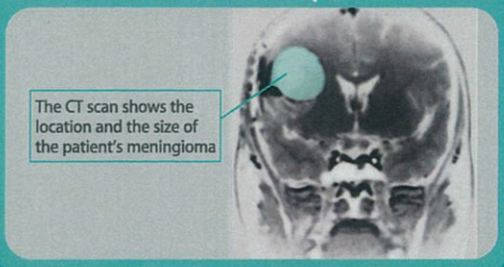
ReDura™ CLINICAL GUIDE

Biomimetic-Synthetic-Absorbable Dural Substitute

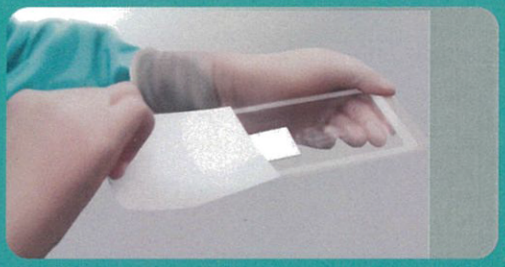
ReDura™ is
- made of polylactic acid
- mimic the native dura with a synthetic structure
- well characterized absorbable implant material
- suturable and sealable

Step 1
Choose the suitable ReDura specification.



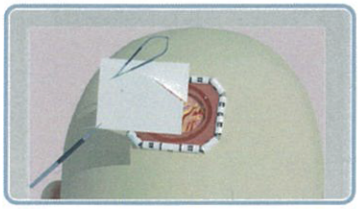
Step 2
Inspect the package carefully before use. Do not use in case original package is damaged.

Step 3
Tear or cut the outer package along the notch and take out the inner package by aseptic manipulation, and then tear open the blister package and take out the ReDura.

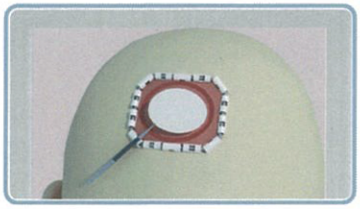


After that, onlay or suture method can be chosen.
It suggests to suture when the specification is larger than 60mm*60mm.

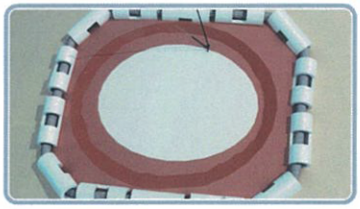
Suture procedure:



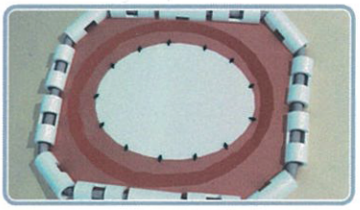
①. Trim the ReDura into a suitable shape as needed.



②. Place the ReDura onto the dural defect.

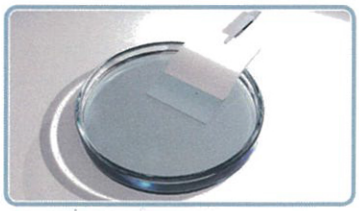


③. Fix ReDura into place by routine suturing with 4-0 sutures, or the usual sutures the surgeon uses to suture the dura. During suturing, pinholes should stay on the positions 2-3mm away from the product edge to ensure a watertight closure.



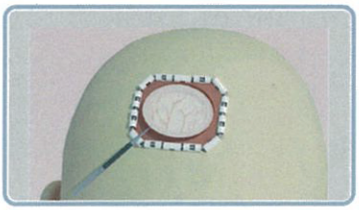
④. Suturing Finished.

Onlay procedure:

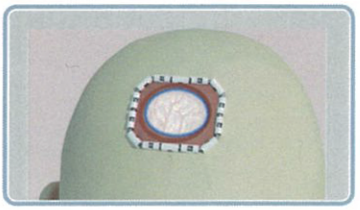


①. Put the ReDura into normal warm saline.

②. Press onto ReDura to ensure it absorbs the saline, remove it once it becomes completely transparent.



③. Trim the ReDura into a suitable shape, the edges of ReDura should be beyond the defect area by 20-30mm and applied onto the dural defect.



