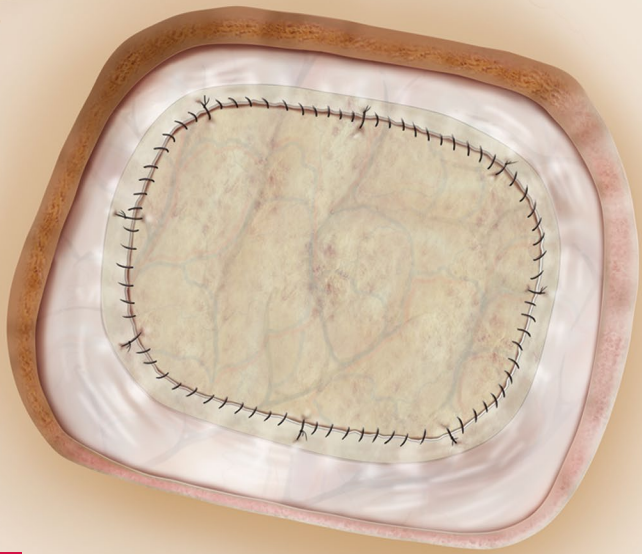
Handle with *ease*, *repair* with confidence.[1]

Biodesign® Dural Repair Products



COOK® MEDICAL

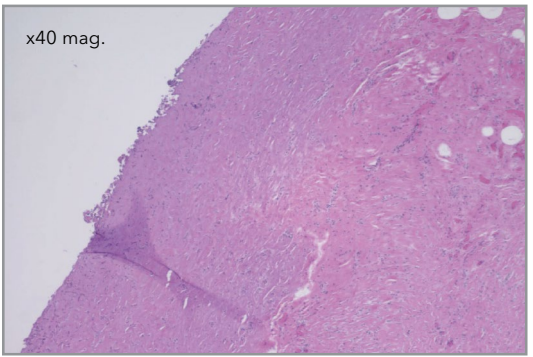
Illustration by Lisa Clark.

What is Biodesign?

Biodesign is a platform technology behind numerous tissue-repair products that span multiple medical specialties. Biodesign is natural extracellular matrix (ECM) derived from porcine small intestinal submucosa (SIS). The ECM is a complex latticework of proteins and structural molecules that helps guide the growth of cells.[2] Cook's proprietary processing methodology decellularizes the SIS material while preserving natural matrix molecules such as collagen, proteoglycans, and glycosaminoglycans.[3] The result is a scaffold that, when implanted, provides a location for host cells to infiltrate and remodel into vascularized tissue.[4]

Microscopic view of the remodeling process[3]

Biodesign graft prior to implantation



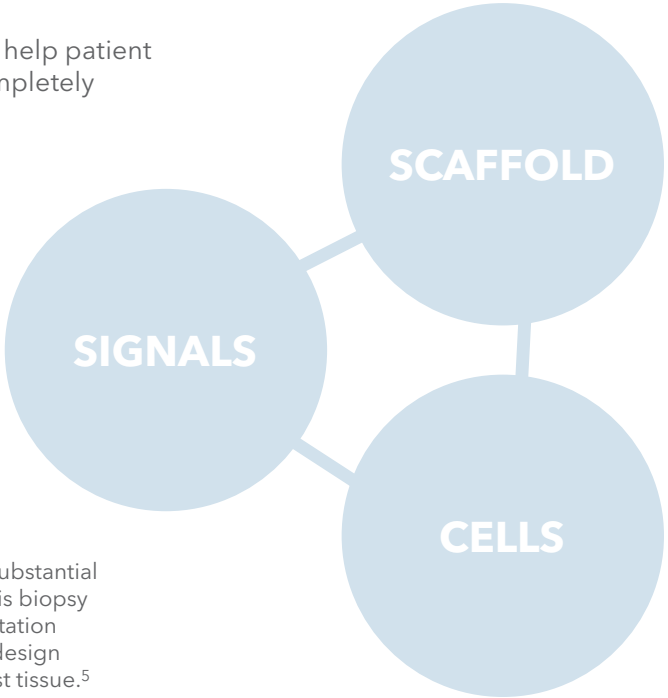
8 months after implantation

How does Biodesign work?

There are three essential components to healing: a scaffold, signals, and cells.

Biodesign's open lattice structure provides a scaffold for tissue ingrowth.[4]

The body's signaling mechanisms help patient cells infiltrate the scaffold and completely remodel into natural host tissue.



