



# **A Commercial-Stage Bioelectronic Medicine Company**

Nasdaq: ECOR

**Corporate Presentation**

November 2022

# Forward Looking Statement

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In addition to historical information, this presentation may contain forward-looking statements with respect to our business, capital resources, strategy and growth reflecting the current beliefs and expectations of management made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are subject to a number of risks, uncertainties and assumptions, and you should not rely upon forward-looking statements as predictions of future events. All forward-looking statements may be based upon current estimates and expectations about future events and financial and other trends. There is no guarantee that future results, performance or events reflected in the forward-looking statements will be achieved or occur. No person assumes responsibility for the accuracy and completeness of the forward-looking statements, and, except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons why actual results could differ materially from those or our situation may change in the future.

Forward-looking statements include all statements that are not historical facts and, in some cases, can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" or similar expressions and the negatives of those terms. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements represent our management's beliefs and assumptions only as of the date they are made and are only predictions that may be inaccurate. You should read the Risk Factors set forth in our reports filed from time to time with the Securities and Exchange Commission, which factors may cause our actual future results to be materially different from what we expect.

Additionally, in an effort to provide additional information management believes is a useful indicator of operating performance for the period ended September 30, 2022, this presentation contains a financial measure not determined by generally accepted accounting principles (GAAP): Adjusted EBITDA net loss. A reconciliation to the most directly comparable GAAP financial measure of Net Loss is available on the presentation slide entitled "Adjusted EBITDA Reconciliation." The rationale for management's use of non-GAAP information is included in Exhibit 99.1 to the Company's Form 8-K furnished with the SEC November 3, 2022, and in slide 13 of this presentation.





gammaCore

# Sapphire™

1<sup>st</sup> FDA-cleared non-invasive  
vagus nerve stimulator

- Fast acting, comfortable, easy to use hand-held option
- FDA Cleared for the prevention and treatment of primary headache in adults and adolescents
- Use alongside existing treatments; no drug-drug interactions or drug-like side effects
- Can use multiple times per day or month
- Cost dominance in the first-year when gammaCore therapy is used in conjunction with standard of care as supported by UK NICE guidance

# Investment Summary

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## Platform Therapy

FDA cleared; proprietary, non-invasive vagus nerve stimulator (nVNS) positioned to unlock the broad potential of bioelectronic medicine

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## Large Initial Market

Cluster headache and migraine estimated to affect more than 39 million<sup>1</sup> adults in the U.S.

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## Attractive Revenue Model

Recurring revenue business model

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## Strong IP Portfolio

Patent coverage extends beyond 2033

<sup>1</sup> American Migraine Foundation

# nVNS and the Benefits of gammaCore

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- ✓ The vagus nerve affects multiple organs and systems
- ✓ Activates multiple mechanisms of action
- ✓ Evidence supports possible future treatment for many indications
- ✓ Self-treating and no off-target effects
- ✓ Complementary to existing care

# Unmet Need in Primary Headache

## MIGRAINE

**39 million U.S. adults<sup>1</sup>**

Indirect costs associated with migraine in the U.S. has been estimated at \$19.3 billion (inflated to 2019 (US\$))<sup>2</sup>

Triptans represent 80% of prescribed acute therapies 40% of patients are dissatisfied or unresponsive to triptans<sup>3</sup>

More than half of insured migraineurs receive no Rx treatment<sup>3</sup>

gammaCore is FDA-cleared for migraine prevention and treatment of acute migraine

## CLUSTER HEADACHE

**400,000 U.S. patients<sup>4</sup>**

Up to eight 15-180 min attacks per day

Considered one of the most painful conditions known; a “suicide headache”

gammaCore is FDA-cleared for the prevention of all types of cluster headache and for the acute treatment of episodic cluster headache

nVNS is recommended as a first line treatment for both the acute and preventative treatment of cluster headache and highly relevant treatment option for patients suffering from migraine<sup>5</sup>

Identified as the only emerging treatment for cluster headache that has been shown to be effective in clinical trial for both the acute treatment of episodic cluster headache as well as the preventive treatment of cluster headache<sup>6</sup>

