



A Commercial-Stage Bioelectronic
Medicine Company

Corporate Presentation
August 2019



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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 of the prospectus, and are only predictions that may be inaccurate. You should read the Risk Factors set forth in our prospectus and other reports filed from time to time with the Securities and Exchange Commission, which factors may cause our actual future results may be materially different from what we expect. 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.

electroCore At-a-Glance

NASDAQ: ECOR

Headquarters: Basking Ridge, NJ

No. of employees: 50

Market cap: ~\$50M (8/16/19)

Recent close: \$1.64 (8/16/19)

Cash & marketable securities (6/30/19): \$41.1M

Expected cash runway into beginning of 2021



gammaCore
Sapphire™

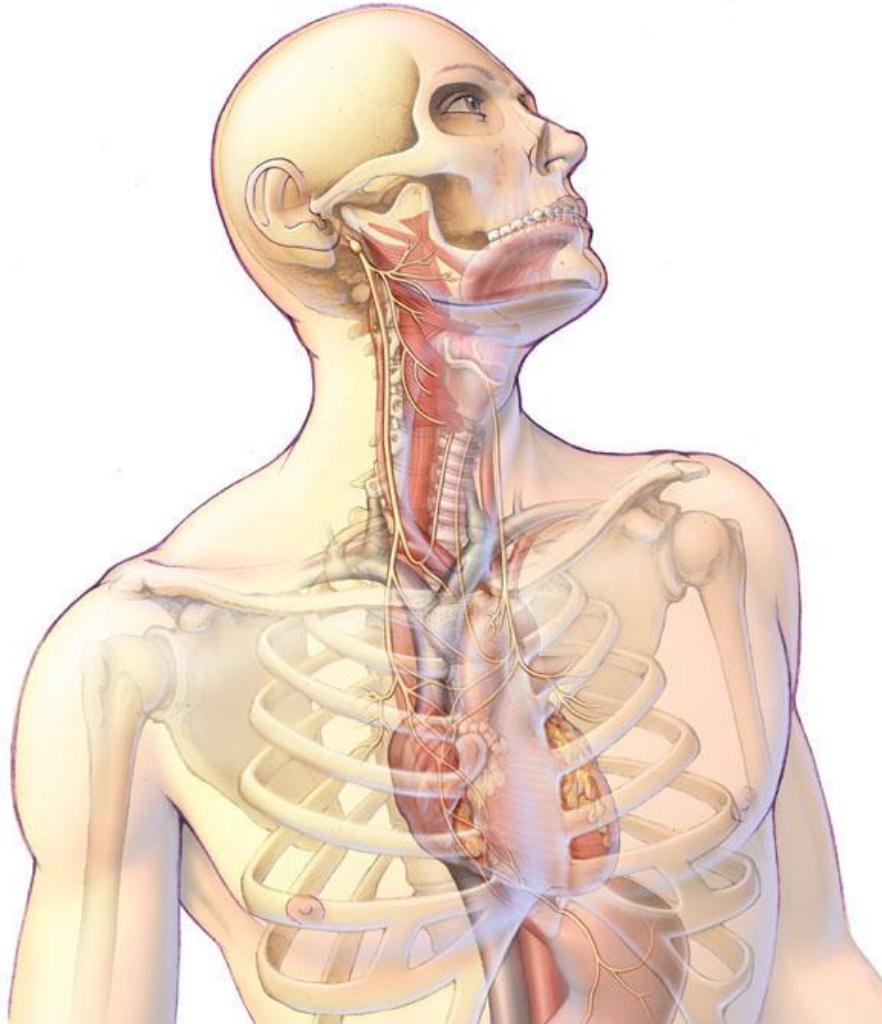
Investment Highlights

Platform Therapy	Only FDA-cleared non-invasive vagus nerve stimulator positioned to unlock the broad potential of bioelectronic medicine
Pharma Distribution	Distributed through standard specialty pharmacy channels
Large Initial Market	Primary headache market opportunity for cluster headache and migraine estimated to be in excess of \$4 billion
Pipeline in a Product	Opportunity to expand into additional large-markets, including neurology and rheumatology
High Margins	Low one-time, upfront device cost followed by high-margin electronic refill model
Strong IP Portfolio	Key patent coverage extends through 2033

Portfolio & Pipeline

Indication	PreClinical / Pilot Trials	Pivotal Trials	FDA Clearance	Commercial Launch	Key Milestones
Acute Treatment of Episodic Cluster Headaches	ACT 1 & 2				FDA clearance April 2017 Full commercial launch 3Q 2018
Acute Treatment of Migraine	PRESTO				FDA label expansion January 2018 Full commercial launch 3Q 2018
Cluster Headache Prevention	PREVA				FDA label expansion November 2018 Full commercial launch 4Q 2018
Migraine Prevention	PREMIUM 1 & 2				Final PREMIUM 1 data publication expected 2H 2019 1/3 of enrollment target in PREMIUM 2 achieved in Q2 2019 – 510(k) submission accepted by FDA
Post-Traumatic Headache	GAP-PTH (Investigator initiated)				Preclinical results presented 1Q 2019 IRB for human pilot study submitted 1Q 2019 Trial expected to commence 3Q 2019
Rheumatoid Arthritis	GENIUS-RA (Investigator initiated)				

