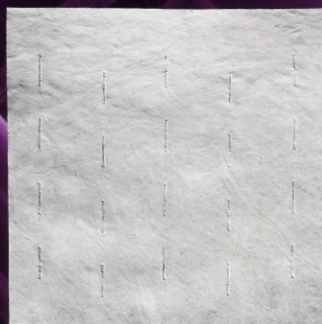




ORGANOGENESIS
PuraPly[®]AM
Antimicrobial Wound Matrix



ORGANOGENESIS
PuraPly[®]XT
Extra Fenestrated, Five-layer
Antimicrobial Wound Matrix

THE POWER OF PLUS

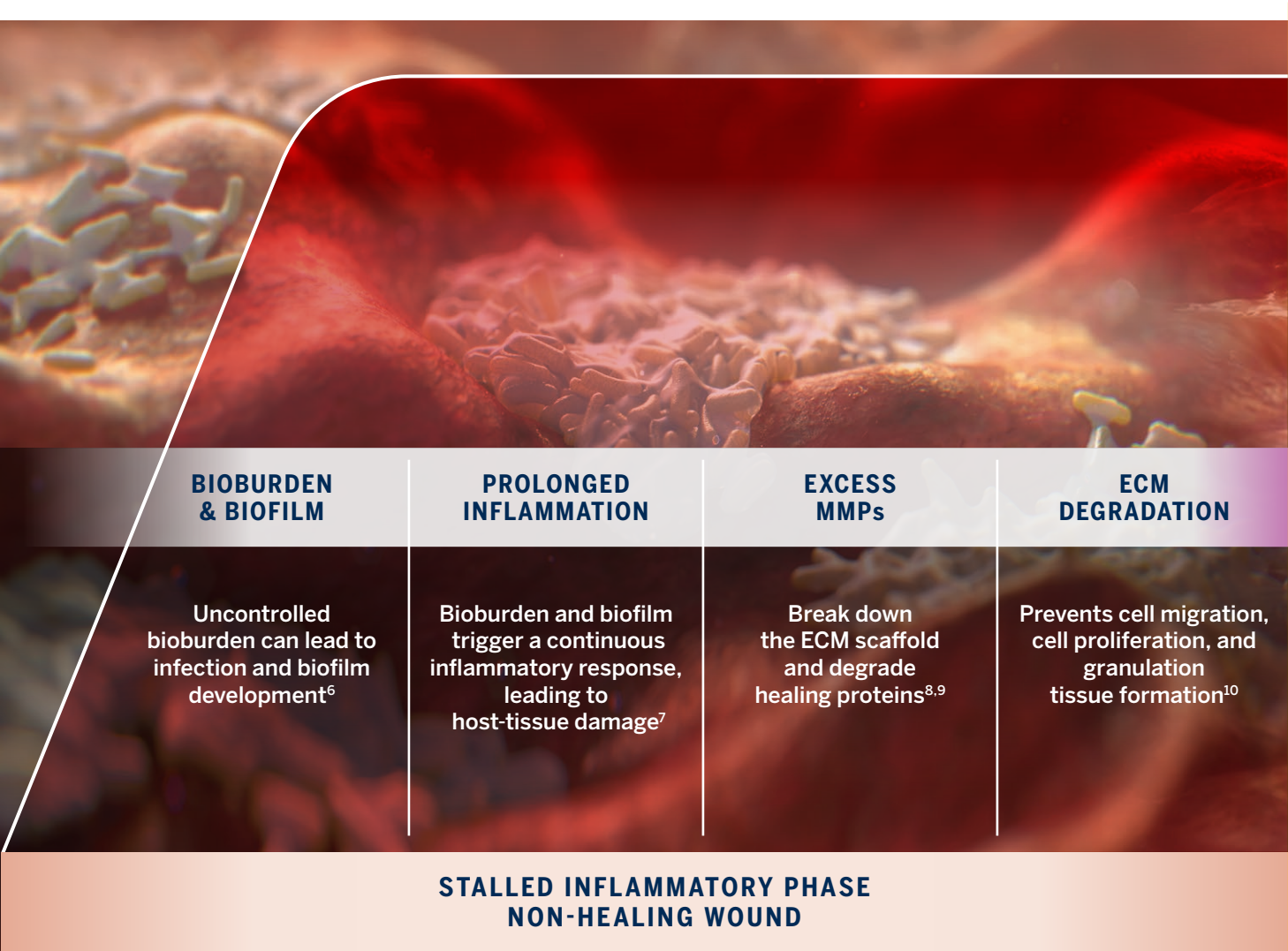
WITH PURAPLY[®] AM & PURAPLY[®] XT

Native ECM scaffold + broad-spectrum PHMB antimicrobial
for next-level wound healing support¹⁻⁵

