

# Optimal Medical Management

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## Table of Contents

EVALUATION / ASSESSMENT .....	3
1. Aim .....	3
2. Definitions:.....	3
2.1. Failed Back Surgery Syndrome (FBSS)/Post-Laminectomy Syndrome (PLS):.....	3
2.2. Evaluation of Patient with FBSS/PLS:.....	3
3. Assessment of patients with FBSS/PLS:.....	3
3.1. History.....	3
3.2. Examination .....	3
3.3. Investigations .....	4
3.4. Red flags? .....	4
3.5. Assessment based intervention .....	4
4. Interdisciplinary management.....	4
4.1. Medications:.....	4
4.1.1. Non-Opioid Analgesics .....	4
4.1.2. Opioids.....	4
4.1.2.1. Long-acting agents.....	4
4.1.2.2. Short-acting agents.....	5
4.1.3. Adjuvant medications .....	5
4.1.3.1. Tricyclic antidepressants (TCAs).....	5
4.1.3.2. Serotonin and norepinephrine reuptake inhibitors (SNRIs) .....	5
4.1.3.3. Selective serotonin reuptake inhibitors (SSRIs) .....	5
4.1.3.4. Anti-convulsants.....	5
4.1.3.5. Cannabinoids .....	5
4.1.3.6. Muscle Relaxants.....	5
4.2. Psychological/Behavioral Therapy.....	5
4.3. Physiotherapy .....	6
4.4. Interventions .....	6
4.5. Interventional Therapies .....	6
4.5.1. Axial Pain .....	6
4.5.2. Radicular pain.....	6
5. Excluded Therapies .....	6
5.1. Partial List of Excluded and/or Experimental and/or Investigational Therapies: .....	6

# Optimal Medical Management

Pain treatment will be evaluated, and medical management of subjects' pain will be optimized. The investigator and subject will determine an individual optimal medical management (OMM) treatment plan, which should include non-investigational pharmacologic agents (e.g., tricyclic antidepressants, opioid analgesics or tramadol, antiepileptics, or lidocaine) and/or interventional therapies<sup>1</sup> (e.g., therapeutic injections, radiofrequency, acupuncture, and physical therapy) as appropriate.

## EVALUATION / ASSESSMENT

### 1. Aim

Define OMM for failed back surgery syndrome/post-laminectomy syndrome such that a treatment protocol may be developed or suggested by the principal investigator to subjects enrolled either in the SCS+OMM or OMM alone arms of the PROMISE Study.

### 2. Definitions:

#### 2.1. Failed Back Surgery Syndrome (FBSS)/Post-Laminectomy Syndrome (PLS):

- A term embracing a constellation of conditions that describes persistent or recurring low back pain, with or without sciatica following one or more spine surgeries.
- A more functional definition proposes FBSS results when the outcome of lumbar spinal surgery does not meet the pre-surgical expectations of the patient and/or the surgeon.
- For the PROMISE Clinical Study, FBSS is further defined as the subject does not require further surgery. FBSS is defined as persistent or recurrent back and leg pain of at least 6 months duration following at least one decompression and/or fusion procedure.

#### 2.2. Evaluation of Patient with FBSS/PLS:

- Etiology of persistent or recurring pain
- Psychosocial aspects of the patient
- Comorbidities (depression, anxiety, sleep disturbances), and
- Previous management and investigations

### 3. Assessment of patients with FBSS/PLS:

#### 3.1. History

- Pain characteristics and comparison with pre-surgical pain
- Assessment of red flags
- Review of preoperative and postoperative surgical assessments and investigations
- Past treatments trial and effects
- Assessment of psychosocial factors and addiction risk
- Co-morbid medical history and treatments

#### 3.2. Examination

- Assist in excluding serious pathology
- Assist in identifying the source of pain and directing investigations

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<sup>1</sup> Chou R, Atlas S, et al. Nonsurgical Interventional Therapies for Low Back Pain. A Review of the Evidence for an American Pain Society Clinical Practice Guideline. *Spine*. Sep 2009;34(10):1078-1093.

### 3.3. Investigations

- Magnetic resonance imaging (contrast enhanced)
- CT
- CT-myelogram
- Standing flexion-extension radiographs (rule out residual, recurrent or new spondylolisthesis)

### 3.4. Red flags?

- Clinical evidence of infectious/inflammatory process, malignancy, new focal neurological deficits, extraspinal sinister cause (AAA)  
→Early Surgical Referral
- Are there surgically correctable factors? (i.e. Misplaced pedicle screw, misplaced graft)  
→Referral to spine surgeon
- Are there yellow flags? Significant psychosocial factors including: depression, anxiety, poor coping mechanisms, somatization, hypochondriasis, ongoing compensation claims, ongoing litigation  
→More intensive psychological and social support

### 3.5. Assessment based intervention

Axial versus extremity pain (rule out pseudoarthrosis, residual, recurrent or new spondylolisthesis, inadequate decompression, foraminal stenosis, epidural fibrosis, recurrent disc herniation, or residual disc or fragments, as well as instrumentation issues such as pedicle screw nerve compression

Axial Pain: Suggests facet joint, sacroiliac (up to 32% of patients following lumbar fusion), myofascial or discogenic causes.