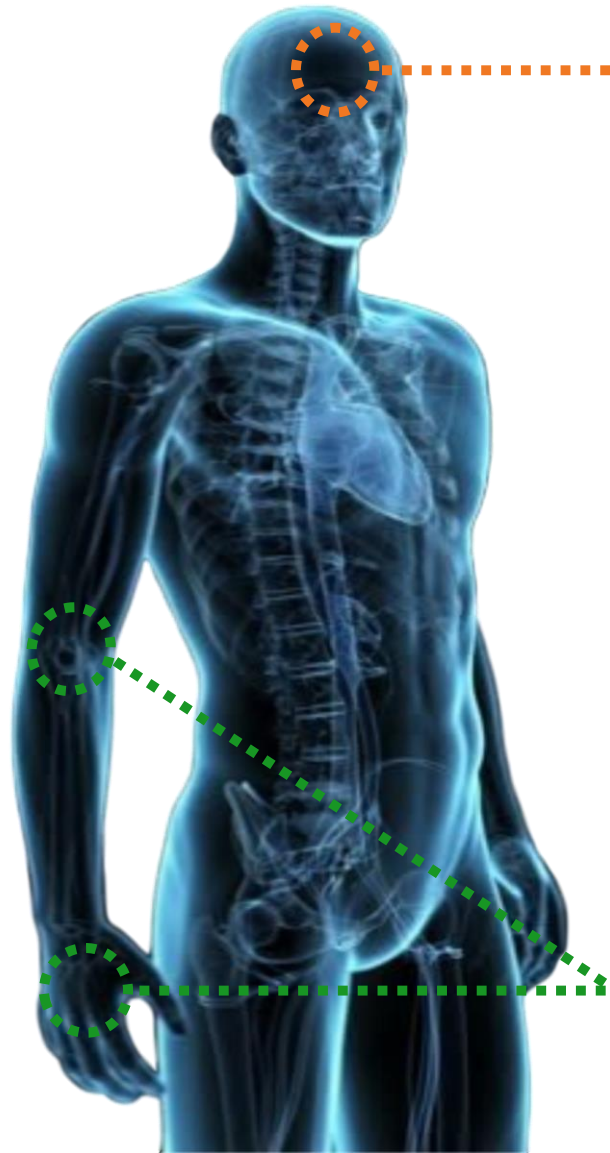
The Vagus Nerve



The longest cranial nerve in the body; the communication link between the brain and the body

Stimulation of the vagus nerve affects many important autonomic functions in the brain and in the body, including neurotransmitter levels, inflammation levels, and metabolism

Clinical Potential of VNS



Neurological Disorders

In the CNS, VNS effects *are similar to multiple major classes of drugs, including SSRIs, SNRIs, GABA analogues, and acetylcholine esterase inhibitors*

Peripherally, VNS affects immune activity, *suppressing the expression of TNF- α and other inflammatory cytokines*, resulting in effects similar to drugs used to suppress severe inflammation

Autoimmune Diseases

Bluetooth-
enabled

Hand-held,
simple-to-use,
highly targeted
therapy

Rechargeable
unit refilled by
RFID cards



gammaCore Sapphire™

1st FDA-cleared non-invasive
vagus nerve stimulator

- Fast acting, comfortable option for **acute treatment and prevention**, with only local, mild, and transient side effects
- Initial indications in **cluster headache and migraine**
- **Unique RFID card authorization** system for on-site specialty pharmacy encoding
- **Bluetooth-enabled** for novel web-based delivery of the therapy

Unmet Need in Cluster Headache & Migraine

20X

Cluster Headache

Suicide rate vs. the U.S. average



350,000 U.S. patients (approx. market \$400M¹)

Up to eight 15-180 min attacks per day

Typically occur 4-24 weeks per year

Only FDA-cleared therapy for acute and preventive treatment of Cluster Headache

#3

Migraine

Most prevalent illness



36 million U.S. patients (\$3.8B¹ approx. market)

