

# NEUROMetrix<sup>®</sup>

A commercial stage neuromodulation  
company

CORPORATE PRESENTATION, JANUARY 2024

Nasdaq:NURO

A decorative graphic at the bottom of the slide consisting of three overlapping, wavy bands of color. The top band is purple, the middle band is a lighter blue, and the bottom band is a darker blue. The bands curve upwards from left to right, creating a sense of motion and depth.

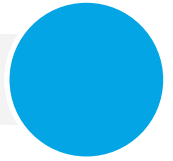
# Forward Looking Statements

The statements contained in this corporate presentation include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, including, without limitation, statements regarding our or our management's expectations, hopes, beliefs, intentions or strategies regarding the future. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "plan" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. The forward-looking statements contained in this corporate presentation, including those related to the Quell and DPNCheck business models, are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors including those risks, uncertainties and factors referred to under the section "Risk Factors" of the Company's most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q, as well as other documents that we may file from time to time with the Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

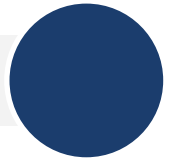


Our mission is to improve the lives of patients living with chronic pain through neuromodulation

# Innovative technology and recent clinical and regulatory success position NeuroMetrix for growth



Neuromodulation platform with two FDA breakthrough device designations



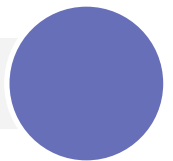
Successful strategic commercial launch into the U.S. fibromyalgia market



Pipeline of clinical indications that will expand addressable market



Neurodiagnostic and legacy products that generate positive cash flow



Sufficient cash to fund near-term growth, no debt, common stock only

# Quell® is the first and only high-dose wearable neuromodulation device for chronic pain

- Non-invasive peripheral nerve stimulator placed on upper calf\*
- Provides daily multi-hour neuromodulation
  - Typically used on most days for 4-8 hours†
  - May be used during sleep
- Dynamic stimulation control
- Mobile and cloud connected
- Key mechanism of action is reduction of pain hypersensitivity‡
- Protected by 26 U.S. utility patents



\*One device per patient. Activates cutaneous afferents in S2-L4 dermatomes and deep tissue afferents innervated by tibial and deep fibular nerves.

†Utilization data on file.

‡The specific biological mechanisms by which Quell produces all its clinical benefits are uncertain. Additional support from unpublished data in fibromyalgia and chronic low back pain RCTs.

# Quell offers an ideal benefit/risk profile among widely used chronic pain treatments

Benefits	Quell®	OTC & Rx TENS	OTC Internal Analgesics	OTC External Analgesics	Non-Opioid Pain Meds	Opioid Pain Meds
Effective for chronic pain	■	+/-	+/-	+/-	■	■
Demonstrated to reduce nociplastic pain	■				+/-	
Specific FDA indications (e.g., fibromyalgia, CIPN)	■				+/-	
May be used while sleeping	■		■		■	■
No major side effects	■	■		■		
No addiction risk	■	■	■	■	+/-	
Smartphone and cloud enabled	■	+/-				
Digital health integration	■					
Available without prescription	General Chronic Pain Only	+/-	■	■		
Examples		Omron CVS private label Zynex	Ibuprofen Naproxen Acetaminophen	Ben Gay Icy Hot Salonpas	Pregabalin Gabapentin Duloxetine Amitriptyline TNX-102 SL*	Oxycontin Percocet Vicodin

\*In development by Tonix Pharmaceuticals for fibromyalgia and long COVID. Possible FDA approval in 2025 for fibromyalgia. Similar efficacy to approved pain meds with different side effect profile.



# Quell commercial assets and pipeline represent addressable market of 30M+ patients

Clinical Indication	OTC / Rx	Brand	Regulatory Status	Commercial Status	Addressable Market (US only)
<b>Commercial Stage</b>					
Chronic lower extremity pain	OTC	Quell Relief	Cleared (K152954)	Launched Q3'15; paused Q3 '22	10M+ U.S. adults
Fibromyalgia*	Rx	Quell Fibromyalgia	Authorized (DEN210046)	Strategic launch phase (Q4 '22 – present)	Up to 6% of U.S. adults
<b>Regulatory Stage</b>					
Chemotherapy induced peripheral neuropathy (CIPN)*	Rx	Quell CIPN	510(k) filed Dec '23		30% of patients who receive chemotherapy annually (700K+)
Fibromyalgia like Long COVID	Rx	Quell Fibromyalgia†	Planned 510(k) filing in '24	Data analysis	One-third of those with Long COVID (10M U.S. adults)
Chronic low back pain (with high pain sensitivity)	Rx	Quell Fibromyalgia†	Planned 510(k) filing in '24	Data analysis	7-13% of U.S. adults
Chronic low back pain	OTC	Quell Relief†	Planned 510(k) filing in '25	Data analysis	7-13% of U.S. adults
<b>Clinical Stage</b>					
Chronic Overlapping Pain Conditions (COPC)	Rx	Quell Fibromyalgia†	Regulatory determination will follow analysis of clinical data	Trial ongoing (probable Q4 '24 completion)	20 – 62% of chronic pain (10-30M US adults)

