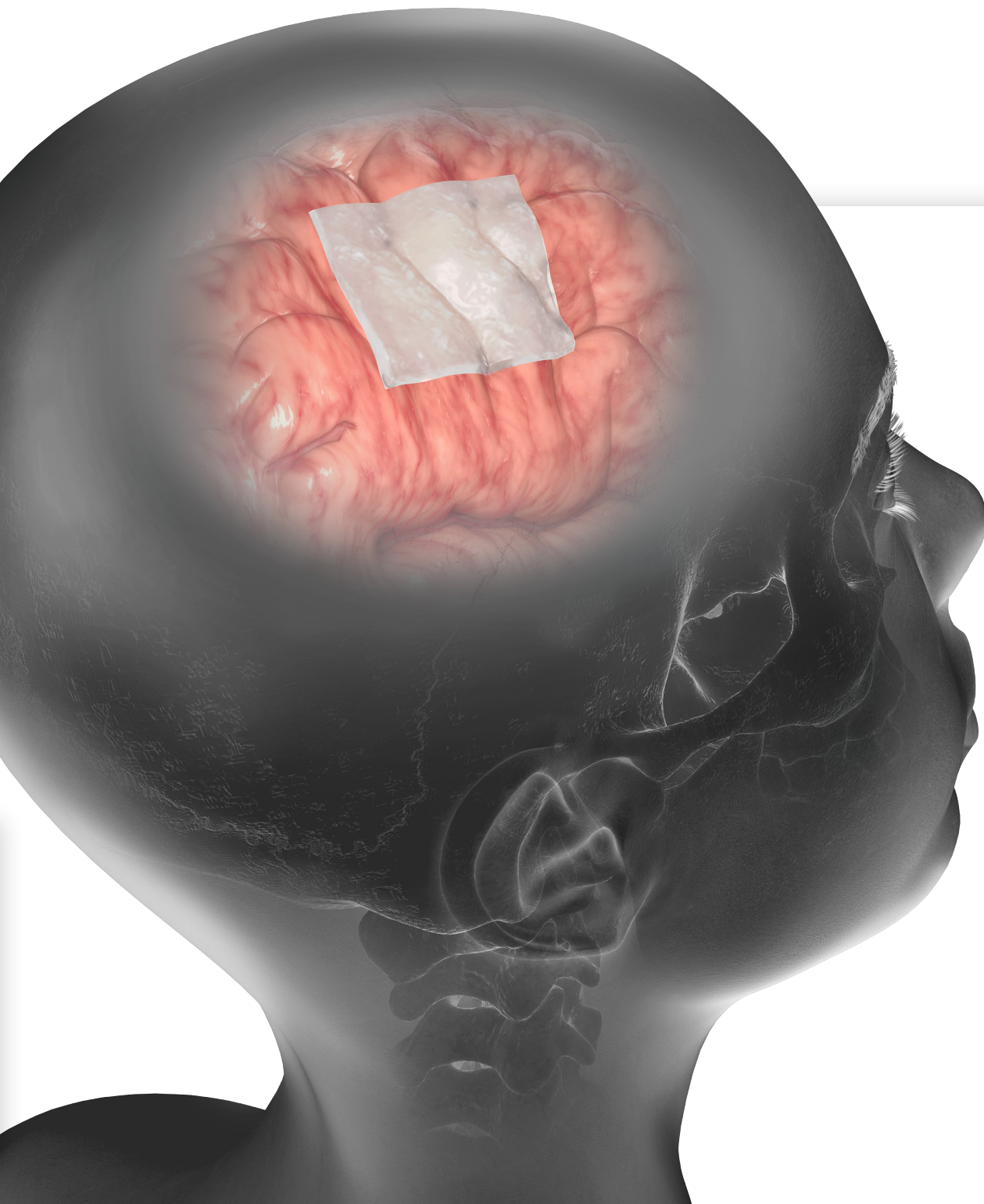


stryker



# DuraMatrix<sup>®</sup> portfolio

**Restore with confidence**

# History

Since 2003, Stryker has partnered with Collagen Matrix, Inc. to provide our customers with quality products that are safe and effective in the restoration of the dura mater.

Collagen Matrix, founded in 1997 by Shu-Tung Li, Ph.D., who has over 40 years of experience in connective tissue research and collagen based implant development, delivers a full line of the highest quality collagen and mineral based medical devices that support the body's natural ability to regenerate. The Company currently produces finished medical devices in the areas of Dental, Neurosurgical, Spine, Orthopaedic and Nerve Repair Surgery.

