Medical Products that Matter™

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Corporate Vision

Addison Delk, Company Board Chairman

To lead the future of wound care innovation by delivering advanced medical solutions that improve patient outcomes & establish a legacy of excellence that endures for generations.

Our Mission & Values

Our Mission

To improve lives by developing and distributing innovative and advanced wound care products.

Our Core Values

Help First
Our primary concern is helping others however we can. We value people and strive to be a trusted resource.

Own Your Impact
We recognize that every action we take leaves an imprint. By taking charge and saying, “This is mine,” we turn every responsibility into a testament to our commitment and character.

Never Settle
We foster a culture of continuous growth and improvement. Whether it’s our products or our own skill sets, we’re constantly seeking ways to improve.

Empower Each Other
We value feedback and aim to make everyone feel appreciated, supported, and motivated. It takes heart, and it takes all of us.

Our History

Over Three Decades of Success

Since its inception in 1992, MPM Medical has been committed to developing innovative wound care products that improve the lives of healthcare providers and the patients they treat.

@ Mesquite, TX
(25 miles from DFW airport)

1992 – MPM Medical launches with advanced wound care products.

2002 – Launch of RegeneCare 2% Lidocaine Hydrogel.

2007 – Expands Hydrogel offering with SilverMed Antimicrobial products.

2012 – Expands into DME contracts to offer at-home patient delivery.

2015 – Launch of unique super absorbent dressings.

2017 – FDA approval of surgical collagen with antibacterial properties.

2018 – Launch of ACM (collagen matrix) Surgical line for burn patients.

2022 – Launch of MetaMatrix™ Surgical line for orthopedics.

2023 – FDA approval of OTC collagen.

2024 – Surgical expands to General surgery, spine & other applications.

Core Products

Antibacterial/ Antimicrobial

SilverMed™ Antibacterial Alginate
SilverMed™ Antibacterial Foam
SilverMed™ Antimicrobial Hydrogel
SilverMed™ Antimicrobial Wound Cleanser

Collagens - Surgical

ACM Surgical™
MetaMatrix™

Collagens - Wound Care

TripleHelix™

Lidocaine Hydrogel

RegeneCare HA™

Dressings & Foams

CoolMagic™

NoTraum Extra™

Super Absorbent Dressings

DryMax Extra™

ExcelSAP™
Available in Bordered & Non-Bordered

75% Surgical

25% Wound Care

ACM Surgical Use Case

https://www.acmsurgical.com/
Email: surgical@mpmmed.com

Collagen Matrix Indications

ACMSurgical™
Advanced Collagen Matrix

mpm MEDIC

https://www.acmsurgical.com/
Email: surgical@mpmmed.com

Indications and Instructions

Indications for Use:

This product may be used in the management of:

- Partial- and Full-Thickness Wounds
- Pressure (Stage I-IV) and Venous Ulcers
- Ulcers Caused by Mixed Vascular Etiologies
- Venous Stasis and Diabetic Ulcers
- First- and Second-Degree Burns
- Cuts, Abrasions, and Surgical Wounds

Reorder Numbers:

ACM05	-5 mL Powder
MP00345	-1g Powder
MP00332	-2" x 2" Sheet
MP00333	-3" x 3" Sheet
MP00334	-4" x 5" Sheet
MP00337	-7" x 7" Sheet
MP00329	-8" x 12" Sheet

Directions for Use:

1. Cleanse wound site with gentle cleanser.
2. Debride necrotic tissue, biofilm, or other non-viable tissue to prepare the wound site.
3. Apply a ¼" thick layer of ACM Surgical Collagen Powder or the appropriate collagen sheet dressing size. Do not pack collagen powder tightly. Collagen sheets my be trimmed and layered, or folded into the wound bed.
4. Cover with non-adherent dressing. Repeat daily, or as needed, until the wound is healed. Change dressings based on drainage and always within 7 days; collagen dressings are for short-term use up to 4 weeks, with long-term use requiring healthcare assessment.