ORGANOGENESIS

IDENTIFYING KEY BARRIERS TO HEALING TO IMPROVE OUTCOMES

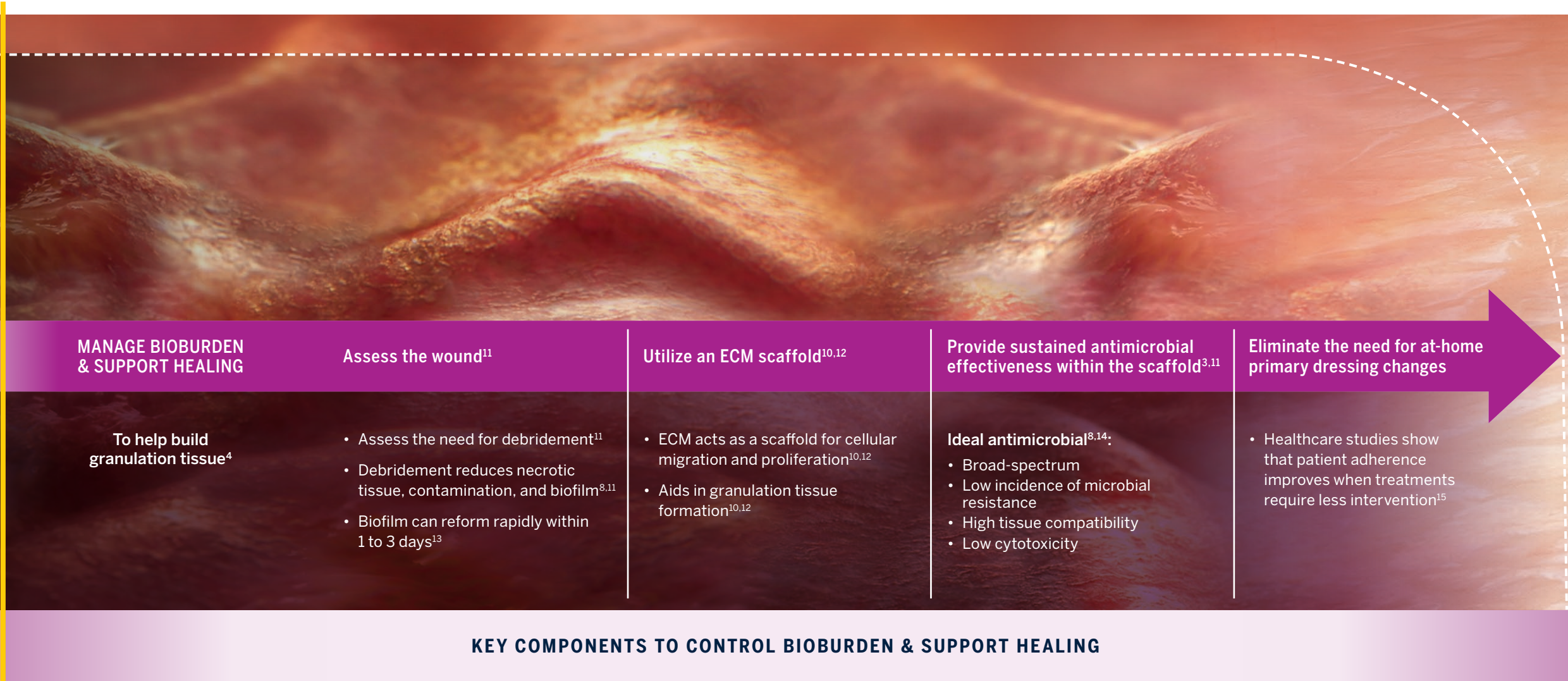
In acute and chronic wounds, uncontrolled bioburden can lead to biofilm resulting in excess MMPs and a continuous inflammatory response, which can break down the ECM scaffold and contribute to stalled, non-healing wounds⁶⁻¹⁰



MMPs=matrix metalloproteinases; ECM=extracellular matrix

SUPPORT HEALING WITH OPTIMAL WOUND CONTROL

For optimal bioburden control and wound healing support, combine standard of care with an ECM scaffold that provides sustained antimicrobial effectiveness within the product^{3,10-12}



ECM=extracellular matrix

IMPROVING PATIENT LIVES STARTS WITH CHOOSING A SOLUTION THAT MEETS THEIR NEEDS



Nonhealing wounds
significantly impact
**PATIENT QUALITY
OF LIFE**^{16,17}

At-home primary dressing changes
can expose the wound to bacteria and

**LEAD TO
CONTAMINATION**

Many patients with lower-extremity
chronic wounds are

**UNABLE TO CHANGE
THEIR OWN DRESSINGS**¹⁸

Many patients fear touching
their wounds and

**PREFER A DOCTOR
OR A NURSE**

exclusively to control
their care¹⁹

Supports healing and controls bioburden
in a wide variety of acute and chronic wounds¹⁻⁵