- Intra-articular facet injections
- Lumbar medial branch blocks
- Intra-articular sacroiliac joint injections
- Lateral branch blocks
- Consider provocative discography with manometry

## 4. Interdisciplinary management

### 4.1. Medications:

#### 4.1.1. Non-Opioid Analgesics

- NSAIDs
- COX-2 inhibitors
- Tramadol
- Acetaminophen

#### 4.1.2. Opioids

##### 4.1.2.1. Long-acting agents

- Oxycodone (OxyContin)
- Oxymorphone (Opana ER)
- Fentanyl (Duragesic)
- Hydromorphone (Exalgo)
- Methadone
- Tapentadol (Nucynta ER)

#### 4.1.2.2. Short-acting agents

- Hydrocodone (Vicodin, Lortab, Norco)
- Oxycodone (Roxicet, Percocet, Roxicodone)
- Fentanyl-transmucosal, sublingual (Actiq, Fentora, Onsolis)
- Hydromorphone (Dilaudid)
- methadone
- Tapentadol (Nucynta)

#### 4.1.3. Adjuvant medications

##### 4.1.3.1. Tricyclic antidepressants (TCAs)

- Amitriptyline
- Nortriptyline (Pamelor)
- Desipramine (Norpramin)
- Amoxapine

##### 4.1.3.2. Serotonin and norepinephrine reuptake inhibitors (SNRIs)

- Duloxetine (Cymbalta)
- Milnacipran (Ixel)

##### 4.1.3.3. Selective serotonin reuptake inhibitors (SSRIs)

- Citalopram (Celexa)
- Escitalopram (Lexapro)
- Fluoxetine (Prozac, Prozac Weekly, Sarafem)
- Paroxetine (Paxil, Paxil CR, Pexeva)
- Sertraline (Zoloft)
- Fluoxetine combined with the atypical antipsychotic olanzapine (Symbyax)

##### 4.1.3.4. Anti-convulsants

- Pregabalin (Lyrica)
- Gabapentin (Neurontin, Gabarone) (also long-acting formulations)
- Carbamazepine (Carbatrol, Equetro, Tegretol)

##### 4.1.3.5. Cannabinoids

##### 4.1.3.6. Muscle Relaxants

- Cyclobenzaprine (Flexeril)
- Cyclobenzaprine (long-acting Amrix)
- Metaxalone (Skelaxin)
- SOMA (Carisoprodol)
- Valium
- Robaxin (Methocarbamol)
- Tizanidine (Zanaflex)
- Baclofen (Kemstro, Lioresal, and Gablofen)
- Dantrolene (Dantrium)

## 4.2. Psychological/Behavioral Therapy

- Cognitive behavioral therapy
- Hypnosis
- Pacing
- Group therapy
- Relaxation

### 4.3. Physiotherapy

- McKenzie approach (mechanical movement based approach to physical therapy based on response to movement, pain and function)
- Lumbar stabilization/strengthening
- Aquatic
- Exercise
- Neural flossing
- TENS, e-Stim
- Roling (therapy system based on manipulating fascia by specific methods)

### 4.4. Interventions

- Acupuncture
- Reiki (Japanese technique of palm healing on hands on healing)
- Massage
- Chiropractic

### 4.5. Interventional Therapies

Although these interventions are allowed and the need for them may develop during the course of the trial, it is expected that the appropriate screening for these potential interventions occur during the evaluation phase if possible.

#### 4.5.1. Axial Pain

- Myofascial trigger point injections
- Caudal epidural steroid injection
- Prolotherapy
- Intra-articular facet injections
- Lumbar medial branch blocks
- Intra-articular sacroiliac joint injections
- Lateral branch blocks
- Lumbar medial branch neurotomy
- Sacroiliac joint neurotomy

#### 4.5.2. Radicular pain

- Caudal, interlaminar, selective nerve root blockade/transforaminal epidural all via fluoroscopic guidance
- Percutaneous epidural adhesiolysis, if appropriate

## 5. Excluded Therapies

Excluded from OMM is intrathecal drug delivery, peripheral nerve stimulation, back surgery at the location related to his/her original back pain complaint and experimental therapies. Data regarding pain treatments implemented during the study will be collected to reveal how medical management was optimized.