Triptans represent 80% of prescribed acute therapies

40% of patients are dissatisfied or unresponsive to triptans²

More than half of insured migraineurs are untreated²

1. Estimated addressable market, based on industry sources.
2. IMS Pharmedics Plus.

Non-Invasive Therapy vs. Drug Alternatives

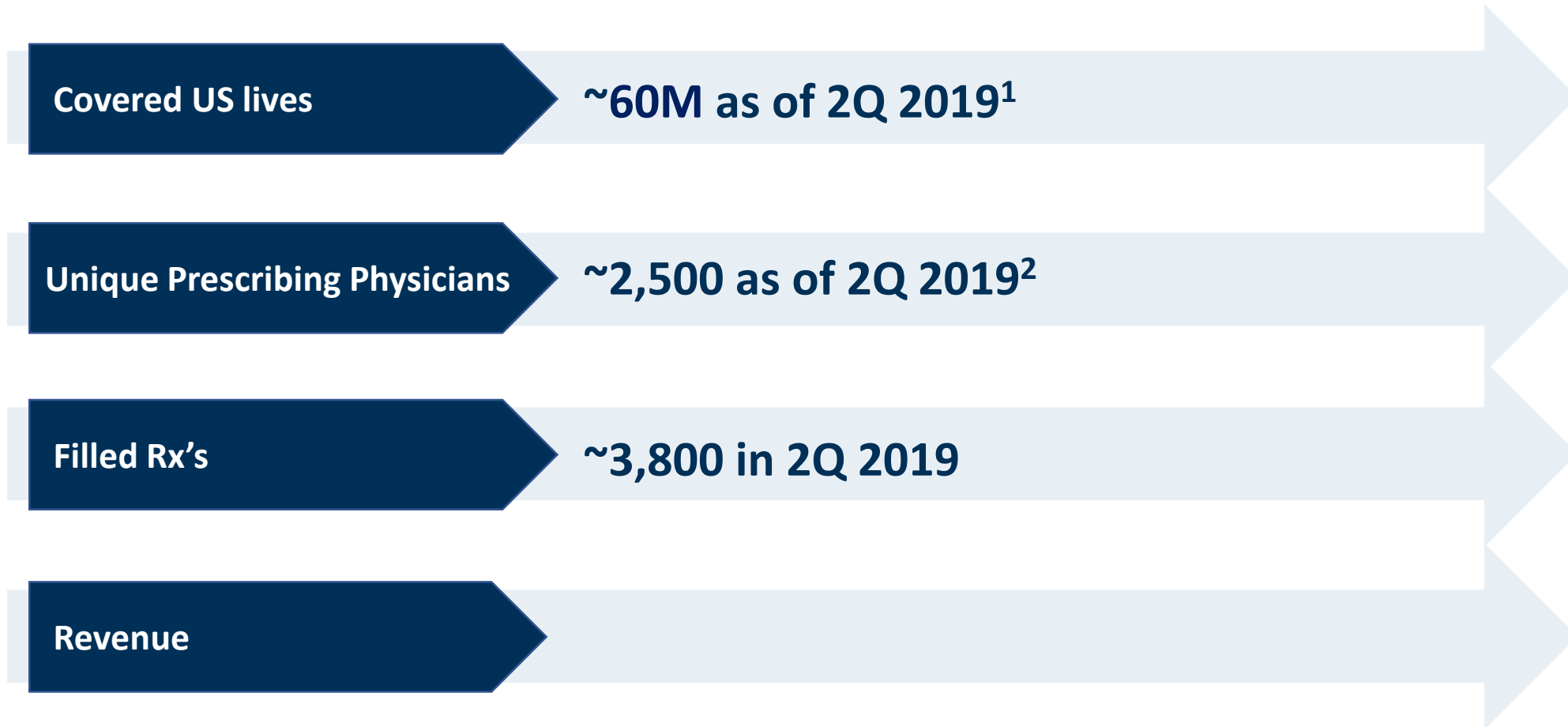
Benefits of gammaCore

- ☒ Targeted non-systemic
- ☒ Safe and well tolerated
- ☒ Patient self-administered
- ☒ Flexible daily dosing
- ☒ Vast patient experience (~5M doses)

Drawbacks of Current Drug Treatments

- ☒ Systemic side effects
- ☒ Serious adverse events
- ☒ Potential drug/drug interactions
- ☒ CVD contraindications
- ☒ Potential for medication overuse headache

Market Penetration & Development Strategy



Go-forward strategy: pull coverage contracts through to revenue

¹ Includes non-preferred medical and pharmacy reimbursement for approximately 10 million lives, medical exception coverage for an additional 30 million pharmacy benefit lives and 21 million lives under FSS reimbursement.

² Cumulative since product launch

Pathway to Reimbursement

Aligned to stakeholder experience



PHYSICIANS

Write a prescription
for use at home



PATIENTS

Acquire gammaCore from
a specialty pharmacy with
simple refill process



PAYERS

Manage utilization
through pharmacy or
medical benefit
reimbursement

Commercial payer Response

Current Payer Relationships

- CVS Caremark, Highmark, FSS reimbursement for ~ 60M lives as a pharmacy benefit¹

Payer Engagement

- Active discussions and negotiations with multiple national plans covering ~90M additional lives

Reimbursement Path

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

Suggested Payment

- No major payer hurdles to current pricing

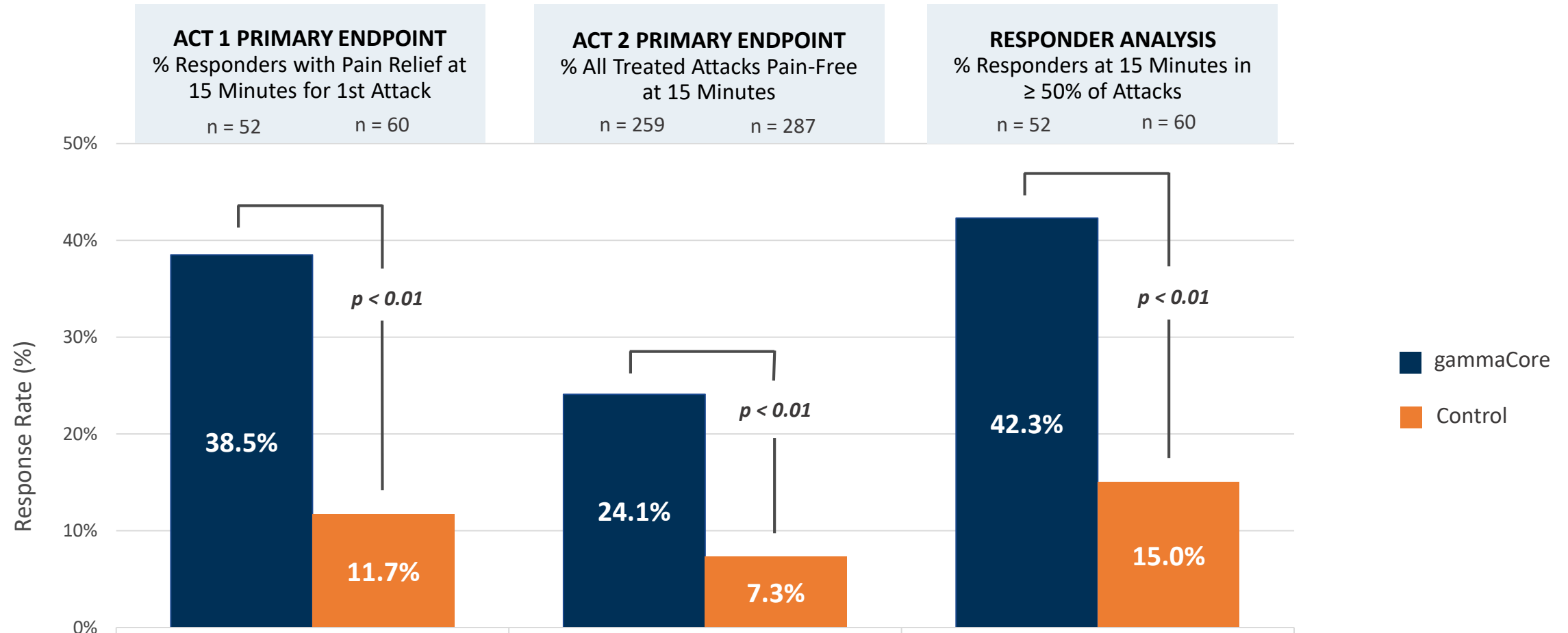
¹ Includes non-preferred medical and pharmacy reimbursement for approximately 10 million lives, medical exception coverage for an additional 30 million pharmacy benefit lives and 21 million lives under FSS reimbursement.