THE POWER OF PLUS

NATIVE,
CROSS-LINKED
ECM SCAFFOLD^{1,2}

+

BROAD-SPECTRUM
PHMB
ANTIMICROBIAL^{1,2,20}

NATIVE, CROSS-LINKED ECM SUPPORTS HEALING^{5,10}

Provides a scaffold for cellular migration and proliferation to aid in granulation tissue formation²¹

EXTRACELLULAR MATRIX SCAFFOLD OF PURAPLY® AM AND PURAPLY® XT

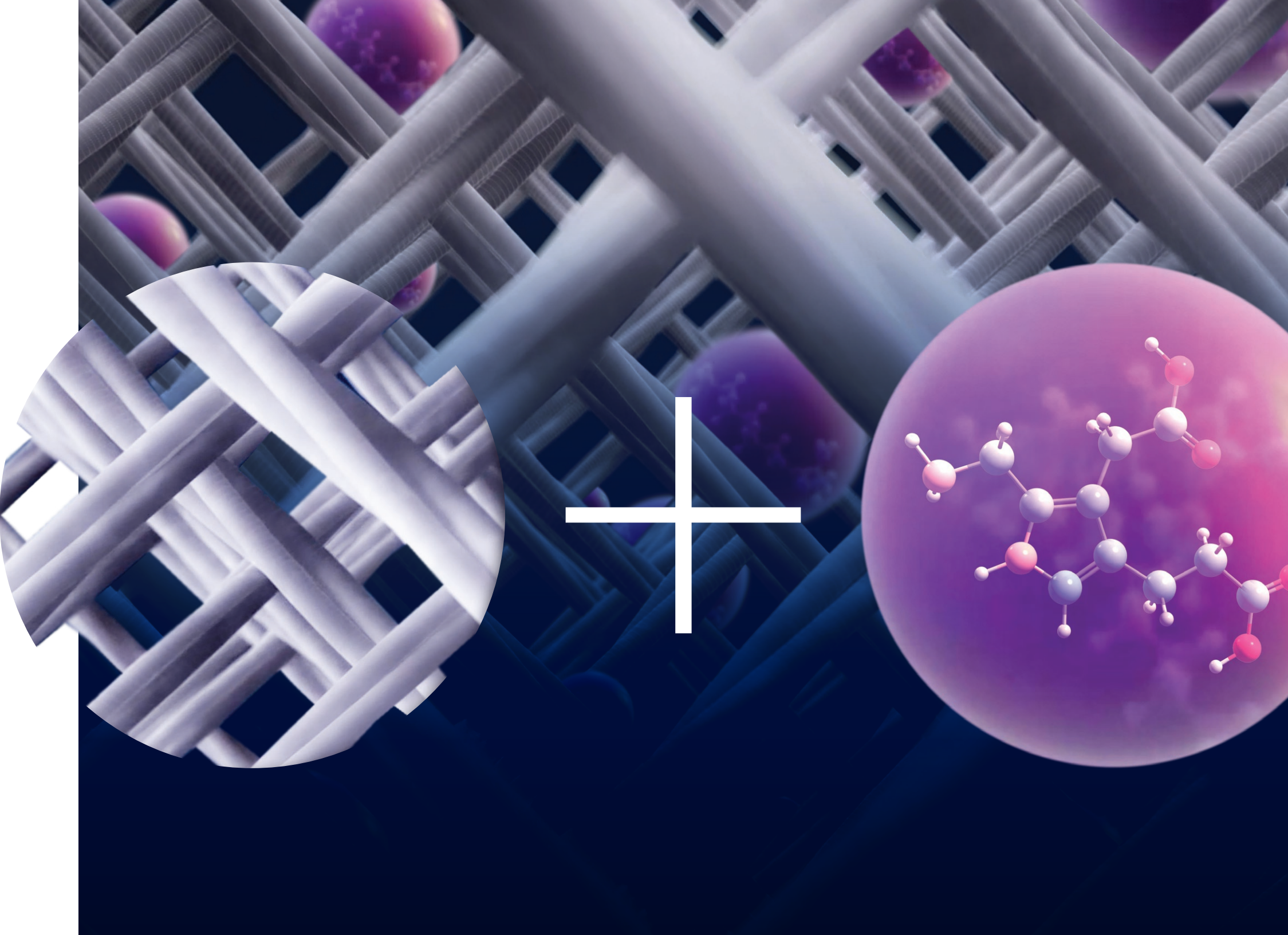
Maintains native collagen structure^{8,22}

- Inhibits a wide range of MMPs and controls excess proteases^{4,8,23}
- Ensures strength and compatibility^{8,22}

Cross-linked collagen layers^{4,8,22}

- Strengthens matrix bonds to resist protease degradation^{24,25}
- Reinforces persistence between patient treatment visits^{24,25}
- Maximizes surface area for PHMB saturation^{4,8,23}

ECM=extracellular matrix; MMP=matrix metalloproteinase; PHMB=polyhexamethylene biguanide
Note: PuraPly AM and PuraPly XT resist microbial colonization within the product and reduce microbes penetrating through it. PuraPly AM and PuraPly XT will naturally be resorbed into the wound and are not intended to be removed.