The Biodesign graft (left) allows for the substantial growth of organized tissue, as seen in this biopsy sample, taken eight months after implantation (right). The above images are of the Biodesign Plastic Surgery Matrix implanted in breast tissue.[5]

Handle with *ease*,

Illustration by Lisa Clark.

Biodesign® Dural Graft

STRONG SEAL

The Biodesign Dural Graft is completely remodeled into natural host tissue, resulting in a post-op leak rate as low as 1.7%.[1]

EXCELLENT HANDLING

Biodesign material is easy to manipulate, doesn't swell with hydration, and doesn't fold onto itself.[6]

Biodesign® Dural Graft

Available product sizes

Shown at actual size.

4 x 7 cm

2 x 3 cm

7 x 10 cm

7 x 20 cm

Tips to help get the best possible results:

Ensure adequate blood supply.

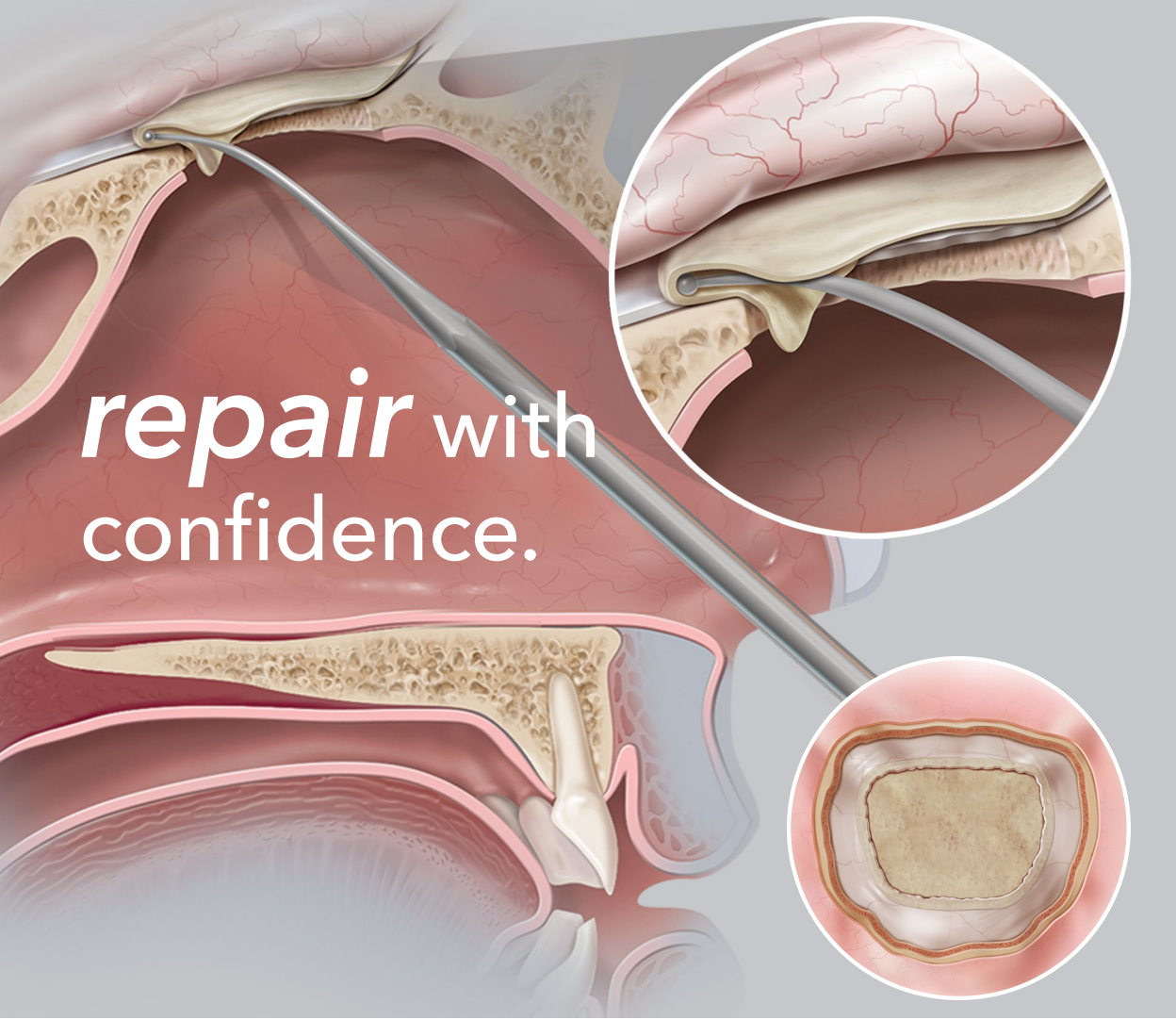
Size the graft to allow for tissue overlap.

