverage for Innovative Technologies – accelerated coverage pathway for innovative products
• 4 years CMS reimbursement from the date of clearance for products with a breakthrough designation and FDA clearance
• Alignment of coverage with launch date

60 million people in the US are covered under Medicare.
U.S. Pre-Commercial Activities

- Building out go-to-market strategy (including licensing, territory identification, KOL engagement, etc.) and supporting infrastructure
- Finalizing distribution model of the PoNS device
- Targeting commercial launch in Q1’22 with initial cash pay customers, while pursuing commercial and government reimbursement programs
- Continuing to pursue Medicare Coverage for Innovative Technologies ("MCIT") Pathway - accelerated coverage that allows for 4 years CMS reimbursement from the date of clearance for products with a breakthrough designation and FDA clearance (CMS target ruling date Dec 2021)
- Creating Patient Access Programs
- Identifying and onboarding neuro rehab clinics currently treating MS patients to provide treatment
Capitalization & Ownership
## Capitalization & Ownership

### Capitalization

<table>
<thead>
<tr>
<th>Common Stock Equivalents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock</td>
<td>2,317,772</td>
</tr>
<tr>
<td>U.S. Warrants (WAEP $16.32)</td>
<td>593,924</td>
</tr>
<tr>
<td>Options (WAEP $38.92)</td>
<td>631,015</td>
</tr>
<tr>
<td>RSUs</td>
<td>8,290</td>
</tr>
<tr>
<td>Total Fully Diluted</td>
<td>3,551,001</td>
</tr>
</tbody>
</table>

### Ownership

<table>
<thead>
<tr>
<th># Common Shares</th>
<th>% of Common Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Officers and Directors</td>
<td>376,941</td>
</tr>
<tr>
<td>Columbus Capital Management</td>
<td>160,805</td>
</tr>
<tr>
<td>Maple Leaf Funds</td>
<td>116,366</td>
</tr>
<tr>
<td>AIGH Capital Management, LLC</td>
<td>77,429</td>
</tr>
<tr>
<td>A&amp;B (HK) Company, Ltd.</td>
<td>71,306</td>
</tr>
</tbody>
</table>
Executive Team
Experienced Leadership With Healthcare and Commercialization Expertise

Dane Andreeff
President & CEO
- 20+ years at Maple Leaf Partners as the General Partner and Portfolio manager, a value-based hedge fund which grew to over $2b in assets
- Board member and advisor to Helius for over 3 years, Myocardial Solutions for 4 years and HDL Therapeutics, Inc. for over 15 years
- ~8.8% ownership of the company

Dr. Antonella Favit-Van Pelt
Chief Medical Officer
- Board-certified neurologist with 20+ years in the health sciences industry
- Led U.S. Medical Strategy for the Neurology program of H. Lundbeck A/S
- Founded and led as President and CEO, Synaerion Therapeutics and its affiliate Thera Neuropharma, Inc.
- Served as Senior Director and Global Medical Lead at Shire Pharmaceuticals, Director of Medical Strategy at Bristol-Myers Squibb, and as Global Clinical Development Lead at GE Healthcare

Jeff Mathiesen, CPA
Chief Financial Officer
- Vice Chair, Lead Independent Director, and Audit Committee Chair of Panbela Therapeutics, Inc. (Nasdaq: PBLA)
- Director and Audit Committee Chair of NeuroOne Medical Technologies Corporation (OTCQB: NMTC)
- Former Board Member and Audit Committee Chair of eNeura, Inc.
- Former CFO at Gemphire Therapeutics and Sunshine Heart

Frederick Fantazzia
VP, Sales & Marketing North America
- 25+ years combined experience in Medical Device and Pharmaceutical Sales
- 16+ years in the medical devices industry with extensive commercialization expertise in neuromodulation sales and marketing
- Former VP of North America Sales and Marketing, LivaNova and legacy Cyberonics (Cyberonics experience included global responsibility)
- Pharma Experience - Launched and sold multiple pharmaceuticals including Tiazac, Celexa, Monourol, and Lexapro
Non-Executive Directors
Experienced Leadership With Healthcare and Commercialization Expertise

Blane Walter
Chairman of the Board
- Partner, Talisman Capital Partners
- Vice Chair of InVentiv Health
- Chair of the Governor of Ohio’s Executive Workforce Board
- Former CEO of InVentiv Health
- Former Founder of InChord Communications

Sherrie Perkins
Director
- 20 years neuromodulation medical device experience in neurology, psychiatry, and sleep medicine
- Former Marketing and Business Development Executive, Cyberonics, Inc. (Nasdaq: CYBX) and LivaNova PLC (Nasdaq: LIVN)
- Former member Board of Directors, eNeura, Inc.
- Former member Board of Directors, ImThera Medical, Inc.

Ed Straw
Director
- Founder, Managing Partner of Osprey Venture Partners
- Chairman of Odyssey Logistics
- Member of the Board of Directors of Performance Equity Management, Capital Teas and Document Capture Technologies, Inc.
- Former President, Global Operations, Estee Lauder
- Former SVP, Global Manufacturing and Supply Chain Management at Compaq Computer Corporation
- Distinguished 3-star Admiral, US Navy

Mitch Tyler
Director
- Founder and Co-Inventor of PoNS™ technology
- Co-founder of Wicab, Inc and former VP, Research and Development
- Lead Inventor of the BrainPort Balance Device
- Former University of Wisconsin Biomedical Engineering faculty member
- MS, Biomedical Engineering and Registered Professional Engineer
Helius MS Scientific Advisory Board and Key Opinion Leaders
Extenstive IP Portfolio

Exclusively licensed from inventors (4% royalty):
- 9 US Medical Method Patents Issued
- Patents expire between 2029 and 2031

Patents owned by Helius (no royalty):
- 29 US Patents Issued
- 41 Foreign Patents Issued
- Patents expire between 2026 and 2040

Helius Patents Transferred to China Medical System Holdings (CMS):
- 3 Chinese Design Patents

Independent Verification of Patents and Freedom to Operate Opinion:
- September 2017
First-in-Class Neurotech

- Unique and innovative treatment authorized to improve impaired function by stimulating cranial nerves via the tongue, supported by an extensive IP portfolio
- US authorization in gait deficit due to MS
- MS launch targeted Q1’22 in US
- Potential CMS reimbursement for 4 years with FDA clearance for breakthrough designation for MS
- FDA Breakthrough Designation granted for the treatment of balance and gait deficits due to symptoms of stroke
- Potential CMS reimbursement for breakthrough designation for stroke pending FDA clearance
Thank you

(NASDAQ:HSDT | TSX:HSM)