### 5.1. Partial List of Excluded and/or Experimental and/or Investigational Therapies:

- Plasma rich protein/plasma lysate therapy
- Adipose stem cells
- Endoscopic discectomy
- Laser
- Minimally invasive lumbar decompression (mild)
- Sacroiliac Joint Fusion

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## Document Change History

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Document: Optimal Medical Management

<b>Rev</b>	<b>Revision Date</b>	<b>Description of and Rationale for Change</b>	<b>Effects on Other Documents</b>
1.0	10 Sept 2012	First issue	NA

**SUPPLEMENT TO:**  
**Multicolumn Spinal Cord Stimulation for Predominant Back Pain in Failed Back  
Surgery Syndrome Patients: A Multicenter Randomized Controlled Trial**



**Table S1: Secondary outcomes, low back (30% and 2-point) and leg pain (50%) responder rates at 6 months**

	SCS+OMM responders			OMM responders			Between-group risk difference (95% CI)	Between-group difference p-value
	n	Total	%	n	Total	%		
Low back Pain <b>30% responder rate</b>								
ITT	31	110	28.2%	14	108	13.0%	15.2% (3.8%, 26.7%)	0.008
Completer's	31	92	33.7%	14	104	13.5%	20.2% (7.5%, 32.9%)	0.001
As-treated	31	79	39.2%	14	117	12.0%	27.3% (14.0%-40.6%)	< 0.001
Low back Pain <b>2-point responder rate</b>								
ITT	34	110	30.9%	13	108	12.0%	18.9% (7.4%, 30.4%)	< 0.001
Completer's	34	92	37.0%	13	104	12.5%	24.5% (11.7%, 37.2%)	< 0.001
As-treated	34	79	43.0%	13	117	11.1%	31.9% (18.6%, 45.3%)	< 0.001
Leg Pain <b>50% responder rate</b>								
ITT	33	110	30.0%	9	108	8.3%	21.7% (10.7%, 32.6%)	<.0001
Completer's	33	92	35.9%	9	104	8.7%	27.2% (15%, 39.4%)	<.0001
As-treated	32	79	40.5%	10	117	8.5%	32% (18.9%, 45%)	<.0001

**Table S2: Additional results at 6 months, as-treated**

As-treated Mean (SD)	SCS+OMM (As-treated)					OMM (As-treated)					Between group difference (95% CI)	Between group p-value
	n <sup>a</sup>	Baseline	6-mo	Change from baseline	Within group p-value	n	Baseline	6-mo	Change from baseline	Within group p-value		
<b>EQ-5D-5L index value</b>	78	0.31 (0.27)	0.49 (0.27)	0.18 (0.26)	< 0.001	117	0.36 (0.23)	0.38 (0.27)	0.02 (0.23)	0.060	0.16 (0.09, 0.23)	< 0.001
<b>EQ VAS</b>	78	42.9 (22.1)	54.1 (23.1)	11.2 (24.3)	< 0.001	117	49.4 (23.2)	50.1 (23.8)	0.8 (25.8)	0.717	10.4 (3.2, 17.7)	0.002
<b>SF-36 MCS</b>	79	41.15 (14.55)	42.53 (14.26)	1.38 (11.01)	0.349	117	40.71 (14.24)	41.38 (14.64)	0.67 (11.21)	0.580	0.7 (-2.5, 3.9)	0.475
<b>PSQI</b>	78	13.1 (4.1)	10.8 (5.0)	2.3 (3.9)	< 0.001	117	12.3 (4.2)	11.6 (4.7)	0.7 (3.5)	0.030	1.6 (0.5, 2.6)	0.010
<b>Morphine Milligram Equivalents<sup>b</sup></b>	79	59.5(114.5)	58.5 (121.1)	-0.9 (34.6)	0.742	117	57.5 (69.1)	64.8 (83.1)	7.3 (46)	0.024	8.3 (-3.1 to 19.6)	0.031

<sup>a</sup> One patient provided SF-36 but not EQ-5D-5L and PSQI  
Change from baseline is defined as 6-mo minus baseline, a negative value is an improvement

