

Introducing the

PURAPLY® PORTFOLIO

NEXT-LEVEL CONTROL FOR COMPLEX WOUNDS*1-3

Supporting an optimal environment
for healing in complex surgical wounds

PuraPly®AM
Antimicrobial Wound Matrix

PuraPly®XT
Extra Fenestrated
Five-layer Antimicrobial Wound Matrix

PuraPly®MZ
Micronized Wound Matrix

Wound with application of PuraPly® MZ and PuraPly® AM

*Please refer to the package inserts for complete prescribing information.

PROTECTING AGAINST POST-SURGICAL COMPLICATIONS

After the operating room, a variety of surgical wounds may require bioburden management including an antimicrobial barrier to help mitigate the risk of additional surgical debridement procedures and flap/graft failures⁴⁻⁷:

- Venous leg ulcers
- Diabetic foot ulcers
- Open fractures
- Limb salvage
- Amputations
- Surgical dehiscence
- Pressure injuries
- Fasciotomies
- Mohs surgical defects
- Tunneling wounds
- Chronic wounds
- Pressure ulcers
- Trauma
- Soft tissue

A microscopic image showing a dense, multi-layered biofilm of white, irregularly shaped bacterial cells. The biofilm is growing on a dark, textured surface, likely a medical device. A white line points from the 'Biofilm' label to a specific point within the biofilm.

Biofilm

Uncontrolled bioburden
and biofilm can
delay healing^{8,9}

KEY BARRIERS TO HEALING COMPLEX WOUNDS

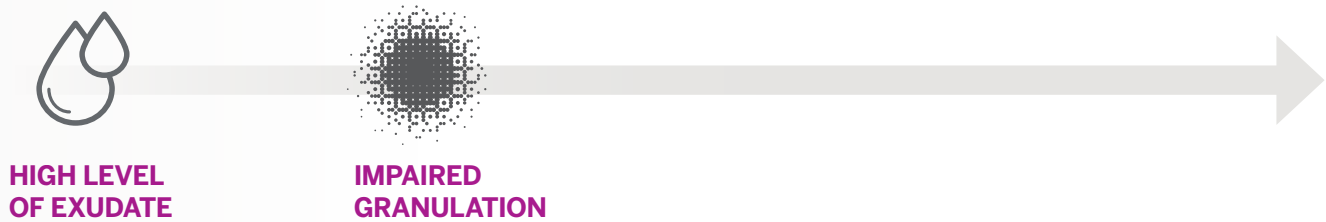
Comorbidities may impair host defenses and increase risk of surgical site infection (SSI), leading to increased length of stay (LOS), complications, readmissions, and costs^{6, 10, 11}



Elevated bioburden can lead to biofilm, which may trigger uncontrolled inflammation that delays healing^{9, 12-14}



Highly exudative wounds can also pose a challenge for properly promoting granulation tissue¹⁵





Wound microenvironment

This 3D visualization depicts a medical device, such as a catheter, within a wound microenvironment. A thick, yellowish-green biofilm is shown forming on the device's surface. Red, irregular shapes represent MMPs (Matrix Metalloproteinases) and ECM (Extracellular Matrix) components. A central area of the biofilm is highlighted with a white, crystalline structure, possibly representing a point of debridement or a specific microbial component. The background is a blurred, colorful representation of the wound's internal structure.

MMPs

ECM

Biofilm

Debridement alone does not control microbial growth or prevent biofilm re-formation⁹

Combine debridement with an optimal barrier that contains a broad-spectrum antimicrobial and provides a sustained effect against bioburden and biofilm regrowth in the barrier from day 1.

