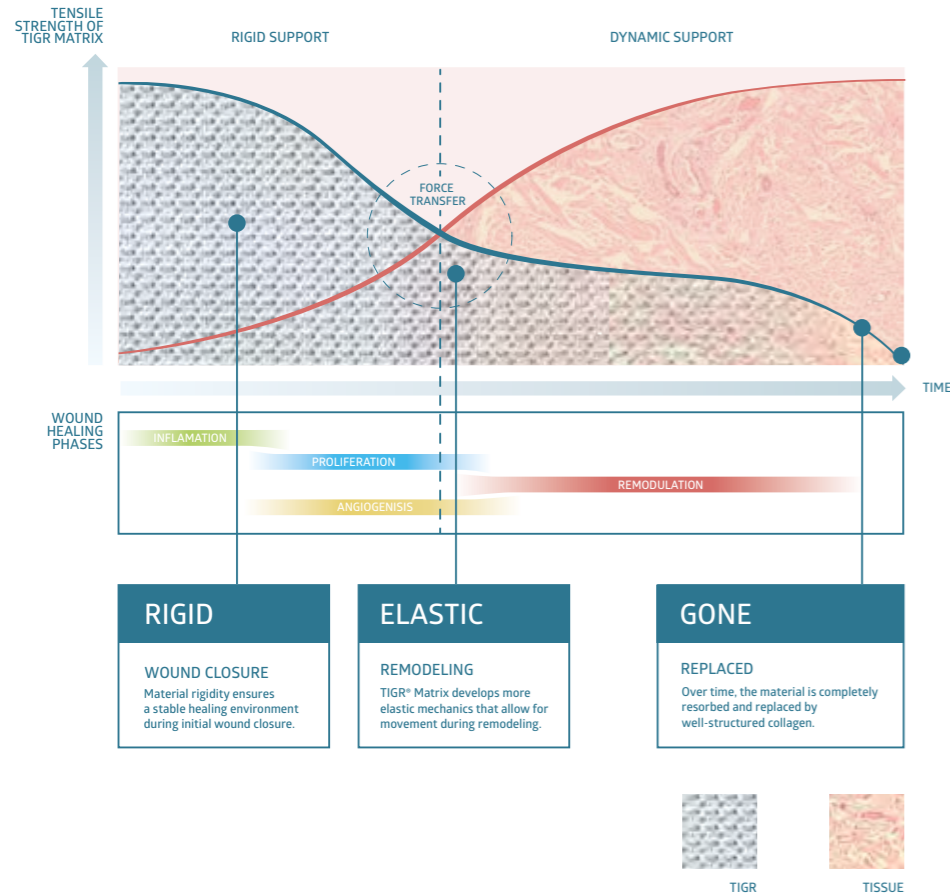


HOW IT WORKS

TIGR® Matrix works in two phases, in which it gradually transfers the load from the scaffold to tissue. In phase 1 it gives strength and stability in the mesh is high during initial wound-healing. In phase 2 it gradually increases the elasticity and transfer of load to the tissue stimulates regeneration of well-structured collagen.



TIGR® MATRIX SUPERIOR HANDLING CHARACTERISTICS

- Knitting process allows mesh to be cut to optimal size without fraying.
- Slight memory allowing fixation under gentle stretch preventing buckling of the mesh.
- With mesh taut, no buckling when anterior fascia is closed in TAR and other sub-lay techniques.

TO ORDER

Size	Reference number
10x15 cm	NSTM1015
15x20 cm	NSTM1520
20x30 cm	NSTM2030

United States

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Caution: Read instructions for use which accompany the product for indications, contraindications, warnings and precautions. The information presented in this product folder is intended to demonstrate a Novus Scientific product. Always refer to the package insert, product label, and/or instructions for use before using any Novus Scientific product. Products may not be available in all markets. Product availability is subject to the regulatory or medical practices that govern individual markets. Please contact your Novus Scientific representative if you have questions about the availability of Novus Scientific's product(s) in your area. This device may only be used upon prescription by a surgeon. 510(k) since 2010.

www.tigrmatrix.com | info@tigrmatrix.com

SYNTHETIC RESORBABLE SCAFFOLD

TIGRmatrix
 a product by **NOVUS SCIENTIFIC**

WHAT IS TIGR® MATRIX?