**Table S3: Non-drug pain treatment by treatment group between randomization and the 6-month visit, as-treated**

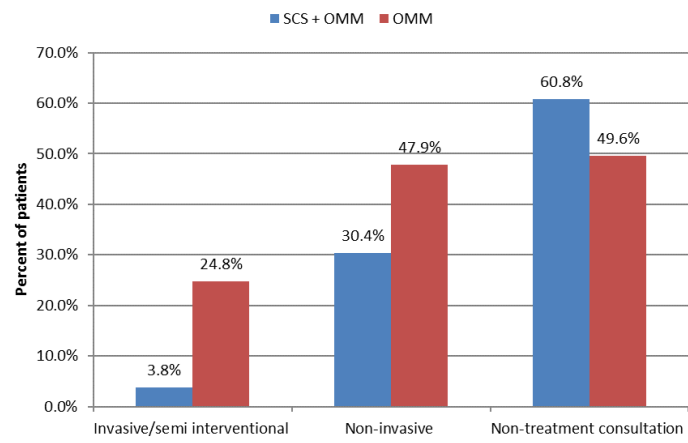
Non-drug treatments received between randomization and 6 months	SCS+OMM			OMM		
	n	% (n=79)	total contacts	n	% (n=117)	total contacts
Invasive/semi interventional <sup>a</sup>	3	3.8%	3	29	24.8%	69
Non-invasive <sup>b</sup>	24	30.4%	431	56	47.9%	1622
Non-treatment consultation <sup>c</sup>	48	60.8%	401	58	49.6%	246

<sup>a</sup> Invasive or semi interventional treatment: Caudal epidural steroid injection, Caudal, interlaminar, selective nerve root blockade/transforaminal, Intra-articular facet injections, Intra-articular sacroiliac joint injection, Lateral branch block, Lumbar medial branch block, Lumbar medial branch neurotomy, Myofascial trigger point injection, Percutaneous epidural adhesiolysis, Sacroiliac joint neurotomy

<sup>b</sup> Non-invasive treatment: Acupuncture, Aquatic, Chiropractic, Cognitive behavioral therapy, Exercise, Group therapy, Lumbar stabilization/strengthening, Massage, McKenzie approach, Mental health visit (including Psychiatrist, Psychologist, Counselor, other Mental), Neural flossing, Reiki, Relaxation, TENS, e-Stim, Visit to addiction medicine specialist, Walk-in center (e.g. minute clinic)

<sup>c</sup> Non-treatment consultation: Home health care visit, Nurse Practitioner/Registered Nurse/Licensed Practical, Other, Primary Care or General Practitioner office visit (not described above)

**Figure S1: Non-drug pain treatment by treatment group between randomization and the 6-month visit, as-treated**



**Table S4: Pain medication by treatment group between randomization and the 6-month visit, as-treated**

WHO Drug ATC3 name	SCS+OMM				OMM			
	Baseline		6 months		Baseline		6 months	
	n	% (n=79)	n	% (n=79)	n	% (n=117)	n	% (n=117)
OPIOIDS	59	74.7%	53	67.1%	92	78.6%	92	78.6%
OTHER ANALGESICS AND ANTIPYRETICS <sup>a</sup>	56	70.9%	52	65.8%	65	55.6%	67	57.3%
ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS, NON-S	19	24.1%	15	19.0%	35	29.9%	34	29.1%
ANTIDEPRESSANTS	19	24.1%	21	26.6%	31	26.5%	34	29.1%
MUSCLE RELAXANTS, CENTRALLY ACTING AGENTS	11	13.9%	9	11.4%	23	19.7%	21	17.9%
ANXIOLYTICS	6	7.6%	8	10.1%	7	6.0%	11	9.4%
ANESTHETICS, LOCAL	3	3.8%	2	2.5%	9	7.7%	8	6.8%
TOPICAL PRODUCTS FOR JOINT AND MUSCULAR PAIN	3	3.8%	3	3.8%	5	4.3%	4	3.4%
ANTIEPILEPTICS	2	2.5%	2	2.5%	4	3.4%	5	4.3%
CORTICOSTEROIDS FOR SYSTEMIC USE, PLAIN	1	1.3%	1	1.3%	0	0.0%	0	0.0%

<sup>a</sup> Includes gabapentin and pregabalin.

**Table S5: Reasons for pain medication stop or change between randomization and the 6-month visit by treatment group, as-treated**

Reasons for medication stop or change	SCS+OMM		OMM	
	n	% (n=79)	n	% (n=117)
Inadequate response	38	48.1%	77	65.8%
Pain level improvement	37	46.8%	21	17.9%
Completed medication therapy	20	25.3%	21	17.9%
Other	6	7.6%	14	12.0%
Side effects/intolerance	2	2.5%	24	20.5%
Unknown	2	2.5%	3	2.6%

**Table S6: Programming parameters for SCS implanted patients at the 6-month visit**

<b>Programming parameters at the 6-month visit_(n = 71)</b>	<b>n <sup>a</sup></b>	<b>Mean (SD)</b>	<b>Range</b>
Amplitude (V)	67	3.07 (1.58)	0.5-9.9
Pulse width (µs)	67	388.0 (142.1)	90-1000 <sup>b</sup>
Rate (Hz)	68	90.6 (179.6)	20-1200 <sup>c</sup>
Therapy time (INS lifetime usage at 6-month visit)	71	64.5% (34.6%)	0.2%-100%
Number of programs used	67	2.0 (1.0)	1-6
Number of contacts used	67	4.6 (2.0)	2-11
<sup>a</sup> # of patients provided programming data, varied among parameters due to different reports on the strip <sup>b</sup> two at 1000 <sup>c</sup> one at 1000 and one at 1200			