PROTECTING POST-SURGICAL WOUNDS AND SUPPORTING HEALING

The PuraPly® portfolio offers innovative solutions for a variety of wounds:

Options with broad-spectrum PHMB antimicrobial⁸

- Provides a persistent antimicrobial barrier effect¹⁶
- Features high tissue compatibility and low cytotoxicity^{8,16,17}
- Has no known instances of bacteria acquiring resistance to date^{8,17,18}

Native, cross-linked collagen matrix to control excess proteases¹⁸⁻²⁰

- Quenches excess protease activity¹⁸⁻²⁰
- Resists protease degradation^{18,19}

Various sizes and forms

- Maximizes wound contact and coverage
- Multiple configurations and sizes for a variety of wounds

Introducing the
PURAPLY PORTFOLIO

Antimicrobial barrier devices featuring native,
cross-linked ECM + broad-spectrum PHMB^{1,2,8,18}

PuraPly[®]AM
Antimicrobial Wound Matrix



PuraPly[®]XT
Extra Fenestrated



Micronized native collagen matrix³

PuraPly[®]MZ
Micronized Wound Matrix



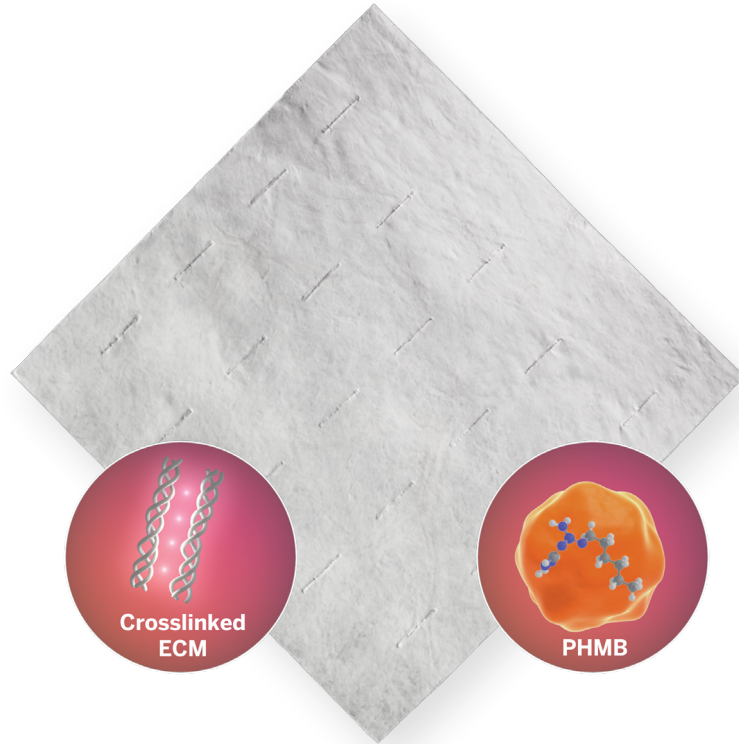
THE POWER OF PLUS + GIVES YOU CONFIDENT CONTROL OF BIOBURDEN



Antimicrobial barrier devices
featuring native, cross-linked ECM +
broad-spectrum PHMB^{1,2,8,18}

PuraPly[®]AM

Antimicrobial Wound Matrix



- Provides a sustained antimicrobial barrier effect to manage bioburden^{8,16}
- Native, cross-linked dual layers of ECM quench excess protease activity¹⁸⁻²⁰
- Resists protease degradation^{18,19}
- Reduces microbes penetrating through the device¹
- Convenient to use and stored at ambient temperature¹
- FDA-cleared for wound management

Also available: PuraPly XT

- Thicker, 5-layer ECM for deep, complex wounds
 - Available with extra fenestrations for highly exudative wounds
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BACKED BY REAL-WORLD & SCIENTIFIC EVIDENCE

Real-world evidence

Supported healing in large,* difficult-to-heal wounds

The Real-World Effectiveness Study of PuraPly AM on Wounds (RESPOND) was the first prospective, large (N=307), multicenter (28 sites) cohort study to assess the effectiveness of PuraPly AM in various difficult-to-heal wounds.²¹

86%

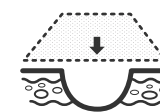
of all PuraPly AM–treated wounds demonstrated improvement in the wound bed condition²¹:



**INCREASED
HEALTHY
GRANULATION
TISSUE**



**REDUCED
EXUDATE**



**READINESS
FOR OTHER
ADVANCED SKIN
SUBSTITUTES**

RESPOND post-surgical wounds (N=54)[†]

96%

(52/54) of post-surgical wounds achieved closure at end of study²¹

12 WEEKS

median time to closure for post-surgical wounds²¹

*12.9 cm² mean wound area at baseline

[†]Post-surgical wounds (eg, donor site/grafts, post-Mohs surgery, postlaser surgery, podiatric surgery wound, and wound dehiscence) were categorized as surgical incisions sutured together by a margin approximation dressing or device after an operative procedure that fail to heal. Post-surgical wounds that failed to heal primarily due to dehiscence were defined by the separation of the incision line prior to complete healing resulting in an open wound. Partial dehiscence of a surgical wounds presented as superficial layers of tissue being reopened. Complete dehiscence presented as all tissue layers being separated with underlying tissue and organs being exposed and sometimes protruding through the wound opening. Other symptoms that characterized post-surgical wound dehiscence included broken sutures before the wound had healed, renewed pain, bleeding, and drainage from the surgical wound site.

Scientific data

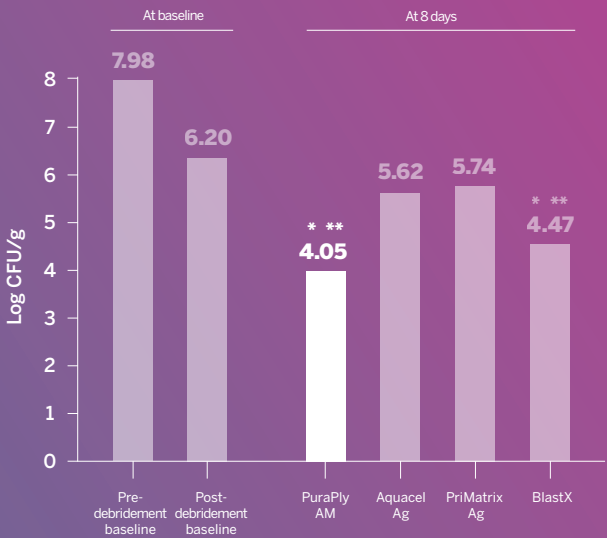
Antimicrobial barrier effectiveness + low cytotoxicity¹⁶

In an *in vitro* and *in vivo* nonclinical study to evaluate the antimicrobial capabilities of PuraPly AM and several other antimicrobial and collagen products against MRSA USA300:

- PuraPly AM was able to substantially reduce MRSA *in vivo* without impairing the wound healing process¹⁶
- PuraPly AM was noncytotoxic, with no detrimental effects *in vitro* on fibroblast proliferation and viability¹⁶

In vivo: Superior MRSA reduction with PuraPly AM

MRSA counts (*in vivo*)



* $P < 0.05$ vs Aquacel Ag and vs PriMatrix Ag.

** $P < 0.05$ vs pre- and post-debridement baselines.

99.28%

PuraPly AM MRSA reduction from post-debridement baseline¹⁶

In vitro: Minimal cytotoxicity

94.41%

fibroblast viability
at 48 hours for PuraPly AM¹⁶

Help maintain optimal contact
with the wound



Purified, micronized native porcine collagen³

PuraPly[®] MZ

Micronized Wound Matrix



- Native collagen structure
- Optimizes contact, conformity, and coverage in deep/tunneling complex wounds
- Supports a wound healing environment²²
- Supplied as a highly absorptive dry powder (particle size $\leq 1000 \mu\text{m}$)³
- Sterile device in a vial, sealed in a single pouch³
- Can be applied dry, or mixed with sterile solution to form a paste, enabling desired handling characteristics to access difficult wound locations³

PuraPly MZ can be used adjunctly with PuraPly AM

As an antimicrobial barrier, PuraPly AM helps control bioburden, while PuraPly MZ, made of the same original native collagen structure, continues to support a healing environment in complex surgical wounds.