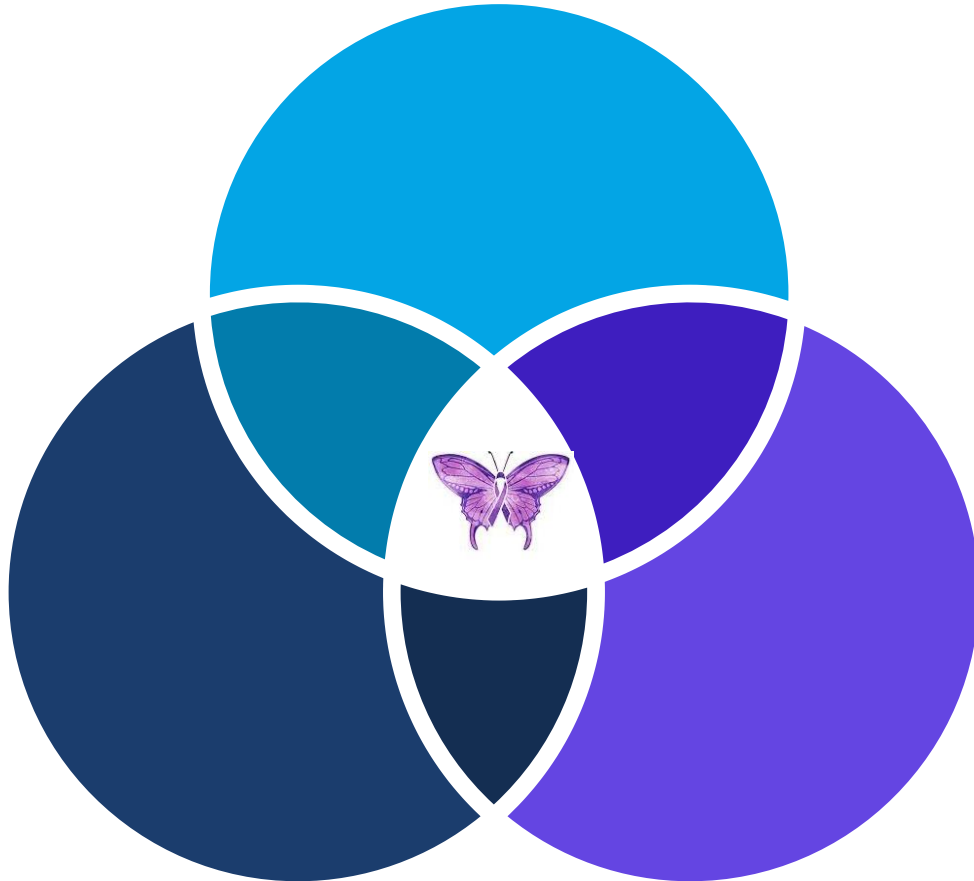
**Pipeline indications are investigational and have not been cleared or approved by the FDA**

\*FDA breakthrough device designation.

†Label extension.

COPC, a set of painful chronic conditions characterized by high levels of co-occurrence and central sensitization (nociceptive pain). Includes fibromyalgia, chronic low back pain, chronic migraine, TMJD and others.

# Fibromyalgia is a large underserved market



## DEBILITATING DISEASE

Widespread pain and tenderness; fatigue, poor sleep, cognitive impairment, mood disorders; low quality of life.

## HIGH PREVALENCE

Up to 6% of U.S. adults (15M)\*. Most diagnosed patients are women.

