

BACKGROUND		RESULTS		CONCLUSIONS											
Standardized connections are common in implantable pacemakers and ICDs. Similarly, the Institute of Neuromodulation (IoN) has advocated for standardized connector designs for neuromodulation devices so as to help address certain complications, including Loss of Efficacy (LoE) in permanently-implanted Spinal Cord Stimulation (SCS) patients (1). A recent European study utilizing such adaptors in patients experiencing LoE reported a high rate (approximately 60%) of therapy salvage using a multi-modal SCS system (2,3). Here, we report clinical outcomes in patients using SCS devices that can be interconnected using standardized connections or implantable adaptors to salvage SCS therapy following Loss of Efficacy (LoE). This is a single-center, real-world, observational study of patients previously implanted with an SCS system (commercially-available device) who report LoE. If comprehensive reprogramming was unsuccessful, patients were connected to a new SCS device (Boston Scientific) via direct standardized connection or an FDA-approved adaptor. Briefly, system conversion entails explantation of the previously-implanted IPG and use of adaptors or standardized connectors to enable a -1-week trial period with an external stimulator. After confirmation of successful pain relief, patients underwent permanent implantation with a new IPG and pre-existing leads. Here we report on data collected from permanently implanted patients with previously failed SCS therapy.		Baseline Characteristics (n = 25) <table><tr><td>Gender - Females (%)</td><td>60% (15/25)</td></tr><tr><td>Age [Mean (SD)]</td><td>59.5 (14.4) years n = 24</td></tr><tr><td>Pain Diagnosis (%)</td><td>Lumbosacral Radiculopathy (100%)</td></tr><tr><td>Baseline NRS [Mean (SD)]</td><td>6.2 (2.1) n = 24</td></tr><tr><td>Sub-optimal Pain Relief with non-BSC System</td><td>100% (25/25)</td></tr></table> PPR post Therapy Salvage with New SCS System (n = 24) • 100% of patients who converted to a new SCS System that reported PPR were Responders • 44% (11/25) of patients reported ≥70% pain relief • Average Follow-up post BSC implant was 151 days (0 to 724 days)		Gender - Females (%)	60% (15/25)	Age [Mean (SD)]	59.5 (14.4) years n = 24	Pain Diagnosis (%)	Lumbosacral Radiculopathy (100%)	Baseline NRS [Mean (SD)]	6.2 (2.1) n = 24	Sub-optimal Pain Relief with non-BSC System	100% (25/25)	• Regaining control of chronic pain and preventing explanation is of key, fundamental importance for patients implanted with an SCS system who experience LoE. Preliminary results of this study demonstrate that implantable adaptors and standardized connectors can be useful tools for achieving salvage of SCS therapy. • 100% of subjects were responders to SCS post conversion to a new SCS System. • 44% (11/25) of patients reported ≥70% pain relief	
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				REFERENCES											
				1. North RB, Konrad PE, Judy JW, Ries AJ, Stevenson R. Examining the Need to Standardize Implanted Stimulator Connectors: NANS Survey Results. Neuromodulation. 2021 Dec;24(8):1299-1306. 2. Haider N, Ligham D, Quave B, Ha rum KE, Garcia EA, Gilmore CA, Miller N, Moore GA, Bains A, Lechleiter K, Jain R. Spinal Cord Stimulation (SCS) Trial Outcomes After Conversion to a Multiple Waveform SCS System. Neuromodulation. 2018 Jul;21 (5):504-507. 3. Rigoard P, Billot M, Bougeard R, Llopis JE, Raoul S, Matis G, Vesper J, Belaid H. Improved Outcomes and Therapy Longevity after Salvage Using a Novel Spinal Cord Stimulation System for Chronic Pain: Multicenter, Observational, European Case Series. J Clin Med. 2024 Feb 14;13(4):1079.											
				DISCLOSURES											
<table><tr><td>Study Design</td><td>Single-Center, Consecutive, Observational, Case-Series. Data collected by site personnel only</td></tr><tr><td>Study Device</td><td>Boston Scientific WaveWriter SCS Systems</td></tr><tr><td>Cohort</td><td>25 Subjects with a prior SCS system converted to Boston Scientific SCS System</td></tr></table>		Study Design	Single-Center, Consecutive, Observational, Case-Series. Data collected by site personnel only	Study Device	Boston Scientific WaveWriter SCS Systems	Cohort	25 Subjects with a prior SCS system converted to Boston Scientific SCS System								
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