DuraMatrix line products are comprised of Type I collagen and intact dermis tissue derived from a bovine source and a strict closed herd system to ensure safety and quality.

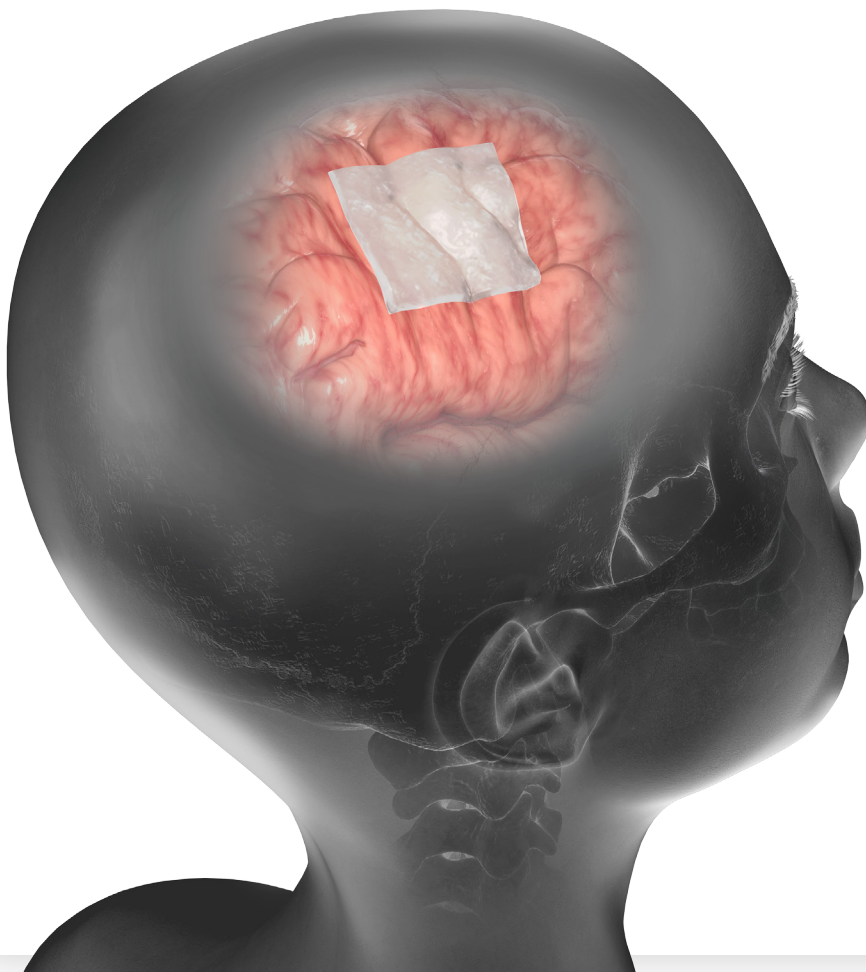
# DuraMatrix-Onlay PLUS

Collagen dura regeneration matrix  
highly conformable and sutureless restoration

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

In addition to the thick, spongy texture, this fourth generation DuraMatrix product has a non-porous, collagen layer. This layer helps produce a lower liquid permeability rate compared to that of DuraGen Plus as shown in a bench test.<sup>1,3</sup>

DuraMatrix-Onlay PLUS offers a balanced resorption profile that occurs over approximately 8 weeks.<sup>2,3</sup>



