

# Abdominal Wall Reconstruction with a Non-Cross-Linked Porcine Dermal Scaffold: A Follow-Up Study†

Diaz-Siso JR, Bueno EM, Pomahac B. *Hernia* 2012 July. [Epub ahead of print]

## Purpose:

A previous study demonstrated XENMATRIX™ as an alternative to prosthetic mesh in the reconstruction of complicated abdominal wall defects. This current study reports the long term outcomes of abdominal wall reconstruction using XENMATRIX™ in a larger patient population.

## Methods:

Patients who underwent abdominal wall reconstruction with XENMATRIX™ between May 2006 and December 2010 were retrospectively reviewed.

Patient Characteristics	
Total Patients	40
Months (Mean follow-up 13-66)	40.1
Mean Defect Size (100-3000)	435 cm <sup>2</sup>
Planned Procedures	29 (72.5%)
Emergent Procedures	11 (27.5%)

Type of Repair	Patients	%
Fascial closure with XENMATRIX™ underlay	18	45
Component separation with XENMATRIX™ underlay	14	35
Component separation with XENMATRIX™ underlay and XENMATRIX™ inlay (Fascial closure not achieved)	4	10
Bridge repair with XENMATRIX™ underlay	4	10

## Results:

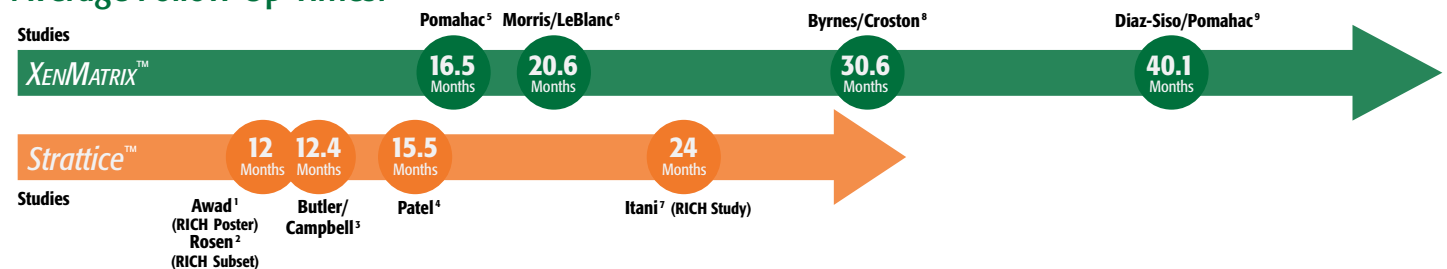
Outcomes	N	%
Seroma	8	21
Recurrence	3	7.9
Infection	2	5.2

## Conclusion:

“Our findings suggest that XENMATRIX™ Surgical Graft is an effective adjunct in the reconstruction of complex abdominal wall defects, resulting in satisfactory outcomes at an average follow-up time of 40.1 months and yielding a low rate of surgical complications.”

## XENMATRIX™ Surgical Graft: Longest Reported Follow-Up for a Biologic Graft in Abdominal Wall Reconstruction

### Average Follow-Up Times:



**XENMATRIX™ Surgical Graft**  
Structure. Strength. Performance.



TECHNOLOGY  
TECHNIQUE  
TRAINING  
TRUST

## Product Codes:

Product Code	Quantity	Shape	Dimensions*
1161015	1/cs	Rectangle	3.9" x 5.9" (10 cm x 15 cm)
1161020	1/cs	Rectangle	3.9" x 7.9" (10 cm x 20 cm)
1161028	1/cs	Rectangle	3.9" x 11" (10 cm x 28 cm)
1161520	1/cs	Rectangle	5.9" x 7.9" (15 cm x 20 cm)
1161525	1/cs	Rectangle	5.9" x 9.8" (15 cm x 25 cm)
1162020	1/cs	Rectangle	7.9" x 7.9" (20 cm x 20 cm)
1162025	1/cs	Rectangle	7.9" x 9.8" (20 cm x 25 cm)
1161928	1/cs	Rectangle	7.5" x 11" (19 cm x 28 cm)
1161935	1/cs	Rectangle	7.5" x 13.8" (19 cm x 35 cm)

\*Thickness 1.8 mm to 2.5 mm.

- Please add the XENMATRIX™ Surgical Graft to my preference card.
- I would like to have the XENMATRIX™ Surgical Graft in stock.
- I would like to trial the XENMATRIX™ Surgical Graft.

