

**SPRINT<sup>®</sup>**  
PNS SYSTEM



**Sustained Pain Relief  
Starts Here<sup>™</sup>**

**BREAKTHROUGH  
NEUROMODULATION  
TREATMENT**

# SPRINT<sup>®</sup>

PNS SYSTEM

## A Breakthrough in Pain Management

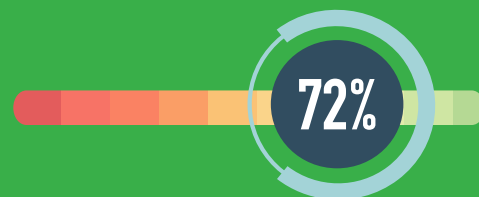
The **SPRINT<sup>®</sup> PNS System**, by SPR<sup>®</sup> Therapeutics, marks an innovative shift in the treatment of pain. Our breakthrough treatment is proven to provide significant and sustained relief from chronic pain and works by selectively stimulating targeted peripheral nerve fibers.

- Short-term, 60-day treatment
- No permanent implant
- Minimally-invasive and drug-free

### Clinically proven.

The SPRINT PNS System has been studied extensively for low back pain, shoulder pain, post-amputation pain, and chronic and acute post-operative pain, and is cleared for use up to 60 days.\*

72% of patients reported **significant & sustained pain relief.**<sup>1-9</sup>

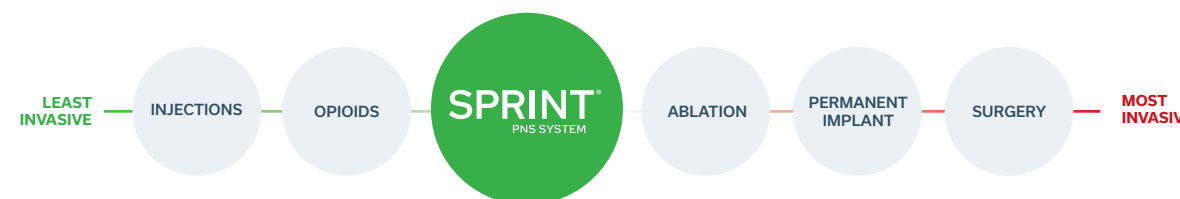


*"It's been well over 20 months since I had the treatment and the right shoulder has just been absolutely great. No pain whatsoever. Now I can go back and do what I was doing before, going to the YMCA 3-4 days a week and I've been able to play with my grandkids... Just an entire life change."*

— **Hank** (Osteoarthritic shoulder pain patient averse to surgery)

## Rethink Your Pain Strategy<sup>™</sup>

The SPRINT PNS System is a patient-preferred, low risk alternative to more invasive treatments such as ablation, permanent implants or surgery. Our breakthrough neuromodulation treatment is proven to provide significant and sustained pain relief when prior treatments such as opioids or injections have failed.

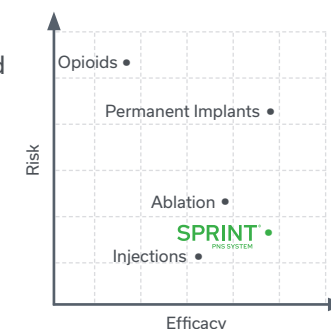


### Patient-preferred.

Our system was recently ranked as the most desirable treatment for chronic pain when compared to radiofrequency ablation and permanently implanted neuromodulation systems.<sup>10</sup>

### Low risk. High reward.

Compared to other treatment options, the SPRINT PNS System provides highly effective pain relief without a permanent implant, nerve damage or the risk of addiction.<sup>11</sup>



Physician survey data, PNS Leadership Forum

### Recognized by leading centers.

Leading pain management centers are championing the SPRINT PNS System as part of their treatment algorithm (partial listing):

Carolinas Pain Institute

Cleveland Clinic

International Spine Pain & Performance Center

Mayo Clinic

Memorial Sloan Kettering Cancer Center

MossRehab/Einstein Medical Center

Shepherd Center

Spine & Nerve Centers of the Virginias

Stanford Medical Center

Virginia Commonwealth University

## Designed to Outsmart Pain™

The SPRINT PNS System is uniquely designed to selectively and robustly stimulate targeted peripheral nerve fibers for up to 60 days, modulating central plasticity to enable significant and sustained pain relief.



### Highly targeted:

Focuses stimulation on targeted nerve fibers to maximize therapeutic benefit and modulate central plasticity.