Channels With Potential for Revenue Growth Now

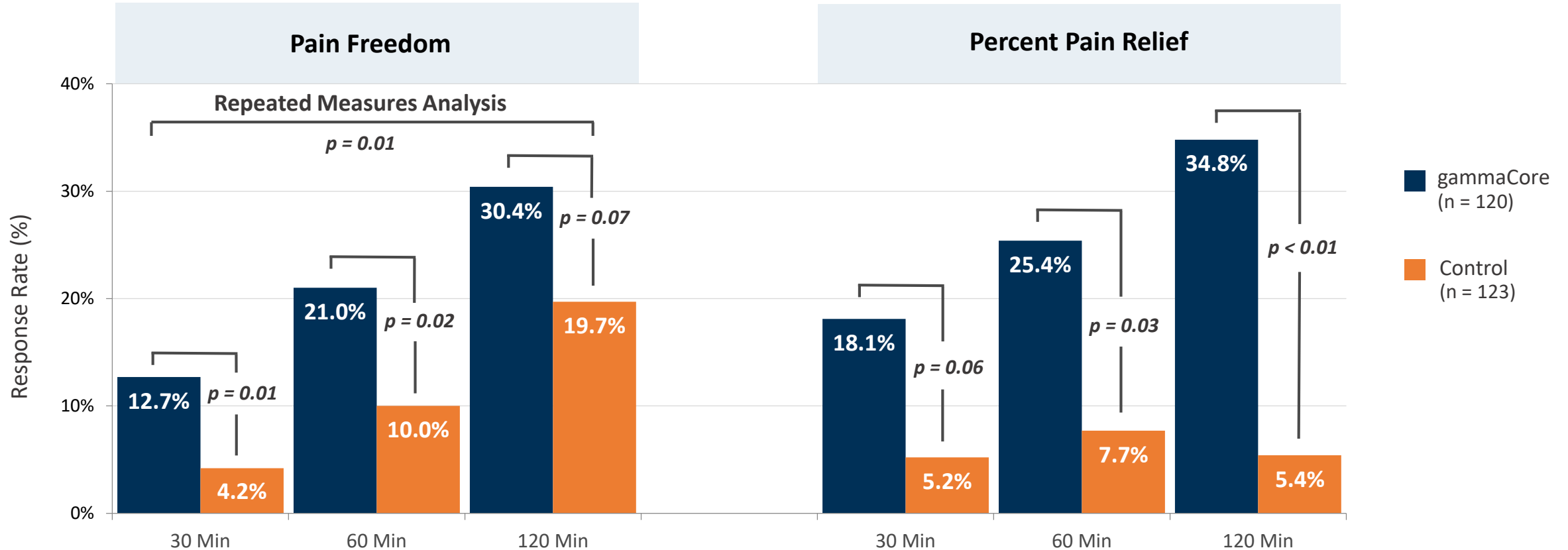
- Driving FSS/VA-DoD contract sales - ***started January 15th***
- Pulling through the UK – Innovation Technology Program Award for CH – ***started May 1st***
- Finalized Pain Management Initiative with Leading Workers' Comp provider – ***signed and pending launch***
- Pursuing enhanced CVS/Caremark agreement and establishing additional commercial relationships
- Exploring physician dispensing, direct selling model - ***analyzing***
- Exploring reimbursement codes through CMS - opioid legislation includes non-invasive neuromodulation as suggested therapy for reimbursement – ***on-going***