Precautions:

- ACM Surgical Collagen should not be used on persons sensitive to bovine products.
- Discontinue use and contact a physician if excessive redness, pain, swelling, blistering, infection, no sign of healing, or other unexpected symptoms occur.
- Avoid eye contact; flush thoroughly with water if this occurs.
- Discard any open or unused product.
- Store in a cool, dry storage environment, <77ºF.

Caution: Federal law restricts this device to sale by or on the order of a licensed healthcare practitioner.

Target Markets

- Reconstructive:
  - Reconstructive surgery includes a wide range of procedures designed to restore form and function after injury, disease, or congenital abnormalities.

- Burn Cases:
  - Tissue Regeneration, create and maintain a wound environment for dermal tissue generation and reepithelialization with or without split thickness skin graft.

Use Case Training

Severe Burn Injury with mixed-depth burn (partial- and full – thickness)

Burn Depth and Appearance

- The **tan and white areas** represent **coagulated dermis** — tissue that's been thermally damaged, typical of **deep partial-thickness to full-thickness burns**.
- The **black leathery patches** are **eschar**, composed of necrotic, denatured tissue.
- The **red, moist zones** around these areas indicate regions where the epidermis is lost but dermis remains partially viable — **partial-thickness burns**.

Extensive involvement of multiple body regions suggests a **major burn**, likely exceeding 30% of total body surface area (TBSA).

Use Case Training

Create a Proper Wound Bed with surgical debridement

- Remove devitalized or infected tissue.
- Reduce bacterial load and the risk of infection.
- Prepare wound bed for advanced closure techniques, such as:
  1. Collagen dressing placement (ACM pads)
  2. Skin grafting
  3. Negative pressure wound therapy (NPWT)

A Proper Wound Bed has,

- Skin Edges with proper bleeding
- Subcutaneous Fat w/Punctate Bleeding
- Scored Fascia with Red to Pink Muscle
- Solid Tendon and Ligament structure

ACM® Collagen Matrix provides:

- Pure bovine type I collagen pad, lyophilized for strength and conformability.
- Ideal for large, complex, or deep wounds post-debridement.
- Provides a biologically active scaffold that encourages angiogenesis and tissue granulation.
- Especially useful after surgical excision of necrotic or infected tissue, as in this case.

Image shows a surgeon actively debriding necrotic (dead) tissue from a wound using an electrocautery tool.
Required for Severe burns, Necrotizing fasciitis, Chronic nonhealing wounds (such as diabetic ulcers or pressure injuries), Traumatic wounds with tissue necrosis or Post-surgical wound infections

Use Case Training

Pathophysiology:

- Achieve hemostatis. Avoid broad area cauterization.
- In cases like this, infection spreads along fascial planes, destroying skin, fat, and connective tissue.
- Once the necrotic tissue is excised, the wound is left open and deep, requiring:
  1. Moist wound healing, Bacterial control, and
  2. A scaffold to support granulation and closure.
  3. The key to recovery is maintaining a clean, biologically active wound bed and preventing reinfection while promoting tissue regeneration.

ACM® Collagen Matrix provides:

- Ideal once wound is clean. Low pH of ~2.5 maintains an antibacterial environment.
- Pure bovine type I collagen pad serves as a biologic scaffold for healing.
- Promotes angiogenesis and cellular migration, particularly in deep, irregular wounds like this.
- Promotes tissue regeneration by becoming the sacrificial collagen for MMPs allowing the body's collagen to work.
- Can be layered or trimmed to fit the wound cavity.

Image: Post-debridement necrotizing soft tissue wound involving the buttock and posterior thigh region.

This wound type is frequently seen after, Necrotizing fasciitis, Stage IV pressure ulcers (sacral/gluteal region), Traumatic degloving injuries or Compartmental infection debridement

Use Case Training

Hydrating ACM® pads:

ACM® pads are lyophilized (freeze-dried) to maintain structural integrity and sterility. Before application, rehydration in sterile saline serves several clinical purposes:

- Reactivation of the collagen matrix. Restores the native triple-helix structure of Type I collagen, allowing it to interact biologically with the wound bed.
- Enhanced adherence to tissue. A moistened collagen sheet conforms to the wound base, reducing dead space and improving cellular contact.
- Immediate hemostatic and healing activation. Once rehydrated, collagen can bind platelets and growth factors, supporting hemostasis and repair.

