solventum

The ORC difference is easy to see

3M™ Promogran Prisma™ Collagen Matrix with ORC and Silver and 3M™ Promogran™ Collagen Matrix with ORC

Promogran Prisma Matrix is now indicated for use with Solventum™ V.A.C.® Peel and Place Dressing*

*Indication only valid when used in conjunction with Solventum™ ActiV.A.C.™ Therapy System

Unlike any other collagen dressing

3M™ Promogran™ Collagen Matrix Family of dressings are uniquely formulated with Oxidized Regenerated Cellulose (ORC) and demonstrated effective through multiple clinical studies including Randomized Controlled Trials (RCTs) that were systematically reviewed in a meta-analysis.[1]

A meta-analysis showed that **wounds treated with collagen/ ORC dressings were**

3.4x

more likely to close compared to standard dressings (n=2447).[1]

Collagen — 55%

- Acts as a **sacrificial substrate** for excessive MMP[2]
- **Bioresorbable**[3] into amino acids which can be reused by cells to make new proteins
- Encourages the movement of neutrophils, macrophages and fibroblasts, **stimulating new tissue growth**[4]

Oxidized Regenerated Cellulose (ORC) — 44%

In vitro studies have demonstrated the potential benefits of ORC:[5]

- **Protects growth factors** from degradation
- **Reduces protease** activity levels, specifically **elastase**

Silver (Ag) — 1% Ag/ORC

Due to the antibacterial properties of silver, Promogran Prisma Matrix is known to provide an effective **antibacterial barrier** against common wound pathogens *in vitro*.[6]

A key difference is ORC

The only collagen dressing to have the unique combination of collagen and Oxidized Regenerated Cellulose (ORC).

While collagen alone is particularly effective against matrix metalloproteinases (MMPs), it has a limited effect on elastase activity. *In vitro* studies have demonstrated the combination of Oxidized Regenerated Cellulose (ORC) and collagen materials had a greater effect in reducing both MMP and elastase activity than collagen alone.[7] This is important because both are highly predictive of non-healing wounds as shown below.[8]

Why is elastase important?

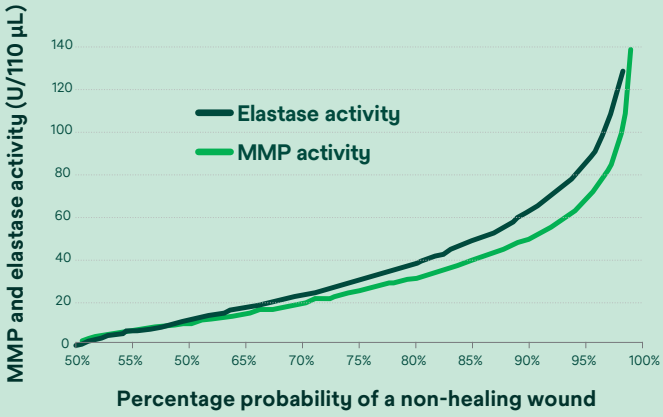
While MMPs are the most commonly discussed, elastase is one of the most abundant proteases present in chronic wounds, the first of the proteases to arrive post-injury, and is responsible for damage to:[9-11]

- **Fibronectin** – Vital for cell adhesion and migration; must be present to signal growth factors to appear
- **Elastin** – Gives tissue elasticity
- **Growth factors** – Platelet-Derived Growth Factor (PDGF) and Epidermal Growth Factor (EGF)

Solventum's exclusive pairing of collagen with ORC helps reduce elastase activity which may help to promote healing.[5, 12*]

Problem

As protease activity increased for both MMPs and elastase, the probability of healing decreased.[5,8]



**In vitro*

Solution

Promogran Matrix with a combination of collagen and ORC reduced elastase activity by more than 90% in an ex vivo study after 24 hours.[13]

Elastase activity reduced by

93%

Two great dressing choices. Both with ORC.

Two products offering the right combination of materials, depending on your needs. Promogran Prisma Matrix — for those wounds that can benefit from silver's antibacterial properties[6] — and Promogran Matrix.

