

Universal Neuro™ III

1.5mm Cranial fixation system



Universal Neuro III



The Universal Neuro III module neatly contains a comprehensive selection of screws, low profile plates, skull base plates, dynamic mesh, and instrumentation.

Unique Features:

Low profile

Low profile height (0.4mm) with deeper countersinks, broader bars, and a smoother geometry.

AXS screw

Optimised self-drilling AXS (axial stability) screws help with off-axis loading and insertion.

Specialised plates

Specialised plates to reconstruct difficult skull base approaches with minimal plate modification.

Colour coding

Colour coding of the modules and associated instrumentation provides ease of use for surgeon and staff.

You specialise in your patients.
We specialise in you.

Module

Universal Neuro III module

The Universal Neuro III module neatly contains a comprehensive selection of skull base plates, low-profile plates, dynamic mesh, screws, and the instrumentation needed to fixate cranial bone flaps.

Unique features:

- Addition of specialised plates to reconstruct difficult skull base approaches with minimal plate modification
- Optimised self-drilling screws with addition of 3mm option
- Unique burr hole cover design with added fixation hole and dynamic bar for ease of contouring
- 20% thinner plates* with deeper countersink, broader bars, smoother geometry, and same stability
- Addition of ergonomic screwdriver handle
- Redesigned module with designated pockets for decreased plate stacking and ease of identification
- Customisable screw disc with screws of different lengths



Storage options

Universal Neuro III system: Storage and sterilisation containers

The Universal Neuro III System features Half (not shown), Combined and Quarter size sterilisation containers to accommodate a wide variety of options for your specific neurosurgical needs.



**Quarter size
sterilisation
container**

**Combined size
sterilisation
container**



**VariSpeed™
sterilisation
container**

Technology and innovations

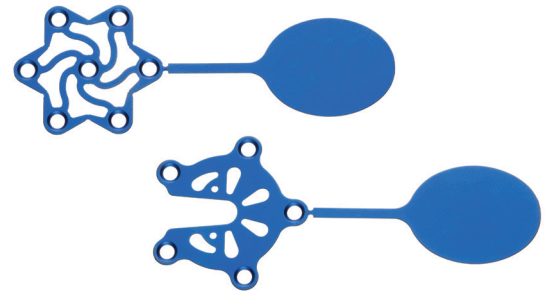
Instrumentation

- Ergonomically shaped screwdriver handle and newly designed screwdriver blade for improved handling, allowing optimal blade-to-screw interface/retention and easier screw insertion



Burr hole covers

- Unique burr hole covers with added fixation hole and dynamic bar design for ease of contouring; in addition to two new shunt plate options



Lower profile plates

- 0.4mm profile height allows for rigid fixation of cranial flaps with decreased palpability
- Deeper countersink* for a more flush plate/screw construct
- Select plates feature break-off tabs for easy handling and identification
- Comprehensive selection of implants including shunt, "dog-bone," gap, and box plates along with 5 sizes of burr hole covers offer numerous fixation options



VariSpeed - battery powered screwdriver

- Touch sensors for continuous, variable speed control
- Forward and reverse capabilities
- Ergonomically balanced for both left and right hand use
- Acoustic Feedback to help ensure battery is attached and device is working properly
- Standby Mode to minimise power consumption and improve battery life
- Improved electrical components to protect against rigorous sterilisation parameters and excessive heat



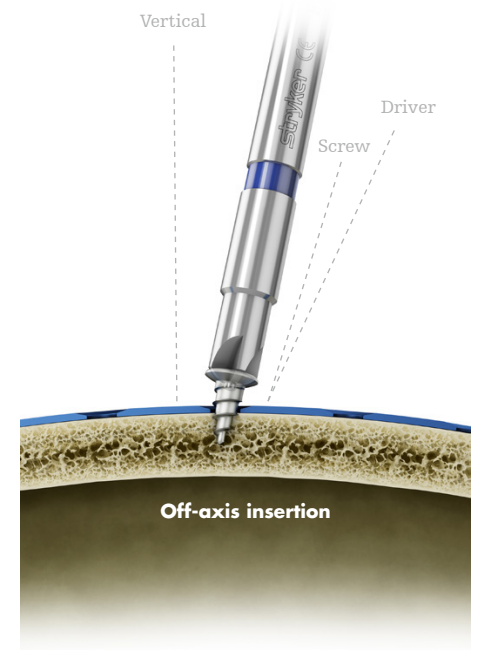
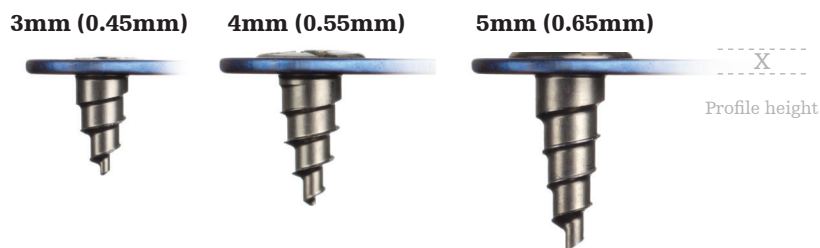
Screws

