

# Struxxure® Anterior Cervical Plate System



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# BEFORE USING PRODUCT, READ THE FOLLOWING IMPORTANT INFORMATION

## **IMPORTANT**

This booklet is designed to assist in using the Struxxure® Anterior Cervical Plate System. It is not a reference for surgical techniques.

**CAUTION** – Federal (or United States) law restricts these devices to sale by or on the order of a physician.

**PRECAUTION:** The implantation of anterior cervical spinal implant systems should be performed only by experienced spinal surgeons with specific training in the use of this anterior cervical spinal system because this is a technically demanding procedure presenting a risk of serious injury to the patient.

#### IMPORTANT NOTE TO OPERATING SURGEON

The Struxxure® Anterior Cervical Plate System is designed to provide biomechanical stabilization as an adjunct to fusion in skeletally mature patients. Spinal fixation should only be undertaken after the surgeon has had hands on training in this method of spinal fixation and has become thoroughly knowledgeable about spinal anatomy and biomechanics. A surgical technique is available for instruction on the important aspects of this surgical procedure and can be requested from Nexxt Spine at the address or phone number above.

Preoperative instructions to the patient are essential. The patient should be made aware of the limitations of the implant and potential adverse effects of the surgery. The patient should be instructed to limit postoperative activity, as this will reduce the risk of bent, broken or loose implant components. The patient must be made aware that implant components may bend, break or loosen even though restrictions in activity are followed.

Postoperative evaluation of the fusion and implant status is necessary. The surgeon may remove the implant once a solid fusion is obtained. The patient must be informed of the potential of this secondary surgical procedure and the associated risks.

# INDICATIONS

The Struxxure® Anterior Cervical Plate System is intended for anterior screw fixation of the cervical spine. These implants have been designed to provide stabilization as an adjunct to cervical fusion. Indications for the use of this implant system include degenerative disc disease (defined as neck pain of discogenic origin with the degeneration of the disc confirmed by history and radiographic studies), spondylolisthesis, trauma (i.e., fractures or dislocations), spinal stenosis, deformity (i.e., kyphosis, lordosis or scoliosis), tumor, pseudarthrosis or failed previous fusion.

#### DESCRIPTION

The Struxxure® Anterior Cervical Plate System consists of fixed and variable angle screws of Ø4.0mm and Ø4.3mm diameters with self-drilling and tapping tips. Overall length of screws range from 10mm-20mm. Plates are offered from 1 to 5 levels. The Struxxure® system surgical technique is available at no charge upon request. For further information, please contact Customer Service at 317-436-7801.

# **MATERIALS**

All components are manufactured from titanium alloy (Ti-6Al-4V ELI) per ASTM F136 and commercially pure titanium (Grade 4) per ASTM F67.

#### CLEANING AND DECONTAMINATION

All implants and instruments must first be cleaned using established hospital methods before sterilization and introduction into a sterile field. Refer to Nexxt Spine Reprocessing Instructions for Reusable Instruments document available at www.NexxtSpine.com/Resources/Indications-For-Use or by calling 317-436-7801 for a copy of the detailed cleaning instructions.

# **STERILIZATION**

The Struxxure® Anterior Cervical Plate System components are supplied clean and not sterile. All implants and instruments should be cleaned and sterilized prior to surgery. AORN recommended practices for in hospital sterilization should be followed. The use of an FDA cleared sterilization wrap is recommended.

Sterilization testing of components has shown the following recommendations for sterilization are effective to an SAL of  $10^{-6}$ :

Method: Steam
Cycle: Prevacuum
Temperature: 270°F (132°C)
Exposure Time: 4 minutes
Drying Time: 30 minutes

## CONTRAINDICATIONS

Use of the Struxxure® Anterior Cervical Plate System and spinal fixation surgery are contraindicated when there was recent or local active infection near or at the site of the proposed implantation. Any conditions that preclude the possibility of fusion are relative contraindications. These include but are not limited to: cancer, fever, mental illness, alcoholism or drug abuse, osteoporosis or osteopenia, neurotrophic diseases, obesity, pregnancy and foreign body sensitivity. See also the WARNINGS, PRECAUTIONS AND POTENTIAL RISKS sections of this insert.