1. American Migraine Foundation

2. CPI for all urban consumers (CPI-U). Bureau of Labor Statistics. Accessed May 17, 2019.

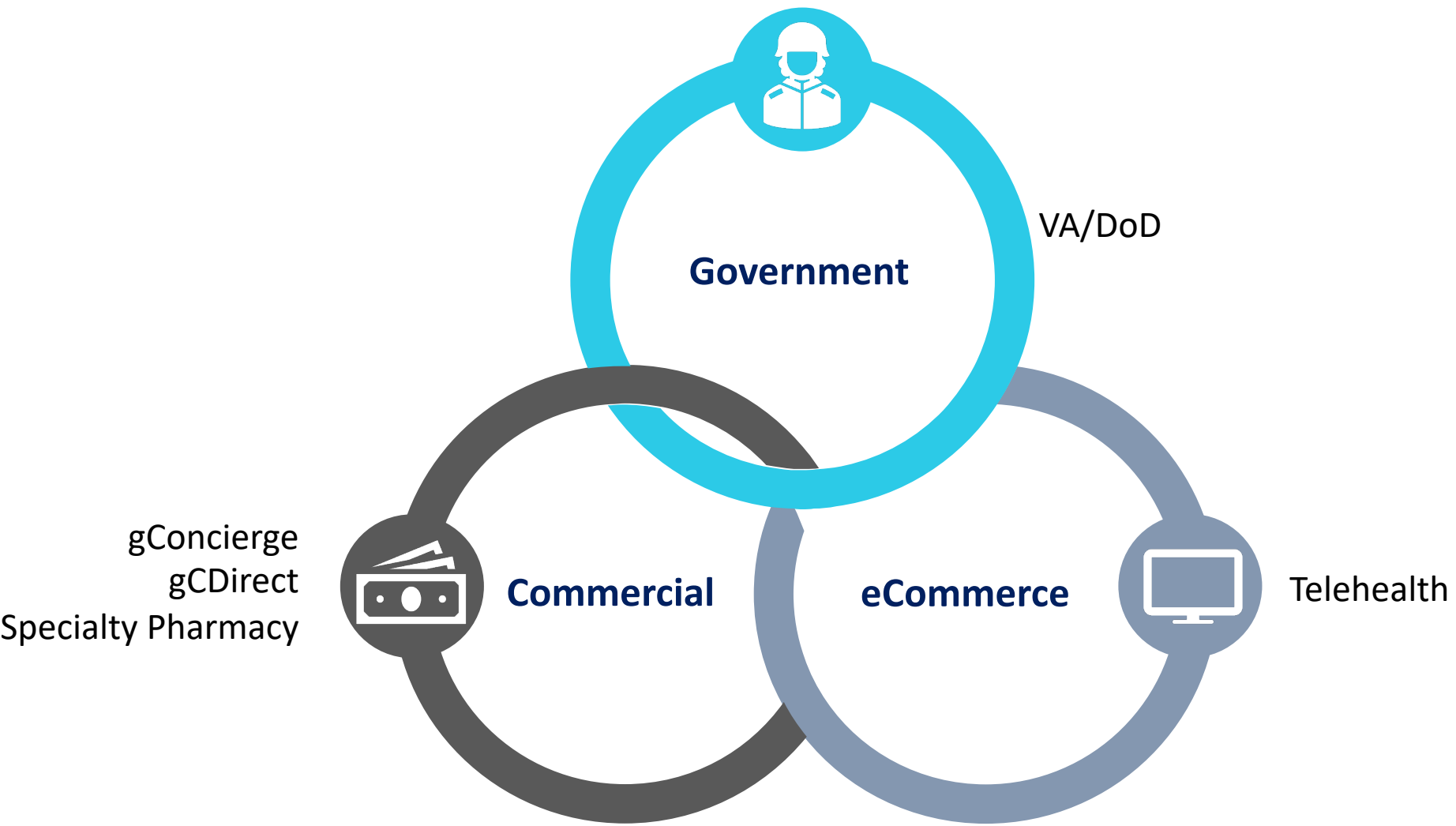
3. IMS Pharmedics Plus.

4. Cephalalgia. 2008 Jun;28(6):614-8. doi: 10.1111/j.1468-2982.2008.01592.x. Epub 2008 Apr 16.

5. Cephalalgia. 2020 Jul 27; In-Press. Non-invasive vagus nerve stimulation for primary headache: a clinical update

6. Nature Reviews: Neurology 2021 Mar 29; In-Press: Cluster headache pathophysiology - insights from current and emerging treatments. doi: 10.1038/s41582-021-00477-w. Epub ahead of print. PMID: 33782592

# US Sales Channels



# Active Channels With Revenue Growth Opportunities

Driving Department of Defense and Community Care Network sales through the roughly 1,300 Department of Veterans Affairs and Military Treatment Facilities

Growth in U.S commercial channel driven by cash pay business models

Growth in the UK by leveraging: 1) Broader coverage through the MedTech Funding Mandate, 2) Growth from the new eCommerce platform, 3) Scottish Health Technology Group (SHTG) adaptation for NHS Scotland on the use of gammaCore for cluster headache; and 4) similar approvals expected in Wales

International expansion through recently executed distribution agreements covering Eastern Europe, Canada, Australia, Belgium, Luxembourg, the Netherlands, France, Qatar, Taiwan, China, Malaysia, Singapore, Indonesia, and Japan.