BROAD-SPECTRUM PHMB CONTROLS BIOBURDEN^{3,4}

Proactively disrupts bioburden to help prevent biofilm reformation^{4,26}

PHMB IS ONE OF THE BEST-INVESTIGATED ANTIMICROBIAL SUBSTANCES²⁰

Positively-charged PHMB²⁰

- Demonstrates high tissue compatibility and low cytotoxicity^{3,20,26,27}
- Will not damage key cells (eg, fibroblasts) involved in wound healing⁴
- Exhibits no known bacterial resistance to date^{4,20,26}

Covers a broad antimicrobial spectrum²⁰

- Provides sustained antimicrobial effectiveness within the product³
- Effective against gram-positive and gram-negative bacteria (eg, MRSA, *Pseudomonas aeruginosa*) and spore-forming bacteria and fungi²⁰
- Efficacy is not impaired in wound fluid, blood, or tissue²⁰

PHMB=polyhexamethylene biguanide; MRSA=methicillin-resistant *Staphylococcus aureus*
Note: PuraPly AM and PuraPly XT resist microbial colonization within the product and reduce microbes penetrating through it. PuraPly AM and PuraPly XT will naturally be resorbed into the wound and are not intended to be removed.

CONFIRMATION OF CONTROL: THE PURAPLY® PORTFOLIO IS BACKED BY AN EXPANDING EVIDENCE BASE

DAVIS STUDY

ANTIMICROBIAL EFFECTIVENESS STUDY

Davis SC, et al. *Int Wound J*. 2022;19(1): 86-99.

RESPOND STUDY

REAL-WORLD CLINICAL EFFECTIVENESS STUDY

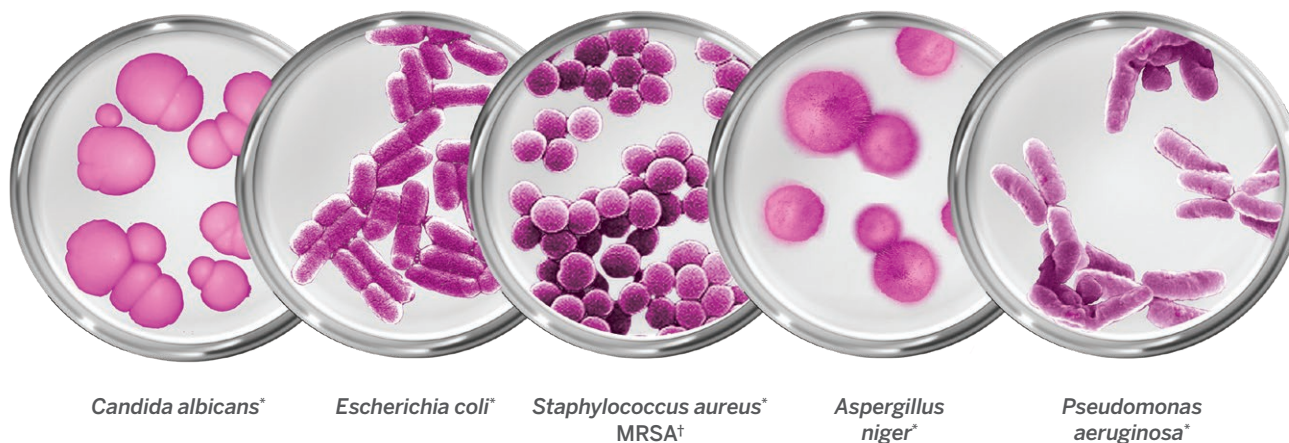
Bain MA, et al. *J Comp Eff Res*. 2020; 9(10):691-703.

OROPALLO STUDY

PROSPECTIVE CASE SERIES IN DIFFICULT-TO-HEAL WOUNDS

Oropallo AR. *Plast Reconstr Surg Glob Open*. 2019;7:e2047.