Image: ACM® Collagen Pads being hydrated in sterile normal saline.
Hydration step makes the material pliable, conformable, and easier to contour to wound surfaces, especially for large irregular wounds.

Use Case Training

ACM® Collagen Matrix meshing provides several biological and mechanical advantages:

- Expanded Coverage: A single ACM pad can cover a much larger wound bed, making it cost- and resource-efficient. A 1:1 size ratio is used for smaller wounds to achieve tight fit and high collagen density. A 2:1 ration doubles surface area and is used for large or irregular wounds like burn surfaces. A 3:1 ration is rare for collagen to avoid compromising structural integrity.
- Conformability: The meshed pattern allows the collagen to drape over uneven wound contours — especially useful in areas like the sacrum, limbs, or back.
- Exudate Channeling: The mesh openings create drainage pathways for wound fluid, reducing the risk of fluid accumulation beneath the graft.
- Enhanced Tissue Integration: The lattice pattern permits cellular migration and capillary ingrowth through the openings, improving healing speed.
- Improved Adherence: The mesh allows for better contact between the wound bed and the collagen scaffold.

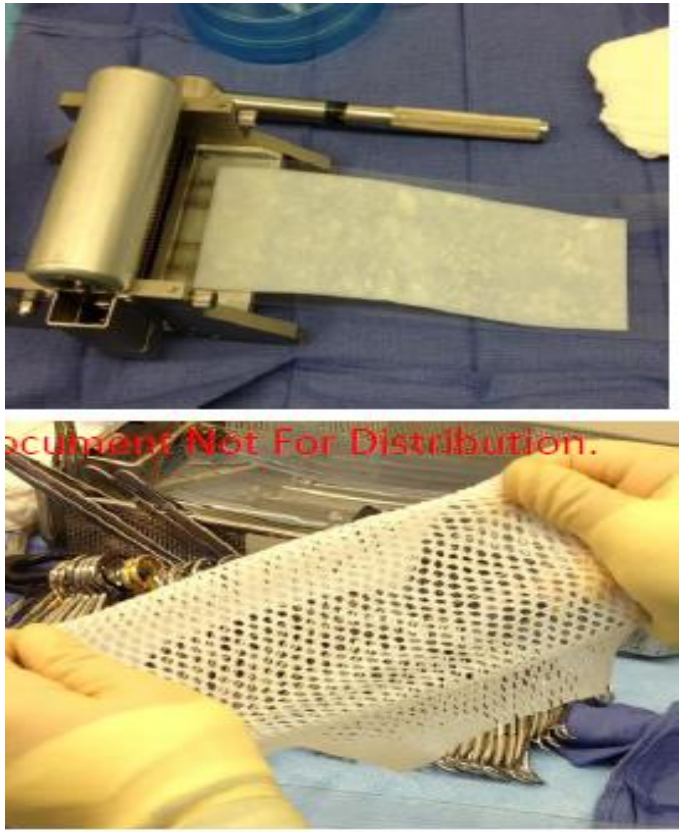

Image: Skin graft mesher used with a 1:1 or 2:1 ratio to create an ACM® collagen mesh.

Use Case Training

ACM® Meshed Collagen Application: Smooth Dressing across the Wound to ensure intimate contact with the wound bed. This step is part of biologic wound bed reconstruction. The goals are:

- Protect exposed tissue and prevent fluid loss– The collagen acts as a temporary dermal barrier.
- Provide a biologically active scaffold– Supports fibroblast migration, angiogenesis, and new tissue formation. Collagen layer accelerates granulation, vascularization, and epithelial migration.
- Control the wound environment– Helps balance moisture and reduces bacterial contamination. ACM's proprietary technology of ~2.5 pH provides an antibacterial environment.
- Prepare for future skin grafting (if needed)– A well-granulated, vascularized bed ensures better graft take later.
- This design essentially transforms the collagen pad into a **living scaffold** — encouraging tissue to regenerate in an organized, vascularized pattern.