# nVNS – A Platform Technology



## NEUROLOGY/PAIN

### **Primary Headache<sup>1</sup>**

Post-traumatic headache<sup>2</sup>

Parkinson's Disease<sup>2</sup>

Post-traumatic stress disorder<sup>2,4</sup>

Traumatic Brain Injury<sup>2</sup>

Subarachnoid hemorrhage<sup>2</sup>

Acute Stroke<sup>2</sup>

Opioid Use Disorder<sup>2</sup>

Migraine in Long COVID<sup>1</sup>



## GASTROENTEROLOGY

Gastroparesis<sup>2</sup>

Post-operative Ileus<sup>2</sup>



## INFLAMMATION

Reactive Airway Disease

Asthma exacerbations in  
known or suspected  
COVID-19 patients<sup>3</sup>

- <sup>1</sup> Cleared indications
- <sup>2</sup> Independent Investigator initiated studies ongoing
- <sup>3</sup> Cleared through FDA Emergency Use Authorization
- <sup>4</sup> Breakthrough Designation

gammaCore is the only FDA-cleared non-invasive VNS therapy in primary headache

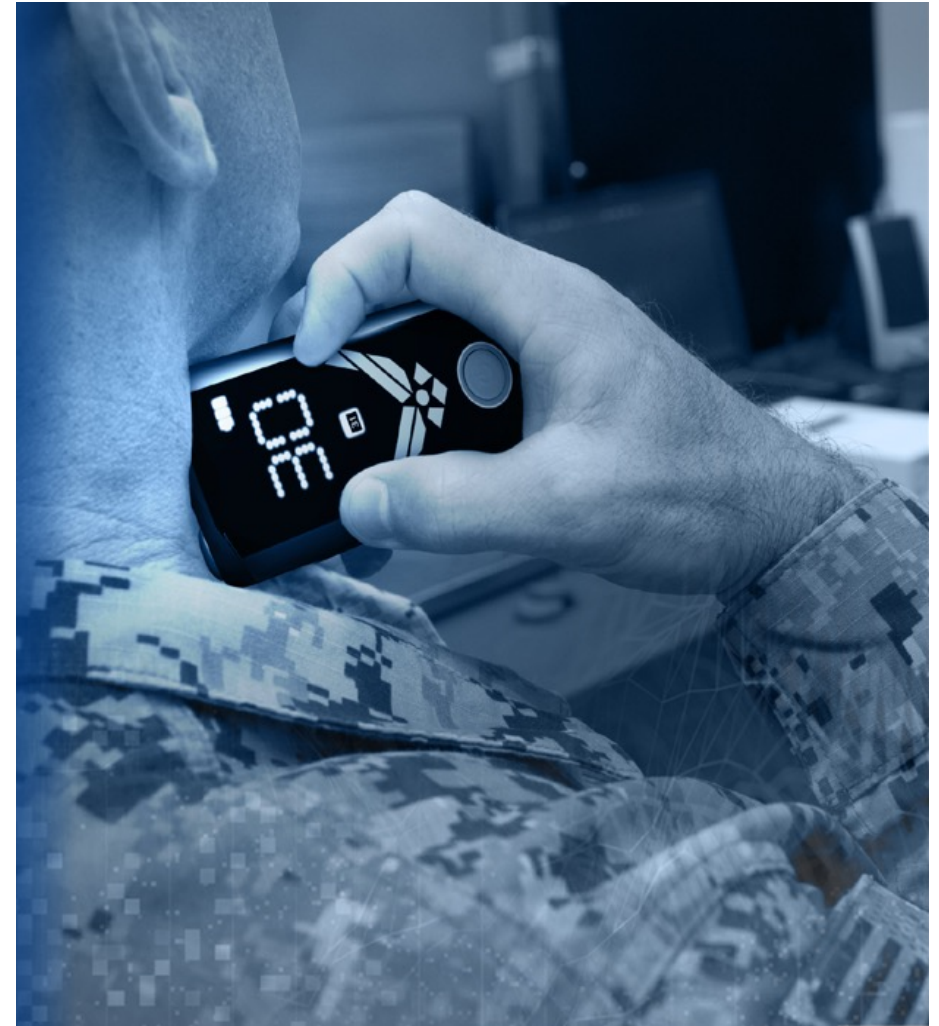
# BOOST Program

United States Department of Defense Biotech Optimized for Operational Solutions and Tactics (BOOST)

nVNS selected for further study under the BOOST research program conducted under the leadership of the 711 Human Performance Wing Performance Optimization Branch of the United States Air Force to provide:

- Accelerated Training
- Sustained Attention
- Reduced Fatigue
- Improved Mood

Should the BOOST Program confirm the initial findings, the project expects to call for electroCore to be prepared to provide field ready devices to the USAF in the second half of 2023



# Broad Intellectual Property Portfolio

electroCore owns all intellectual property on which the technology relies

## Expansive pioneering IP coverage of non-invasive, transdermal neuro-stimulation in the neck

We have patent coverage extending beyond 2033:

- High-frequency burst signals capable of passing comfortably through the skin
- Low-pass signal filtration that reduces signal harmonics that cause pain
- Growing digital health portfolio

# >190

PATENTS AND PATENT APPLICATIONS

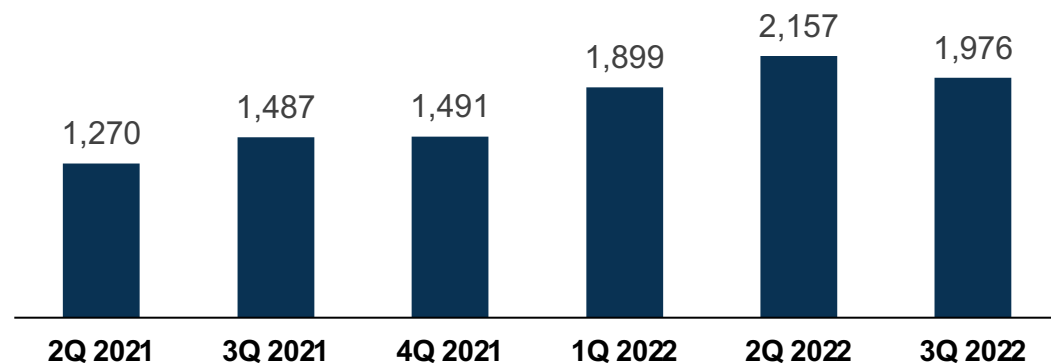
~110 issued U.S. patents

>40 U.S. patent applications

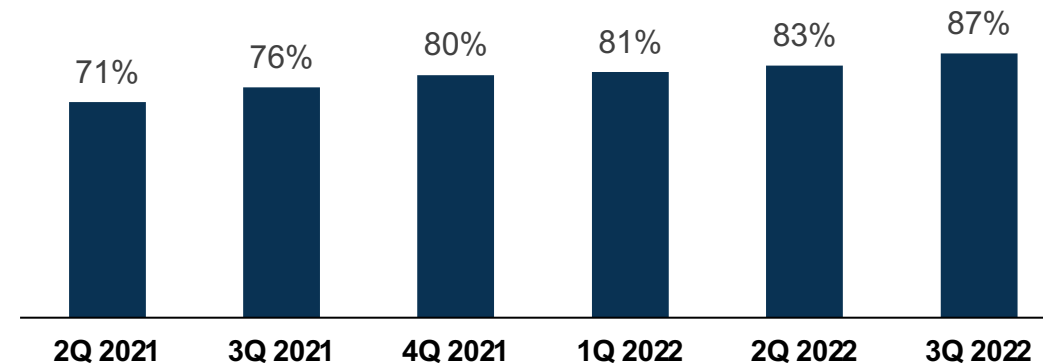
>40 International patents and applications