AXS - Axial stability screw

The latest iteration of the Universal Neuro screw continues to advance neurotechnology. A brand new head design provides surgeons with ease-of-use and performance.

Unique features:

- Enhanced pick-up designed to minimise complications in loaded screwdriver hand-off from tech to surgeon, with optimised self-retention to allow reliable transport into OR field
- Self-centering feature facilitates off-axis insertion
- Low profile heights:
 - 4mm SD screw with blue plate - 0.55mm
 - 4mm SD screw with gold plate - 0.6mm



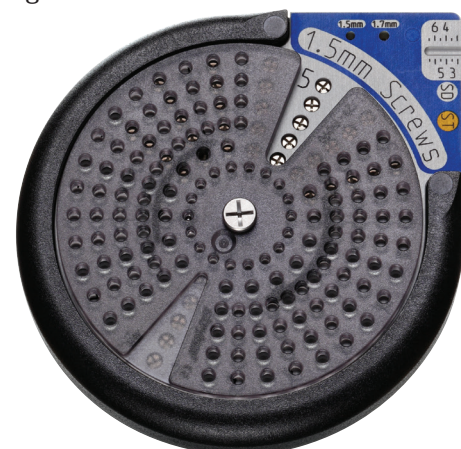
Optimised self-drilling (SD) screws

- Addition of 3mm self-drilling screw provides lowest plate-to-screw profile option in UNIII system for minimal palpability
- Newly designed self-drilling screws require 25% less turns to fully insert*
- 23% lower construct for decreased palpability*
- 40% greater initial bite into bone for quicker insertion*



Customisable screw disc delivery system

- Customisable screw disc allows placement of 3, 4, and 5mm SD screws and/or 4, 5, 6mm ST screws in a single screw disc