## FEW TREATMENTS

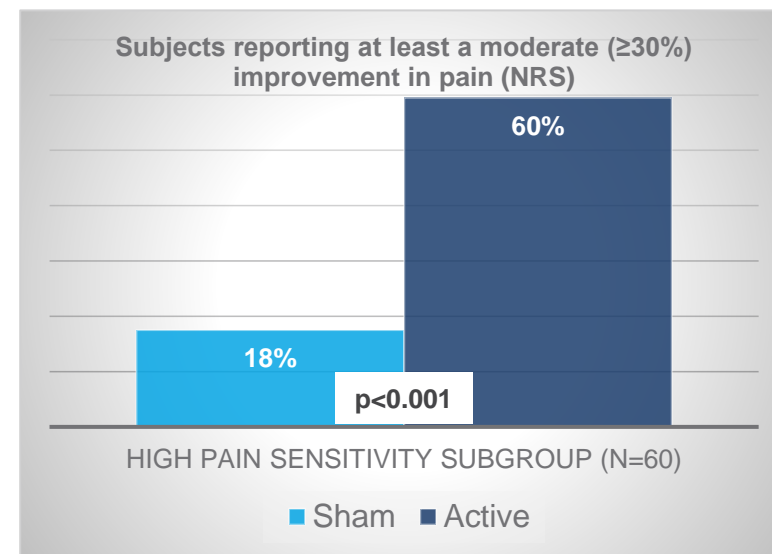
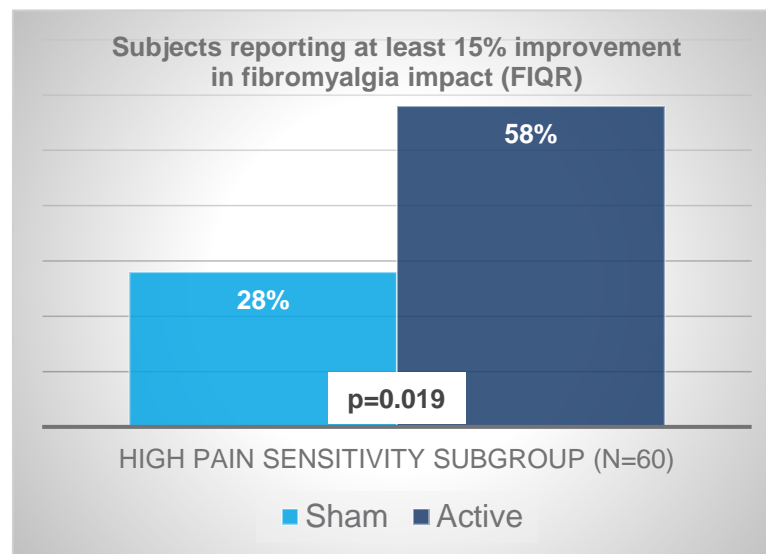
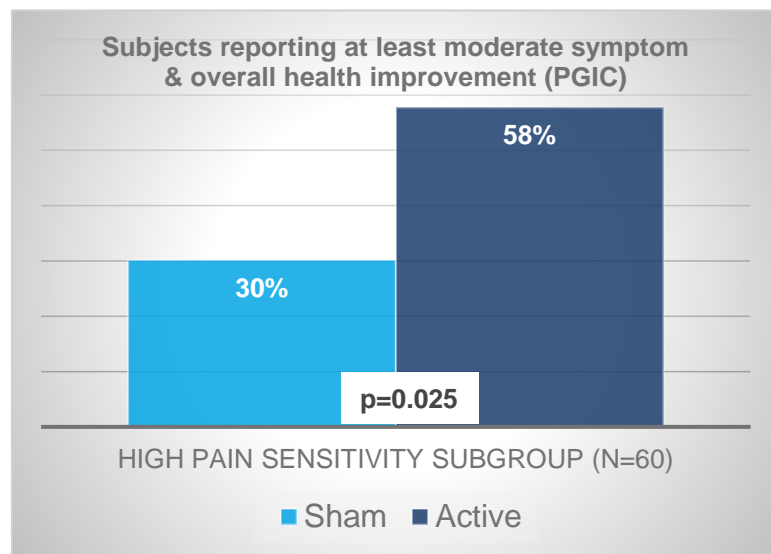
3 FDA approved drugs<sup>†</sup> with limited efficacy and significant side-effects. Exercise and CBT are useful.

\*Vincent et al. Arthritis Care Res (Hoboken). 2013. †Lyrica®/pregabalin, Cymbalta®/duloxetine, Savella®/milnacipran. CBT, cognitive behavioral therapy.



# Quell improved fibromyalgia symptoms and quality of life in a clinical trial

- 119 patients with fibromyalgia (ACR criteria and physician diagnosis)
- Double blinded, randomized to active Quell or sham (non-therapeutic stimulation) Quell
- 3-months at-home treatment (median wear time 6 hours)
- Analyses conducted on ITT population (N=119) and high pain sensitivity subgroup (N=60)
- Few adverse events, all minor



**Quell Fibromyalgia is indicated for patients with fibromyalgia and high pain sensitivity**

ACR, American College of Rheumatology. ITT, Intention to Treat. PGIC, Patient Global Impression of Change. FIQR, Fibromyalgia Impact Questionnaire (Revised).  
Source: Quell Fibromyalgia De Novo (DEN210046) Decision Summary. [https://www.accessdata.fda.gov/cdrh\\_docs/reviews/DEN210046.pdf](https://www.accessdata.fda.gov/cdrh_docs/reviews/DEN210046.pdf)

# Quell Fibromyalgia

Only FDA authorized neuromodulation device that reduces the symptoms of fibromyalgia

- Symptom relief, beyond reduction in pain
- Drug free, no significant side effects
- Convenient, personalized treatment



FDA De Novo authorization DEN210046. Indications: Quell Fibromyalgia is a transcutaneous electrical nerve stimulation (TENS) device indicated as an aid for reducing the symptoms of fibromyalgia in adults with high pain sensitivity. The device may be used during sleep. The sale, distribution, and use of Quell Fibromyalgia is restricted to prescription use in accordance with 21 CFR 801.109.