# Summary Financials (\$ in thousands)

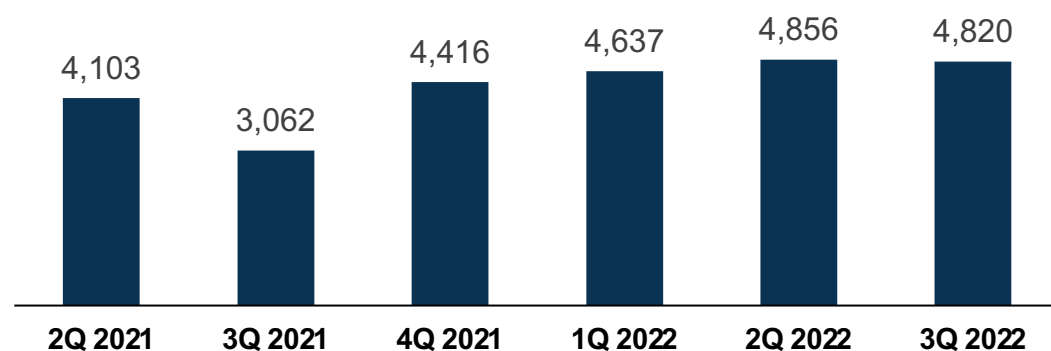
Net Sales



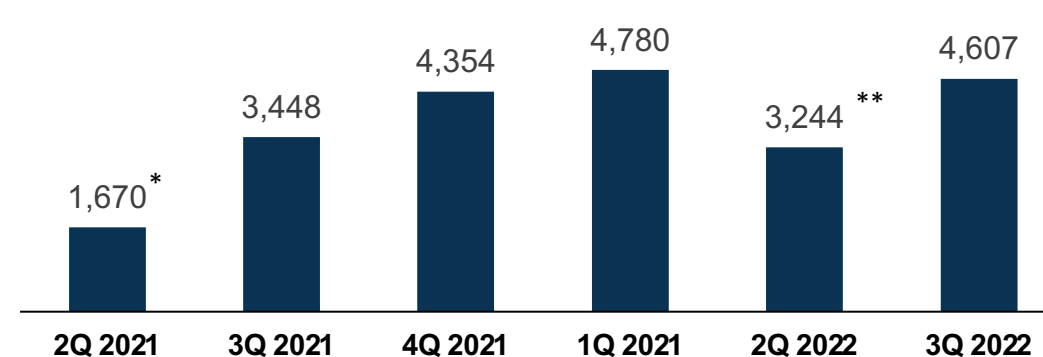
Gross Margin



Adjusted EBITDA Net Loss



Net Cash Used in Operations



- **Cash, cash equivalents and restricted cash as of 9/30/22: \$21.9 million**
- **Preliminary Q4 2022 guidance (dated November 3, 2022):**
  - Q4 2022 Revenue: \$2.2 - \$2.3 million
  - Q4 2022 Net Cash consumed by operations: \$4.0 - \$4.5 million

# Adjusted EBITDA Reconciliation

(in thousands)	2Q 2021		3Q 2021		4Q 2021		1Q 2022		2Q 2022		3Q 2022	
<b>GAAP net loss</b>	\$	(2,894)	\$	(3,994)	\$	(4,947)	\$	(5,582)	\$	(5,337)	\$	(5,453)
Provision (benefit) from income taxes		(885)		9		26		-		(445)		-
Depreciation and amortization		96		95		95		106		141		153
Stock-based compensation		838		760		762		777		752		566
Write-off of right of use operating lease		-		-		-		-		-		-
Increase in inventory reserves		-		-		70		-		-		-
Restructuring and other severance related charges		-		-		-		-		-		-
Legal fees associated with stockholders' litigation		166		77		187		61		71		17
Gain on extinguishment of debt		(1,422)		-		-		-		-		-
Total other (income)/expense		(1)		-		(1)		1		(38)		(103)
<b>Adjusted EBITDA net loss</b>	\$	(4,103)	\$	(3,052)	\$	(4,416)	\$	(4,637)	\$	(4,856)	\$	(4,820)

The company is presenting adjusted EBITDA net loss because it believes this measure is a useful indicator of its operating performance. electroCore management uses this non-GAAP measure principally as a measure of the company's core operating performance and believes that this measure is useful to investors because it is frequently used by the financial community, investors, and other interested parties to evaluate companies in the company's industry. The company also believes that this measure is useful to its management and investors as a measure of comparative operating performance from period to period. Additionally, the company believes its use of non-GAAP adjusted EBITDA net loss from operations facilitates management's internal comparisons to historical operating results by factoring out potential differences caused by gains and charges not related to its regular, ongoing business, including, without limitation, non-cash charges and certain large and unpredictable charges such as restructuring expenses.

The company defines adjusted EBITDA net loss as GAAP net loss, adjusting to exclude non-operating gains and losses, depreciation and amortization, stock-compensation expense, legal fees associated with stockholders' litigation, interest and other income/expense, benefit from income taxes, and gain on extinguishment of debt.