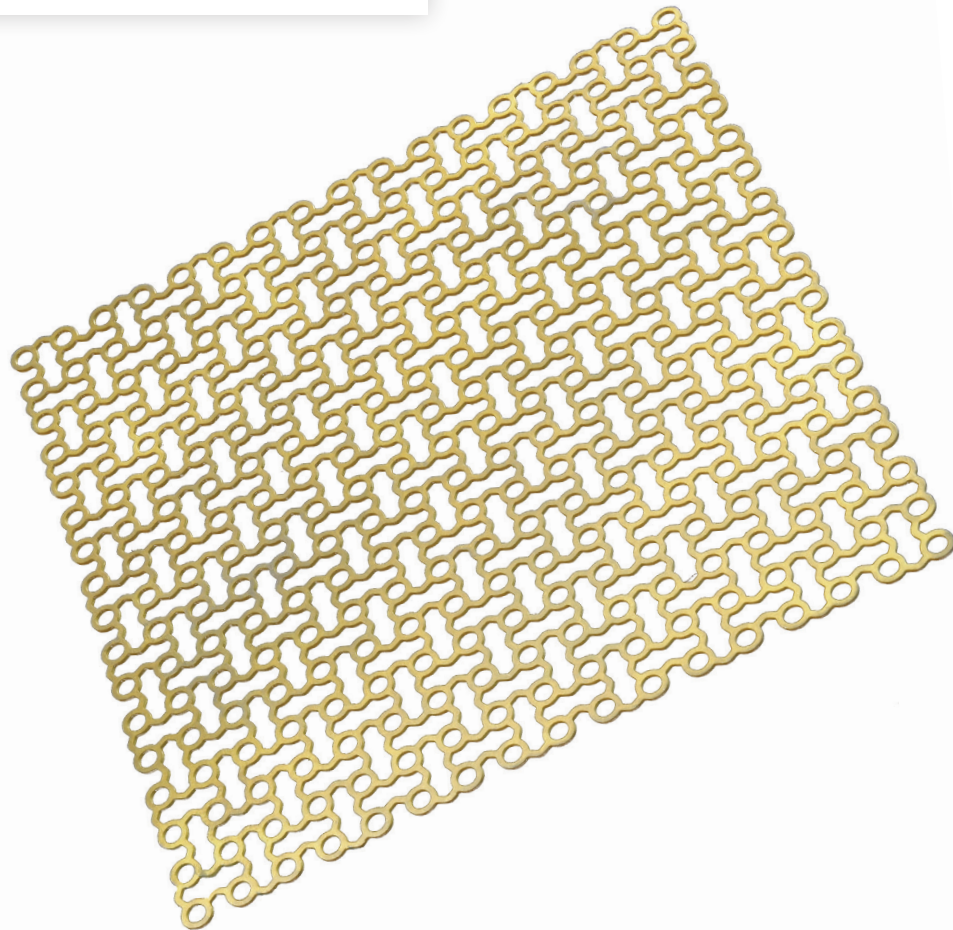
Mesh

Dynamic mesh

Dynamic mesh has optimised properties to facilitate controlled, three-dimensional contouring while maintaining adequate rigidity for bone defects of varied size and location. Dynamic mesh can be shaped to fit most three-dimensional bone surfaces without unwanted wrinkled or overlapped areas.

Unique features:

- Standard (Gold - 0.60mm profile height) and Malleable Low Profile (Blue - 0.30mm profile height) designs
- Dedicated screw holes for many options in screw placement
- Easy to cut and accurately contour to anatomical structures
- Instrumentation for cutting

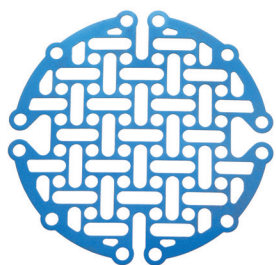
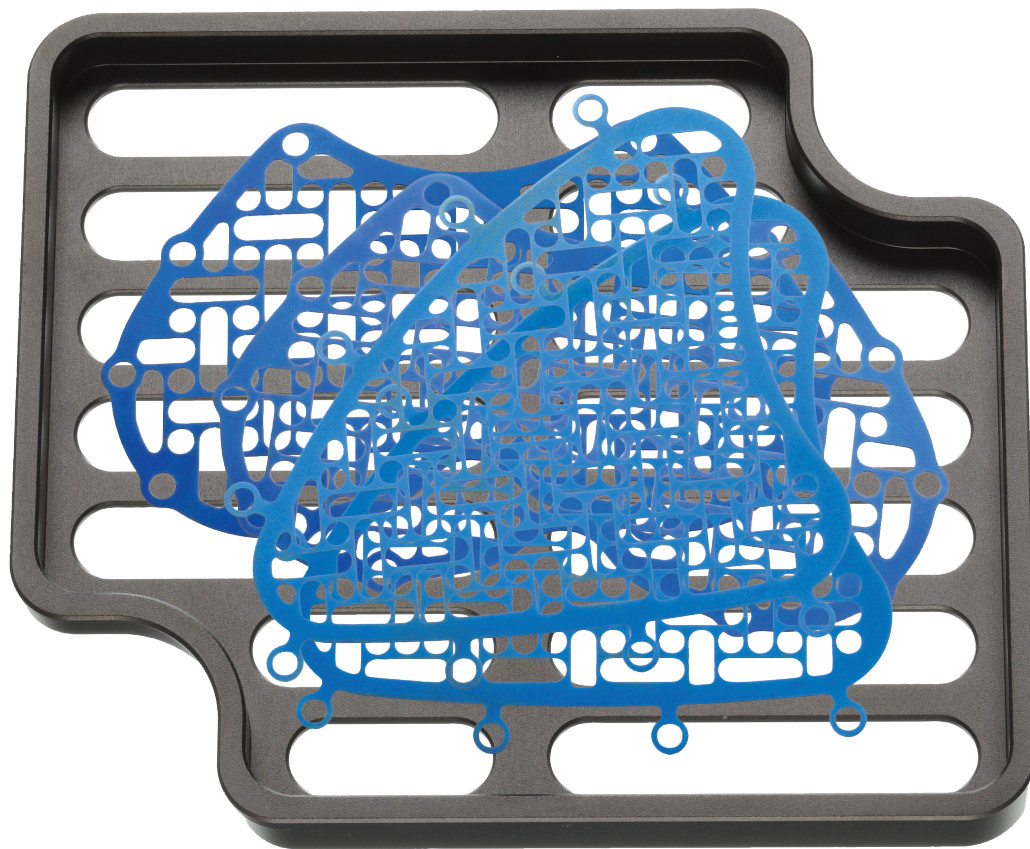