PURAPLY AM PROVIDES SUSTAINED ANTIMICROBIAL EFFECTIVENESS WITHIN THE PRODUCT AGAINST A BROAD SPECTRUM OF MICROBES²⁸



*Candida albicans**

*Escherichia coli**

*Staphylococcus aureus**
MRSA[†]

*Aspergillus niger**

*Pseudomonas aeruginosa**

In the US Pharmacopeia Antimicrobial Effectiveness Test,
PuraPly AM reduced concentrations of these microbes on days 7, 14, and 28 within the product

* United States Pharmacopeia Antimicrobial Effectiveness Test showed reduced concentrations at days 7, 14, and 28

[†] Zone of inhibition test demonstrated efficacy *in vitro*

MRSA=methicillin-resistant *Staphylococcus aureus*

SUBSTANTIAL MRSA REDUCTION WITHOUT COMPROMISING WOUND HEALING CELLS³

DAVIS STUDY

STUDY BACKGROUND

In vivo microbiology*

Compared MRSA colonies in each wound, using a porcine deep reticular dermal wound model

KEY STUDY FINDINGS

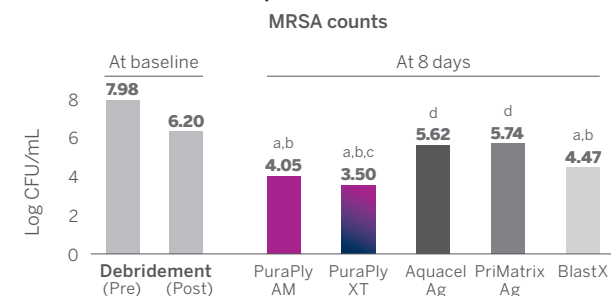
PuraPly® AM & PuraPly® XT provided a persistent and significantly greater antimicrobial effectiveness within the products

ANTIMICROBIAL EFFECTIVENESS WITHIN PURAPLY AM & PURAPLY XT†

>99%

MRSA reduction from
post-debridement baseline

In vivo: Superior MRSA reduction



*P<0.05 vs pre- and post-debridement baseline; †P<0.05 vs Aquacel Ag and PriMatrix Ag; ‡P<0.05 vs BlastX; §P<0.05 vs pre-debridement baseline

Data shown compared MRSA colonies in each wound, using a porcine deep reticular dermal wound model

STUDY BACKGROUND

In vitro cytotoxicity

Measured cell proliferation and cell viability using human dermal fibroblasts in media conditioned with test materials

KEY STUDY FINDINGS

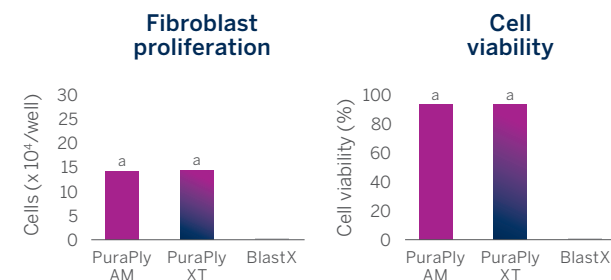
PuraPly AM & PuraPly XT did not prohibit cell proliferation and were non-cytotoxic to wound healing cells, unlike topical treatments

PURAPLY AM & PURAPLY XT LOW CYTOTOXICITY

>94%

Fibroblast viability
at 48 hours

In vitro: Low cytotoxicity



*P<0.001 vs Blast X

Data shown measured cell proliferation and cell viability using human dermal fibroblasts in media conditioned with test materials

* Wounds were inoculated with MRSA and were allowed to form biofilm for 72 hours; the wounds were then debrided before the application of testing agent

† In a study evaluating the antimicrobial effectiveness within PuraPly AM and PuraPly XT versus a variety of other wound products

MRSA=methicillin-resistant *Staphylococcus aureus*

PROVEN REAL-WORLD EFFECTIVENESS: MULTI-CENTER STUDY

PuraPly® AM supported healing and aided in granulation tissue formation⁵

RESPOND STUDY

N=307
28 Sites

Prospective, multicenter
cohort study

**Large
Difficult-to-Heal
Wounds**

12.9 cm² mean wound area

86% of wounds demonstrated improvement
in wound bed conditions[†]:



Increased
granulation
tissue



Reduced
exudate



Readiness for
other advanced
skin substitutes

85% of wounds achieved >75% reduction
in volume[†]

41.5% of wounds achieved
complete closure at 12 weeks

RESPOND=Real-World Effectiveness Study of PuraPly AM on Wounds

* PuraPly AM was applied post-debridement for up to 32 weeks; mean number of applications was 5.2

[†] At 32 weeks

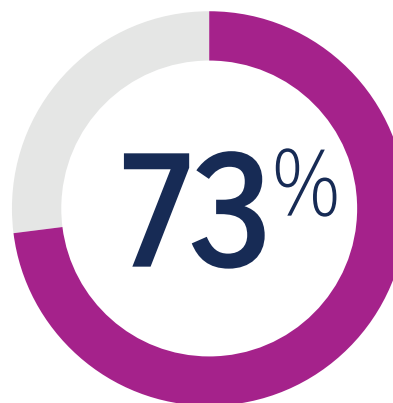
PROVEN REAL-WORLD EFFECTIVENESS: PROSPECTIVE CASE SERIES

PuraPly® AM demonstrated significant improvement in wounds that had been stalled for two years²⁹