# Capitalization Table

Fully diluted as of September 30, 2022  
(in thousands)

Common Shares	71,122	
Warrants	12	Exercise price \$15.30
Options	6,273	Average Exercise price = \$3.89
Restricted Stock Units	927	RSUs which vest through February 2025
<b>Total</b>	<b>78,334</b>	

# Experienced Management Team

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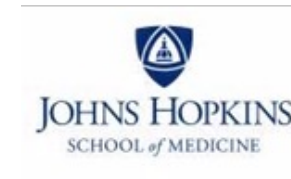
**Dan Goldberger**  
Chief Executive Officer



**Brian Posner**  
Chief Financial Officer



**Peter Staats**  
Chief Medical Officer



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**Appendix**

# U.S. Reimbursement Pathway

Aligned to stakeholder experience



## HEALTHCARE PROFESSIONALS

Write a prescription for use at home



## PATIENTS

Acquire gammaCore from a specialty pharmacy or directly from the company with a simple refill process



## PAYERS

Manage utilization through pharmacy or medical benefit reimbursement

## Payer Response

### CURRENT PAYER COVERAGE

CVS Caremark, Express Scripts, Highmark Blue Cross Blue Shield, North Dakota Blue Cross Blue Shield, Federal Supply Schedule (VA, DoD, Indian Health Service)

### PAYER ENGAGEMENT

Active discussions with multiple regional and national plans leveraging unique Level II HCPCS code K1020 “Non-invasive vagus nerve stimulator”

### REIMBURSEMENT PATH

Prescription model with periodic refill; can be reimbursed as pharmacy or medical benefit



# Commercial Headache Reimbursement

## **CVS/Caremark**

gammaCore is reimbursed by CVS/Caremark at a non-exclusionary co-pay of roughly \$50 - \$75/month for those beneficiaries who have a benefit design that does not differentiate between drugs and devices

Approximately five million CVS/Caremark members currently have a benefit design of this type

## **Express Scripts (ESI)**

gammaCore is reimbursed by ESI on all National Standard Formularies at a preferred copay of roughly \$25 - \$45/month for those beneficiaries who have a benefit design that does not differentiate between drugs and devices

## **CMS (HCPCS)**

Unique Level II Healthcare Common Procedure Coding System (HCPCS) code K1020 “Non-invasive vagus nerve stimulator” established by the Centers for Medicare and Medicaid Services, effective April 1, 2021

## **Joerns Healthcare**

Distribution agreement with Joerns Healthcare, LLC that will add more than 12.5 million covered lives within a select Managed Care Health System. Joerns will handle adjudications, billing and collections, while electroCore will ship directly to patients and provide in-servicing and patient support

# Expanding Federal Sales Opportunities

**>20 million**

covered lives between  
the VA (9m<sup>1</sup>), DoD  
(9.6m<sup>2</sup>), and Indian  
Health Service (2.2m<sup>3</sup>)  
across ~1,300<sup>1,2</sup>  
treatment facilities

