

# Three-Year Outcomes of a Large, Multicenter, Real-World Study Utilizing a Multimodal SCS System Capable of Combination Therapy

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## BACKGROUND

Single-modality Spinal Cord Stimulation (SCS) approaches (e.g., burst, 1-10 kHz, etc.) are currently available to patients.<sup>1-4</sup> However, these approaches are typically only available via separate commercially-available SCS devices. Systems capable of providing multiple therapeutic neurostimulation modalities and adjustable programming options are now thought to be key for personalizing therapy to identify the best, patient-specific course of treatment and may help avoid surgical revision and/or explant. In this report, we present long-term, real-world outcomes from multiple centers using an SCS system designed to provide patients with an enhanced capability for customizing their SCS treatment by offering several modalities including combination therapy (simultaneous delivery of modalities) that engages different mechanisms of action.

## METHODS

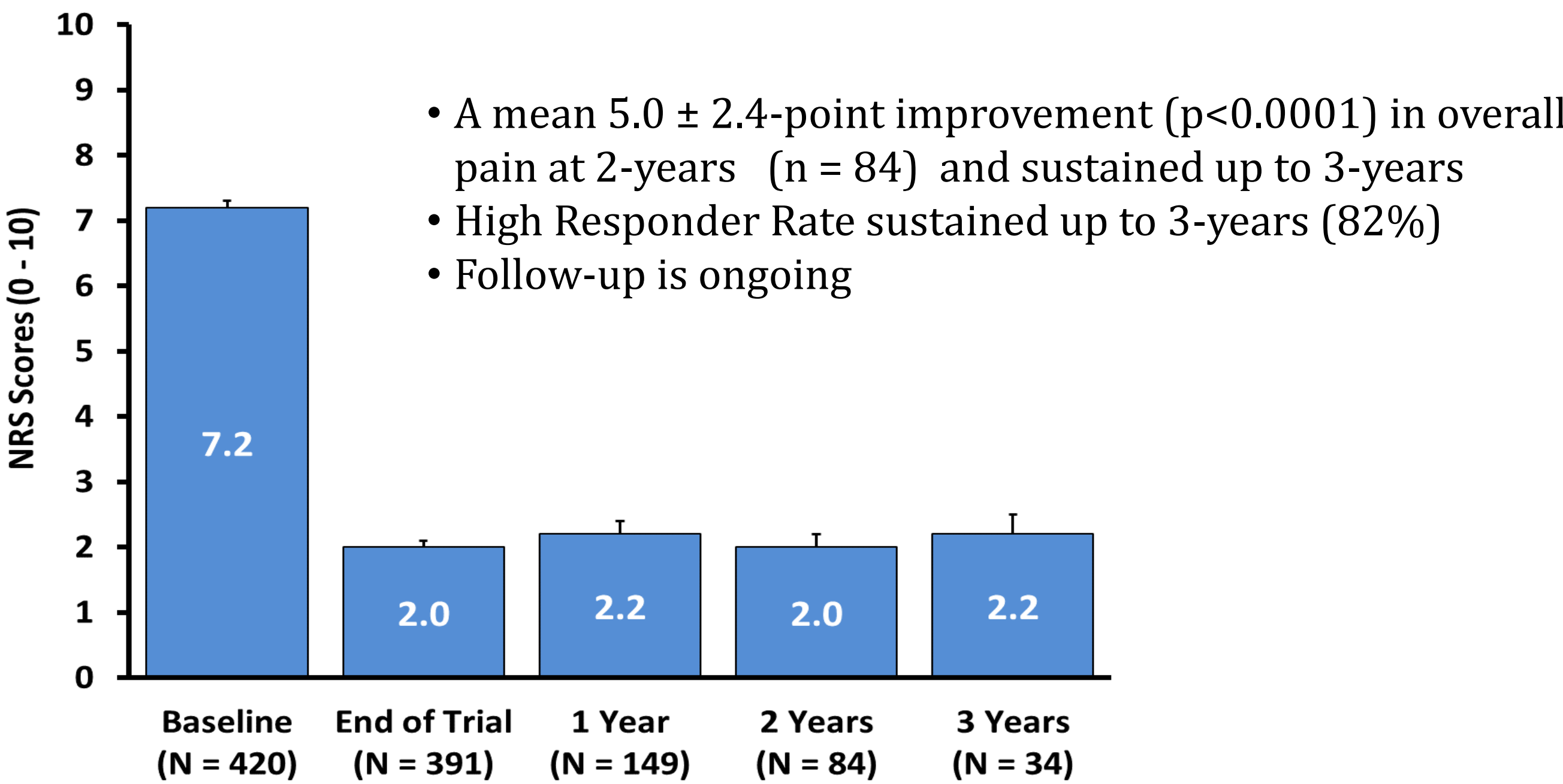
|              |                                                                                                                                                                                                                      |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Study Design | Multicenter, Consecutive, Observational, Case-Series.<br>Data collected by site personnel only.                                                                                                                      |
| Study Device | SCS System<br>Spectra WaveWriter, Boston Scientific: <ul style="list-style-type: none"><li>•Combination Therapy (sequential or simultaneous neurostimulation)</li><li>•Multiple waveforms and field shapes</li></ul> |
| Cohort       | 420 patients diagnosed with chronic pain                                                                                                                                                                             |