# Multi-channel commercialization strategy to drive widespread adoption of Quell Fibromyalgia



## Direct Physician Channel

- Detail rheumatology, pain medicine, neurology, internal medicine & others
- Educate physicians about ACR fibromyalgia diagnostic criteria



- Strategic launch Dec '22

### Current Sales Organization:

- National director of sales (Q3 '22)
- FL regional BD manager (Q3 '23)
- CA regional BD manager (Q3 '23)



## Direct to Patient & Telemedicine

- Build awareness of Quell Fibromyalgia to motivate patients to talk to their physician via digital marketing and advocacy groups



- Telemedicine option for immediate patient access via Beluga Health\*



## Systems & Partnerships

- Veterans Health – approved for prescriptions in Northern California, Nevada and Hawaii



- Exploring value-based care markets
- Evaluating collaborations in federal health programs, employer health, women's health, integrative medicine

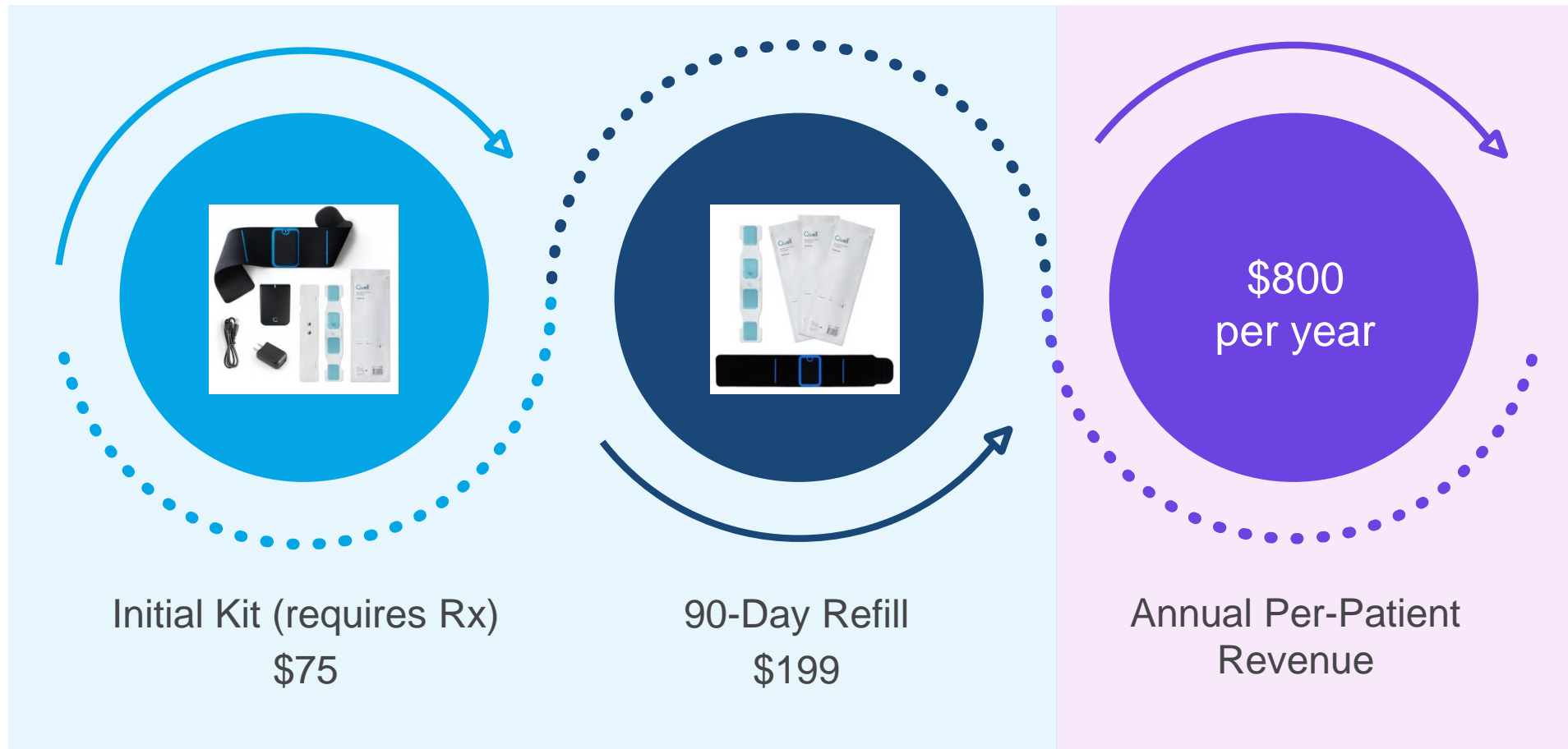


## International

- Prevalence of fibromyalgia is similar throughout the world
- Country specific distribution; there are no current regulatory approvals outside US
- 2025 initiative