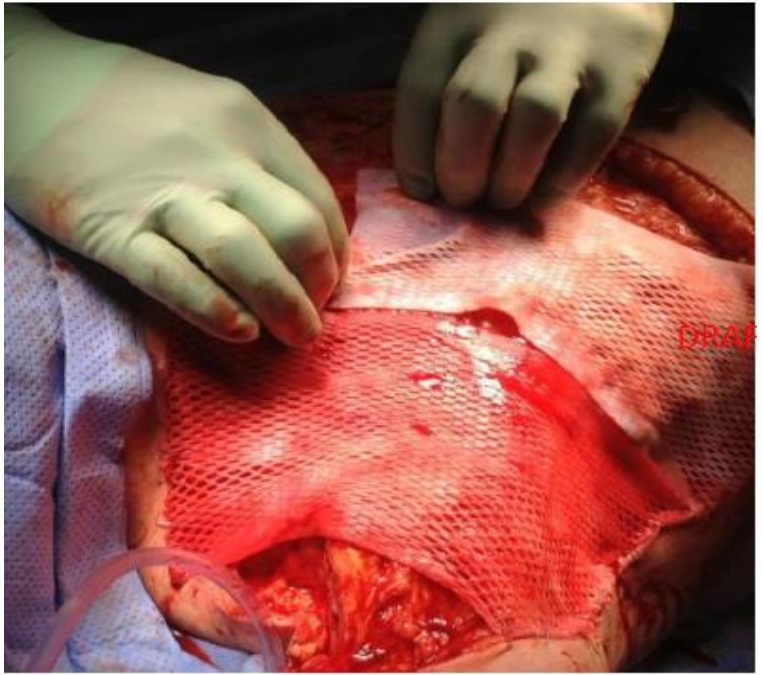

Image: Application of a meshed ACM® Collagen Matrix to promote healing, protect underlying structures, and prepare the wound for closure or grafting.
A **drain** (visible in the lower corner) is positioned to remove exudate and prevent fluid accumulation.

Use Case Training

ACM® Meshed Collagen Application: The smoothing technique serves both **mechanical** and **biologic** purposes:

- Eliminate air pockets: Air or fluid beneath the collagen prevents cellular contact and vascular ingrowth.
- Enhance adherence: Gentle pressure ensures the dressing fully contacts the wound base.
- Distribute exudate channels: The mesh pattern allows drainage; smoothing aligns these channels for even flow.
- Prevent shear and folding: Smooth placement avoids wrinkling, which can cause dead space or necrosis.
- Activate collagen–tissue interaction: Collagen needs intimate contact with the wound for fibroblast migration and matrix integration.

Once properly smoothed:

- **Fibroblasts** migrate from the wound bed into the collagen lattice.
- **Capillaries** grow upward through the mesh openings (angiogenesis).
- **Collagen remodeling** begins, creating a natural dermal scaffold.
- The **matrix is resorbed** and replaced with newly formed granulation tissue.

Image: Smooth the collagen dressing onto the wound surface. This ensures elimination of trapped air pockets, proper adherence to the wound bed, and uniform contact with underlying tissue.

Use Case Training

ACM® Meshed Collagen Application: The suturing or stapling the ACM® collagen matrix ensures:

- Full contact with wound bed: Prevents air pockets and ensures the collagen directly interfaces with viable tissue.
- Immobilization: Keeps the matrix from shearing or shifting with patient movement.
- Fluid control: Stabilization supports uniform fluid drainage through the mesh openings and toward the drain.
- Optimal biological activity: Tight adherence maximizes fibroblast migration and angiogenesis.
- Prepares for secondary closure or grafting: Ensures stable biologic coverage until definitive skin grafting or epithelialization occurs.

Once secured, the **collagen pad integrates biologically** into the wound:

- **Fibroblast and endothelial cell infiltration** begins within 48–72 hours.
- **Collagen remodeling** and **angiogenesis** occur through the mesh lattice.
- The ACM acts as a **temporary extracellular matrix (ECM)** scaffold, eventually resorbed and replaced by patient tissue.
- **Stable adherence** allows consistent cellular migration and prevents dead space or infection risk.

