# Instructions for Use ACIS

This instruction for use is not intended for distribution in the USA.



# Instructions for Use

#### ACIS

Please read these instructions for use, the Synthes brochure "Important Information" and the corresponding surgical techniques carefully before use. Ensure that you are familiar with the appropriate surgical technique.

#### Material

Material:	Standard:
PEEK	ASTM F 2026
TAV ELI	ASTM F 136

#### Intended use

The Synthes ACIS system is intended to replace cervical intervertebral discs and to fuse adjacent vertebral bodies at vertebral levels C2 - C7 following anterior cervical discectomy for reduction and stabilization of the cervical spine. The use of autologous bone or bone graft substitute is recommended.

## Indications

Cervical pathologies for which segmental arthrodesis is indicated:

- Degenerative disc diseases and instabilities
- Ruptured and herniated discs
- Pseudarthrosis or failed spondylodesis.

For multisegmental fusions with the ACIS system supplemental fixation is recommended

# Contraindications

- Osteoporosis
- Severe instabilities
- Vertebral body fractures
- Spinal tumors
- Infections

#### **Potential risks**

As with all major surgical procedures, risks, side effects and adverse events can occur. While many possible reactions may occur, some of the most common may include:

Problems resulting from anesthesia and patient positioning (e.g. nausea, vomiting, dental injuries, neurological impairments, etc.), thrombosis, embolism, infection, excessive bleeding, iatrogenic neural and vascular injury, damage to soft tissues incl. swelling, abnormal scar formation, functional impairment of the musculoskeletal system, Complex regional pain syndrome (CRPS), allergy/hypersensitivity reactions, side effects associated with implant or hardware loosening, malunion, non-union, ongoing pain; damage to adjacent bones (e.g. subsidence), disc (e.g. adjacent level degeneration), or soft tissue, dural tear or spinal fluid leak; spinal cord compression and/or contusion, partial displacement of the graft, vertebral angulation.

## Sterile device

Sterilized using irradiation STERILE R

Store implants in their original protective packaging, and do not remove them from the packaging until immediately before use.

Prior to use, check the product expiration date and verify the integrity of the sterile packaging. Do not use, if the package is damaged.



# Single-use device

Do not re-use

Products intended for single-use must not be re-used.

Re-use or reprocessing (e.g. cleaning and resterilization) may compromise the structural integrity of the device and/or lead to device failure which may result in patient injury, illness or death.

Furthermore, reuse or reprocessing of single-use devices may create a risk of contamination e.g. due to the transmission of infectious material from one patient to another. This could result in injury or death of the patient or user.

Contaminated implants must not be reprocessed. Any Synthes implant that has been contaminated by blood, tissue, and/or bodily fluids/matter should never be used again and should be handled according to hospital protocol. Even though they may appear undamaged, the implants may have small defects and internal stress patterns that may cause material fatigue.

#### Precautions

The general risks associated with surgery are not described in these instructions for use. For more information, please refer to the Synthes brochure "Important Information"

# Warnings

It is strongly advised that ACIS is implanted only by operating surgeons who are familiar with the general problems of spinal surgery and who are able to master the product-specific surgical techniques. Implantation is to take place with the instructions for the recommended surgical procedure. The surgeon is responsible for ensuring that the operation is carried out properly.

The manufacturer is not responsible for any complications arising from incorrect diagnosis, choice of incorrect implant, incorrectly combined implant components and/or operating techniques, the limitations of treatment methods, or inadequate asepsis.

#### **Combination of medical devices**

Synthes has not tested compatibility with devices provided by other manufacturers and assumes no liability in such instances.

#### Magnetic Resonance environment

MR Conditional

Non-clinical testing of the worst-case scenario has demonstrated that the implants of the ACIS system are MR conditional.

- These articles can be scanned safely under the following conditions:
- Static magnetic field of 1.5 Tesla and 3.0 Tesla.
- Spatial gradient field of 300 mT/cm (3000 Gauss/cm).
- Maximum whole body averaged specific absorption rate (SAR) of 4 W/kg for 15 minutes of scanning

Based on non-clinical testing, the ACIS implant will produce a temperature rise not greater than 2.6°C at a maximum whole body averaged specific absorption rate (SAR) of 4 W/kg, as assessed by calorimetry for 15 minutes of MR scanning in a 1.5 Tesla and 3.0 Tesla MR scanner.

MR Imaging quality may be compromised if the area of interest is in the exact same area or relatively close to the position of the ACIS device.





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