## Liquid permeability (ml/min/cm<sup>2</sup>)<sup>1,3</sup>

DuraMatrix-Onlay PLUS

**0.011 ± 0.007**

DuraGen Plus

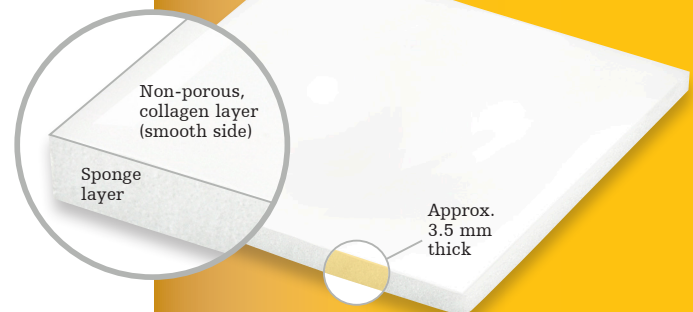
**0.558 ± 0.091**

For more information  
on DMOP or to view  
the leakage test video,  
scan here



# 50x<sup>1,2,3</sup>

lower liquid  
permeability rate  
than DuraGen Plus



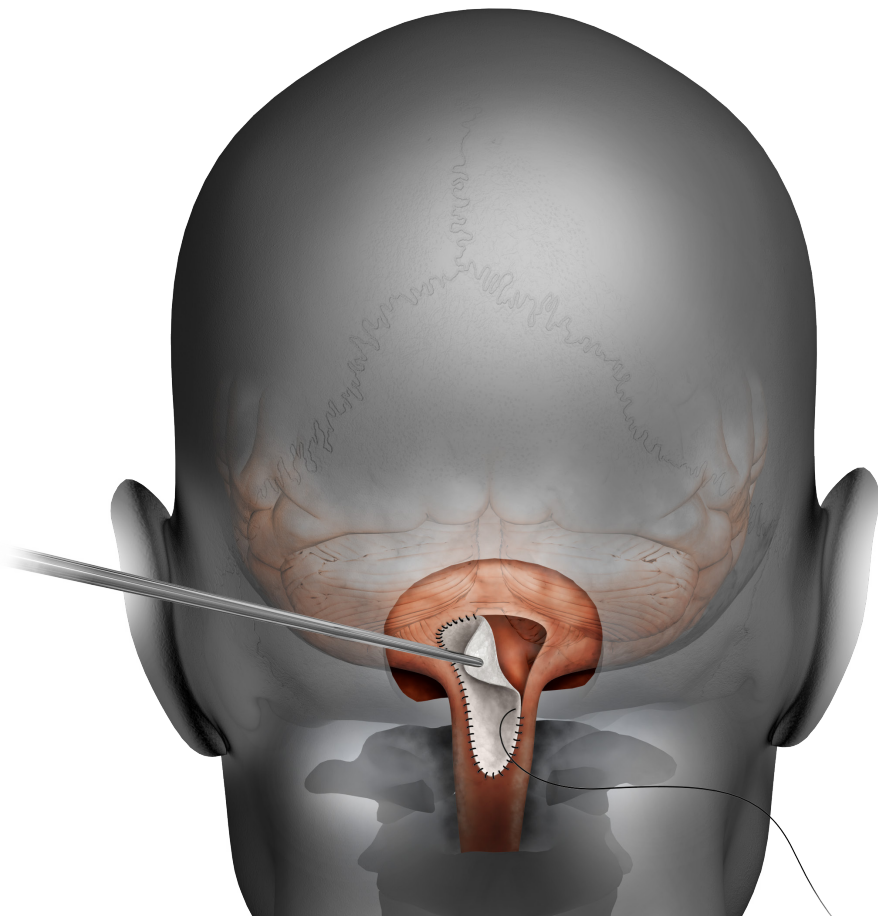
# DuraMatrix Suturable

## Collagen dura membrane reinforced and reliable

**DuraMatrix Suturable** is a collagen dura membrane from purified intact bovine dermis tissue. It is intended for use as a dura substitute for the repair of dura mater.

The natural crosslinks inherent in the native bovine collagen are further biochemically reinforced through a proprietary cross-linking process to provide you with the strength you need. Furthermore, this results in a resorption time of 38-40 weeks based on the results of a rabbit duraplasty model,<sup>2,3</sup> while new dura mater is regenerated to replace the membrane.

DuraMatrix Suturable shows significantly higher suture pull out strength compared to Durepair.<sup>1,3</sup> This permits the graft to be firmly anchored to surrounding tissue with minimal risk of membrane tear or detachment.



## Suture pull out strength (N) <sup>1,3</sup>

DuraMatrix Suturable

**20.40 ± 1.54 N**

Durepair

**11.67 ± 4.12 N**



# 74.8%

greater suture  
pullout strength  
than Durepair

**The total resorption time (defined as <5% implant remaining) is approximately 38-40 weeks for DuraMatrix Suturable and approximately 20-22 weeks for Durepair. <sup>2,3</sup>**

