Senza™ spinal cord stimulation system for the treatment of chronic back and leg pain in failed back surgery syndrome (FBSS) patients

Submission date	Recruitment status	[X] Prospectively registered
21/03/2011	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
08/04/2011	Completed	Results
Last Edited	Condition category	Individual participant data
20/09/2011	Surgery	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Jean-Pierre Van Buyten

Contact details

A.Z. Nikolaas Moerlandstraat 1 Sint Niklaas Belgium 9100

Additional identifiers

Protocol serial number CA2011 PROVA BE

Study information

Scientific Title

Double-Blind, randomised, placebo-controlled clinical trial of the Senza™ spinal cord stimulation system for the treatment of chronic back and leg pain in failed back surgery syndrome (FBSS) patients

Acronym

PROVA

Study objectives

To characterise the effectiveness of the Senza™ System in FBSS patients naive to spinal cord stimulation (SCS)

As of 13/09/2011 the anticipated end date for this trial has been extended from 13/04/2012 to 13/12/2012 and the study design has been updated. The previous study design was as follows: 'Single-centre double-blind two-period prospective randomised placebo controlled crossover study'.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Committee for Medical Ethics, A.Z. Nicholas (Commissie voor Medische Ethiek, A.Z. Nikolaas) approved on 18th March 2011

Study design

Single-centre double-blind three-period prospective randomised placebo controlled crossover study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Chronic back and leg pain in failed back surgery syndrome (FBSS) patients

Interventions

Subjects who meet screening criteria will receive a permanent SCS implant and randomised to:

- 1. ON arm for first period/OFF arm for second period or
- 2. OFF arm for first period/ON arm for second period

Each blinded period will last 2 months with a 2 week washout between periods.

Added 13/09/2011:

3. Immediately following period 2, all subjects will have therapy turned ON for a 6 month open label period

Intervention Type

Procedure/Surgery

Phase

Not Applicable

Primary outcome(s)

- 1. Visual Analogue Scale (VAS) score for back pain: measured at baseline, the mid-point and end of each period
- 2. Emergent adverse events

Key secondary outcome(s))

- 1. VAS score for leg pain: measured at baseline, the mid-point and end of each period
- 2. Sleep disturbance: measured at baseline, the mid-point and end of each period
- 3. Oswestry Disability Index: measured at baseline and the end of each period
- 4. Subject diary: measured at baseline, prior to mid-point and end of each period, following washout
- 5. Subject's assessment of group assignment: measured at the end of each period
- 6. Changes in medication usage: measured at baseline, the mid-point and end of each period

Completion date

13/12/2012

Eligibility

Key inclusion criteria

- 1. An adult (at least 18 years of age)
- 2. Capable of giving informed consent
- 3. An appropriate candidate for implantation of a spinal cord stimulator
- 4. Able to comply with the requirements of the study visits and self-assessment questionnaires
- 5. On stable pain medications for at least 4 weeks prior to the baseline visit
- 6. A failed back surgery syndrome (FBSS) patient with back pain intensity of at least 5 cm out of 10 cm, with radiating pain that originates from lumbar, L3, L4, L5, and/or S1

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

- 1. Progressive neurological disease (multiple sclerosis, chronic inflammatory demyelinating polyneuropathy, rapidly progressive arachnoiditis, cauda equina syndrome, and herniated nucleus pulposis causing progressive motor deficit etc.) as manifested by an unstable neurologic condition
- 2. Has significant pain in other areas that is not intended to be treated with SCS and that could interfere with accurate pain reporting, as determined by the Investigator
- 3. Significant mechanical instability as determined by the Investigator

- 4. Pain intensity of always 10 on a 0-10 scale over the past 6 months based on subject recall
- 5. Metastatic malignant disease or active local malignant disease
- 6. A life expectancy of less than 1 year
- 7. A systemic infection or local infection that would contraindicate SCS placement
- 8. A female of child bearing potential who is pregnant/lactating or not using adequate birth control
- 9. Evidence of an active disruptive psychological/psychiatric disorder or other known condition significant enough to impact perception of pain, compliance of intervention and/or ability to evaluate treatment outcome as determined by the Investigator
- 10. Addiction to any of the following: illicit drugs, alcohol (5 or more drinks/day) and/or medication
- 11. Bleeding diathesis such as coagulopathy or thrombocytopenia
- 12. Immunocompromised and at risk for infection
- 13. Diabetic
- 14. Unresolved issue of secondary gain

Date of first enrolment

13/04/2011

Date of final enrolment

13/12/2012

Locations

Countries of recruitment

Belgium

Study participating centre

A.Z. Nikolaas

Sint Niklaas Belgium 9100

Sponsor information

Organisation

Nevro Corporation (USA)

ROR

https://ror.org/02xcxe208

Funder(s)

Funder type

Funder Name

Nevro Corporation (USA)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet
Participant information sheet
11/11/2025 No Yes