**Table S7: Stimulation amplitude for SCS implanted patients at the 6-month visit**

Stimulation amplitude (in Volts)		Upright	Supine	Difference between upright and supine	P-value	
		n = 71	n = 71	n = 71		
<b>Perceptual</b>	When did patient first perceive paresthesia?	Mean (SD)	2.55 (1.51)	2.07 (1.47)	0.48 (0.61)	< 0.001
		Median	2.10	1.80	0.40	
		Min - Max	0.20-8.00	0.20-7.60	-1.20 - 2.70	
<b>Usage</b>	When did patient report that paresthesia was at his/her desired level of therapy?	Mean (SD)	3.23 (1.77)	2.58 (1.69)	0.65 (0.69)	<0.001
		Median	3.00	2.20	0.50	
		Min - Max	0.50-8.20	0.50-7.80	-0.30 - 3.30	
<b>Discomfort</b>	When did patient report that paresthesia began to feel uncomfortable?	Mean (SD)	3.79 (2.02)	3.05 (1.80)	0.75 (0.81)	< 0.001
		Median	3.50	2.60	0.60	
		Min - Max	1.30-9.95	0.10-8.70	-0.60 - 4.50	



**Figure S2: Stimulation amplitude for SCS implanted patients at the 6-month visit**

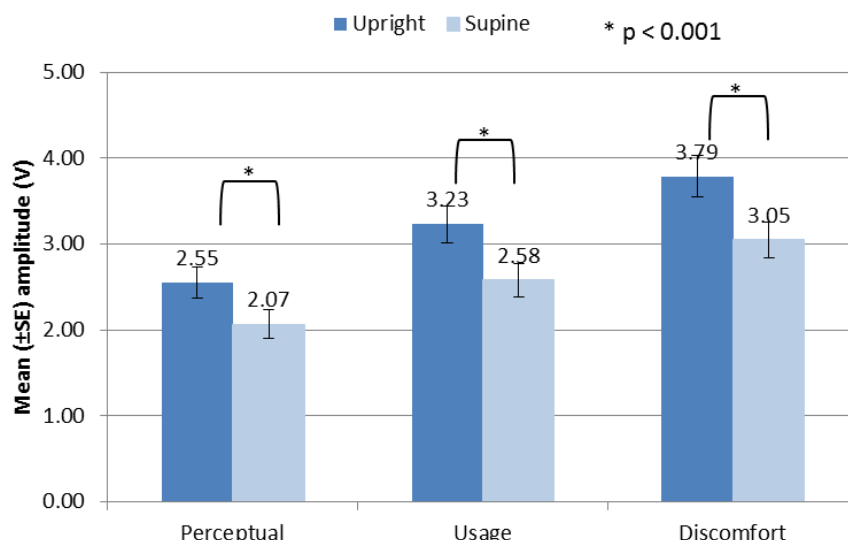


Table S7 and Figure S2 present the stimulation amplitude for the SCS patients with full system implants at the 6-month visit.

At the perceptual stimulation level (defined as the stimulation amplitude when the patient first perceives paresthesia), the mean amplitude was 2.55 volts (SD 1.51) in the upright position and 2.07 volts (SD 1.47) in the supine position. The mean difference between the two positions (defined as the amplitude in an upright minus the amplitude in a supine position) was 0.48 volts (SD 0.61). There was a statistically significant difference in the stimulation amplitude between the two positions ( $p < 0.001$ ).

At usage stimulation level (defined as the stimulation amplitude when the patient reported that paresthesia was at desired level of therapy), the mean stimulation amplitude was 3.23 volts (SD 1.77) in the upright position and 2.58 volts (SD 1.69) in the supine position. The mean difference between the two positions was 0.65 volts (SD 0.69). There was a statistically significant difference in stimulation amplitude between the two positions ( $p < 0.001$ ).

At discomfort stimulation level (defined as the stimulation amplitude when the patient report that paresthesia began to feel uncomfortable), the mean stimulation amplitude was 3.79 volts (SD 2.02) in the upright position and 3.05 volts (SD 1.80) in the supine position. The mean difference between the two positions was 0.75 volts (SD 0.81). There was a statistically significant difference in stimulation amplitude between the two positions ( $p < 0.001$ ).