To learn more, contact your local BARD representative or call 1.800.556.6275.

### Indications

Intended for implantation to reinforce soft tissue where weakness exists and for surgical repair of damaged or ruptured soft tissue, including: plastic and reconstructive surgery; muscle flap reinforcement; hernia repair including abdominal, inguinal, femoral, diaphragmatic, scrotal, umbilical, and incisional hernias.

### Contraindications

XENMATRIX™ Surgical Graft should not be used on patients with known sensitivity to porcine products. Not for reconstruction of cardiovascular defects. Not for reconstruction of central nervous system or peripheral nervous system defects. Use of this product in applications other than those indicated has the potential for serious complications.

### Warnings

If an infection develops, it should be treated aggressively. An allergic reaction, which is unrelated to other therapy, is an indication to consider removal of XENMATRIX™ Surgical Graft.

### Precautions

Place device in maximum possible contact with healthy, well-vascularized tissue to promote cell ingrowth and tissue remodeling. When unable to close skin over the XENMATRIX™ Surgical Graft, ensure that the implant remains moist. Avoid drying of the implant through "continued suction devices" as this may negatively impact the performance of the implant. Only physicians qualified in the appropriate surgical techniques should use this surgical graft.

The surgeon should thoroughly understand the surgical procedure and the performance characteristics of the surgical graft.

### Adverse Reactions

Potential complications with the use of any prosthesis may include, but are not limited to, allergy, seroma, infection, inflammation, adhesion, fistula formation, hematoma and recurrence of tissue defect.

Please consult package insert for more detailed safety information and instructions for use.

<sup>†</sup> Davol Inc., provided financial support in the form of a research fellow salary.

<sup>1</sup> S Awad et. al. Unpublished Data: Prospective Multicenter Clinical Study of Single-Stage Repair of Infected or Contaminated Abdominal Incisional Hernias Using Strattice Reconstructive Tissue Matrix, presented at ACS 2010 and EHS 2010.

<sup>2</sup> Rosen MJ, Denoto G, Itani KM, Butler C, Vargo D, Smiell J, Rutan R. Evaluation of surgical outcomes of retro-rectus versus intraperitoneal reinforcement with bio-prosthetic mesh in the repair of contaminated ventral hernias. *Hernia*. 2012 Mar 14. [Epub ahead of print]

<sup>3</sup> Butler, CE, Campbell, KT. Minimally Invasive Component Separation with Inlay Bioprosthetic Mesh (MICSIB) for Complex Abdominal Wall Reconstruction. *Plastic Reconstructive Surgery Journal* 2011 Feb 25.

<sup>4</sup> Patel KM, Nahabedian MY, Gatti M, Bhanot P. Indications and Outcomes Following Complex Abdominal Reconstruction With Component Separation Combined With Porcine Acellular Dermal Matrix Reinforcement. *Annals of Plastic Surgery* 2011 Dec 9. [Epub ahead of print]

<sup>5</sup> Pomahac B, Aflaki P. Use of a non-cross-linked porcine dermal scaffold in abdominal wall reconstruction. *Am J Surg*. 2010 Jan;199(1):22-7.

<sup>6</sup> Morris, LM, LeBlanc KA. Components Separation Technique Utilizing an Intraperitoneal Biologic and an Onlay Lightweight Polypropylene mesh: "A Sandwich Technique". *Hernia*. 2012 Jul 12. [Epub ahead of print]

<sup>7</sup> Itani KM, Rosen M, Vargo D, Awad SS, DeNoto G 3rd, Butler CE, RICH Study Group. Prospective study of single-stage repair of contaminated hernias using a biologic porcine tissue matrix: The RICH Study. *Surgery*. 2012 Jul 2. [Epub ahead of print]

<sup>8</sup> Byrnes MC, Irwin E, Carlson D, Campeau A, Gipson JC, Beal A, Croston JK. Repair of high-risk incisional hernias and traumatic abdominal wall defects with porcine mesh. *Am Surg*. 2011 Feb;77(2):144-50.

<sup>9</sup> Diaz-Siso JR, Bueno EM, Pomahac B. Abdominal Wall Reconstruction Using a Non-Cross-Linked Porcine Dermal Scaffold: A Follow-Up Study. *Hernia*. 2012 July. [Epub ahead of print]

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