**~400,000  
patients**

saw VA healthcare  
providers for headache  
in 2018<sup>4</sup>

**Migraine  
grew 10-fold**

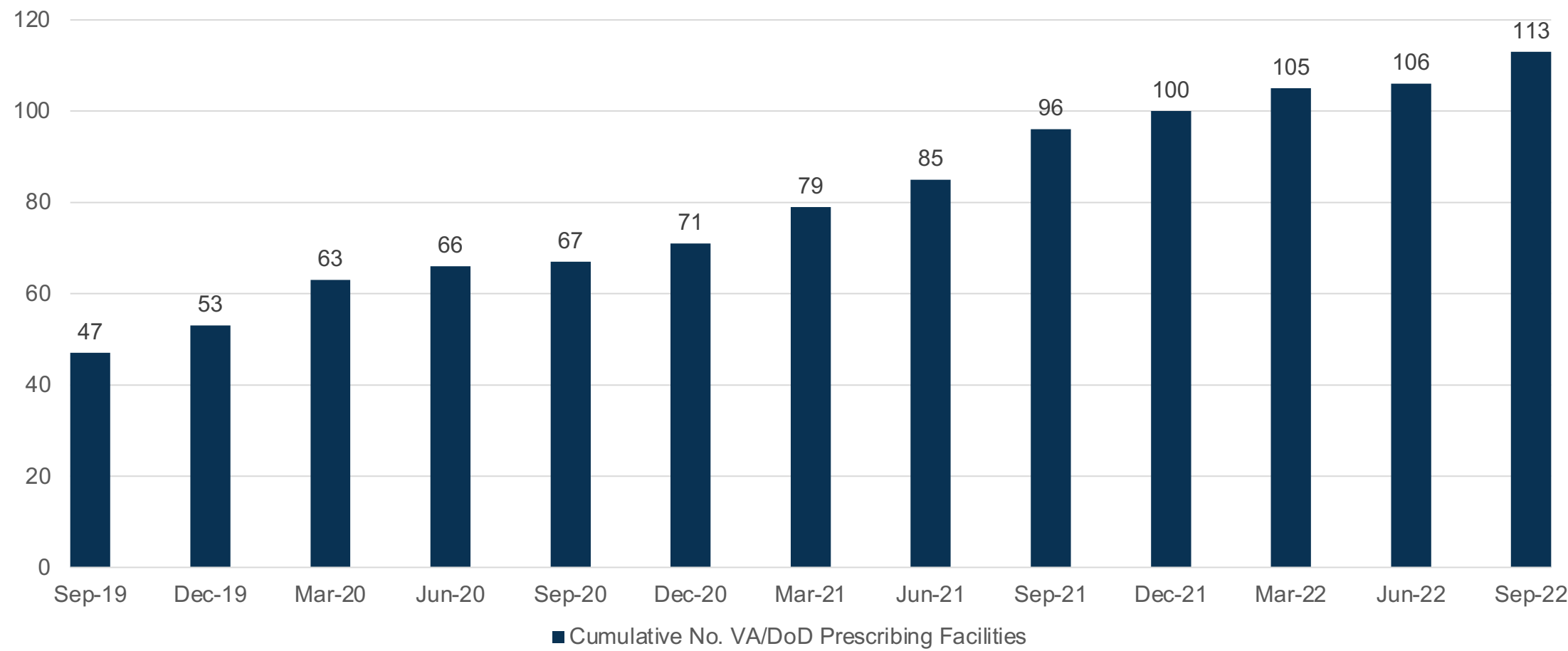
in the VA between  
2004-2012<sup>5</sup>

**More than  
27,000  
veterans  
suffer from  
cluster  
headache<sup>6</sup>**



[1] <https://www.va.gov/health/aboutvha.asp> [2] <https://www.tricare.mil/About/Facts> [3] <https://www.ihs.gov/newsroom/factsheets/quicklook/> [4] Grinberg et al. Understanding the Prevalence and Geographic Distribution of Headache Disorders within the Veterans Health Administration. Poster presentation, AHS 2019 [5] Altalib et al. Increase in migraine diagnoses and guideline-concordant treatment in veterans, 2004-2012 Cephalalgia 2017;37:3-10 [6] Dr. Sico et al. The headache & Migraine Policy Forum: Chronic Headache Disorders & Toxic Exposure, 2021, pg. 5

# Growth in VA/DoD Prescribing Facilities



















~1,300<sup>1,2</sup> VA, DoD, and Indian Health Service treatment facilities

# US Sales Channels: Details

	Pathway	Marketing Target/ Strategy	electroCore Customer	Coverage
Government	VA/DoD	Providers Direct to Veteran	Prosthetics	FSS, Open Market Access
Commercial	gConcierge	Providers DTC*	HCPs	Cash Pay
	gCDirect	Providers DTC*	Patients	Cash Pay
	Specialty Pharmacy	Providers DTC*	Specialty Pharmacy	Cash Pay, Insurance
eCommerce	Telehealth	DTC*	Vytal	Cash Pay

\*Direct to Consumer

# Pipeline

Indication	Phase	Partnerships
<b>Headache</b>		
Primary Headache	Market	  U.S. Department of Veterans Affairs   Northwell Health
Post Traumatic Headache	Pivotal	
Subarachnoid Hemorrhage Headache	Pilot	
<b>General Neurology</b>		
Post Traumatic Stress Disorder	Pivotal	  U.S. Department of Veterans Affairs  EMORY    EMORY   Newcastle University  Institute of Neurosciences Kolkata
Opioid Use Disorder	Pilot	
Parkinson's Disease	Pilot	
<b>Acute Neurological Injury</b>		
Stroke	Pilot	 HACETTEPE UNIVERSITY  Leids Universitair Medisch Centrum    MASSACHUSETTS GENERAL HOSPITAL
Subarachnoid Hemorrhage Headache	Pilot	
<b>Gastrointestinal</b>		
Post Operative Ileus	Pivotal	 UNIVERSITY OF LEEDS   JOHNS HOPKINS MEDICINE
Nausea in gastroparesis	Pilot	

