DTM™ SCS PROVED SUSTAINED SUPERIORITY COMPARED TO CONVENTIONAL STIMULATION AT 3 AND 12 MONTHS¹⁲. PROVEN ONLY ON THE INTELLIS™ PLATFORM.

Post-market, multi-center, randomized control trial (RCT) comparing the efficacy of DTM™ SCS for back pain compared to conventional SCS using the Medtronic Intellis™ spinal cord stimulator.¹²

84%
Highest back pain responder rate reported at 12 months in similar RCTs* (> 50% improvement).

69%
7 out of 10 patients were profound back pain responders (> 80% pain relief).

Sustained back and leg pain relief with DTM™ for back pain compared to conventional SCS using the Medtronic Intellis™ platform.

Pain (VAS) at 12 months

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>1 Month</th>
<th>3 Months</th>
<th>6 Months</th>
<th>12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg Pain</td>
<td>6.18</td>
<td>1.74</td>
<td>0</td>
<td>0.76</td>
<td>0.76</td>
</tr>
<tr>
<td>Back Pain</td>
<td>7.26</td>
<td>1.48</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* Descriptive comparison, including studies with similar design (RCT; randomization >100 subjects; comparing 2 SCS therapies; with at least 12-months follow up) and patient populations (inclusion/exclusion criteria; baseline demographics) with back pain responder rates reported. This is not based on statistical analysis of outcomes between studies.

DTM™ SCS PROVEN
SUPERIOR PAIN RELIEF. PROVEN¹

A new therapy based on science and proven only on Intellis™ with Overdrive™ battery technology.

Medtronic is investing in building long-term evidence for DTM™ SCS by Intellis™ with AdaptiveStim™ technology.

**
Intellis™ with Overdrive™ battery technology, guarantees 95% capacity after 9 years*, with 3x faster recharge than traditional lithium ion batteries**, so patients can have more free time to focus on their lives.

References:

References:
**Glia cells are active contributors to neural processing and various disease states, including chronic pain.** In a pain state, glial cells are known to release factors that can sensitize neurons and cause pro-inflammatory responses, indicating they play a crucial role in the chronic pain process. Furthermore, decades of basic science research have discovered glial cells are key contributors to chronic pain mechanisms or pathological (that can be protective or pathological) behaviors compared to either low- or high-rate stimulation.10

### BEHIND THE SCIENCE

#### Glia cells:
- Are key contributors to chronic pain mechanisms
- Respond to neuronal signaling molecules
- Release inflammatory signals in chronic pain states
- Respond to electrical stimuli
- Release signaling molecules
- Modulate with electrical stimuli, resulting in the release of neurotransmitters, impacting cell-to-cell communication.

#### Astrogliosis:
- **Microglia**: Inactivated Glial Cell
- **Astrocyte**: Activated Glial Cell
- **Injured Neuron**: Neuron
- **Presynaptic Neuron**: Neuron
- **Postsynaptic Neuron**: Neuron

### MECHANICAL SENSITIVITY

**Study Description:**
- Behavioral studies were conducted in spared nerve injury (SNI) models of pain in rodents. Testing included paw withdrawal to a mechanical stimulus.
- The DTM™ waveforms have been studied in animal models, showing statistically significant reversal of pain behaviors compared to low or high frequency SCS therapies alone.

### GENE EXPRESSION ANALYSIS

**Study Description:**
- Analysis of RNA expression comparing the pain state with non-pain state and SCS therapies in rodents.11

With the DTM™ waveform:
- **Glia cells were modulated, in addition to neurons.**
- The neuron and microglia modulation was closest to non-pain state compared to low or high frequency alone.
- **Genes related to biological functions, such as neuroinflammation, were modulated towards the non-pain state.**11

### CONCLUSION

Hypothesis: Do glial and neuronal cells have varied responses to different waveforms?

Conclusion: In pre-clinical studies, the DTM™ waveform best modulates glial and neuronal gene expression back toward the non-pain state when compared to low or high frequency SCS.8-11