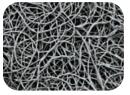
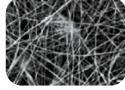
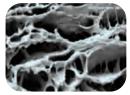


The Restrata® Difference

Restrata is engineered to be structurally similar to native human extracellular matrix.³







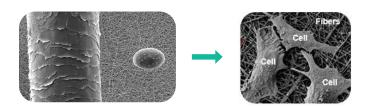
RESTRATA'S HYBRID-SCALE FIBERS

HUMAN TISSUE

XENOGENIC COLLAGEN

Structure and Scale Matter

Restrata's hybrid-scale fiber architecture closely resembles the structure and scale of native ECM, allowing for cellular ingrowth and neovascularization before completely resorbing via hydrolysis^{1,2}.



Hybrid-Scale Fiber Matrix Technology

- Fiber size and structure supports cellular ingrowth and retention^{1, 2}
- Porosity supports granulation and vascularization²
- Controlled resorption rate via hydolysis^{1,2}
- Resistant to enzymatic degradation²
- Excellent biocompatibility^{1, 2}
- Tensile strength similar to human skin¹
- Slightly acidic byproducts, potentially lowering pH of local microenvironment⁴

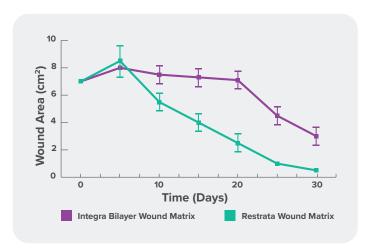
Restrata is indicated for a variety of wound types including:³

- Surgical and trauma wounds
- Partial and full-thickness wounds
- Acute and chronic wounds
- Tunneling and exudating wounds
- VLUs, DFUs, and pressure ulcers
- Burns

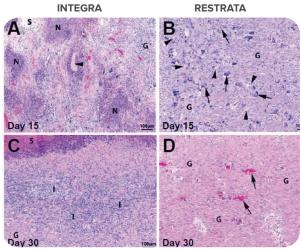
Restrata Compared with Integra® Bilayer Wound Matrix

Results of a Comparative Trial in a Large Animal Model

In an animal model, 100% of-full thickness wounds treated with Restrata granulated after 15 days compared to 20-50% of wounds treated with Integra after 15 days.² Restrata supported more rapid formation of granulation tissue, faster wound closure, significantly reduced inflammation, and significantly increased neovascularization compared with Integra.²



Gross evaulation of inflammation and wound healing, (A) Wound area (average \pm SD) as determined by planimetric analysis of wound photographs. *p < 0.05, Student's t-test, n=6 (Day 1-15) or n=3 (Day 19-30). (B) Average wound scores from gross wound observation.



Hematoxylin and eosin (H&E) stained sections from wounds treated with (A) Integra Bilayer Wound Matrix or (B) Restrata Wound Matrix at Day 15. G-granulation tissue, N-neutrophils, S-Seroma, Arrowheads-wound matrix material, Arrows-multinucleated giant cells surrounding wound matrix material. H&E stained sectiosn from wounds treated with (C) Integra Bilayer Wound Matrix or (D) Restrata Wound Matrix at Day 30. G-granuation tissue, I-inflammation (infiltrating neutrophils and macrophages), S-Serocellular debris. Arrows-Blood vessels.

Restrata is Easy to Apply

- 1. **DEBRIDE** all non-viable tissue
- 2. **SELECT** appropriate size
- 3. FENESTRATE if desired
- 4. CUT to fit
- 5. **HYDRATE** as needed
- **6. FIXATE** with Steri-Strips, staples, or sutures

Restrata has a tensile strength similar to human skin and can be run through a surgical mesher, sutured, or stapled as desired, and can be applied after surgical debridement in the OR.







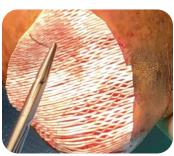






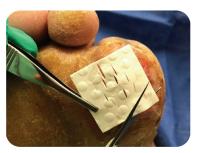






▼ CUT

▼ FIXATE







The value of hybrid-scale fibers and electrospinning has been demonstrated by many publications, but Acera is the first company to develop it beyond the research lab for patient healing."

- Agnes Rey-Giraud, CEO, Acera



Examples of Aftercare

- Primary dressing: Non-adherent dressing.
- Secondary dressings: For dry to light exudate, adding hydrogel is recommended.
 For moderate to heavy exudate, fenestrate Restrata to allow for drainage to pass through and utilize appropriate absorptive dressing.
- All dressing products can be used safely after application of Restrata.
- Restrata has been used in conjunction with Negative Pressure Wound Therapy. It is recommended that the Restrata is adequately fenestrated and the pressure is reduced.
- Primary dressing should remain intact for the course of a week and the secondary dressings can be changed as necessary.