✓ Acute Cluster Headache: ACT 1 & ACT 2

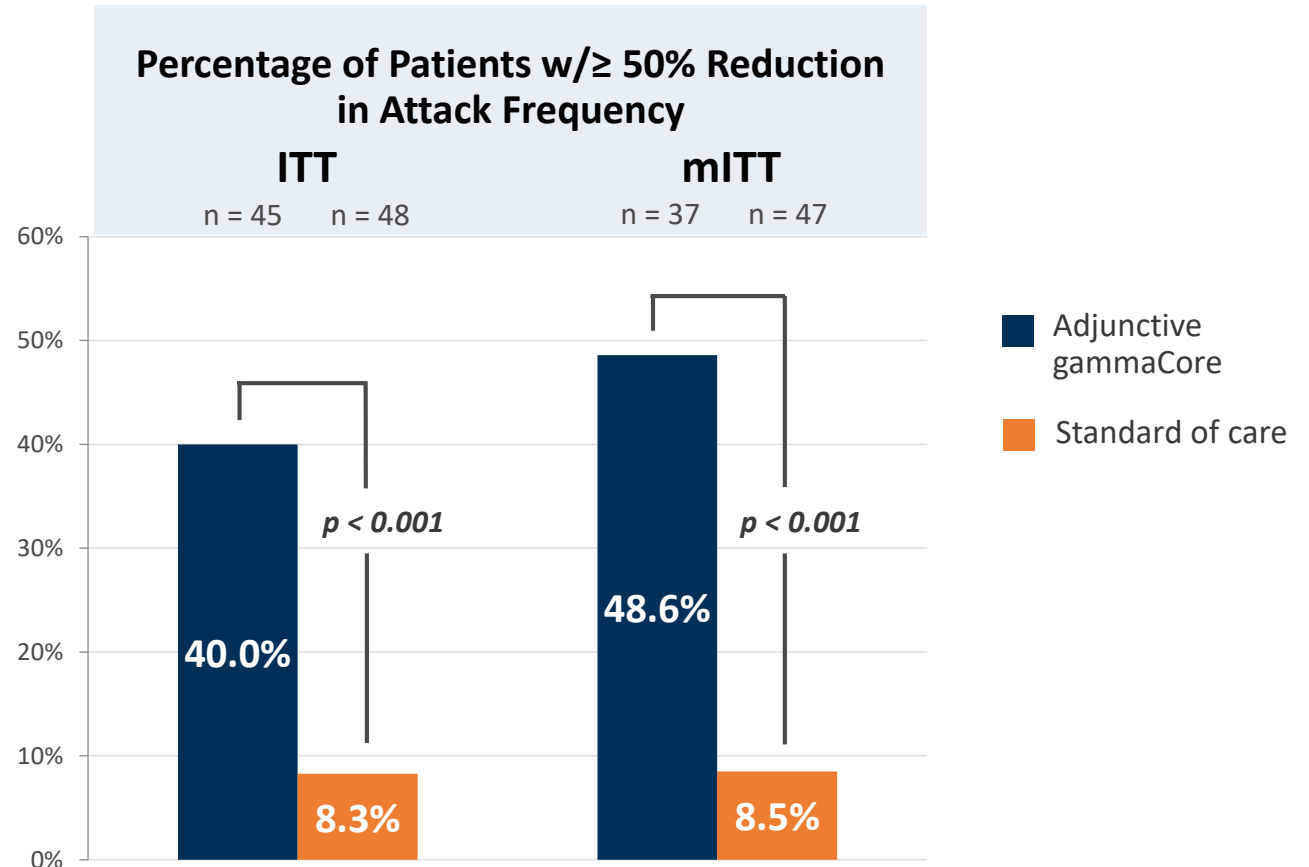
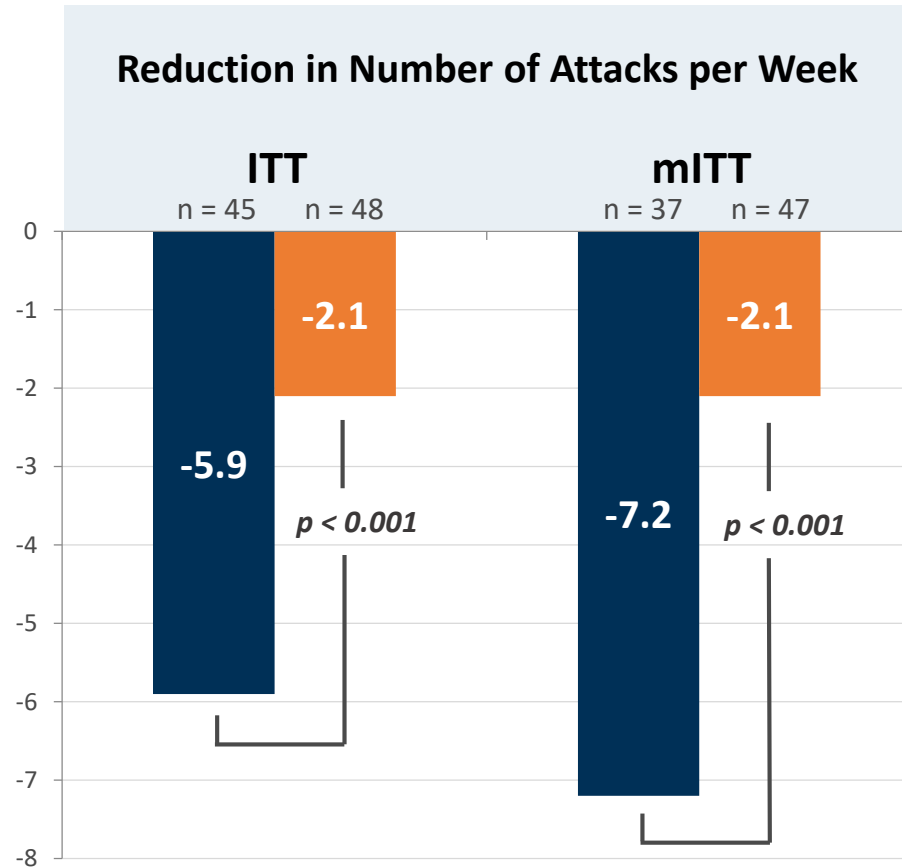
Pooled-analysis of Episodic Cluster Headache from ACT 1 & ACT 2 Trials