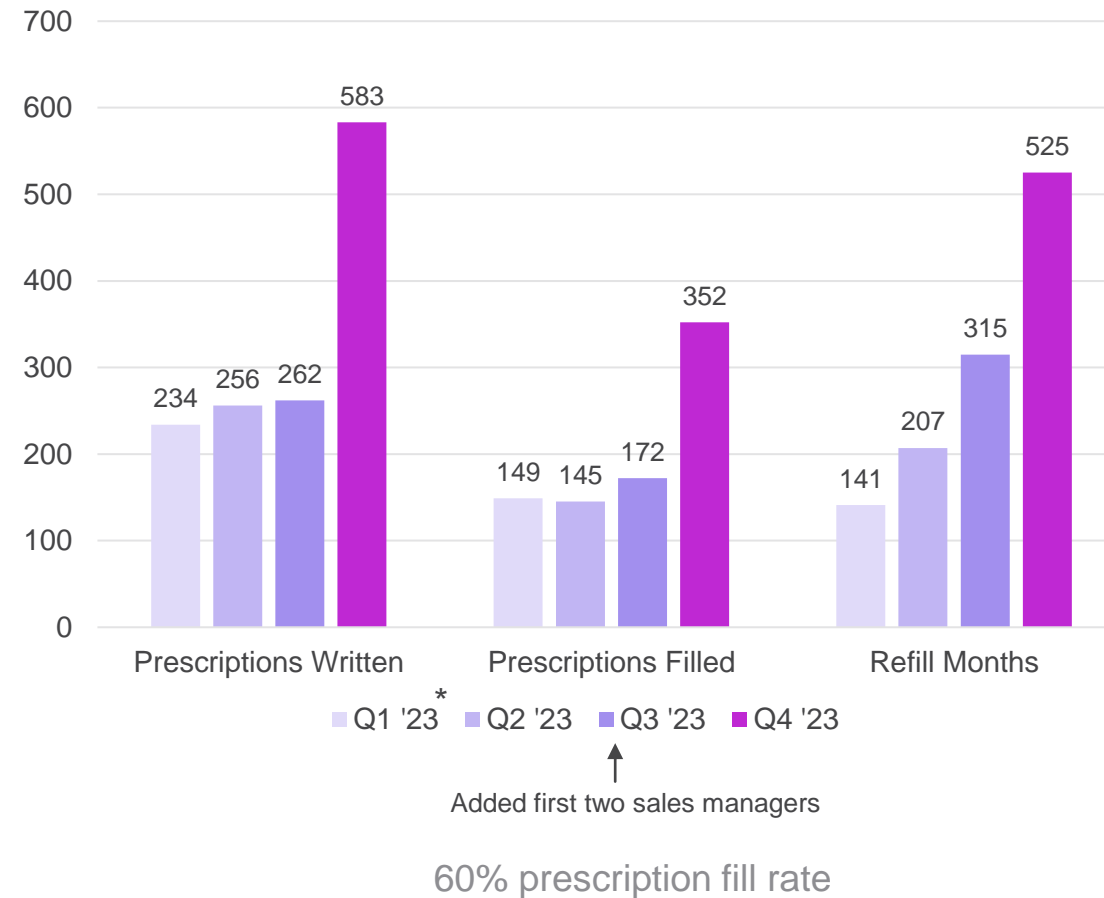
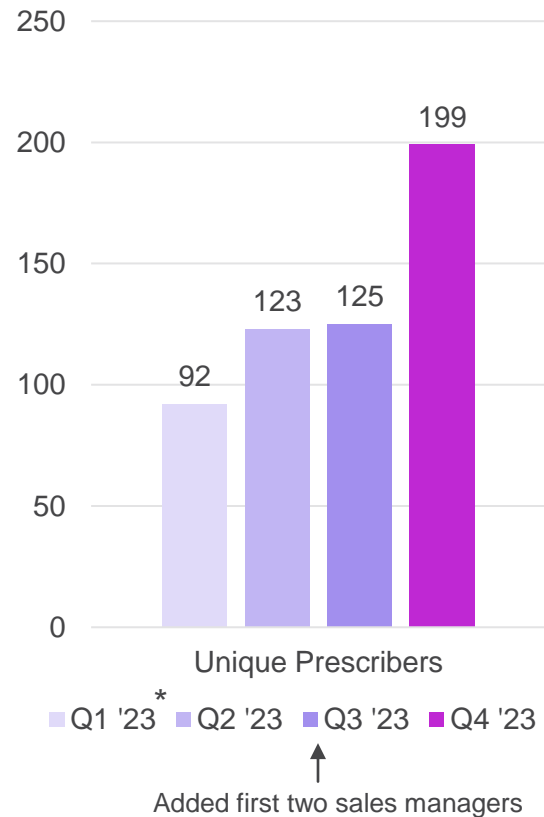
\*Went live Dec '23.