If not secured properly, the collagen may **lift off**, leading to seroma formation, delayed healing, or loss of graft adherence.

Image: Shows the final surgical step of applying and securing a meshed ACM® Collagen Surgical Dressing with minimal overlap, an integration of biologic wound coverage and fixation technique.

Use Case Training

Image: If applicable, like the case above when the burn area is on an extremity. Apply a Non-Adherent Contact Layer Directly (ACM Dry Veil) over ACM® Meshed Collagen. Provides Protection to Developing Tissue and Provides Initial Bolster to Help Intimate Contact with Wound Bed.

Image: If applicable, like the case above when the burn area is on an extremity. A Petrolatum Gauze is used to Cover the Entire Surface of the Wound to provide a moist, oxygenated environment.

Image: If applicable, like the case above when the burn area is on an extremity. Absorbent Dressings are Placed next over the Petrolatum Gauze.

Image: If applicable, like the case above when the burn area is on an extremity. Lastly, a Soft Ace or Elastic Bandage is Wrapped over Wound and/or Body.

Image: Standard dressings.
Or Use NPT solution

Use Case Training

Dressing Change and Wound Management Schedule: This sequence is typically used after applying ACM® Collagen Pad with or without Negative Pressure Therapy (NPT).

Day 1–2: Immediate Post-Application Phase: Maintain collagen adherence and protect early granulation. Leave non-adherent in place and add new secondary dressings as needed.

- Do not disturb the non-adherent layer (e.g., petrolatum gauze or dry veil dressing).
- Add new secondary and outer dressings only as needed (to replace soiled or saturated outer layers).
- If under NPT, check suction and seal integrity daily; do not change the collagen interface layer.

Day 3–5: Early Granulation and Integration Phase: Encourage vascularization while maintaining moisture and protection.

- Replace the non-adherent dressing.
- If NPT is being used, perform a canister and outer foam change while replacing the internal non-adherent dressing.

Day 5+: Maturation and Reassessment Phase: Evaluate graft adherence, wound bed quality, and readiness for next intervention.

- Gently remove staples or sutures securing the dressing.
- Gently cleanse the wound with sterile saline to remove residual debris.
- Apply a new ACM ® collagen dressing and replace all dressing.
- If using NPT, assess whether continued vacuum therapy is needed or if the wound is ready for secondary closure or grafting.

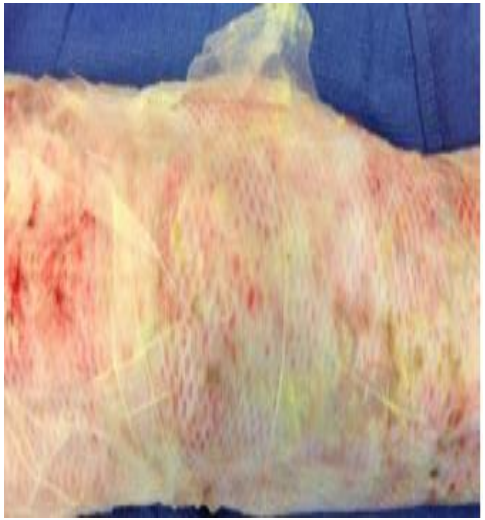

Image: Shows the replacement of the non-adherent Dry Veil layer.

Use Case Training

Expected Outcomes:

Matrix resorption: ACM® collagen gradually breaks down as host cells remodel the tissue.

Neovascularization: Capillaries grow through the matrix, supplying oxygen and nutrients.

Tissue regeneration: Collagen scaffold is replaced by patient-derived dermal tissue.

Reduced inflammation: The wound environment stabilizes, supporting epithelial migration.