## RESULTS

### Baseline Characteristics (n = 420)

|                                |                           |
|--------------------------------|---------------------------|
| Gender - Females (%)           | 53.1% (217/409)           |
| Age [Mean (SD)]                | 66.2 (13.4) years n = 417 |
| Pain Location (%)              | Low Back Pain (67.9%)     |
|                                | Low Back and Legs (85.7%) |
| Baseline NRS [Mean (SD)]       | 7.2 (1.8) n = 420         |
| Follow-Up Duration [Mean (SD)] | 371 (393) days n = 420    |

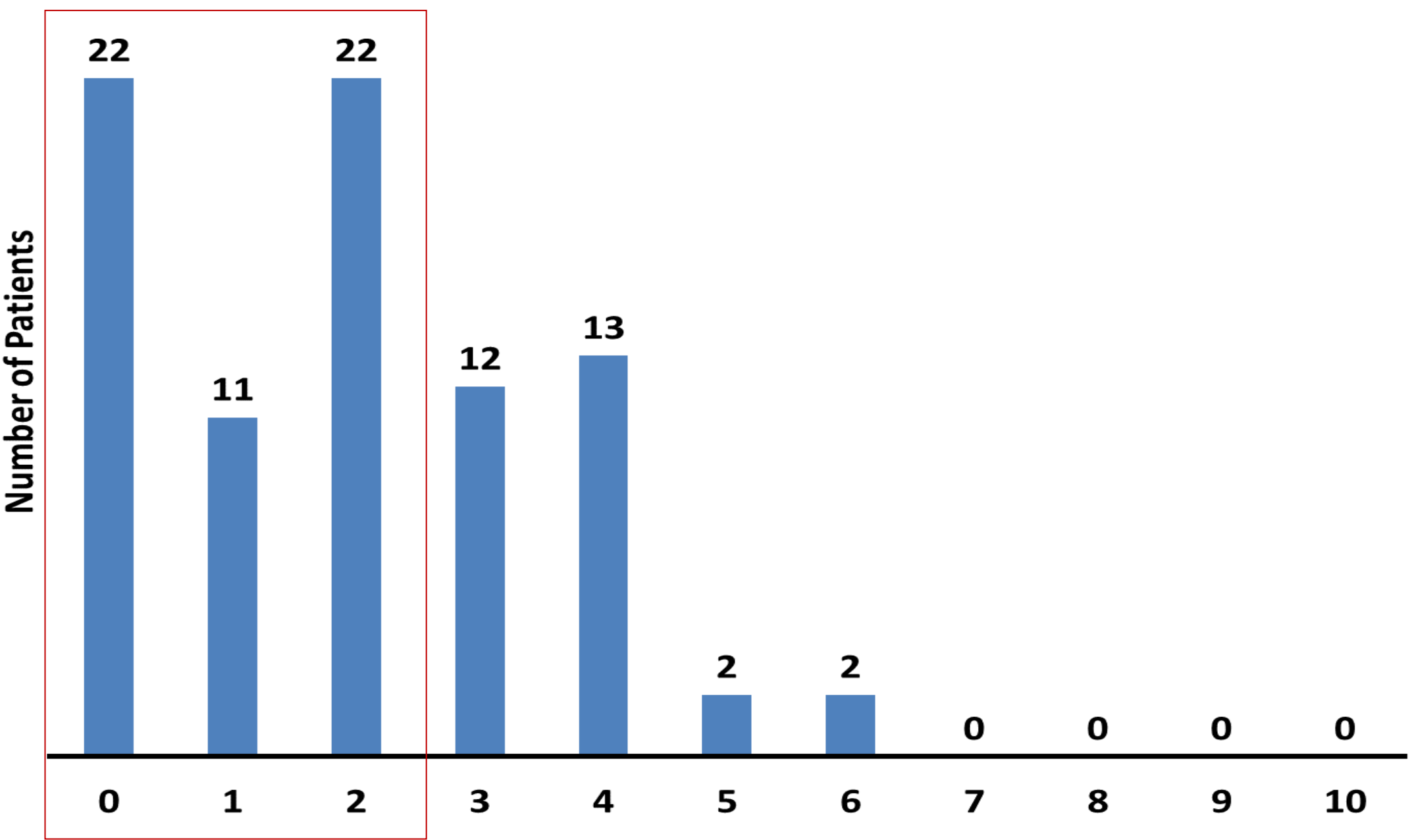
### Overall Pain Scores at Baseline and up to 3-years