Restrata prior to NPWT application



▲ Restrata after NPWT application

What to Expect and When to Reapply

- Restrata is engineered to remain in the wound bed, providing a continuous scaffold for cellular ingrowth.
- Restrata is resorbed via hydrolysis and the resorption rate is relative to the moisture content of the wound.
- At the first dressing change, some or all of the Restrata may be resorbed.
- Restrata can be reapplied at the physician's discretion.

Examples of Restrata Resorption Over Time

Restrata applied to a tumor excision surgical leg wound



▲ Initial application



▲ One week, partially integrated



▲ Two weeks, mostly integrated

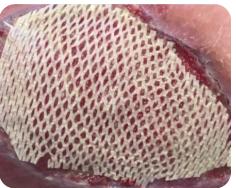


▲ Three weeks, fully resorbed

Chronic VLU post debridement



▲ Initial application with nonadherent primary dressing



▲ One week, Restrata matrix not resorbed but fully adhered to wound bed



▲ Two weeks, Restrata 50% resorbed, re-epithelialization at wound edges

What Should Be Removed Upon Examination?

Wounds should be routinely examined following application:

- Pieces adherent to wound...
- Pieces non-adherent to wound...

Leave in place
Remove and debride

PRE-APPLICATION



AFTER FIRST APPLICATION



AFTER SECOND APPLICATION



Case Studies of Surgical Applications with Restrata



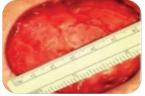








▲ **Abdominal wound** after 2nd hernia repair and six months nonhealing. Progress of two Restrata applications over eight weeks.









Post-Merkel cell resection. One Restrata application in conjunction with tissue expander. Z-flap conducted one week after application.



to closure.





to back side of the flap. One Restrata application

↓ Limb salvage scenario with exposed joint capsule on a diabetic foot ulcer. Two Restrata placed to wound closure.











A Restrata can be utilized for **Surgical wounds**, such as amputation sites, to expedite granulation and epithelialization while potentially reducing post-operative complications.

▲ STSG donor site – Restrata applied to STSG donor site. Patient healed after one application of Restrata in nine days and had markedly reduced pain. Skin pigmentation returned to treated area.







▲ Traumatic wounds – Crush injury to the heel with Restrata applied to tissue defect.









▲ Surgical wounds — Restrata healed a four-month-old BKA stump wound with one application in eight weeks.









▲ **Scalp wound** – Restrata applied with hydrogel to wound after debridement.













▲ Post-Mohs over-ear cartilage. One Restrata application to closure.







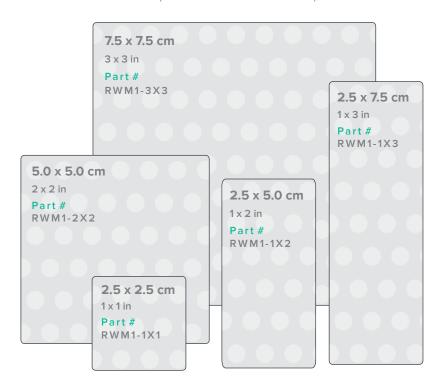


Burn 🔺 Exposed bone and joint capsule. One application to heal.

RESTRATA®

SIZES UP TO 10 X 12.5 CM

Actual size of product. Store at room temperature.



ALSO AVAILABLE:

Size (in): 4 x 5 | **Size (cm):** 10.0 x 12.5 | **Part #:** RWM1-4X5

Acera Surgical, Inc., St. Louis is a bioscience company commercializing a portfolio of synthetic hybrid-scale fiber matrices for medical applications.



Call/fax Acera Customer Service (844) 879-2237

Or visit acera-surgical.com

FSS #V797P-36F79718D0525



Serving our veterans

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RESTRATA IS EASY TO USE

- ✓ No human or animal tissue components-no special storage and handling requirements
- ✓ Suitable for use in patients with specific ethnic or religious objections to tissue grafts
- ✓ No requirement for specific orientation when applied
- Terminally sterilized
- ✓ Latex-Free
- ✓ Six sizes available to reduce waste and cost
- ✓ Two-year shelf life
- Sufficient strength to suture or staple if needed

REFERENCES

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- MacEwan MR, MacEwan S, Wright AP, et al. (August 27, 2017) Comparison of a Fully Synthetic Electrospun Matrix to a Bi-Layered Xenograft in Healing Full Thickness Cutaneous Wounds in a Porcine Model. Cureus Journal of Medical Science 9(8): e1614. doi:10.7759/cureus.1614
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- 4. EDS-70023
- 5. Data on file