# Cash-pay model gives Quell Fibromyalgia patients transparent cost-effective access and provides physicians with clinical autonomy\*



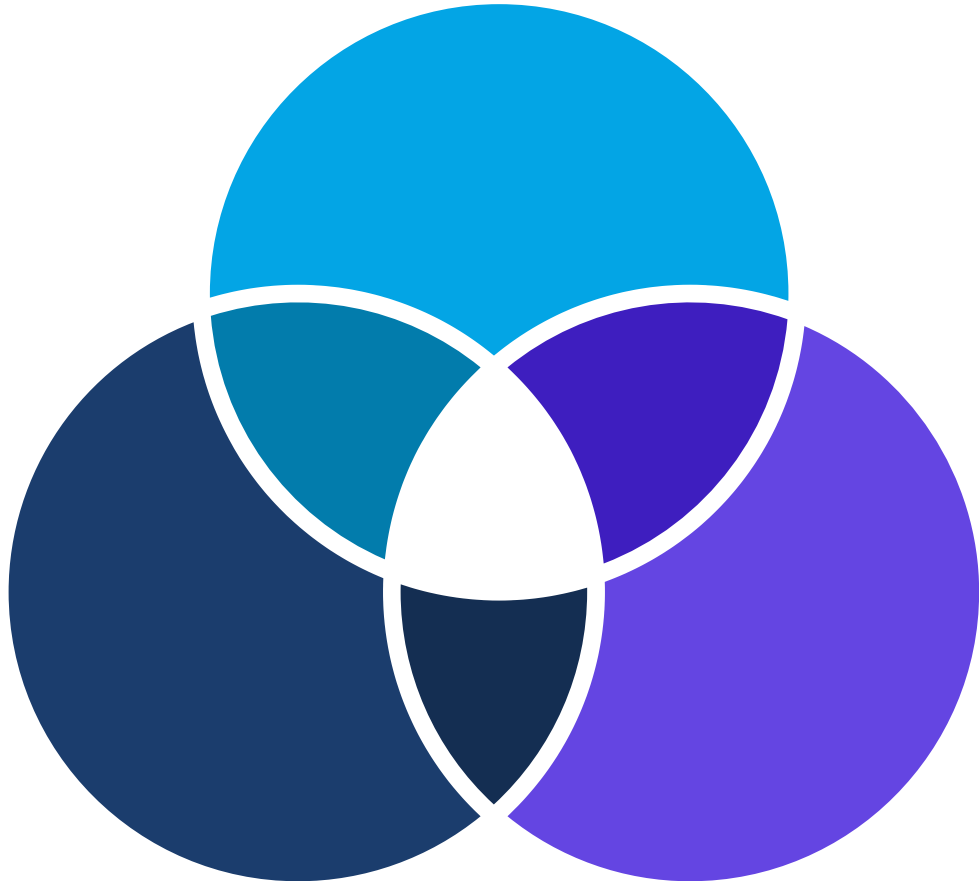
\*Alternative pricing models for Veterans Health and direct to physician offices for re-sale.

# Quell Fibromyalgia operating metrics during strategic launch phase provide early evidence of traction



\*Includes Dec '22 activity.  
Unaudited data provided by Quell Fibromyalgia prescription processor.

# Chronic CIPN is devastating complication of chemotherapy



## **REDUCES QUALITY OF LIFE AND DECREASES SURVIVAL**

Neuropathic pain, numbness, sensory hypersensitivity, muscle cramps, increased fall risk, weakness

## **COMMON SIDE EFFECT OF CHEMOTHERAPY**

1M patients received chemotherapy annually in U.S. with up to 30% developing chronic CIPN