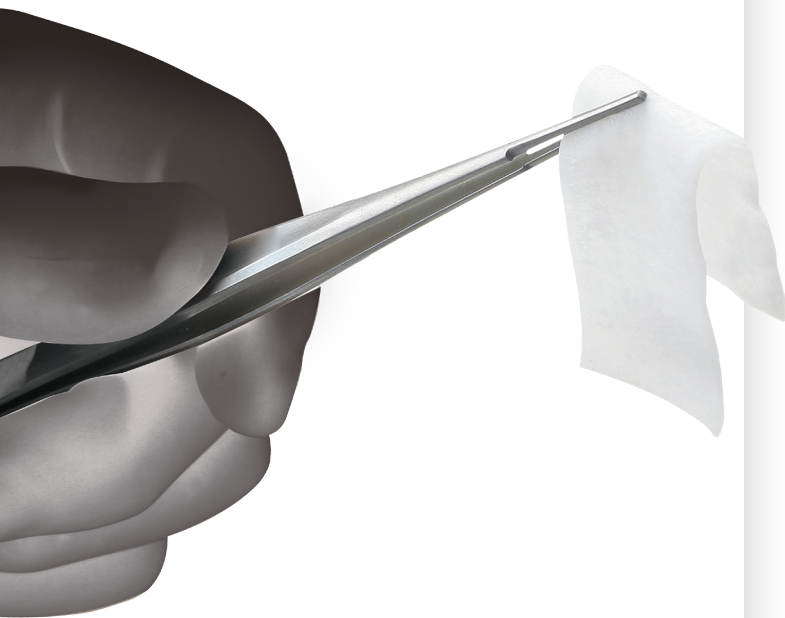
## DuraMatrix-Onlay

**Collagen dura membrane, onlay conformable and versatile**

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

With a thickness of about 0.6mm, DuraMatrix-Onlay serves as a thinner onlay option than DuraMatrix-Onlay PLUS. The graft can also be applied with minimal tension sutures if desired.

DuraMatrix-Onlay offers a balanced resorption that occurs over 6-9 months.<sup>2,3</sup>



## DuraMatrix

**Collagen dura substitute membrane strong and conformable**

**DuraMatrix** is a purified, type I collagen membrane derived from bovine Achilles tendon. It is intended for use as a dura substitute for the repair of dura mater.

DuraMatrix has a thickness of about 0.3 mm which can be considered similar to the thickness of native dura.

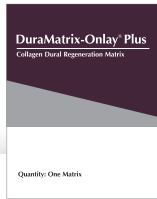
The unique conformability properties of the membrane combined with its mechanical strength allow DuraMatrix to be applied as either an onlay membrane or sutured in place.

DuraMatrix offers a balanced resorption that occurs over 6-9 months.<sup>2,3</sup>

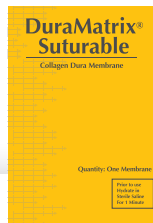




## DuraMatrix-Onlay PLUS



## DuraMatrix Suturable



## DuraMatrix-Onlay



## DuraMatrix



Part number	Size	Units per	Part number	Size	Units per	Part number	Size	Units per	Part number	Size	Units per
DMOP11	1 in x 1 in (2.5 cm x 2.5 cm)	1	DMS11	1 in x 1 in (2.5 cm x 2.5 cm)	1	CDSL11	1 in x 1 in (2.5 cm x 2.5 cm)	1	CDSM11	1 in x 1 in (2.5 cm x 2.5 cm)	1
DMOP13	1 in x 3 in (2.5 cm x 7.5 cm)	1	DMS13	1 in x 3 in (2.5 cm x 7.5 cm)	1	CDSL13	1 in x 3 in (2.5 cm x 7.5 cm)	1	CDSM13	1 in x 3 in (2.5 cm x 7.5 cm)	1
DMOP22	2 in x 2 in (5 cm x 5 cm)	1	DMS22	2 in x 2 in (5 cm x 5 cm)	1	CDSL22	2 in x 2 in (5 cm x 5 cm)	1	CDSM22	2 in x 2 in (5 cm x 5 cm)	1
DMOP33	3 in x 3 in (7.5 cm x 7.5 cm)	1	DMS33	3 in x 3 in (7.5 cm x 7.5 cm)	1	CDSL33	3 in x 3 in (7.5 cm x 7.5 cm)	1	CDSM33	3 in x 3 in (7.5 cm x 7.5 cm)	1
DMOP45	4 in x 5 in (10 cm x 12.5 cm)	1	DMS45	4 in x 5 in (10 cm x 12.5 cm)	1	CDSL45	4 in x 5 in (10 cm x 12.5 cm)	1	CDSM45	4 in x 5 in (10 cm x 12.5 cm)	1
DMOP57	5 in x 7 in (12.5 cm x 17.5 cm)	1				CDSL57	5 in x 7 in (12.5 cm x 17.5 cm)	1			

## Craniomaxillofacial

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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.