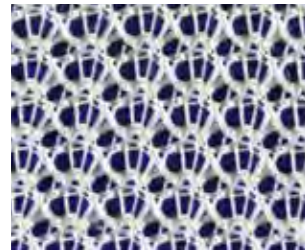
TIGR® Matrix is the world's first long-term resorbable, 100% synthetic surgical mesh. Its unique technology consists of dual-stage degradation and full resorption.

TIGR® MATRIX 3 YEAR PRE-CLINICAL DATA



ABOUT THE PRODUCT

- Copolymers of lactide, glycolide and trimethylene carbonate. Same type of polymers that have been in clinical use since the 1970s. ¹
- Macro-porosity, >1 mm², allows for good tissue integration. ^{1,2}
- Strong for at least 6 months and complete resorption over time. ^{1,5}
- A viable alternative to acellular dermal matrices, at a lower cost. ^{2,3,4}




ABOUT THE USE

- Ready to use directly out of the package, without rinsing.
- Warp-knitted multifilament fibers make it easy to handle, pliable and easy to cut. ⁴

References

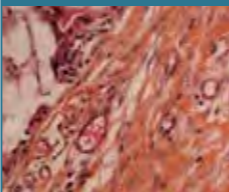
1 - Three-year results from a preclinical implantation study of a long-term resorbable surgical mesh with time-dependent mechanical characteristics H. Hjort, T. Mathisen, A. Alves, G. Clermont, J. P. Boutrand, *Hernia*, 16(2):191-197, 2012 **2** - The use of synthetic mesh in reconstructive, revision, and cosmetic breast surgery H. Becker, J. G. Lind II, *Aesth Plast Surg*, 37(5):914-921, 2013 **3** - Value-based Clinical Quality Improvement (CQI) for Patients Undergoing Abdominal Wall Reconstruction. B. Stephan, B. Ramshaw, B. Forman, *Surg Technol Int*, 26:135-142, 2015 **4** - Immediate implant based breast reconstruction using the TIGR® Matrix. P. Schrenk, *Breast Cancer Manag*, 5(2), 53-59, 2016 **5** - Data on file, in vitro resorption.

9 MONTH




The inflammatory response is limited to the location of the mesh fibers. No sign of granuloma. New blood vessels and connective tissue are evident close to the matrix filaments.

15 MONTH




TIGR® Matrix well integrated in connective tissue. Fibroblasts are present among mesh fibers. New blood cells visible.

24 MONTH



TIGR® Matrix filaments are surrounded by giant cells indicating on-going fiber degradation. Collagen cells are infiltrating the matrix.

36 MONTH



TIGR® Matrix resorbed and replaced with collagen. Few inflammatory cells and no foreign body reaction. Well distributed fibroblasts.

CLINICAL EXPERIENCE USING TIGR® MATRIX SYNTHETIC RESORBABLE SCAFFOLD

Bruce Ramshaw, MD, Brandie Forman, Michelle Preston, Briana Alvoid-Preston.

OPEN VENTRAL HERNIA REPAIR (INCLUDING AWR)

18 Month Post-op Comparison Charts

PATIENT DEMOGRAPHICS

	TIGR - 2015 (61 patients)	Phasix - 2017 (121 patients)	BioA - 2017 (104 patients)	Strattice - 2012 (80 patients)
BMI (Avg.)	33.1	32.2	28	23% Obese (BMI 35-40)
CST (%)	92%	44%	65%	65%
Onlay (%)	0%	26%	0%	4%
Retrorectus (%)	100%	73%	90%	36%
Intraperitoneal (%)	0%	0%	10%	60%
Hernia Defect Size (cm ²)	283.6	115.7	137.0	236.0

Inclusion/Exclusion Criteria

TIGR CQI program- No exclusions | Other prospective studies: Exclusion for more than three recurrences, BMI > 40, cirrhosis, ascites, HIV or on steroids.

PATIENT OUTCOMES

	TIGR - 2015 (61 patients)	TAR: Approach (46 patients)	Phasix - 2017 (121 patients)	BioA - 2017 (104 patients)	Strattice - 2012 (80 patients)
Recurrence	9.8%	1/46 (2.2%)	9.1% Retrorectus 5.7%	15.4%	28%
SSI	13%	3/46 (6.5%)	9.1%	18%	30%
Seroma Requiring Intervention	1.6%	1/46 (2.2%)	5.8%	6%	6%
Mesh Removal Required	0	0	0	0	0

Results

Extremely low rate of mesh related complications | No mesh removal or mesh related complications in complex abdominal wall patients, even in the setting of contaminations and wound complications. | Long-term outcomes and experience demonstrating long-term durability.