Pipeline initiatives largely funded through non-company sources such as IITs and grants



# Global Approvals

## FDA-Cleared Indications for the US

- The preventive treatment of migraine headache in adolescent (age 12 and older) and adult patients.
- The acute treatment of pain associated with migraine headache in adolescent (age 12 and older) and adult patients.
- Adjunctive use for the preventive treatment of cluster headache in adult patients.
- The acute treatment of pain associated with episodic cluster headache in adult patients.
- Treatment of hemicrania continua in adults.
- Treatment of paroxysmal hemicrania in adults.

## CE Marks for the EU/EFTA/EEA and UK

- Acute and/or prophylactic treatment of primary headache (migraine, cluster headache, and hemicrania continua) and medication overuse headache in adults.
- Treatment or prevention of symptoms of reactive airway disease, including asthma, bronchoconstriction, exercise-induced bronchospasm, and COPD.
- Adjunctive therapy for adults to reduce the symptoms of certain anxiety and depression conditions (including panic disorder, posttraumatic stress disorder, obsessive-compulsive disorder, and major depressive disorder).
- Adjunctive therapy in the prevention of partial onset and generalized seizures associated with epilepsy in adults.
- Adjunctive therapy for adults to reduce the symptoms of gastric motility disorders and irritable bowel syndrome (including nausea, vomiting, bloating/distention, early satiety, and abdominal pain).

## Health Canada License for Canada

- Acute and/or prophylactic treatment of migraine in adolescents and adults and cluster headache in adults.

## ARTG Certificate for Australia

- Acute and/or prophylactic treatment of migraine, cluster headache, and hemicrania continua in adults.

# Indication and Important Safety Information

**gammaCore Sapphire™ (non-invasive vagus nerve stimulator) is intended to provide non-invasive vagus nerve stimulation (nVNS) on the side of the neck. gammaCore is indicated for:**

- The preventive treatment of migraine headache in adolescent (age 12 and older) and adult patients.
- The acute treatment of pain associated with migraine headache in adolescent (age 12 and older) and adult patients.
- Adjunctive use for the preventive treatment of cluster headache in adult patients.
- The acute treatment of pain associated with episodic cluster headache in adult patients.
- Treatment of hemicrania continua in adults.
- Treatment of paroxysmal hemicrania in adults.

The effectiveness of gammaCore (nVNS) has not been established in the acute treatment of chronic cluster headache.

The long-term effects of the chronic use of the device have not been established.

**gammaCore contraindications include but are not limited to:**

- Patients that have an active implantable medical device, such as a pacemaker, hearing aid implant, or any implanted electronic device
- Patients that have a metallic device such as a stent, bone plate, or bone screw implanted in or near the neck
- Patients that are using another device at the same time (e.g., TENS unit, muscle stimulator) or any portable electronic device (e.g., cell phone).

**Safety and efficacy of gammaCore have not been evaluated in the following patients, and therefore gammaCore is NOT indicated for:**

- Adolescent patients with congenital cardiac issues
- Patients diagnosed with narrowing of the arteries (carotid atherosclerosis)
- Patients who have undergone surgery for resection of the vagus nerve in the neck (cervical vagotomy)
- Pediatric patients (less than 12 years)
- Pregnant women
- Patients with clinically significant hypertension, hypotension, bradycardia or tachycardia

**The long-term safety and effectiveness of the gammaCore device has not been demonstrated in adolescents 12-17 years of age. Due to hormonal and cognitive development changes in adolescents, this population should be closely monitored while using the device. The use of the device in this population is based on extrapolated data from a clinical study in adults.**

- You must read the gammaCore Instructions for Use before using gammaCore
- Only use gammaCore as described in these Instructions for Use or as otherwise directed by your Healthcare Provider
- Only use an electroCore-approved electrode gel with gammaCore.

In the US, the FDA has not cleared gammaCore for the treatment of pneumonia and/or respiratory disorders, such as acute respiratory stress disorder associated with COVID-19.

Please refer to the gammaCore Instructions for Use for all of the important warnings and precautions before using or prescribing this product: [www.gammacore.com](http://www.gammacore.com)

Please also see the instructions for Use for gammaCore CV for all the important warnings and precautions specific to gammaCore CV and its use pursuant to the Emergency Use Authorization (EUA): <https://www.fda.gov/media/139970/download>