In summary, the stimulation amplitude increased from the perceptual level to the usage level to the discomfort level. In all levels, the stimulation amplitudes were statistically significantly higher in the upright position than in the supine position. Similarly, 40 out of 71 (56.3%) patients had the “usage amplitude” in the upright position greater than that the “discomfort amplitude” in supine position.

This speaks to the need for patients to change the stimulation amplitude of the device when a surgical lead is used for SCS therapy.

**Table S8: Patients request to change therapy at the 6-month visit**

Did patient decide to make a change to treatment group as randomized since last visit?	SCS + OMM <sup>a</sup>		OMM <sup>b</sup>	
	n	%	n	%
<b>Requested to switch</b>	2	2.4%	77	72.6%
<b>Decided to continue on therapy</b>	76	91.6%	26	24.5%
<b>Missed visit</b>	2	6.0%	3	2.8%
<b>Total</b>	<b>83</b>	<b>100.0%</b>	<b>106</b>	<b>100.0%</b>

<sup>a</sup> Total doesn't include the 13 early discontinuations and the 14 subjects who had screening tests but didn't get implants

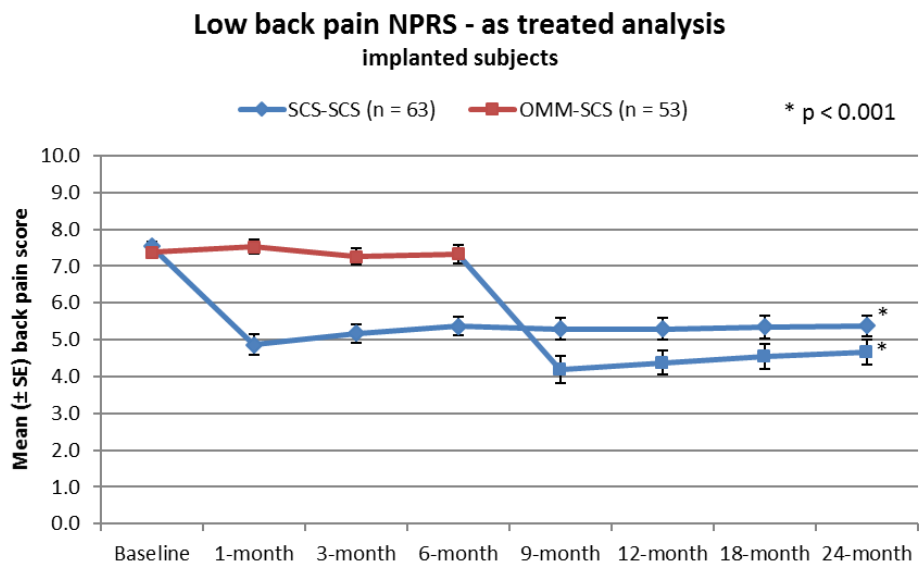
<sup>b</sup> Total doesn't include the 1 early discontinuation and the 1 subject who had previously switched from OMM to SCS

**Table S9: Low back pain NPRS by group at the 12-month visit and 24-month visit**

**Table S9: Low back pain NPRS by group at 12- and 24-month visit**

Group	n	Baseline mean (SD)	12-mo mean (SD)	Change from baseline mean (SD)	Within group p-value	# of 50% responders	% of 50% responders	# of 30% responders	% of 30% responders
SCS-SCS	68	7.5 (1.2)	5.2 (2.3)	2.3 (2.2)	< 0.001	18	26.5%	30	44.1%
OMM-SCS	54	7.4 (1.2)	4.4 (2.2)	3.0 (2.0)	< 0.001	21	38.9%	33	61.1%
			<b>24-mo</b>						
SCS-SCS	63	7.5 (1.1)	5.4 (2.2)	2.2 (2.0)	< 0.001	13	20.6%	24	38.1%
OMM-SCS	53	7.3 (1.2)	4.7 (2.5)	2.7 (2.2)	< 0.001	20	37.7%	30	56.6%

Figure S3: Low back pain NPRS by group from Baseline to 24-month visit



Red line indicates patients are receiving OMM treatment; Blue line indicates patients are SCS

**Table S10: All SCS-related adverse events by preferred term for patients who underwent screening test, from trial lead placement to 24-month visit**