✓ Acute Migraine: PRESTO Trial

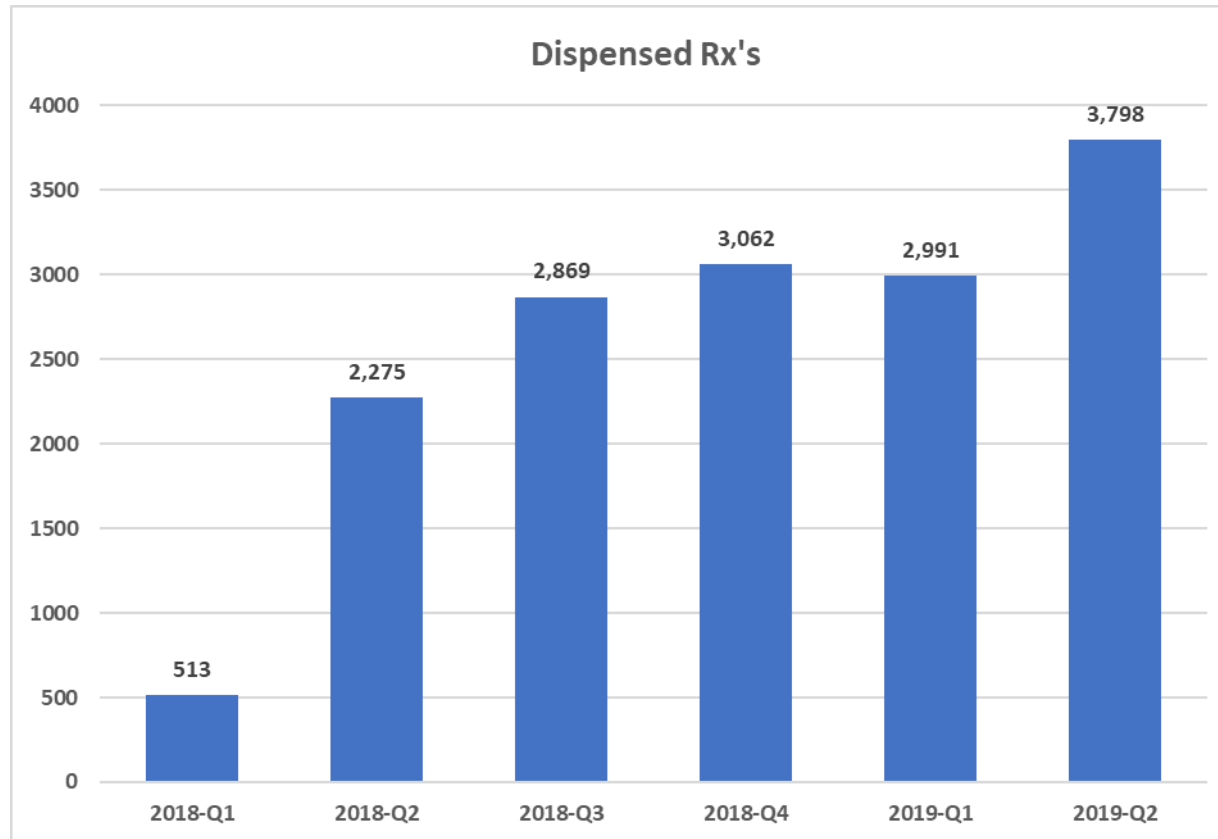


✓ Cluster Headache Prevention: PREVA Trial



mITT - Patients who provided data in the randomized period sufficient to compare to baseline measurements

Growth in gammaCore Prescriptions



Updated as of August 19, 2019

~2,500

UNIQUE PRESCRIBING PHYSICIANS
SINCE PRODUCT LAUNCH

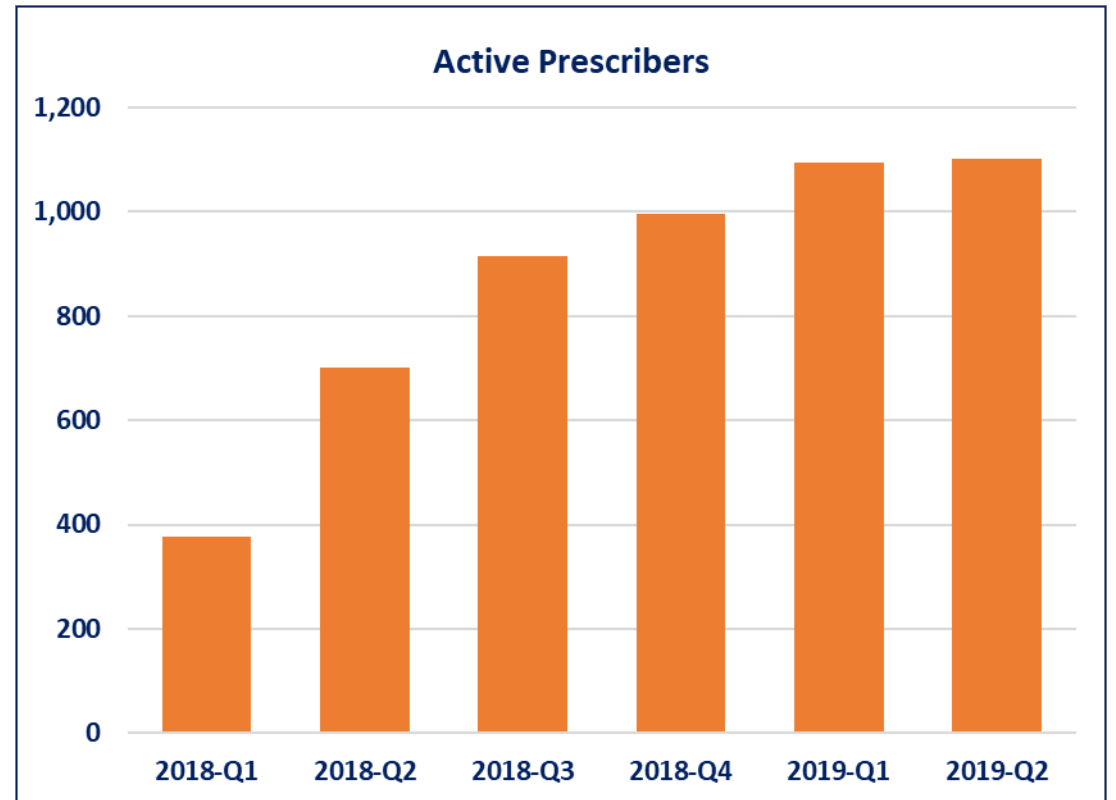
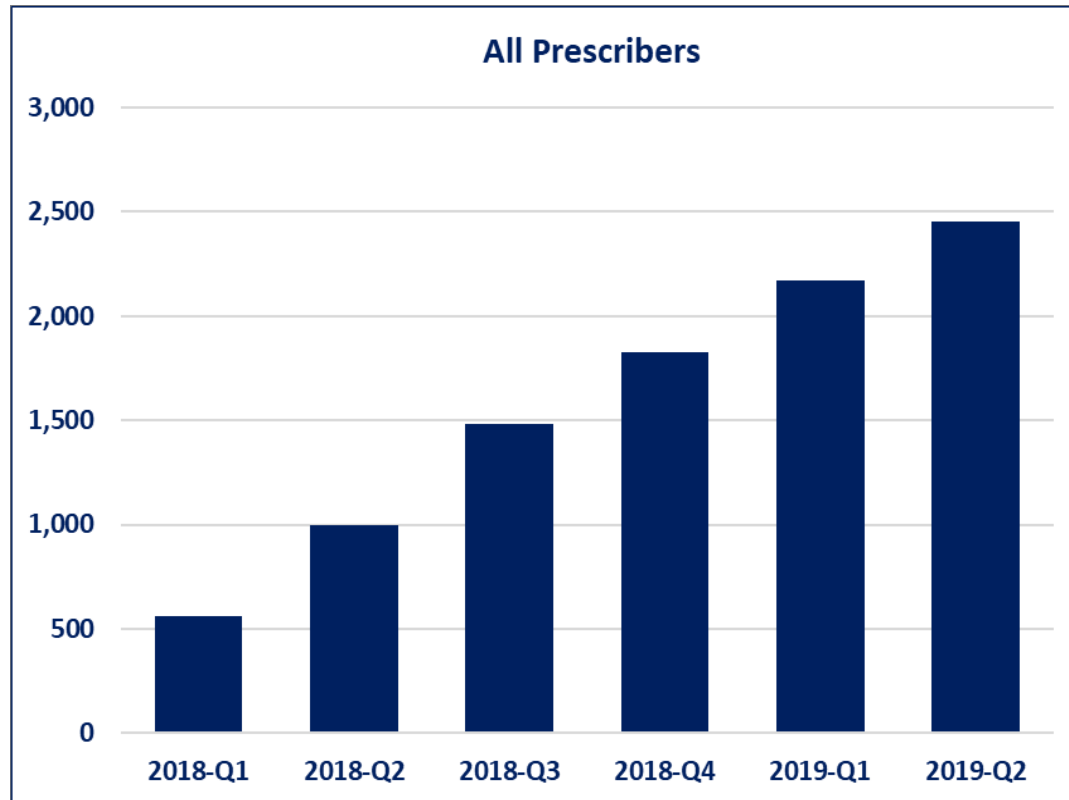
Dispensed Rx's +27%