④. Apply the ReDura to cover the dural defect, ensuring the overlap of 20–30mm- a Valsava manouvre can be performed to ensure a watertight closure. A sealant or Sutures can be applied if a CSF leak is then detected.

ZENITON

ZENITON

ReDura™

Regenerative Dural Repair Patch
Made in Germany

Made by a German Company with USD 70 million annual turnover, Redura has been manufactured with strict quality control, thru various tests for Clinical,and medical certification institutes for its safety.
With the CE certification, product is being manufactured in Germany with * PLLA(Poly-L-Lactic Acid) as main ingredient, Alpha Hydroxy Acid which gradually absorb within the patient's mouth, which is being used in many of the clinics worldwide.
When it is being absorbed inside patient's mouth, it gets divided into water, carbon-dioxide and glucose which does not leave any residuals.
* PLLA is the ingredient approved by US FDA.

Ideal for Open-Technique | Excellent Hydrophillicity | Maintenance Period upto 5 to 9 month

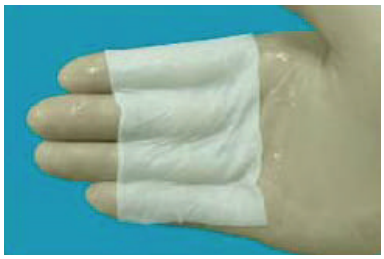
Redura, Healthy & Economical

0% infection-free product with safe Lyoplant's ideal size.
Made with porosity shape which attracts new collagen element & cells growing inside the matrix.
It is high intensity with strong tension, product is ideal for easy handling with cohesiveness, unchanging shape of the patch after the periodontal surgery.

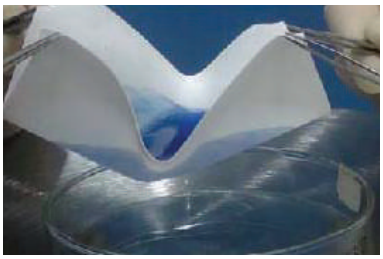
Redura Selling Point

- Rapid Repair & Regeneration
- Excellent Handling
- High strength
- Non swelling
- Can be repositioned
- CSF

Flexibility and Water Tight



Excellent Adhesiveness on curvy surface, enables to make superb positioning



100% water-proof, does not allow leakage

High Strength and No-Swelling

Strong Tension

Before Hydration Effect (0.215mm)

After Hydration, it does not swell up (0.205mm)

Renew Collagen Membrane

Biodegradable Collagen Membrane

Diaderm

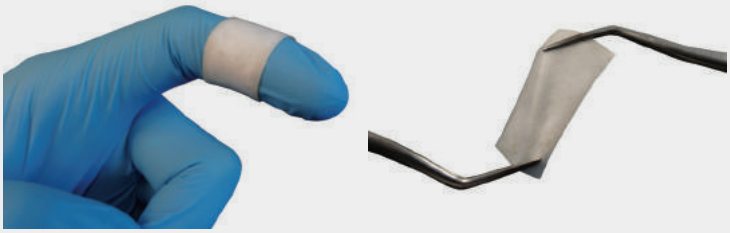
GBR membrane
Optimal barrier function
Easy manipulation

DTG 10002 / 1.5 X 3 cm

RENEW MEDICAL

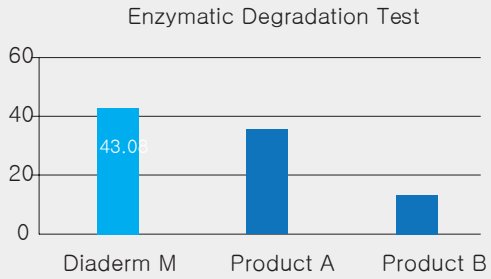
Diaderm

1 Easy manipulation



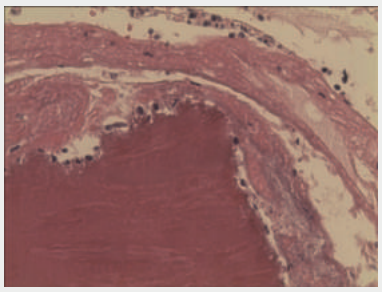
Low thickness
Flexible
Easy manipulation