MedDRA Preferred Term	Number of serious adverse events	Number of events	Number of patients with events	Percent of patients with event(s) (n = 174) <sup>a</sup>
Device stimulation issue	3	12	9	5.2%
Implant site infection	7	8	7	4.0%
Implant site pain	2	6	6	3.4%
Back pain	3	5	4	2.9%
Paraesthesia	1	4	4	2.3%
Device dislocation	0	3	3	1.7%
Device deployment issue	0	2	2	1.1%
Procedural pain	0	2	2	1.1%
Therapeutic product ineffective	0	2	2	1.1%
Therapeutic response decreased	0	2	2	1.1%
Abdominal pain	0	1	1	0.6%
Abdominal pain lower	1	1	1	0.6%
Burning sensation	0	1	1	0.6%
Dermatitis contact	0	1	1	0.6%
Device battery issue	0	1	1	0.6%
Extradural abscess <sup>b</sup>	1	1	1	0.6%
Extradural haematoma <sup>b</sup>	1	1	1	0.6%
Hypoaesthesia	0	1	1	0.6%
Implant site cellulitis	0	1	1	0.6%
Implant site swelling	0	1	1	0.6%
Monoparesis <sup>b</sup>	0	1	1	0.6%
Musculoskeletal pain	1	1	1	0.6%
Pelvic pain	0	1	1	0.6%
Post procedural complication	1	1	1	0.6%
Pulmonary oedema	1	1	1	0.6%
Urinary tract infection	1	1	1	0.6%
<b>Total</b>	<b>24</b>	<b>63</b>	<b>44</b>	<b>25.3%</b>

<sup>a</sup> Denominator for "Percent of patients with event(s)" is the number of patients who underwent screening test.

<sup>b</sup> One case of epidural abscess, hematoma, and monoparesis occurred in an OMM subject who was trialed after the 6-Month Period

**Table S11: Non-SCS-related adverse events by preferred term between randomization and the 6-month visit**

MedRA Preferred Term	SCS + OMM				OMM			
	Number of serious adverse events	Number of events	Number of patients with events	Percent of patients with events (n = 110)	Number of serious adverse events	Number of events	Number of patients with events	Percent of patients with events (n = 108)
Abdominal pain	0	1	1	0.9%	0	0	0	0%
Abdominal pain upper	0	0	0	0%	0	1	1	0.9%
Acute coronary syndrome	1	1	1	0.9%	0	0	0	0%
Adjustment disorder	0	0	0	0%	1	1	1	0.9%
Adverse drug reaction	0	2	2	1.8%	0	4	4	3.7%
Animal bite	0	0	0	0%	0	1	1	0.9%
Arthralgia	0	1	1	0.9%	0	1	1	0.9%
Arthritis	0	0	0	0%	0	2	2	1.9%
Back injury	0	1	1	0.9%	0	1	1	0.9%
Back pain	0	2	2	1.8%	0	0	0	0%
Bronchitis	0	2	2	1.8%	0	1	1	0.9%
Bursitis	0	0	0	0%	0	1	1	0.9%
Candida infection	0	0	0	0%	0	1	1	0.9%
Cardiac disorder	1	1	1	0.9%	0	0	0	0%
Cardiomegaly	0	0	0	0%	0	1	1	0.9%
Carpal tunnel syndrome	0	1	1	0.9%	0	0	0	0%
Cerebrovascular accident	1	1	1	0.9%	0	0	0	0%
Cholelithiasis	0	0	0	0%	1	1	1	0.9%
Chronic obstructive pulmonary disease	0	0	0	0%	1	1	1	0.9%
Constipation	0	0	0	0%	0	3	3	2.8%
Contusion	0	1	1	0.9%	0	2	2	1.9%
Deep vein thrombosis	0	0	0	0%	1	1	1	0.9%
Depression	0	2	2	1.8%	0	0	0	0%
Dermatitis allergic	0	0	0	0%	0	1	1	0.9%
Device extrusion	0	0	0	0%	1	1	1	0.9%
Diabetes mellitus	0	0	0	0%	0	1	1	0.9%
Diarrhea	0	0	0	0%	0	1	1	0.9%
Drug abuse	1	1	1	0.90%	0	0	0	0%
Drug hypersensitivity	0	1	1	0.90%	0	0	0	0%
Drug intolerance	0	0	0	0%	0	3	3	2.8%
Erythema	0	0	0	0%	0	1	1	0.9%
Fall	0	3	2	1.8%	0	7	7	6.5%
Fibula fracture	1	1	1	0.9%	0	0	0	0%
Fungal skin infection	0	0	0	0%	0	1	1	0.9%
Gastroenteritis	0	1	1	0.9%	0	0	0	0%
Gastroesophageal reflux disease	0	1	1	0.9%	0	0	0	0%
Headache	0	0	0	0%	0	1	1	0.9%
Herpes zoster	0	0	0	0%	0	1	1	0.9%
Hiatus hernia	0	0	0	0%	0	1	1	0.9%
Hypercholesterolaemia	0	1	1	0.9%	0	1	1	0.9%
Hypertension	0	1	1	0.9%	0	0	0	0%

