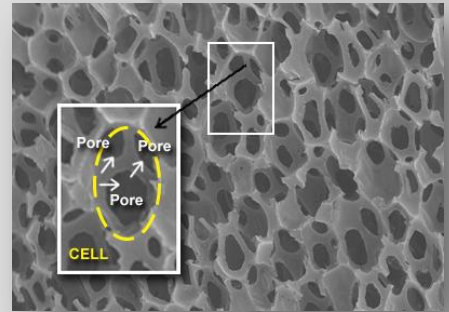


BIOMERIX BIOMATERIAL™

A GROUNDBREAKING BIOINTEGRATIVE TISSUE SCAFFOLD

The Biomerix Biomaterial is a non-degradable, three-dimensional scaffold specifically designed to support tissue ingrowth and biointegration. This proprietary, biomaterial is a cross-linked, thermoset, reticulated polycarbonate polyurethane-urea. The scaffold embodies a unique microarchitecture consisting of an interconnected network of cells and pores.



23x Magnified View of Biomerix Biomaterial™

Features:

Biointegrative

- Supports robust fibrovascular ingrowth and remodeling
- Interconnected three-dimensional network of cells and pores mimics nature and function of extracellular matrix (ECM)
- Fully accessible morphology with high void content of 90-95%
Cell sizes ranging from 250 μ –500 μ
Pore sizes ranging from 100 μ –250 μ

Biocompatible

- Full panel of ISO 10993 testing supports material biocompatibility
- Four devices cleared by U.S. FDA, European Union, and Canada for indications including peripheral embolization, soft tissue repair, and rotator cuff repair

Biostable

- Polycarbonate polyurethane chemistry with urea crosslinks provides excellent biostability

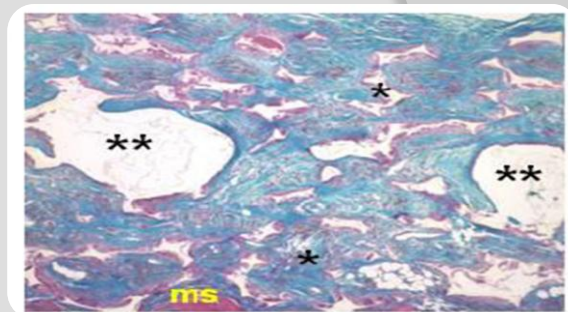
Bioactive Agent Delivery Capabilities

- Structure provides unique scaffold for delivery of agents including growth factors, stem cells and therapeutic drugs

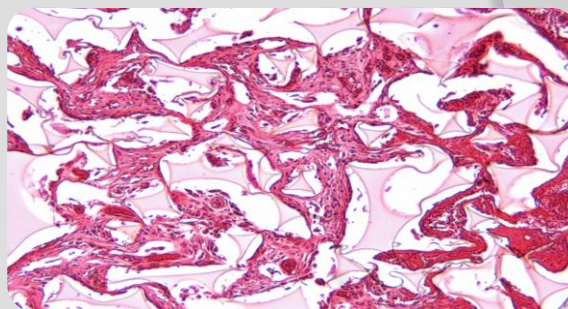
Demonstrated Preclinical Results

The Biomerix Biomaterial™ supports durable fibrovascular tissue ingrowth and biointegration as demonstrated across an array of animal studies.

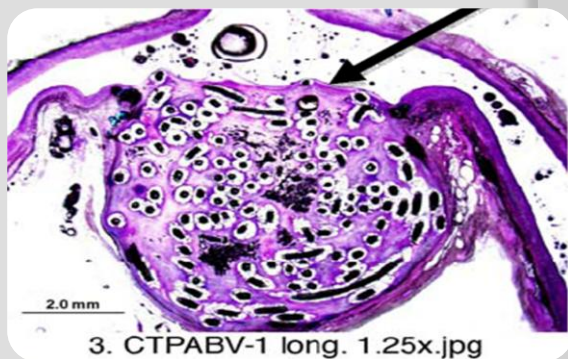
Model : Rat Abdominal Wall
Time Frame: Four Months, 4X
Device: *Biomerix REVIVE Mesh*
(Surgical Mesh for Hernia Repair)



Model: Sheep Rotator Cuff Tendon
Time Frame: Three Months, 10X
Device: *Biomerix RCR Mesh*
(Surgical Mesh for RCR Repair)



Model: Canine Carotid Aneurysm
Time Frame: Six Months, 1.25X
Device: *Biomerix Embolization Coil*
(Neurovascular Embolization Coil)



Processing Capabilities

- Wide range of customizable form factors available
- Compatible with ethylene oxide, gamma radiation and e-beam sterilization
- Compatible with established manufacturing techniques: annealing, compression molding, bonding, lamination, coating, and various reinforcement techniques
- Manufactured under a ISO 13485 Certified Quality System

DISCLAIMER

The characteristics, properties, and functionality of the Biomerix Biomaterial described in this brochure are supported by data on file at Biomerix Corporation. The characteristics, properties, and functionality of the Biomerix Biomaterial may differ when processed and used for individual applications; the user is fully responsible for assessing the suitability of the material for any individual application or use.
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