OROPALLO STUDY

**Stalled,
Non-Healing Wounds
103 weeks**

~ 2 years mean wound duration
Prospective case series

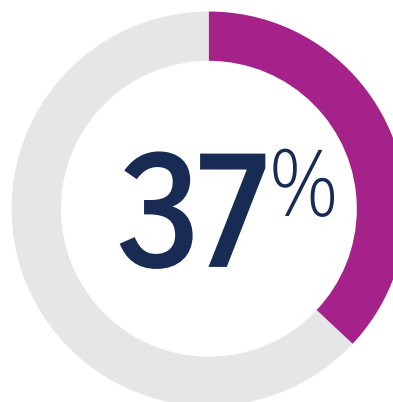


of wounds had a
reduction in wound area

**Large Wounds
18.0 cm²**

Baseline wound area

**Failed Multiple
Therapies**



of wounds **closed**
6.7 weeks mean time to
complete closure

Prospective case series, N=41

* PuraPly AM was applied post-debridement for up to 12 weeks; mean number of applications was 8; treating physician determined the frequency and type of assessments performed for each patient, according to standard of care for their target wound

A PORTFOLIO DESIGNED FOR A VARIETY OF ACUTE AND CHRONIC WOUNDS^{1,2}



PuraPly[®]AM

- 2 layers
- Cross-linked ECM scaffold
- PHMB
- Fenestrated



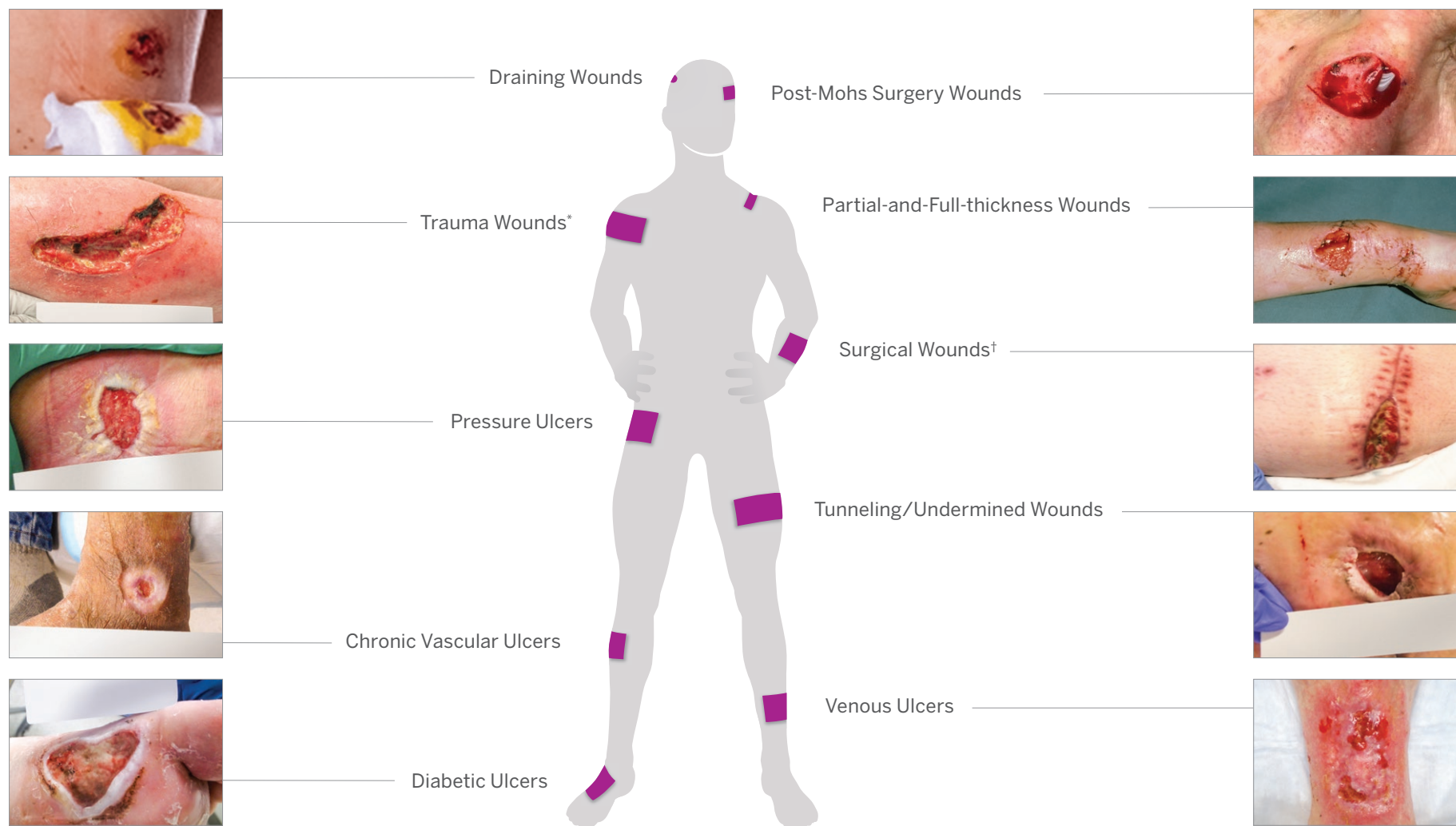
PuraPly[®]XT

- 5 layers
- Cross-linked ECM scaffold
- PHMB
- Extra fenestrated for conforming to irregularly-shaped wounds

Product Number	Description/Dimensions	Total Size (cm ²)	Billable Units	HCPCS Code	UPC Number
515-044	PURAPLYAM-COM 3.02X3.02	10	10	Q4196	618474000299
515-046	PURAPLYAM-COM 3.76X3.76	15	15	Q4196	618474000305
515-008	PURAPLYAM-COM 5X5	25	25	Q4196	618474000107
515-018	PURAPLYAM-COM 6X9	54	54	Q4196	618474000114
515-071	PURAPLYAM XT-COM 4.91X4.91 EXTRA FENESTRATED	24.10	25	Q4197	618474000466



THE PURAPLY® PORTFOLIO HELPS TO CONTROL BIOBURDEN AND SUPPORT HEALING FOR A WIDE RANGE OF ACUTE AND CHRONIC WOUNDS¹⁻⁵



* Abrasions, lacerations, second-degree burns, skin tears