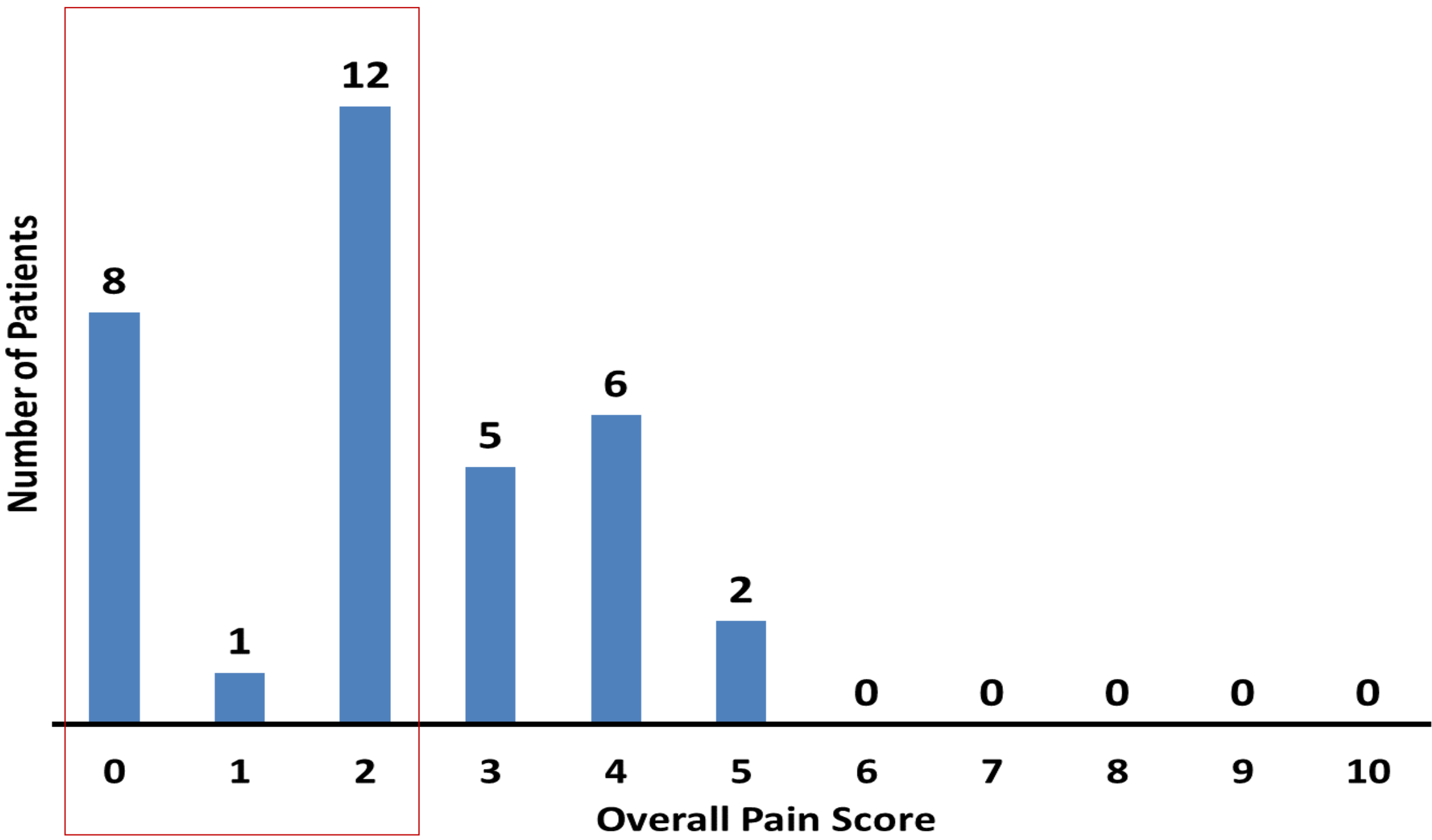
### Overall Pain Scores at 2-year and 3-year follow-up

During long-term follow-up, ≥60% reported a pain score of 2 or less and nearly a quarter of all patients were pain free (NRS = 0)

#### 2-years follow-up



#### 3-years follow-up



## CONCLUSIONS

- Results from this large, multicenter, real-world observational cohort demonstrated sustained significant improvement in overall pain with the use of an SCS system capable of engaging multiple mechanisms of action, providing combination therapy, and multiple waveforms
- This evidence aligns with that of previous studies indicating the practical value of providing various SCS-based programming options to patients<sup>5-10</sup>
- At long-term follow-up (up to 3-years):
  - A mean 5.0 ± 2.4-point improvement (p<0.0001) in overall pain at 2-years (n = 84) and sustained up to 3-years
  - ≥60% reported a pain score of ≤2 and ~25% of all patients were pain free (NRS = 0)

## REFERENCES

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## DISCLOSURES

Study sponsored by Boston Scientific. Drs. North, Pyles, Washabaugh, Berg, and Waghmarae have consulting agreements with Boston Scientific. Yu Pei and Edward Goldberg are employees of Boston Scientific.