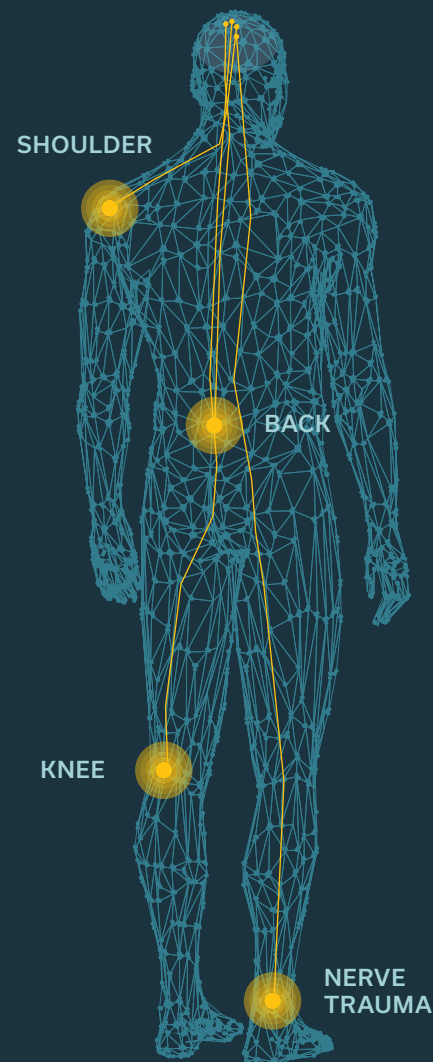


### Remote stimulation:

Our patented approach is designed to enable comfortable yet robust activation of nerve fibers to promote central plasticity while avoiding activation of non-target pain fibers.

*"A 60-day percutaneous treatment that delivers long-term relief without a permanent implant...this is a game changer."*

— **Peter Staats** MD, MBA, DABA, ABIPP, FIPP



## Patient-friendly technology.

The SPRINT PNS System is a minimally-invasive treatment option that helps patients get back to life. The MicroLead™ is implanted and then removed after treatment of up to 60 days. Patients can easily adjust the level of stimulation during treatment to comfortably provide pain relief.

### PULSE GENERATOR

Worn on the skin to deliver gentle pulses to the nerve. Powered by a rechargeable battery.



### ONEPASS INTRODUCER™

Single-stick percutaneous targeting for implanting the MicroLead.

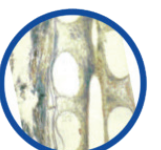


### MICROLEAD

Coiled 300 micron lead is designed to allow fibrotic ingrowth to reduce migration and infection risk.<sup>12</sup>



MICROLEAD



TISSUE  
INGROWTH

### HAND-HELD REMOTE

User-friendly design allows patients to easily adjust stimulation levels.





# SPR Therapeutics, Inc, manufacturer of the SPRINT PNS System, has been awarded more than \$30 million in grants and contracts by the National Institutes of Health and the Department of Defense.