2 Stable degradation period



Stable–lasting barrier function
Stable degradation resistance

3 Minimal inflammation



Histology of Diaderm M 6 weeks after implantation shows stable barrier function with minimal inflammatory reaction

Dia – derm

Biodegradable Atelocollagen Membrane

Basic Information on
Specification and Scientific Evidence

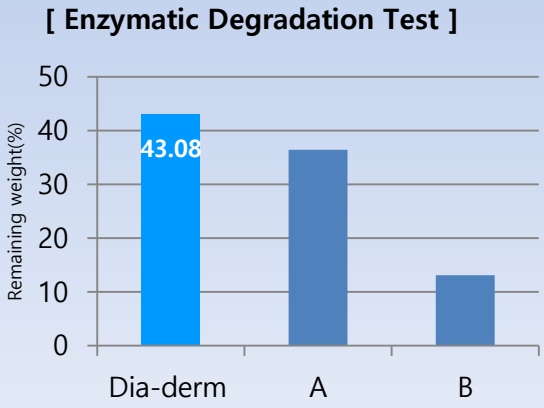
RENEW MEDICAL

Intended Use and Overview

Dia - derm is an absorbable and implantable collagen membrane that is intended for tissue regeneration procedures in periodontal defects to enhance regeneration of the periodontal apparatus.

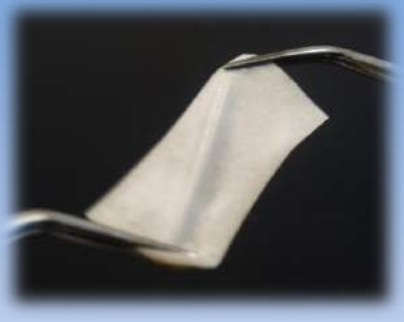
Dia - derm is crosslinked for the resistance to enzymatic degradation. Rapi-Gide® provides a stable barrier for 3~5 months and optimized physical property.

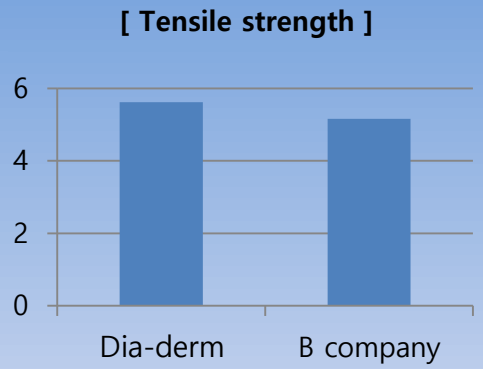
Stable Property of Dia - derm



In enzyme resistance test, Dia - derm showed significant resistance to degradation compare to other company's products.

Stable Property of Dia - derm

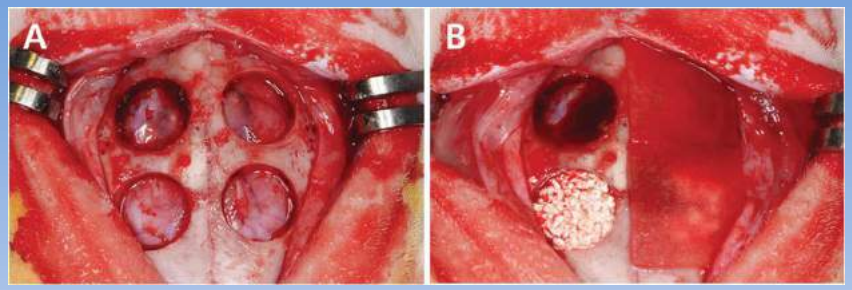




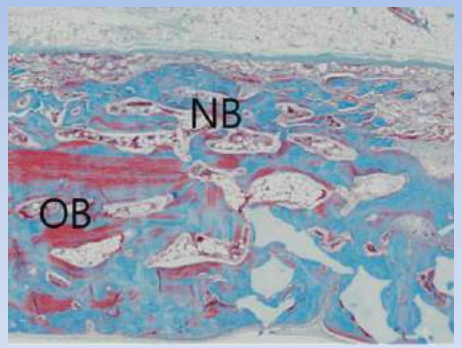
The result of tensile test suggested that Dia -derm has suitable tensile strength.