Hydrate for at least two minutes before placement.

Product ordering information

Order Number	**Reference Part Number**	Size cm	Nominal Thickness mm
Biodesign Dural Graft			
G57557	**C-DUR-2X3-2**	2 x 3	0.25
G57558	**C-DUR-4X7-2**	4 x 7	0.25
G57559	**C-DUR-7X10-2**	7 x 10	0.25
G57560	**C-DUR-7X20-2**	7 x 20	0.25

Some products or part numbers may not be available in all markets.
Contact your local Cook representative or Customer Service for details.



Illustrations by Lisa Clark.

Biodesign® Duraplasty Graft

STRONG SEAL

SUTURED/SUTURELESS FIXATION

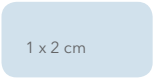
The Biodesign Duraplasty Graft can be secured in place with or without sutures, depending on clinician preference.

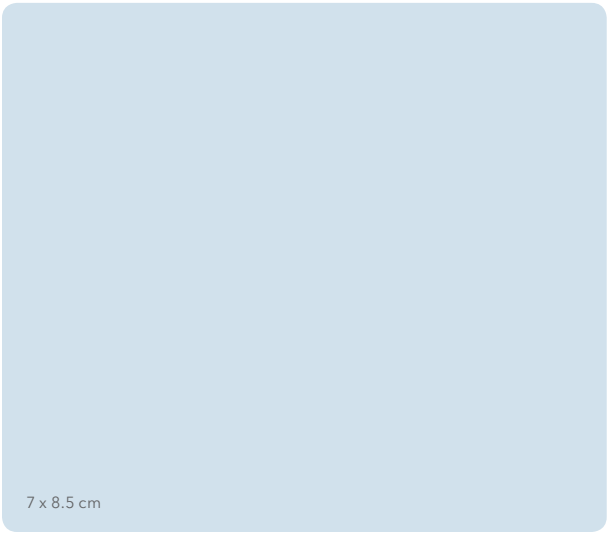
EXCELLENT HANDLING

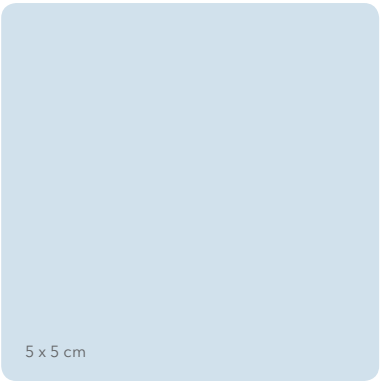
Biodesign® Duraplasty Graft

Available product sizes

Shown at actual size.







Tips to help get the best possible results:

Ensure adequate blood supply.

Size the graft to allow for tissue overlap.

Hydrate for at least two minutes before placement.

Product ordering information

Order Number	**Reference Part Number**	Size cm	Nominal Thickness mm
Biodesign Duraplasty Graft			
G57553	**ENT-CBD-1X2-2**	1 x 2	0.25
G57554	**ENT-CBD-2.5X2.5-2**	2.5 x 2.5	0.25
G57555	**ENT-CBD-5X5-2**	5 x 5	0.25
G57556	**ENT-CBD-7X8.5-2**	7 x 8.5	0.25

Some products or part numbers may not be available in all markets.
Contact your local Cook representative or Customer Service for details.

References

1. Bejjani GK, Zabramski J; Durasis Study Group. Safety and efficacy of the porcine small intestinal submucosa dural substitute: results of a prospective multicenter study and literature review. *J Neurosurg*. 2007;106(6):1028-1033.

2. Hubbell JA. Materials as morphogenetic guides in tissue engineering. *Curr Opin Biotechnol*. 2003;14:551-558.

3. Hodde J, Janis A, Ernst D, Zopf D, Sherman D, Johnson C. Effects of sterilization on an extracellular matrix scaffold: Part I. Composition and matrix architecture. *J Mater Sci Mater Med*. 2007;18(4):537-543.

4. Data on file. Cook Biotech Internal Report #D00199545.

5. Data on file. Cook Biotech Internal Report #D00199430.

6. Illing E, Chaaban MR, Riley KO, Woodworth BA. Porcine small intestine submucosal graft for endoscopic skull base reconstruction. *Int Forum Allergy Rhinol*. 2013;3(11):928-932.

Cover illustration by Lisa Clark.