## REFERENCES:

1. Yu, D. T., Chae, J., Walker, M. E. & Fang, Z. P. Percutaneous intramuscular neuromuscular electric stimulation for the treatment of shoulder subluxation and pain in patients with chronic hemiplegia: a pilot study. Arch Phys Med Rehabil 82. 2001;20-25.
2. Chae, J., Yu, D. T., Walker, M. E. et al. Intramuscular Electrical Stimulation for Hemiplegic Shoulder Pain. American Journal of Physical Medicine & Rehabilitation 84. 2005;832-842.
3. Chae, J., Wilson, R. D., Bennett, M. E., Lechman, T. E. & Stager, K. W. Single-lead percutaneous peripheral nerve stimulation for the treatment of hemiplegic shoulder pain: a case series. Pain Pract 13. 2013;59-67.
4. Wilson, R. D., Gunzler, D. D., Bennett, M. E. & Chae, J. Peripheral nerve stimulation compared with usual care for pain relief of hemiplegic shoulder pain: a randomized controlled trial. Am J Phys Med Rehabil 93. 2014;17-28.
5. Wilson, R. D., Harris, M. A., Gunzler, D. D., Bennett, M. E. & Chae, J. Percutaneous peripheral nerve stimulation for chronic pain in subacromial impingement syndrome: a case series. Neuromodulation 17. 2014;771-776; discussion 776.
6. Rauck, R. L., Cohen, S. P., Gilmore, C. A. et al. Treatment of post-amputation pain with peripheral nerve stimulation. Neuromodulation 17. 2014;188-197.
7. Gilmore, C. A., Ilfeld, B. M., Rosenow, J. M. et al. Percutaneous 60-day Peripheral nerve stimulation implant provides sustained relief of chronic pain following amputation: 12-month follow-up of a randomized, double-blind, placebo-controlled trial. Regional Anesthesia Pain Medicine 45. 2019; 44-51.
8. Gilmore, C. A., Kapural, L., McGee, M. J. & Boggs, J. W. Percutaneous Peripheral Nerve Stimulation for Chronic Low Back Pain: Prospective Case Series with 1 Year of Sustained Relief Following Short-Term Implant. Pain Pract. 2019 Nov 6. doi: 10.1111/papr.12856.
9. Wilson, R. D., Bennett, M. E., Nguyen, V. Q. C. et al. Fully Implantable Peripheral Nerve Stimulation for Hemiplegic Shoulder Pain: A Multi-Site Case Series With Two-Year Follow-Up. Neuromodulation 21. 2018;290-295.
10. Patient Preference Survey Data on file SPR Therapeutics.
11. Physician Survey Data from PNS Leadership Forum, Scottsdale, AZ, December 2019. Data on file SPR Therapeutics.
12. Ilfeld, B. M., et al., Infection Rates of Electrical Leads Used for Percutaneous Neurostimulation of the Peripheral Nervous System. Pain Pract. (2016).
13. Shellock, FG, Zare A, Ilfeld BM, Chae J, Strother, RB (2018). Vitro Magnetic Resonance Imaging Evaluation of Fragmented, Open-Coil, Percutaneous Peripheral Nerve Stimulation Leads. Neuromodulation Volume 21, Issue 3, 276-283.
14. Ilfeld, B. M., Grant, S. A., Gilmore, C. A. et al. Neurostimulation for Postsurgical Analgesia: A Novel System Enabling Ultrasound-Guided Percutaneous Peripheral Nerve Stimulation. Pain Pract 17. 2017;892-901.
15. Ilfeld, B. M., Ball, S. T., Gabriel, R. A. et al. A Feasibility Study of Percutaneous Peripheral Nerve Stimulation for the Treatment of Postoperative Pain Following Total Knee Arthroplasty. Neuromodulation 22. 2019;653-660.
16. Ilfeld BM, Ball ST, Cohen SP, Hanling SR, Fowler IM, Wongsarnpigoon A, Boggs JW. Percutaneous Peripheral Nerve Stimulation to Control Postoperative Pain, Decrease Opioid Use, and Accelerate Functional Recovery Following Orthopedic Trauma. Mil Med. 2019 Mar 1;184(Supplement 1):557-564. doi: 10.1093/milmed/usy378.
17. Cohen SP, Gilmore CA, Rauck RL, Lester DD, Trainer RJ, Phan T, Kapural L, North JM, Crosby ND, Boggs JW. Percutaneous Peripheral Nerve Stimulation for the Treatment of Chronic Pain Following Amputation. Military Medicine, 2019;10.1093/milmed/usz114.
18. Gilmore, C, Kapural, L, Hopkins T, Desai M, Li S, DePalma M, Deer TR, Burgher A, McGee M, Boggs J. Reductions in Opioid Consumption Reported among Chronic Low Back Pain Patients Following Percutaneous Peripheral Nerve Stimulation (PNS) of the Medial Branch Nerves for up to 60 Days. As presented at American Society of Regional Anesthesia and Pain Medicine November 2019.

\*The SPRINT PNS System is cleared for up to 60 days in the back and/or extremities for: (i) Symptomatic relief of chronic, intractable pain, post-surgical and post-traumatic acute pain; (ii) Symptomatic relief of post-traumatic pain; and (iii) Symptomatic relief of post-operative pain. The SPRINT PNS System is not intended to treat pain in the craniofacial region. Physicians should use their best judgment when deciding when to use the SPRINT PNS System. For more information see the SPRINT PNS System IFU.

Most common adverse events are skin irritation and erythema. Results may vary. Rx only.

## Ready to champion a new protocol of care?

Learn more at [SprintPNS.com](https://SprintPNS.com) or contact us at 844.378.9108

**SPRINT**<sup>®</sup>  
PNS SYSTEM

*Breakthrough Treatment for Pain*

The SPRINT<sup>®</sup> PNS System, MicroLead<sup>™</sup>, OnePass Introducer<sup>™</sup>, Rethink Your Pain Strategy<sup>™</sup>, Outsmart Pain<sup>™</sup>, Sustained Pain Relief Starts Here<sup>™</sup> and SPR<sup>®</sup> are registered or common law trademarks of SPR Therapeutics, Inc.

© SPR THERAPEUTICS, INC 2020. MKT-000073(01)