2Q19 vs. 1Q19

~15,500

PRESCRIPTIONS FILLED TO DATE IN
THE UNITED STATES

Growth in gammaCore Prescribers



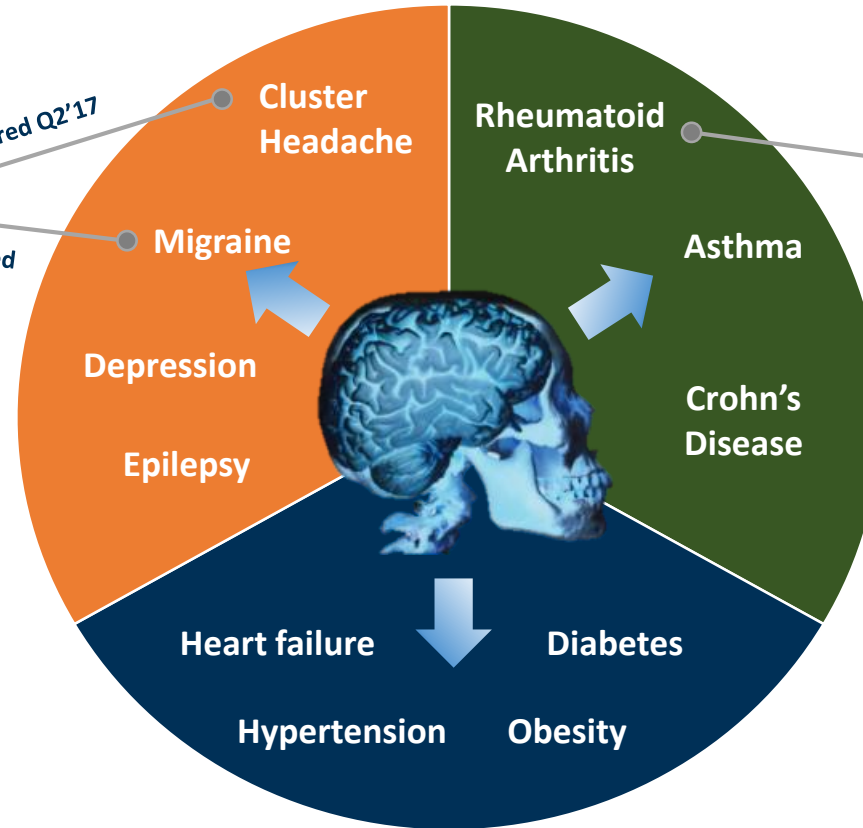
A Pipeline in a Product

gammaCore is the **only** FDA cleared non-invasive VNS therapy

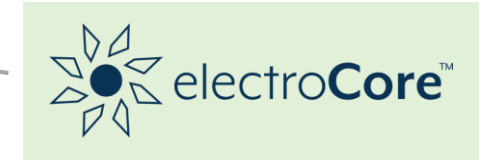
NEURO-PSYCH



FDA-cleared Q2'17
FDA-cleared Q1'18



INFLAMMATION

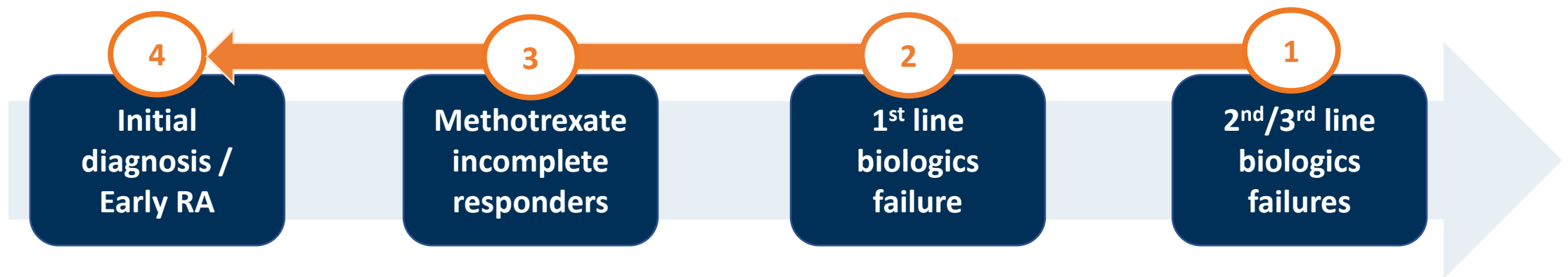


METABOLIC SYNDROME

Rheumatoid Arthritis (RA)

- Chronic progressive disease-causing inflammation in the joints and resulting in painful deformity and immobility, especially in the fingers, wrists, feet, and ankles
- Affects approximately 1.3 million people in the US¹ and there are no currently approved non-systemic therapies for RA
- Potential as a cost-effective, non-immunosuppressive alternative to the **\$23.7 billion**² anti-TNF drug class

Multiple **penetration points** into the RA market:



¹ <https://www.rheumatology.org/Learning-Center/Statistics/Prevalence-Statistics>

² 2017 worldwide sales, source Cowen & Co.