† Donor sites/grfts, post-Mohs surgery, post-laser surgery, podiatric, wound dehiscence

Note: PuraPly AM and PuraPly XT are contraindicated for third-degree burns

PURAPLY® AM & PURAPLY® XT APPLICATION STEPS^{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 the wound bed



3 Hydrate with sterile saline, do not soak



4 Anchor PuraPly AM or PuraPly XT using preferred fixation method, such as sutures, adhesive strips, or dermal adhesive and thoroughly cover with a non-adherent dressing



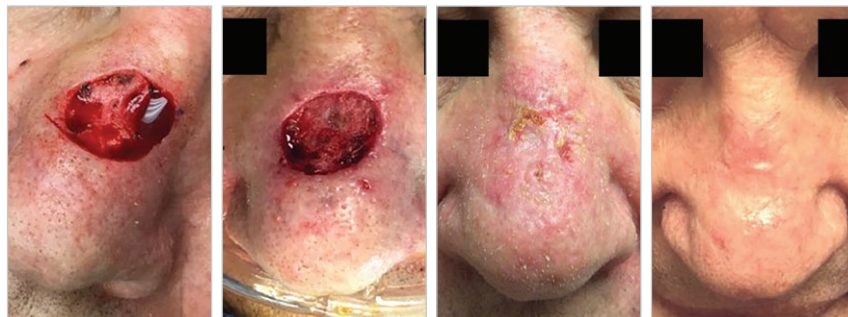
5 Cover and wrap with secondary dressings. Reassess at next patient treatment visit. PuraPly AM or PuraPly XT will naturally be resorbed into the wound and is not intended to be removed. Subsequent application is at the discretion of the healthcare practitioner.

ACUTE CASE STUDY

FACIAL POST-MOHS

Courtesy of Jeffery L. Walding, MD, FACS

PuraPly® AM, native ECM scaffold + broad-spectrum PHMB antimicrobial, was used to control bioburden and support granulation tissue formation in preparation for a full-thickness skin graft (FTSG)



PuraPly AM application

Prior to FTSG

3 weeks post-FTSG

3 months post-FTSG

FTSG healed well with a good cosmetic outcome

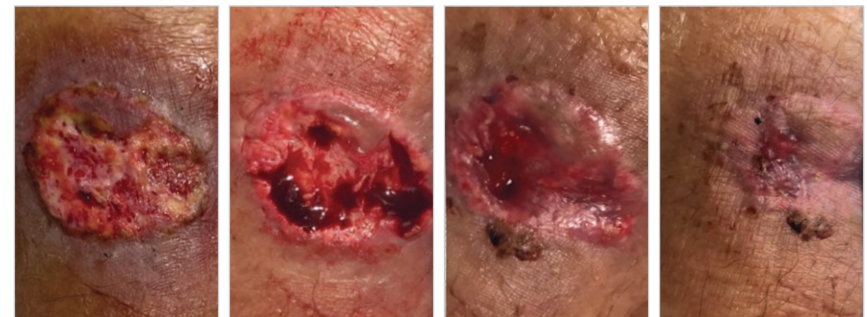
- 67-year-old male underwent Mohs surgery to remove a basal cell carcinoma on the nose
- Medical history included hypertension and former smoker
- PuraPly AM was applied immediately post-Mohs surgery and a FTSG was performed 1 week post-application