Skull base plates

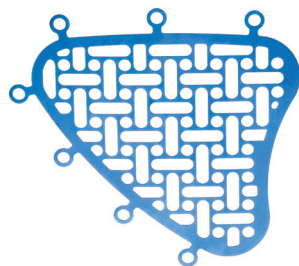
The addition of dedicated skull base plates may make reconstruction of unique cranial approaches quicker and more efficient through minimal plate modification.

Unique features:

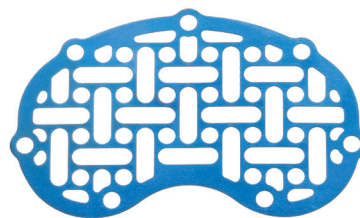
- Low profile 0.3mm construct for minimal implant palpability
- Multiple thickness and size options to match unique patient needs
- Closed outer frame design offers enhanced stability
- Multiple fixation holes, including long holes within center of plates, for added rigidity



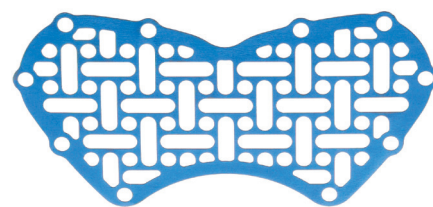
Round



Translabyrinthine



Temporal



Suboccipital

QuikFlap®

QuikFlap offers an easy, cost effective solution for cranial flap fixation. Provided sterile, the procedure packs can limit processing risks for the hospital while decreasing inventory and the cost of backstock.

Unique features:

- Space conservation
- Sterilisation by manufacturer specifications
- Cost efficiency
- Comprehensive product offering
- Now offered with the AXS screw

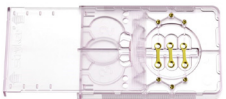
Options:



12-01540S - 2-hole plate set with self-drilling screw

Contains:

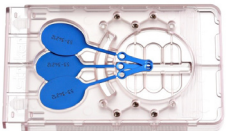
UNIII 0.6mm 2-hole rigid plate (x3)
UNIII screw AXS self-drilling 1.5x4mm (x6)



12-01541S - 2-hole plate set, self-tapping screw

Contains:

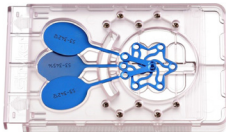
UNIII 0.6mm 2-hole rigid plate (x3)
UNIII screw AXS self-tapping 1.5x4mm (x6)



12-01542S - 2-hole plate set, low profile with tab

Contains:

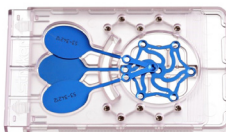
UNIII 0.4mm 2-hole plate with tab (x3)
UNIII screw AXS self-drilling 1.5x4mm (x6)



12-01544S - 2-hole plate burr hole cover 14mm set

Contains:

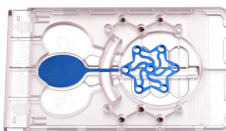
UNIII 0.4mm 2-hole plate with tab (x2)
UNIII 0.4mm 14mm burr hole cover (x1)
UNIII screw AXS self-drilling 1.5x4mm (x10)



12-01546S - 2-hole plate burr hole cover 20mm set

Contains:

UNIII 0.4mm 2-hole plate with tab (x2)
UNIII 0.4mm 20mm burr hole cover (x1)
UNIII screw AXS self-drilling 1.5x4mm (x10)



12-01548S - 2-hole plate burr hole cover 14mm set

Contains:

UNIII 0.4mm 14mm burr hole cover (x1)
UNIII screw AXS self-drilling 1.5x4mm (x6)

Ordering information

1.5mm Neuro plates/mesh product number description

Low profile plates

(Order quantity: package of 1)