Dia-Derm ® provides fast hydration(30s) appropriate flexibility for handling after rehydration

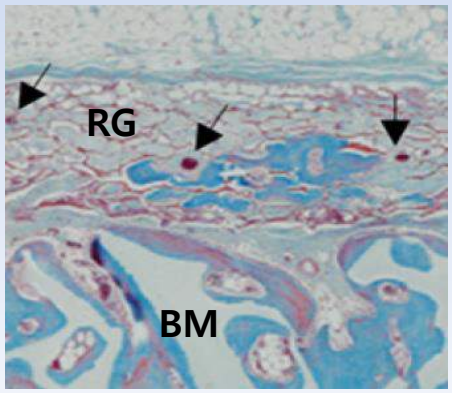
Animal Test



(a) Four circular defects (ø = 8 mm) were created in each calvarium of 12 male white rabbits, and four groups were randomly assigned to the defects. (b) Random assignment of the defects clockwise from top left – control group, collagen membrane only(CM), bone graft with collagen membrane (B-CM) and bone graft only (BG). Specimens were harvested at 2 and 8 weeks postoperatively for histologic and histometric analysis



Histologic view of Dia-derm showing new bone (NB) integrated to the network of collagen membrane
* NB(New Bone), OB(Native Bone)

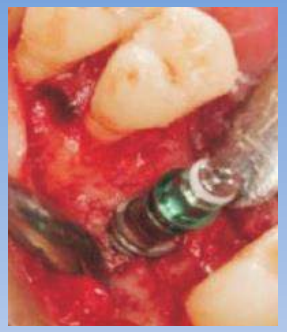


Histological analysis shows newly generated vasculature and new bone integration into the bone defect site at PO 8 weeks.

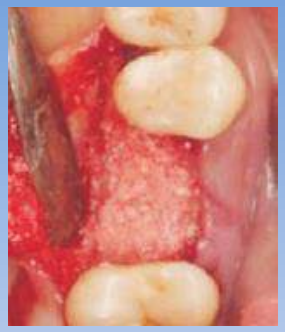
* BM(Bone materials), RG(Rapi-Gide ®)

*** Ref.** Park et al. Guided bone regeneration using 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide (EDC)-cross-linked type-I collagen membrane with biphasic calcium phosphate at rabbit calvarial defects. Biomaterials Research (2015) 19:15

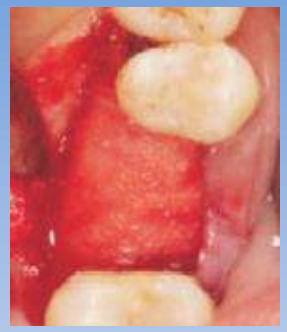
Clinical Case



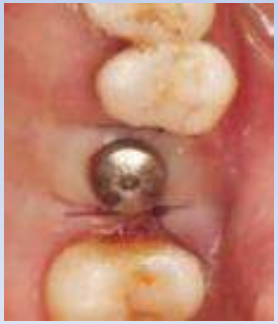
Surgical presentation of the bone defect



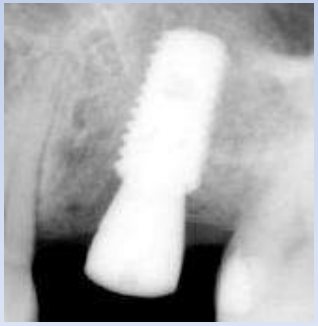
Lateral augmentation with bone materials



Application of Rapi-Gide®



Close with healing abutment



After 4 months, increased bone formation and implant integration were confirmed

Ref. Lee et al. Guided Bone Regeneration Using Type-I Collagen Membrane Cross-Linked by 1-ethyl-3-(3-dimethyl aminopropyl) carbodiimide in Two Implant Dehiscence Cases.
Implantology 2015; 19(1): 16~25