Day 4

Day 11

Day 14

Assess Tissue Generation:

- Day 1-3: Hydration and adherence. Some Color Change Red to White
- Day 3-5: Cellular Infiltration. ACM Dressing Attaches to Wound Bed
- Day 5-14: Angiogenesis & tissue ingrowth. Interstices Begin to Fill with Tissue

Use Case Training

Expected Outcomes:

- ACM Generated Tissue.
- Tissue in Interstices is Meshed Pattern of ACM and is still clearly visibe.
- Gentle Abrasion Causes Tissue to Bleed.
- New tissue is Flush with ACM.

Image: ACM generated tissue

Use Case Training

Final Stage:

The left image shows a wound after full incorporation of the ACM® Collagen Pad — the matrix has vascularized and formed a granulating neodermis.

The right image shows the split-thickness skin graft (STSG) freshly applied and stapled into place. This graft is autologous — harvested from the same patient.

By the time of grafting:

- The ACM® Collagen has been fully integrated and vascularized, forming a healthy dermal layer.
- The STSG provides the epidermal component necessary for permanent closure.
- Because the graft is applied to a vascularized collagen base, the graft take rate is significantly higher, and healing is faster and more stable.

The ACM® Collagen served as a biologic scaffold that transformed the wound from a deep, nonviable surface into a vascularized, graft-ready bed.

Image: Final stage of biologic wound reconstruction using ACM® Collagen Surgical Dressing followed by a split-thickness skin graft (STSG). This is the point where the collagen matrix has prepared the wound bed for definitive closure.

Target Markets – Reconstructive

1. Post-Traumatic Soft Tissue Reconstruction: After severe trauma (such as crush injuries or degloving wounds), the goal is to restore durable soft tissue coverage.

Typical use of ACM® Pads:
•Applied directly to the wound bed after debridement to **stimulate granulation tissue** and **reduce wound depth**.
•Used as a **temporary dermal scaffold** prior to split-thickness skin grafting.
•Supports cellular infiltration and neovascularization for improved long-term graft take.

2. Diabetic Foot and Lower Extremity Reconstruction: In diabetic limb salvage, wounds are often chronic and difficult to close surgically.

ACM® Pad role:
•Applied after debridement to **prepare the wound bed for closure or grafting**.
•Can be used as a **stand-alone biologic dressing** to promote granulation and epithelialization when flap coverage isn't feasible.
•Provides a **collagen matrix** that modulates protease activity and supports cell migration.

3. Pressure Ulcer Reconstruction: Chronic stage III–IV pressure injuries frequently require flap coverage.

ACM® Pad use:
•Applied during the **preoperative wound conditioning phase** to promote healthy granulation tissue.
•Can also be used **under flap closures** to enhance healing and reduce recurrence risk.
•Supports tissue regeneration in areas of poor vascularity.

Target Markets – Reconstructive

4. Oncologic and Radiation Wound Reconstruction: After tumor excision or radiation injury, healing can be compromised by fibrosis and poor perfusion.

ACM® Pad role:
•Serves as a **biologic scaffold** to fill soft tissue voids and promote revascularization.
•Can be used before flap reconstruction to improve wound bed quality.
•Offers a **non-cytotoxic, bioactive collagen environment** ideal for compromised tissue.

5. Burn and Scar Revision Surgeries: In both acute and reconstructive burn care, ACM® Pads can enhance dermal regeneration.

Applications:
•Used after excision or scar contracture release to **encourage dermal repair**.
•Provides a **temporary collagen matrix** under grafts for improved graft adherence and texture.
•Aids in reducing scarring and contracture formation during remodeling.

6. Chronic Surgical or Dehisced Wound Reconstruction: Postoperative wounds that fail to close due to tension, infection, or poor perfusion often benefit from biologic scaffolding.

ACM® Pad role:
•Applied following surgical debridement to **stimulate granulation** and **bridge open wounds**.
•May be left in place under secondary closure to **support collagen deposition** and tensile strength.

Target Markets – Reconstructive

7. Traumatic and Post-Mohs Defects (Head & Neck)
These wounds often need biologic support before definitive closure.
ACM® Pad use:
•Ideal for **partial-thickness post-Mohs wounds** or donor sites.
•Promotes rapid epithelialization and **minimizes hypertrophic scarring**.
•Serves as a **natural dermal replacement layer** until complete closure occurs.

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