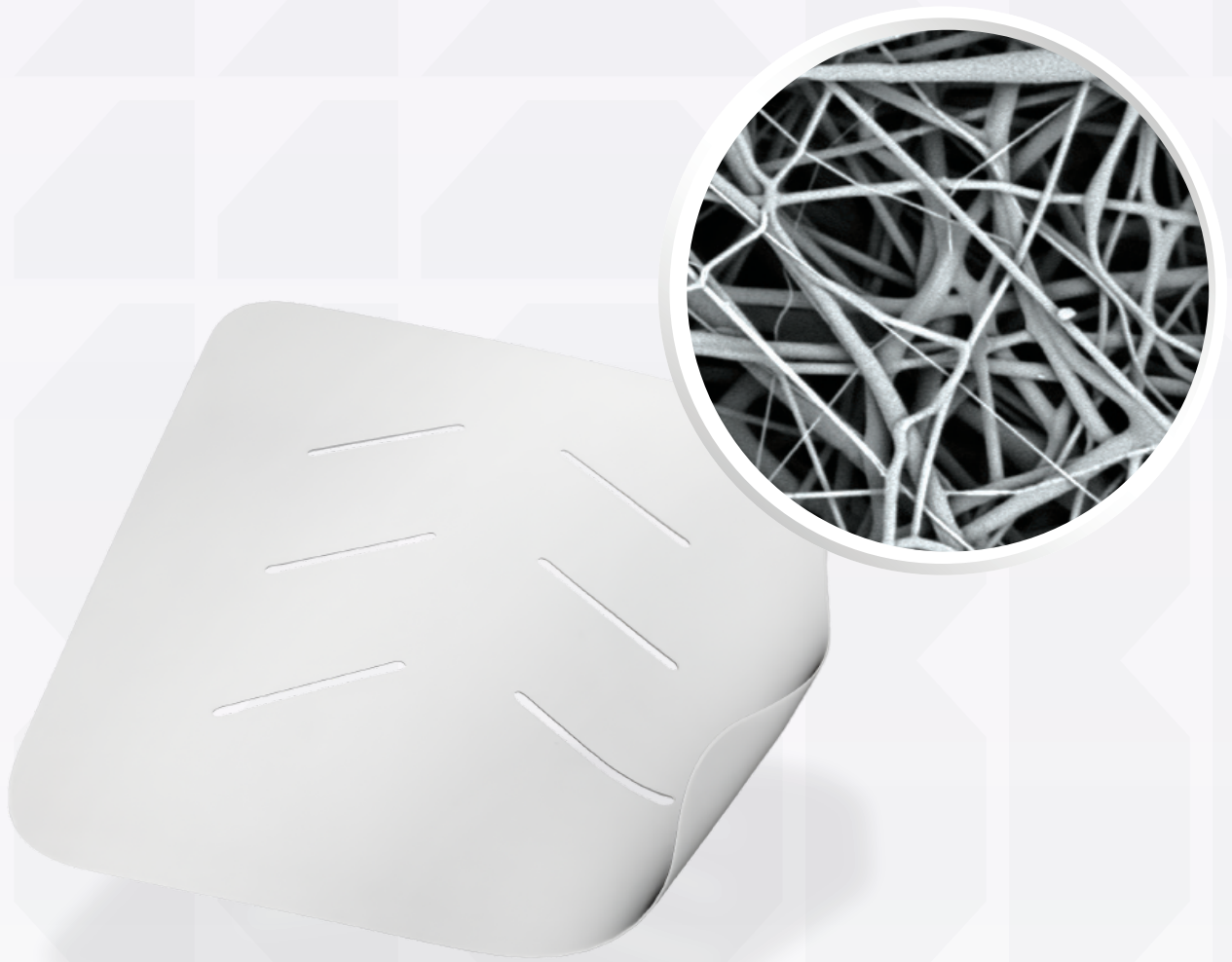




PHOENIX

Wound Matrix®

ELECTROSPUN SYNTHETIC SCAFFOLDS
FOR FULL TO PARTIAL-THICKNESS WOUNDS



 **ATREON**
ORTHOPEDICS

AUTOBIOLOGIC™ SCAFFOLDS: POWERING THE HEALING RESPONSE



AN UNMET NEED IN WOUND HEALING

Chronic and complex wounds pose a significant clinical challenge. If a balanced, reparative environment is not restored, wounds are at an increased risk of chronic inflammation, delayed healing, and complications such as infection and dehiscence.¹

REDEFINING THE MICROENVIRONMENT

PHOENIX Wound Matrix is a bioresorbable and microporous synthetic scaffold designed to:

- Stimulate a low-pH environment
- Promote reestablishment of a balanced microbiome
- Enable progression of wound healing cascade
- Support formation of healthy granulation tissue

DESIGNED AS A SCAFFOLD

Electrospun Matrix Design

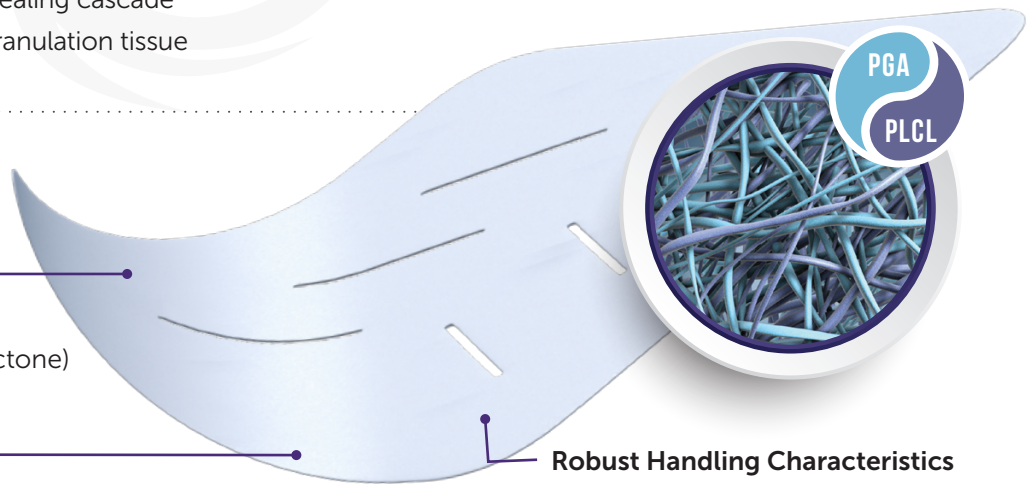
- **PGA:** Polyglycolic acid
- **PLCL:** Poly(lactide-co-caprolactone)

Bioresorbable

- Natural resorption via hydrolysis over 10–14 days

Robust Handling Characteristics

- Thickness: 0.2mm
- Accommodates suture if needed



Promotes Tissue Repair & Remodeling

- Reduces pH levels to pro-healing state²
- Supports formation of healthy granulation tissue
- Modulates inflammation
- Facilitates wound homeostasis

Design Facilitates Ease of Use

- Fenestration accommodates wound exudate and compatibility with NPWT*
- Easily conforms to complex wound beds
- Durable & visible to enable repositioning

100% Synthetic Polymers

- No human or animal components
- No tissue tracking or special storage requirements
- No contraindications
- Consistent quality & biocompatibility

Bioresorbable Barrier Membrane

- Biphasic resorption profile
- Provides barrier membrane to protect against microorganisms
- Mimics native extracellular matrix

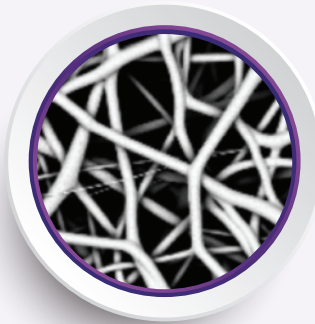
*Negative Pressure Wound Therapy

MICROENVIRONMENT OPTIMIZATION POWERED BY SYNTHETICS

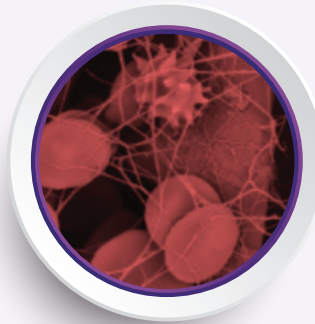
Sophisticated design mimics the native extracellular matrix to facilitate and optimize cellular infiltration, proliferation, and remodeling through a natural reparative process.



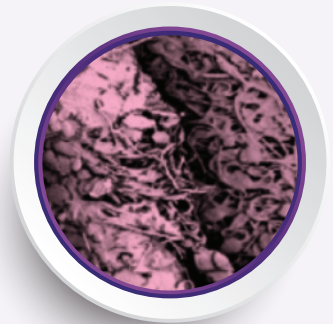
Native Dermal ECM



PHOENIX Wound Matrix



Cell Migration & Infiltration



Cell Proliferation

SPECIFIC POLYMER COMPOSITION PROMOTES HEALING ENVIRONMENT

Sustained release of bioactive contributors from PGA and PLCL reduce pH, modulate inflammation, and fuel cellular activity to promote a favorable healing environment for tissue repair.