Broad Intellectual Property Estate

We are inventors/owners of all patents on which therapy relies

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

We have key patent coverage extending out through 2033, including:

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

>140

PATENTS AND PATENT
APPLICATIONS

>70

Issued U.S. patents

>25

U.S. patent applications

>40

International patents
and applications

Key Company Milestones and Goals



1Q 2018 FDA cleared for **acute migraine pain**



2Q 2018 Completed **Initial Public Offering**



3Q 2018 Commercial launch **across US market** (6,500 MDs)



4Q 2018 FDA cleared for **cluster headache prevention**



1Q 2019 Achieved target of **50M** covered lives*



3Q 2019 Submitted to FDA for **migraine prevention** label expansion

4Q 2019 Targeting possible FDA clearance for **migraine prevention**

1Q 2020 Achieve target of **100M** covered lives

1H 2020 Complete enrollment in PREMIUM 2 trial

*Includes 21M FSS lives.



Summary Financials

\$ In thousands	1Q 2018	2Q 2018	3Q 2018	4Q 2018	1Q 2019	2Q 2019
GAAP revenue	81	393	151	368	410	623
Research and Development	2,306	4,367	2,333	3,460	3,460	2,510
SG&A	6,825	12,007	11,273	12,397	11,000	9,388
Operating loss	(9,099)	(16,221)	(13,551)	(15,681)	(14,211)	(12,380)
Net loss	(9,499)	(17,782)	(13,203)	(15,335)	(13,862)	(12,101)
Shares outstanding	NA	29,450	29,450	29,450	29,633	29,582
Cash and investments (6/30)						\$41,432
Shareholders' Equity (6/30)						\$41,756

Streamlined Clinical Plan

To enhance label expansion and sales

Pivotal Trials

Expand indications and use in Headache

Premium 2 Migraine Prevention (pivotal), enrolling (180/400) and 100+ Randomized

ATOM Adolescent Migraine (pivotal), plan to delay until revenue ramp

Low-Cost Pilot Studies

Label expansion beyond primary headache

GAP-PTH Post-traumatic Headache, under IRB review; key to VA focus

TR-Venus Treatment of Acute Stroke, enrolling (11/60); majority of funding via external grant

GENIUS-RA Treatment-Resistant Rheumatoid Arthritis, enrolling (10/40)

Extended Cash Runway – Recent Actions



Reduced annual operating costs by **~\$20 million**, will continue to look for efficiencies



Reduced the number and scope of clinical projects



Reduced headcount from **91 to 50**



Increased focus on near-term revenue opportunities with the least cost as we contract for greater insurance coverage



Extended cash runway to 2021

Experienced Management Team



Frank Amato
Chief Executive Officer &
Board Member
28 years



Tony Fiorino, MD
Chief Medical Officer
20 years



Brian Posner
Chief Financial Officer
35 years



Eric Liebler
SVP of Neurology
22 years



Ardelle Ferris
VP of Market Access
30 years



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Pharma Distribution	Distributed through standard specialty pharmacy channels
Large Initial Market	Primary headache market opportunity for cluster headache and migraine estimated to be in excess of \$4 billion
Pipeline in a Product	Opportunity to expand into additional large-markets, including neurology and rheumatology, with key pivotal trials initiated in 2018 and planned for 2019
High Margins	Low one-time, upfront device cost followed by high-margin electronic refill model
Strong IP Portfolio	Key patent coverage extends through 2033

APPENDIX

Indication and Important Safety Information

gammaCore™ (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:

- **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.**
- **The acute treatment of pain associated with migraine headache in adult patients.**

Important Safety Information:

- The effectiveness of gammaCore has not been established in the acute treatment of chronic cluster headache.
- gammaCore has not been shown to be effective for the preventive treatment of migraine headache.
- Safety and efficacy of gammaCore have not been evaluated in the following patients:
 - Patients with an active implantable medical device, such as a pacemaker, hearing aid implant, or any implanted electronic device
 - Patients diagnosed with narrowing of the arteries (carotid atherosclerosis)
 - Patients who have had surgery to cut the vagus nerve in the neck (cervical vagotomy)
 - Pediatric patients
 - Pregnant women
 - Patients with clinically significant hypertension, hypotension, bradycardia, or tachycardia
- Patients should not use gammaCore if they:
 - Have a metallic device such as a stent, bone plate or bone screw implanted at or near their neck.
 - Are using another device at the same time (e.g., TENS Unit, muscle stimulator) or any portable electronic device (e.g., mobile phone)

NOTE: This list is not all inclusive. Please refer to the gammaCore Instructions for Use for all of the important warnings and precautions before using or prescribing this product.

VA/DoD ~2 million patients suffering with primary headache

Large market opportunity for gammaCore

Total Accessible Market (TAM)								
Federal Government Market	Beneficiary Population Enrolled	Sex		Migraine Prevalence	Total (Est) Migraine Patients	Cluster Headache Prevalence	Total (Est Cluster Headache Patients	Combined Total Lives
Veterans Health Administration	8,900,000	Male	8,010,000	6%	480,600	0.40%	32,040	512,640
		Female	890,000	18%	160,200	0.08%	712	160,912
Military Health System	9,400,000	Male	4,600,000	6%	276,000	0.40%	18,400	294,400
		Female	4,800,000	18%	864,000	0.08%	3,840	867,840
Total Patient Lives			18,300,000		1,780,800		54,992	1,835,792

- >95% of these patients are migraineurs