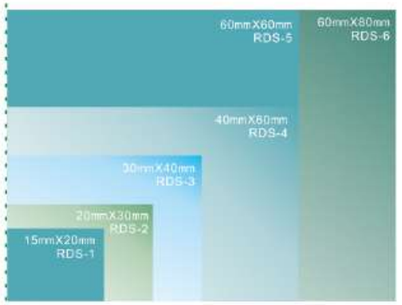
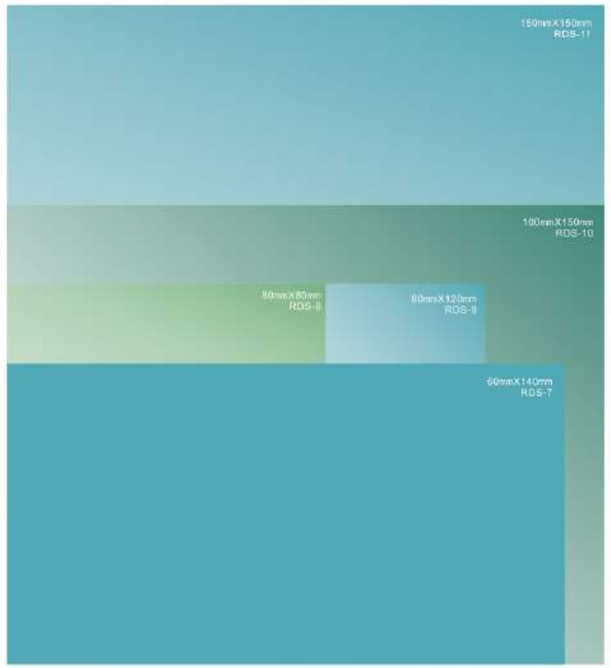
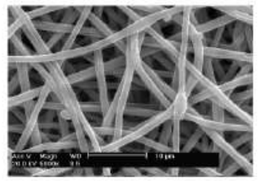


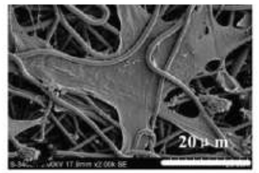
ReDura™ Regenerative Dural Repair Patch

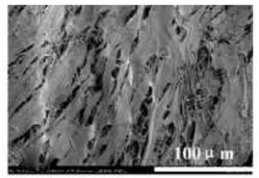
Synthetic biomaterial scaffold resembles microstructures of native dural matrices and provides appropriate environment for recruitment, growth and proliferation of dural cells on scaffolds.

With such unique features, ReDura™ is able to repair and regenerate defective dura within a few months.









ReDura™ Regenerative Dural Repair Patch

Individually packaged in a sterile foil.
Sterilized by Radiation.
Do not resterilize!
Do not use if the package is opened or damaged!

Medprin Biotech GmbH
Address: Mainzer Landstraße 46, 60325 Frankfurt am Main,Germany
Tel: +49-69-580059970
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ISO 13485 CE 1023

R01EN006/2013

MEDPRIN
Innovation Improves Healthcare

ReDura™

Biomimetic-Synthetic-Absorbable Dural Substitute

- Unique Fibrous Structure
- Rapid Repair and Regeneration
- Excellent Conformability
- Superior Water-tight

ReDura™

EXCELLENT BIOCOMPATIBILITY

— The synthetic biomaterial has been widely used in clinical practices for decades and demonstrated outstanding histocompatibility and safety.

RAPID REGENERATION

— Unique construction of 3D nano-fibrous network attracts cells migration into scaffold for improving tissue reconstruction.

OPTIMAL DEGRADATION

— Material degradation rate matches well with tissue regeneration, leading to a full dural reconstruction within 3–6 months.

SUPERIOR ANTI-ADHESION

— ReDura™ shows low adhesion risk to avoid postoperative complications caused by tissue adhesion.

LONG-TERM SAFETY

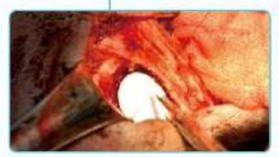
— Avoid potential risk of animal-source disease transmission.
— No long-term foreign body reaction caused by existence of non-degradable materials.

NO PREPARATION TIME

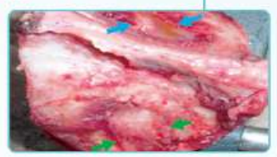
— Compared to an autologous implant, which requires a second procedure for tissue harvesting, the ReDura™ implant can make a valuable reduction in operation time.
— The ReDura™ is provided completely flat and soft. It is easy to curve for desired contour, and easy for the surgeon to suture it with the dura.

Pre-clinical Animal Studies: 3-month Post-implantation

General Appearance

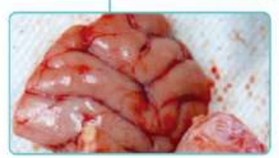


Surgical operation of ReDura™ patch in a defective dura model

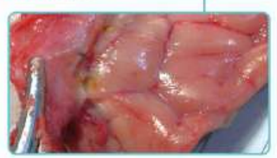


In ReDura™ groups, new-born membrane took place in defects and scaffold materials degraded mostly (green arrows); however, in controls, partial dural was regrown with slow degradation of scaffold (blue arrows).

Adhesion Analysis

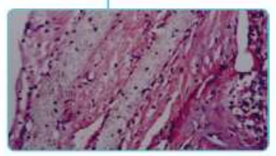


ReDura™ group: smooth surface of brain tissue with no adhesion to implanted material

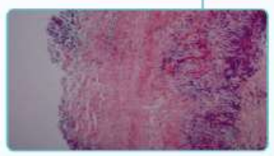


Control group: close adhesion of material to brain tissue

Histological Evaluation

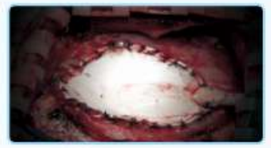


ReDura™ group: implant became discontinuously distributed and exhibited a loose fine mesh-shaped structure with fibroblast and collagen fibers growing in a pattern of ribbon.



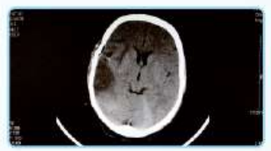
Control group: implant was still integrated and strip-shaped; some fibroblasts grew into the implant; a few calcification spots were seen (in the upper right corner of this picture).

Clinical Studies: ReDura™ Patches in Patients

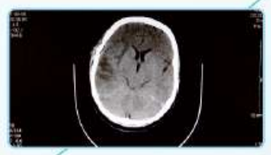


ReDura™ (4 × 6cm) was laid and sutured onto the dural defect of a patient

The patient had glioma. Pre-operative CT image showed the position and size of the glioma



Post-operative CT scanning (Day 3). The glioma was removed and no CSF leakage was found.



Post-operative CT scanning (Day 7). No CSF leakage was further confirmed and rapid growth of "neo-dural" tissues was seen.

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"A Novel Synthetic Absorbable Dural Substitute Fabricated By Emerging Nanotechnology". 2013 20th Annual Scientific Meeting Of Hong Kong Neurosurgical Society, Hong Kong.

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