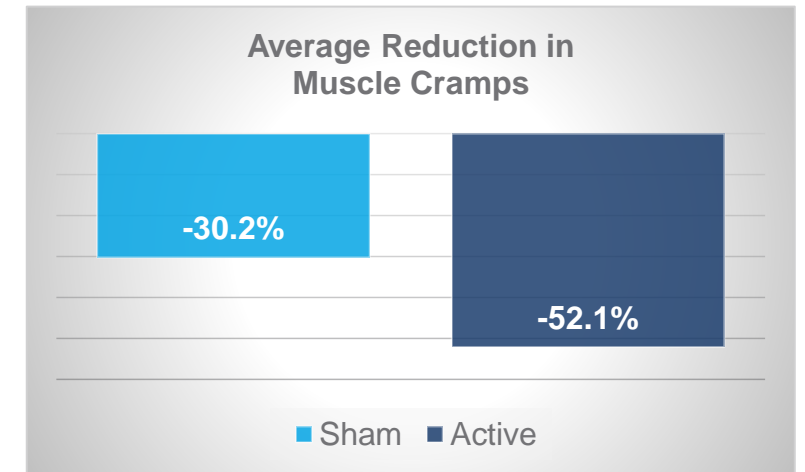
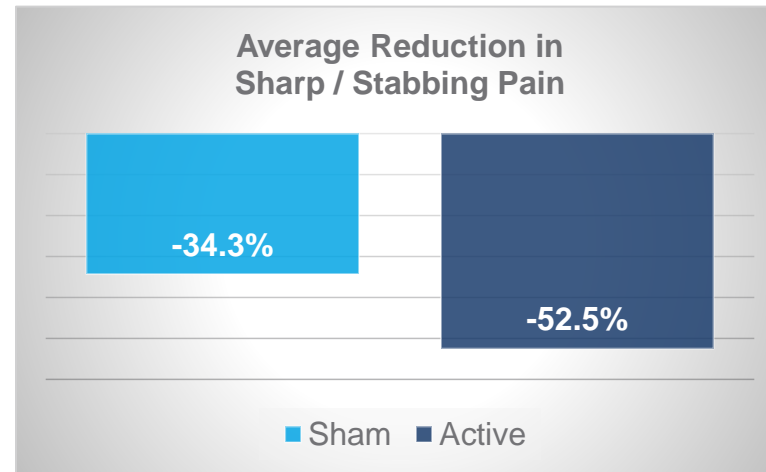
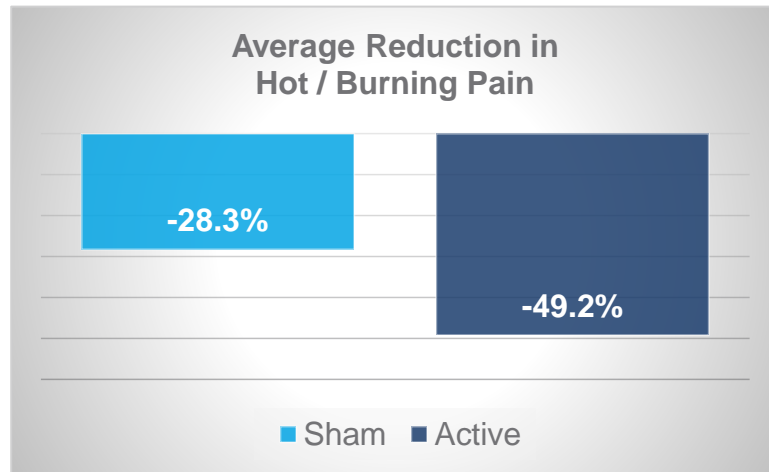
## **NO FDA APPROVED TREATMENTS**

Duloxetine is only treatment recommended by ASCO



# Quell improved neuropathic pain and muscle cramps in subjects with CIPN compared to sham treatment

- Double blind, randomized sham-controlled trial
- 142 patients with chronic CIPN ( $\geq 3$  months following chemotherapy)
- 6-weeks at-home treatment (typical wear time 5 hours/day)
- Few adverse events, all minor and generally resolved by study end



Symptoms measured on 11-point scale (0 to 10). Data shown for each subgroup with moderate-severe symptom at baseline.

Use of Quell for chemotherapy induced peripheral neuropathy is investigational and has not been cleared or approved by the FDA.

Gewandter et al. Wireless Transcutaneous Electrical Nerve Stimulation (TENS) for Chronic Chemotherapy-Induced Peripheral Neuropathy (CIPN): A Proof-of-Concept Randomized Clinical Trial. J Pain. 2023.