Glycolic Acid^{4, 5, 10}

- Promotes fibroblast proliferation & collagen expression
- Modulates inflammation

Lactic Acid^{6, 7, 8, 9}

- Stimulates angiogenesis
- Promotes ECM deposition
- Fuels cellular activity

Caproic Acid^{5, 12}

- Modulates inflammation
- Addresses bacterial & fungal contaminants

DEMONSTRATED EFFICACY

Strong Early Wound Area Reduction with Meaningful and Durable Healing³

Complex patient population with severe comorbidities

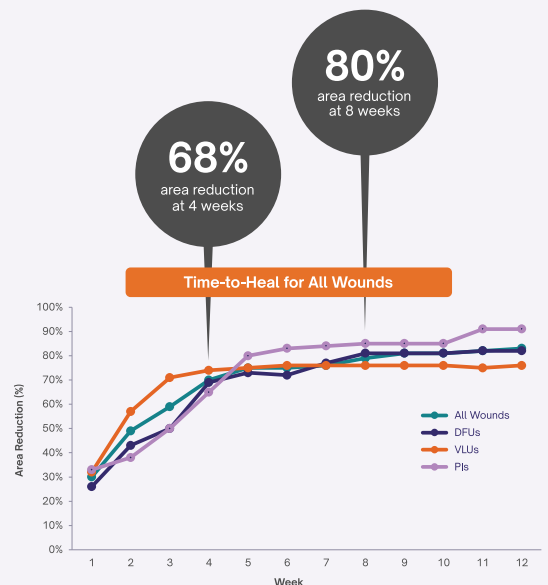
- 50 heterogeneous refractory wounds

Demonstrated acceleration of healing process

- Time to heal similar for all wounds, healing in < 8 wks average

Consistent healing trajectory, regardless of wound etiology

≤ 2 applications of PHOENIX Wound Matrix (3DESPM2) were used to treat majority of wounds

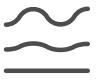


QUICK APPLICATION GUIDE



Prepare the Wound Bed

Prepare the wound using standard methods to promote homeostasis and ensure it is free of debris and necrotic tissue.



Apply PHOENIX Wound Matrix

The matrix may be trimmed to accommodate the area of application. Once applied, the matrix may be smoothed, repositioned, and rinsed with sterile saline (as needed) to ensure conformity to the wound bed.



Affix Wound Matrix (Optional)

The matrix may be affixed to the wound using staples, sutures, surgical glue or reinforced adhesive skin closures (i.e. Steri-Strip™) as needed.



Non-Adherent Dressing

Apply an appropriate non-adherent dressing and/or secondary dressing to maintain graft adherence, protect the wound and manage the wound environment. Additional bandaging may be applied as needed.

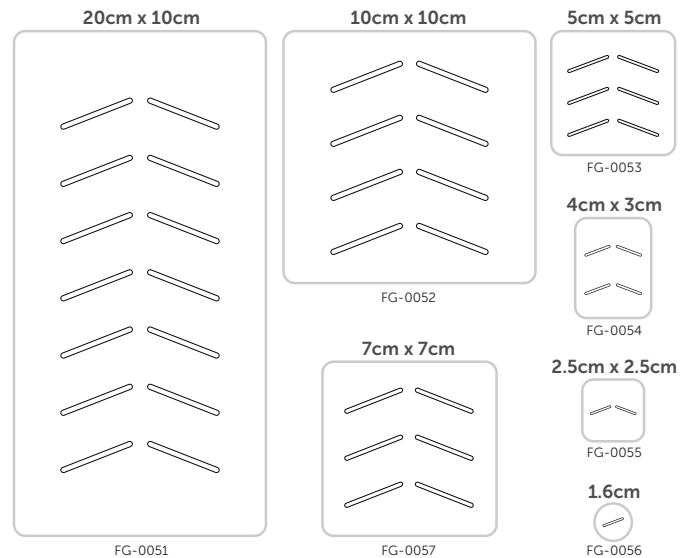
ADAPTABLE AND VERSATILE

Real-world clinical applications:

Revision arthroplasty, limb salvage, necrotizing fasciitis, and trauma surgery.

FDA 510(k) Clearance:

Partial and full-thickness wounds, pressure ulcers, venous ulcers, diabetic ulcers, chronic vascular ulcers, tunneled/undermined wounds, surgical wounds (donor sites/grfts, post-Moh's surgery, post laser surgery, podiatric, wound dehiscence), trauma wounds (abrasions, lacerations, second degree burns, skin tears) and draining wounds.



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For complete list of references and study details visit www.renovoderm.tech

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AOI-00405 Rev A
June 2026