APPLICATION OVERVIEW FOR PURAPLY® PRODUCTS

Refer to this summary of instructions for applying PuraPly products on a wound.

How to apply PuraPly® AM or PuraPly® XT^{1,2}

- 1** Prepare wound to ensure it is free of debris and necrotic tissue
- 2** Cut the dry sheet to the appropriate size and place in contact with wound bed
- 3** Hydrate with sterile saline
- 4** Use appropriate fixation and apply non-adherent dressing and secondary dressings
- 5** Assess weekly for reapplication



How to apply PuraPly® MZ³

- 1** Prepare wound to ensure it is free of debris and necrotic tissue
- 2** Using aseptic technique, open device and container and lightly apply product over the desired wound area; product can be:
 - poured directly from the container as a powder form, or
 - hydrated in a separate sterile container with sterile solution to form a paste (where wound location or geometry makes dry application difficult)
- 3** Use appropriate non-adherent dressing and secondary dressings
- 4** Assess weekly for reapplication



Please refer to the package inserts for complete prescribing information.

Manufactured and distributed by: Organogenesis Inc. Canton, MA 02021

References: **1.** PuraPly Antimicrobial [package insert]. Canton, MA: Organogenesis Inc; 2020. **2.** PuraPly Antimicrobial XT [package insert]. Canton, MA: Organogenesis Inc; 2020. **3.** PuraPly Micronized [package insert]. Canton, MA: Organogenesis Inc; 2022. **4.** Bowler PG, et al. *Clin Microbiol Rev.* 2001;14(2):244-269. **5.** Hu QL, et al. Prevention of perioperative surgical site infection. In: Newman MF, Fleisher LA, Ko C, Mythen M. *Perioperative Medicine: Managing for Outcome.* 2nd ed. Elsevier; 2021:444-457. **6.** Harris CL, et al. *Foundations of Best Practice for Skin and Wound Management. A supplement of Wound Care Canada;* 2017. **7.** Zabaglo M, et al. Postoperative Wound Infection. StatPearls. December 12, 2021. Accessed July 8, 2022. <https://www.statpearls.com/ArticleLibrary/viewarticle/31404> **8.** Hübner NO, et al. *Skin Pharmacol Physiol.* 2010;23(1 suppl):17-27. **9.** Schultz G, et al. *Wound Repair Regen.* 2017;25(5):744-757. **10.** National Healthcare Safety Network. Surgical Site Infection event (SSI). January 2022. Accessed July 8, 2022. <https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsscurrent.pdf> **11.** Agency for Health Research Quality. Surgical site infections. PSNet. September 7, 2019. Accessed April 29, 2022. <https://psnet.ahrq.gov/primer/surgical-site-infections> **12.** Frykberg RG, et al. *Adv Wound Care.* 2015;4(9):560-582. **13.** Schultz GS, et al. *Wound Rep Regen.* 2003;11:1-28. **14.** Gibson D, et al. *Wounds Int.* 2009;1(1):1-6. **15.** Falanga V. *Wound Rep Regen.* 2000;8:347-352. **16.** Davis SC, et al. *Int Wound J.* 2022;19(1):86-99. **17.** Gilbert P, et al. *J Appl Microbiol.* 2005;99(4):703-715. **18.** Brantley J, et al. *Wounds Int.* 2016;7(3):1-5. **19.** Carpenter S, et al. *Wounds.* 2016;28(6 suppl):S1-S20. **20.** Data on file. PDR-0005. Organogenesis Inc. **21.** Bain MA, et al. *J Comp Eff Res.* 2020;9(10):691-703. **22.** Data on file. PMZ_DR-0001. Organogenesis Inc.

For additional product or ordering information, talk with
an Organogenesis Tissue Regeneration Specialist