MedRA Preferred Term	SCS + OMM				OMM			
	Number of serious adverse events	Number of events	Number of patients with events	Percent of patients with events (n = 110)	Number of serious adverse events	Number of events	Number of patients with events	Percent of patients with events (n = 108)
Hypoesthesia	0	1	1	0.9%	0	0	0	0%
Hypotension	0	1	1	0.9%	0	0	0	0%
Incision site haematoma	0	0	0	0%	0	1	1	0.9%
Influenza	0	1	1	0.9%	0	1	1	0.9%
Intervertebral disc disorder	0	1	1	0.9%	0	0	0	0%
Intervertebral disc protrusion	0	0	0	0%	0	1	1	0.9%
Iron deficiency anaemia	0	0	0	0%	0	1	1	0.9%
Joint effusion	0	0	0	0%	0	2	2	1.9%
Ligament sprain	0	0	0	0%	0	1	1	0.9%
Meniere's disease	1	1	1	0.9%	0	0	0	0%
Meniscus injury	0	1	1	0.9%	0	0	0	0%
Mouth injury	0	0	0	0%	0	1	1	0.9%
Muscle spasms	0	0	0	0%	0	1	1	0.9%
Myalgia	0	0	0	0%	0	1	1	0.9%
Myocardial infarction	1	1	1	0.9%	0	0	0	0%
Nasopharyngitis	0	3	3	2.7%	0	1	1	0.9%
Nausea	0	0	0	0%	0	2	2	1.9%
Neck pain	0	0	0	0%	0	1	1	0.9%
Nephrolithiasis	0	0	0	0%	1	1	1	0.9%
Neuralgia	0	0	0	0%	0	1	1	0.9%
Night sweats	0	1	1	0.9%	0	0	0	0%
Obesity	0	0	0	0%	1	1	1	0.9%
Onychoclasia	0	1	1	0.9%	0	0	0	0%
Oral candidiasis	0	1	1	0.9%	0	0	0	0%
Oropharyngeal pain	0	1	1	0.9%	0	0	0	0%
Osteoarthritis	0	0	0	0%	0	1	1	0.9%
Pain in extremity	0	2	2	1.8%	0	1	1	0.9%
Pelvic pain	0	0	0	0%	0	1	1	0.9%
Peripheral swelling	0	1	1	0.9%	0	0	0	0%
Peroneal nerve palsy	0	1	1	0.9%	0	0	0	0%
Physical assault	0	1	1	0.9%	0	0	0	0%
Pneumonia	0	0	0	0%	0	1	1	0.9%
Post laminectomy syndrome	1	1	1	0.9%	1	1	1	0.9%
Postoperative ileus	0	1	1	0.9%	0	0	0	0%
Pregnancy	0	1	1	0.9%	0	0	0	0%
Prostatitis	0	1	1	0.9%	0	0	0	0%
Pulmonary embolism	0	0	0	0%	1	1	1	0.9%
Pyelonephritis	0	0	0	0%	1	1	1	0.9%
Pyrexia	0	1	1	0.9%	0	0	0	0%
Rhinitis	0	0	0	0%	0	1	1	0.9%
Sacroiliitis	0	1	1	0.9%	0	0	0	0%
Salivary gland calculus	0	1	1	0.9%	0	0	0	0%
Sedation	0	0	0	0%	0	1	1	0.9%
Sinus tachycardia	0	1	1	0.9%	0	0	0	0%

MedRA Preferred Term	SCS + OMM				OMM			
	Number of serious adverse events	Number of events	Number of patients with events	Percent of patients with events (n = 110)	Number of serious adverse events	Number of events	Number of patients with events	Percent of patients with events (n = 108)
Sinusitis	0	0	0	0%	0	1	1	0.9%
Sleep apnoea syndrome	0	3	3	2.7%	0	1	1	0.9%
Small intestinal obstruction	1	1	1	0.9%	0	0	0	0%
Somnolence	0	0	0	0%	0	2	2	1.9%
Stomatitis	0	0	0	0%	0	1	1	0.9%
Subcutaneous abscess	0	1	1	0.9%	0	0	0	0%
Tachycardia	0	0	0	0%	0	2	2	1.9%
Tenderness	0	0	0	0%	0	1	1	0.9%
Thermal burn	0	0	0	0%	0	1	1	0.9%
Thyroid mass	0	0	0	0%	0	1	1	0.9%
Urinary retention	0	2	2	1.8%	0	0	0	0%
Urinary tract infection	0	2	2	1.8%	0	1	1	0.9%
Vertigo	0	0	0	0%	0	1	1	0.9%
Vomiting	0	1	1	0.9%	0	0	0	0%
Vulvovaginal candidiasis	0	1	1	0.9%	0	0	0	0%
<b>Total</b>	<b>9</b>	<b>64</b>	<b>40</b>	<b>36.4%</b>	<b>10</b>	<b>81</b>	<b>44</b>	<b>40.7%</b>