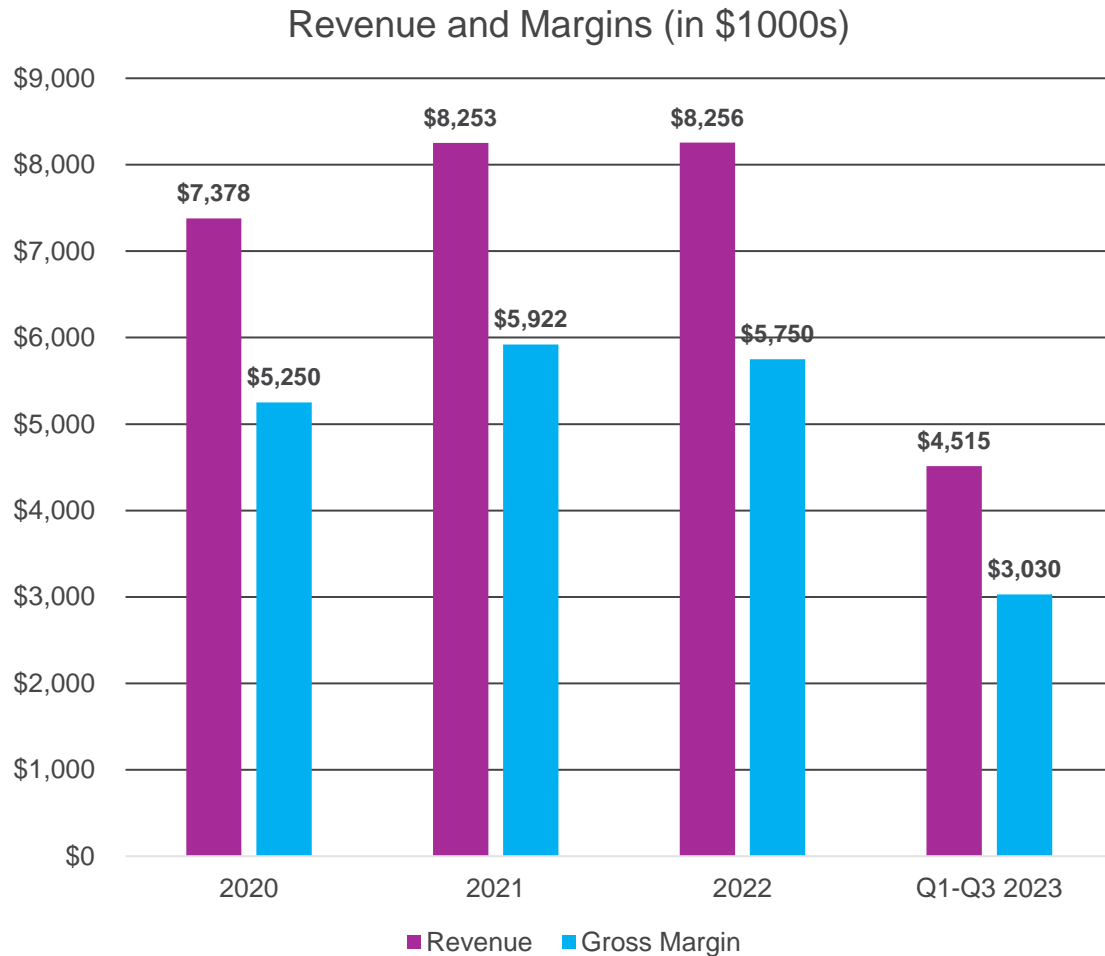


# Complementary neurodiagnostic business generates cash with future diagnostic/therapeutic integration possibility

- DPNCheck® point-of-care test for peripheral neuropathy
- Device and proprietary disposable biosensor
- Accurate, reliable and clinically relevant outcomes; 40+ published studies
- Primarily used to detect and stage diabetic peripheral neuropathy (DPN)
  - Also, PN due to pre-diabetes, aging and CIPN
- Over 2M patients tested
- U.S. B2B sales channel targets value-based care market
  - Until recently customers were Medicare Advantage focused medical groups carrying risk
  - Currently working to reduce exposure to Medicare Advantage given Q2 '23 changes in risk adjustment codes
- International sales in Japan and China



# DPNCheck is main contributor to recent period revenues



- Established commercial infrastructure
- Fully integrated operations including R&D, assembly, quality, fulfillment, sales & marketing
- Revenues and margins driven by sales of proprietary disposable electrodes
- Gross margin rates 65-70%
- Medicare Advantage risk adjustment changes and uncertainty negatively weigh on 2023 revenue
- Starting to see material revenue contributions from Quell Fibromyalgia

# Clean balance sheet and simple capital structure support initial growth phase of neuromodulation business

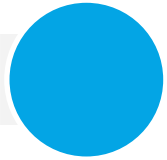
<b>Capitalization</b>				
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>Q1-Q3 2023</b>
<b>Cash and Securities</b>	<b>\$5,226,213</b>	<b>\$22,572,104</b>	<b>\$21,199,727</b>	<b>\$17,637,675</b>
<b>Stockholders Equity</b>	<b>\$5,247,775</b>	<b>\$23,215,786</b>	<b>\$23,355,687</b>	<b>\$19,903,536</b>
<b>Debt</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Common Shares O/S</b>	<b>3,793,739</b>	<b>6,680,480</b>	<b>7,785,754</b>	<b>8,584,000</b>

- \$17.5M in cash and cash equivalents at Q3 '23
- No debt
- Operating cash usage of \$5.5M in '22
- Operating cash usage of \$4.7M through Q3 '23
- Capital structure includes common shares only, no preferred shares or warrants
- 1 for 8 split occurred on Nov. 21, 2023, to maintain Nasdaq listing requirements

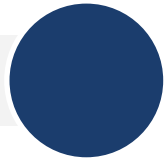
# Plan to create shareholder value in 2024

<b>Neuromodulation Growth</b>	Leverage early Quell Fibromyalgia experience towards material neuromodulation revenue
<b>Expand Market</b>	Obtain regulatory clearance for Quell CIPN and position for commercial launch
<b>Expand Market</b>	Submit regulatory filing for using Quell in chronic low back pain
<b>Improve Cash Flow</b>	Diversify DPNCheck market to offset decreased Medicare Advantage sales
<b>Expand Strategic View</b>	Broadly evaluate strategic opportunities including collaborations, partnerships and M&A

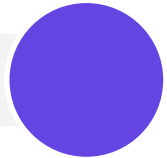
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