#### WARNINGS

- The Struxxure® Anterior Cervical Plate System is not intended for screw attachment or fixation to the posterior elements (pedicles) of the cervical, thoracic or lumbar spine.
- Potential risks identified with the use of this system, which may require additional surgery, include: device component breakage, loss of fixation/loosening, non-union, vertebral fracture, neurologic, vascular or visceral injury.
- 3. The Struxxure® Anterior Cervical Plate System has not been evaluated for safety and compatibility in the MR environment. The Struxxure® Anterior Cervical Plate System has not been tested for heating or migration in the MR environment. See the Potential Risks section of the package insert for a complete list of potential risks.

# **PRECAUTIONS**

PATIENT SELECTION. Proper patient selection is critical to the success of the procedure. Only patients who satisfy the criteria set forth under the INDICATIONS section of this document AND who do not have any of the

conditions set forth under the CONTRAINDICATIONS section of this document should be considered for spinal fixation surgery using the Struxxure® System. In addition, patients who smoke have been shown to have an increased incidence of pseudarthrosis. Based upon the fatigue testing results, the physician/surgeon should consider the levels of implantation, patient weight, patient activity level, other patient conditions, etc. which may impact the performance of the system.

- 2. PATIENT EDUCATION. Preoperative instructions to the patient are essential. The patient should be made aware of the limitations of the implant and potential risks of the surgery. The patient should be instructed to limit postoperative activity, as this will reduce the risk of bent, broken or loose implant components. The patient must be made aware that implant components may bend, break or loosen even though restrictions in activity are followed.
- HANDLING. Implant components should be handled and stored
  appropriately to protect them from unintentional damage. The surgeon
  should avoid introducing notches or scratches into the plate or screw
  surfaces as these may induce premature failure of the component.
- 4. IMPLANT SELECTION. The Struxxure® System components are available in a variety of sizes to insure proper fit of the implanted device. The potential for the success of the fusion is increased by selecting the correct size of the implant. These devices are <u>not</u> intended to be used as the sole support for the spine.
- 5. MIXED METALS. The Struxxure® System is available in titanium. It is imperative that this metal does not come into contact in vivo with other dissimilar metals. Accelerated corrosion may occur when two dissimilar metals are in contact within the body environment.
- SINGLE USE ONLY. These devices are provided as single use only implants and are not to be reused or reimplanted regardless of an apparent undamaged condition.
- 7. **DELAYED UNION OR NONUNION**. The Struxxure® System is designed to assist in providing an adequate biomechanical environment for fusion. It is not intended to be and must not be used as the sole support for the spine. If a delayed union or nonunion occurs the implant may fail due to metal fatigue. Patients should be fully informed of the risk of implant failure.

## POTENTIAL RISKS

Potential risks identified with the use of this system, which may require additional surgery, include: Bending, fracture or loosening of implant component(s), Nonunion or delayed union, Fracture of the vertebra, Neurological, vascular or visceral injury, Metal sensitivity or allergic reaction to a foreign body, Infection, Decrease in bone density due to stress shielding, Pain, discomfort or abnormal sensations due to the presence of the device, Nerve damage due to surgical trauma, Bursitis, Dural Leak, Paralysis, Death.

#### PRODUCT COMPLAINTS

The customer or health care provider should report any dissatisfaction with the product quality, labeling, or performance to Nexxt Spine immediately. Nexxt Spine should be notified immediately of any product malfunction by telephone, fax or written correspondence. When filing a complaint, the name, part number and lot number of the part should be provided along with the name and address of the person filing the complaint.

## MANUFACTURED BY:

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