53-34804	Straight plate, 8-hole
53-34164	Straight plate, 16-hole
53-34406	Straight plate, 4-hole w/ bar
53-36212	Dog-bone plate, 2-hole rigid (0.6mm), 12mm bar
53-34212	Dog-bone plate, 2-hole, 12mm bar, w/ tab
53-34216	Dog-bone plate, 2-hole, 16mm bar
53-34228	Box plate, 2 x 2 hole, small
53-34300	Rectangle plate, 2 x 2 hole
53-34608	Double-Y plate, 6-hole, w/ bar
53-34612	Gap plate, 6-hole, small
53-34622	Gap plate, 6-hole, large
53-34240	Box plate, 2 x 2 hole, large
53-34230	Box plate, 2 x 2 hole, large, w/ tab
53-34630	X plate, 4-hole

Skull base plates

(Order quantity: package of 1)

53-00362	Round malleable (0.3mm), small
53-00364	Round malleable (0.3mm), medium
53-00466	Round rigid (0.4mm), large
53-00342	Translabyrinthine malleable (0.3mm), small
53-00346	Translabyrinthine malleable (0.3mm), large
53-00324	Temporal malleable (0.3mm)
53-00382	Suboccipital malleable (0.3mm), small
53-00486	Suboccipital rigid (0.4mm), large

Low profile burr hole covers

(Order quantity: package of 1)

53-34507	Burr hole cover, 7mm, with tab
53-34510	Burr hole cover, 10mm, with tab
53-34514	Burr hole cover, 14mm, with tab
53-34520	Burr hole cover, 20mm, with tab
53-34524	Burr hole cover, 24mm, with tab
53-34614	Shunt burr hole cover, 14mm, with tab
53-34620	Shunt burr hole cover, 20mm, with tab

Titanium mesh

(Order quantity: package of 1)

54-00262	Micro mesh 60 x 60 x 0.1mm
54-00272	Micro mesh 60 x 60 x 0.2mm
54-00344	Dynamic mesh 40 x 40 x 0.3mm
54-00346	Dynamic mesh 90 x 90 x 0.3mm
54-00646	Dynamic mesh 90 x 90 x 0.6mm
54-00345	Dynamic mesh 120 x 120 x 0.3mm
54-00645	Dynamic mesh 120 x 120 x 0.6mm
54-00647	Dynamic mesh 200 x 200 x 0.6mm

Neuro containers product number description

Sterilisation containers

29-15330	Module with lid
29-15331	Plate inlay
29-15335	Mesh inlay
29-15336	Screw disc inlay
29-15332	Instrument inlay
29-15012	Half-size container
29-15013	Half-size lid
29-15023	Lid for combined tray
29-15026	Combined container
29-15027	Mat for combined tray
29-15028	Instrument inlay for combined tray
29-15031	Quarter-size container
29-15032	Quarter-size lid
29-15036	Accessory tray
29-15037	Silicon mat

1.5mm Neuro screws product number description

Screw disc - pre-loaded

(Order Qty: Pkg of 1)

29-15993	Screw disc, 1.5 x 3mm, SD, 80/p
29-15994	Screw disc, 1.5 x 4mm, SD, 80/p
29-15995	Screw disc, 1.5 x 5mm, SD, 80/p
29-15094	Screw disc, 1.5 x 4mm, ST, 80/p
29-15095	Screw disc, 1.5 x 5mm, ST, 80/p

Screw disc - empty

(Order Qty: Pkg of 1)

29-15091	Screw disc, 1.5mm, empty
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1.5mm Self-drilling screws

(5 screws/package)

56-15933	UNIII screws, SD, 1.5 x 3mm, 5/p
56-15934	UNIII screws, SD, 1.5 x 4mm, 5/p
56-15935	UNIII screws, SD, 1.5 x 5mm, 5/p

1.5mm Self-tapping screws

(1 screw/package)

56-15034	UNIII screws, ST, 1.5 x 4mm, 5/p
56-15035	UNIII screws, ST, 1.5 x 5mm, 5/p
56-15036	UNIII screws, ST, 1.5 x 6mm, 5/p

1.7mm emergency screws

(1 screw/package)

56-17334	UNIII Screws, EM, 1.7 x 4mm, 1/p
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Twist drills (Single use only)

(Order quantity: package of 1)

60-12594	1.2mm drill bit, 4mm stop, J-latch end
60-12596	1.2mm drill bit, 6mm stop, J-latch end
60-12394	1.2mm drill bit, 4mm stop, TPS end
60-12396	1.2mm drill bit, 6mm stop, TPS end