CHRONIC CASE STUDY

LOWER LEG WOUND

Courtesy of Daniel L. Kapp, MD

PuraPly® XT, native ECM scaffold + broad-spectrum PHMB antimicrobial, was used to control bioburden and support healing in a wound that had previously failed a FTSG



1st PuraPly XT application

2nd PuraPly XT application

5th PuraPly XT application

Complete wound closure

Pre-debridement
Wound Area: 12.0 cm²

Post-debridement
Wound Area: 9.8 cm²

Post-debridement
Wound Area: 1.2 cm²

Thin layer of epithelium present

- 79-year-old female underwent surgical excision of a melanoma on the left medial leg, which was initially closed using a FTSG and subsequently failed
- Medical history included cardiac ablation
- Applications 1-5: PuraPly XT (post-debridement); wound closed at week 6

THE POWER OF PLUS WITH PURAPLY® AM & PURAPLY® XT

CONTROL BIOBURDEN AND SUPPORT HEALING

Bioburden and biofilm should be managed early, as they can lead to prolonged inflammation, resulting in breakdown of the ECM scaffold and delayed healing^{4,6-10}

NATIVE ECM SCAFFOLD + BROAD-SPECTRUM PHMB^{1,2,20,22}

Provides an ECM scaffold for cellular migration and proliferation²¹
plus sustained antimicrobial effectiveness within the product³

CONFIRMATION OF CONTROL

PuraPly AM portfolio is backed by scientific and clinical evidence demonstrating that it supports wound healing and aids in granulation tissue formation^{3,5,29}

| PuraPly®AM | PuraPly®XT

ECM=extracellular matrix; PHMB=polyhexamethylene biguanide

References: **1.** PuraPly Antimicrobial [package insert]. Canton, MA: Organogenesis Inc; 2023. **2.** PuraPly XT [package insert]. Canton, MA: Organogenesis Inc; 2023. **3.** Davis SC, et al. *Int Wound J*. 2022;19(1):86-99. **4.** Brantley J, et al. *Wounds Int*. 2016;7(3):1-5. **5.** Bain MA, et al. *J Comp Eff Res*. 2020;9(10):691-703. **6.** Percival SL, et al. *Adv Wound Care*. 2015;4(7):389-397. **7.** Frykberg RG, et al. *Adv Wound Care*. 2015;4(9):560-582. **8.** Carpenter S, et al. *Wounds*. 2016;28(6 suppl):S1-S20. **9.** Gibson D, et al. *Wounds Int*. 2009;1(1):1-6. **10.** Brett D. *Wounds*. 2008;20(12):347-356. **11.** International Wound Infection Institute (IWII) Wound Infection in Clinical Practice. *Wounds International*. 2022. **12.** Araujo TAT, et al. *J Biomater Appl*. 2021;36(1):95-112. **13.** Wolcott RD, et al. *J Wound Care*. 2010;19(8):320-328. **14.** Gotttrup F, et al. *J Wound Care*. 2013;22(Suppl):S1-S92. **15.** Atreja A, et al. *MedGenMed*. 2005;7(1):4. **16.** Sawad A, et al. *J Comp Eff Res*. 2020;9(13):907-918. **17.** Mathias SD, et al. *Adv Skin Wound Care*. 2000;13(2):76-78. **18.** Fife C, et al. *Wounds*. 2007;19(10):255-257. **19.** Zulec M, et al. *Int J Environ Res Public Health*. 2019;16(4):e559. **20.** Hübner NO, Kramer A. *Skin Pharmacol Physiol*. 2010;23(suppl):17-27. **21.** Data on file. PDR-0008. Organogenesis Inc. **22.** Data on file. PDR-0007. Organogenesis Inc. **23.** Data on file. PDR-0005. Organogenesis Inc. **24.** Khor E. *Biomaterials*. 1997;18(2):95-105. **25.** Billiar K, et al. *J Biomed Mater Res*. 2001;56(1):101-108. **26.** Gilbert P, et al. *J Appl Microbiol*. 2005;99(4):703-715. **27.** Sood A, et al. *Adv Wound Care*. 2014;3(8):511-529. **28.** Data on file. USP Antimicrobial Effectiveness Test. Organogenesis Inc. **29.** Oropallo AR. *Plast Reconstr Surg Glob Open*. 2019;7:e2047.

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 ORGANOGESIS