Abbott Showcases Latest Research And Technology To Advance Care For Chronic Pain Conditions At NANS

- The REALITY study demonstrates long-term pain relief for patients implanted with Abbott's proprietary BurstDR™ spinal cord stimulation (SCS) at four-year follow up
- Data shows that BurstDR is preferred by patients and delivers superior pain relief compared to traditional pain management approaches[1,2]
- Abbott launches new unified patient app, NeuroSphere™ Digital Health, which improves communication and supports patients through their entire care journey

ABBOTT PARK, Ill., Jan. 30, 2025 – Abbott announced new four-year data showing the long-term and sustained relief that its proprietary BurstDR™ spinal cord stimulation (SCS) technology provides people with chronic pain, particularly pain in the back and legs. The data, which reinforces the high level of satisfaction people have with the treatment, represents outcomes from the four-year mark of a multi-year follow-up study and is being shared at the North American Neuromodulation (NANS) 2025 Annual Meeting, held in Orlando, Fla. (Jan. 30 – Feb. 1, 2025).

Chronic pain currently impacts nearly a quarter of the adult population in the U.S.[3] and is an often invisible, debilitating condition that can be difficult to treat. Many patients rely on a combination of therapies, such as surgery, physical therapy and pain medications, to address their condition. Stimulation therapies have helped people manage chronic pain for more than 50 years but have generally been tonic stimulation, which is a steady stream of electrical energy that dampens pain by replacing painful feelings with a tingling sensation.

Abbott's BurstDR SCS therapy uses pulses—or bursts—of mild electrical energy without an abnormal sensation of "tingling" (known as paresthesia) to change pain signals as they travel from the spinal cord to the brain. The therapy is not typically felt by patients, which is more comfortable and preferred to traditional tonic stimulation.[1,2] In addition, patients using BurstDR have reported a significant reduction in the impact chronic pain has on their emotional and mental states, particularly as it relates to "pain catastrophizing," worrying about future pain that may magnify pain sensations.[4]

"Unlike traditional approaches, BurstDR stimulation therapy has shown consistent effectiveness across a range of patient-reported outcomes with little or no decline in therapeutic effect over time," said Professor Jan Vesper, M.D., Ph.D., of Heinrich Heine University, Düsseldorf, Germany. "This latest data highlights the life-changing capabilities of Abbott's BurstDR technology in delivering sustained, long-term relief for patients with chronic back and leg pain."

Abbott's REALITY (Long-Term Real-World Outcomes Study on Patients Implanted with a Neurostimulator) study is a five-year prospective, single-arm, international study to analyze the benefits of Abbott's BurstDR technology in people who suffer from chronic pain in their back and/or legs. Key findings from the study, with data from 143 participants at the four-year mark, include:

- **Strong preference and lasting relief:** 91% of patients preferred BurstDR stimulation therapy over traditional tonic stimulation with sustained improvements in pain, sleep and daily function
- **Improved mental and physical health:** 45% reduction in pain catastrophizing, reaching levels comparable to those without chronic pain, as well as significant improvements in sleep and physical function
- **High-level of safety and patient satisfaction:** Low rates of adverse events over the study period with 85% of patients willing to do the procedure again

Advancements to Abbott's Connected Care Ecosystem

Abbott also announced that the NeuroSphere™ Digital Health app will launch a unified patient platform for U.S. patients. This new app builds on current connected care patient support capabilities to encompass the whole care journey—from early education to post-implant follow up. As part of this extended remote support system, the Digital Health app will introduce a live assistance feature, which allows patients to request support from Abbott's patient education team when they have questions about their device.

The new, streamlined app will be available via the Abbott-provided patient controller or personal iOS mobile devices and incorporates the award-winning NeuroSphere™ Virtual Clinic, giving people the flexibility and comfort of receiving care from their doctor wherever they are* through a secure in-app video chat and integrated remote programming feature.

"Chronic pain is a deeply personal and unique experience, requiring equally individualized treatment options," said Pedro Malha, vice president, neuromodulation, Abbott. "Every spinal cord stimulation advancement we develop—from BurstDR to the NeuroSphere Digital Health app—is designed to meet people where they are in their chronic pain journey and help them regain their lives. The pain relief and satisfaction our technologies have brought to people reinforce how Abbott is redefining the way advanced diseases are managed and breaking down barriers to care globally."

*Anywhere with a Wi-Fi or cellular connection and sufficiently charged patient controller.

For U.S. important safety information on the Abbott's SCS systems, visit:https://www.neuromodulation.abbott/us/en/important-safety-information.html.

About Abbott

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[1]Deer, T. Randomized, Controlled Trial Assessing Burst Stimulation for Chronic Pain: 2-Year Outcomes from the SUNBURST Study. Presented at NANS 2018.

[2]Deer T, Slavin KV, Amirdelfan K, et al. Success Using Neuromodulation With BURST (SUNBURST) Study: Results From a Prospective, Randomized Controlled Trial Using a Novel Burst Waveform. Neuromodulation. 2017;20(6):543-552.

[3]Lucas JW, Sohi I. Chronic pain and high-impact chronic pain in U.S. adults, 2023. NCHS Data Brief, no 518. Hyattsville, MD: National Center for Health Statistics. 2024. DOI: https://dx.doi.org/10.15620/cdc/169630

[4]Science Direct. Pain Catastrophizing. Accessed January 15, 2025.https://www.sciencedirect.com/topics/medicine-and-dentistry/pain-catastrophizing#definition

For further information: Abbott Media: Carolina Castaño, (512) 286-4021, carolina.castano@abbott.com; Abbott Financial: Michael Comilla, (224) 668-1872, michael.comilla@abbott.com