Neuro instrumentation product number description

Instrumentation

62-18110	Plate forcep
62-18330	In-situ cutter
62-15001	Screwdriver handle, small
62-15002	Screwdriver handle, medium
62-15035	UNIII screwdriver blade, long
62-15036	UNIII screwdriver blade, short
36-00726	Plate bending plier
64-00132	Mesh bending plier
37-10930	Plate/mesh scissors
60-12294	Drill w/ dental interface
60-12296	Drill w/ dental interface

Markers

52-00003	Screw marker 3mm
52-00004	Screw marker 4mm
52-00005	Screw marker 5mm
52-00006	Screw marker 6mm

Complementary products

DirectInject

DirectInject is the first and only on-demand HA cement, redefining ease-of-use in cranial closure. It's intended to repair neurosurgical burr holes, contiguous craniotomy cuts and other cranial defects.

Applications

- Ready for implantation immediately upon request
- A second mixer-cannula allows for dual interval implantation
- Requires no manual mixer or preparation
- Maintains consistent viscosity with negligible displacement of cement

DuraMatrix-Onlay

DuraMatrix-Onlay is derived from purified, bovine Achilles tendon. It is intended for use as a dura substitute for the repair of dura mater.

Features

- Leak resistant, providing durability and additional protection against CSF leaks^{1,2,3}
- Resorption time of approximately 8 weeks that occurs at a balanced rate^{2,3}
- Sponge-like product that conforms to the natural contours of the defect site

Cranial iD - patient specific implants

Cranial iD implants allow you to address your patients desire for complete restoration and aesthetic results. These are available in the material of your choice including MEDPOR and PEEK.

Features

- PEEK is designed with exacting parameters to optimise the bone-to-implant interface
- MEDPOR's biocompatible material makes it easy to modify

MEDPOR neuro implants

MEDPOR porous polyethylene implants provide surgeons with an expanding range of options for reconstruction and augmentation. MEDPOR is a biocompatible, porous polyethylene material. The interconnecting, omnidirectional pore structure may allow for fibrovascular in-growth and integration of the patient's tissue.⁴ More than 650,000 procedures have been performed with MEDPOR biomaterial, with more than 350 published clinical reports in cranial, reconstructive, oculoplastic and cosmetic applications.

Applications

- Craniofacial reconstruction and repair of craniofacial trauma
- Implants intended for reconstruction of the cranium
- Implants with Titanium mesh embedded in the MEDPOR biomaterial are designed to help the implant retain its shape when bent and contoured to meet a specific patient defect
- May be trimmed and cut with surgical scissors.
- Easily fixated with plates/screws - designed to stay in place

Delta system

Delta System resorbable implant technology merges science and simplicity. The system consists of resorbable bone plates and screws fabricated from a unique tripolymer. The Delta system tripolymer is a composition of poly L-Lactide/D-Lactide/Glycolide having a molecular ratio of 85/5/10. The resulting tripolymer is an extraordinary combination of strength, contourability and absorption, well suited for craniomaxillofacial surgery.

Applications

- Adult and pediatric craniomaxillofacial applications
- Fixation of bones affected by trauma or for reconstruction
- Cranial flap fixation
- Comminuted fractures
- Reconstructive procedures of the midface

Colorado needle

The Colorado microdissection needle has an ultra-sharp tip for clean, precise soft tissue dissection. The heat resistant tungsten alloy maintains tip sharpness, and is highly polished for easy cleaning. We offer a wide selection of needle electrodes and standard shaft sizes for use in standard handpieces.

Applications

- Precise electro-cutting and electro-coagulation during electrosurgery

Craniomaxillofacial

This document is intended solely for the use of healthcare professionals. A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery.

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References:

1. In vitro data on file at Collagen Matrix, Inc.
2. Rabbit duraplasty study. Data on file at Collagen Matrix inc.
3. The results of preclinical in vitro studies may not be indicative of human clinical outcomes In vivo evaluation of resorption in a rabbit duraplasty model. Data on file.
- 4: Liu JK, Gotfried ON, Cole CD, DoughertyWR, CouldwellWT, "MEDPOR Porous Polyethylene implant for Cranioplasty and Skull Base Reconstruction"Neurosurgery [April 2004].

* When compared to Stryker Universal Neuro II System Implants
1 Stryker Test Reports TI2269 and TI3137
2 Stryker Test Reports TI2441 and TI2446

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