3M™ Promogran Prisma™ Collagen Matrix with ORC and Silver

55% Collagen	44% ORC	1% Silver-ORC

3M™ Promogran™ Collagen Matrix with ORC

55% Collagen	45% ORC

How the collagen matrix works

- In the presence of exudate, Promogran Prisma Matrix and Promogran Matrix transform into a soft, conformable, biodegradable gel, allowing contact with all areas of the wound.
- The collagen matrix creates an environment that is conducive to granulation tissue formation, epithelialization and wound healing.
- During dressing changes, it is not necessary to remove any residual Promogran Prisma Matrix or Promogran Matrix.

Demonstrated to potentially lower the cost of treating hard to heal wounds[14*]

1 Cost effective[14*]

Using Promogran Matrix Family dressings is cost effective and has the potential to lower the total cost of treatment[14] due to reduced nursing time and improved healing rates.

A retrospective clinical study on chronic wounds from different etiologies (n=974) demonstrated that sequential wound management with Promogran Matrix Family dressings was more cost-effective (reduced total treatment cost) than treatment with gauze dressings over a 2 month period. The cost advantage was attributed to reduced nursing time and improved healing rate.*

2 Increased number of wounds closed[1]

A systematic review of 20 clinical studies (n=2893) showed wounds treated using Promogran Matrix Family dressings can significantly increase the number of wounds closed.[1]

Based on a subset meta-analysis of 10 studies (n=2447), wounds treated with collagen/ORC dressings are estimated to have odds of complete healing that are 3.4 times higher than with standard dressings (p=0.027).[1]

3.4x

more likely to achieve closure[1]

(OR = 3.4, 95% CI [1.15, 10.1], p=0.027)

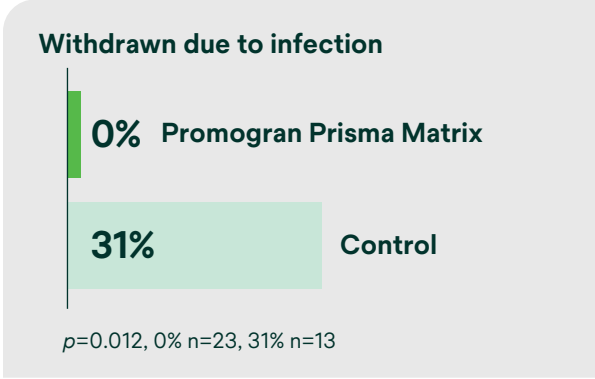
3 Fewer withdrawals due to infection[15]

An RCT showed fewer withdrawals because of infection with Promogran Prisma Matrix.[15]

The dressing provides an effective antibacterial barrier against common wound pathogens as demonstrated by the *in vitro* reduction of bacterial growth.[6] Reduction of bacterial bioburden in the dressing may result in reduced risk of infection.

A 14 week RCT involving diabetic foot ulcer (DFU) patients (n=39) showed:[15]

- Significantly more wounds (DFUs) achieved a greater than 50% reduction in wound area vs. Control (standard of care) at week 4 (79% vs. 43%, p=0.035)
- The number of wounds withdrawn from the study due to infection was significantly greater in the Control group (0% vs. 31%, p=0.012)



*Versus gauze dressings

MMP activity reduced 97.6%

Elastase activity reduced 51.3%

7-month-old diabetic foot ulcer (DFU) heals in 14 weeks

A 74-year-old male presented with a 2.5cm, 7-month-old DFU on the bottom of the right foot (Figure 7A). The patient had a history of diabetes mellitus and had previously undergone a transmetatarsal amputation.

Wound fluid and measurements were taken at wound presentation and every 2 weeks up to 14 weeks. Promogran Prisma Matrix was applied over the wound. Wound fluid was tested for MMP-9 and elastase activity using either a fluorogenic substrate or immunocapture activity assay.

At presentation

- MMP activity = 227.2 relative fluorescence units (RFU)/minute/ml
- Elastase activity = 568.6 RFU/minute/ml

At week 12

- 97.6% reduction of MMP-9 activity and 51.3% reduction in elastase activity
- MMP activity = 5.4 RFU/minute/ml
- Elastase activity = 277.1 RFU/minute/ml

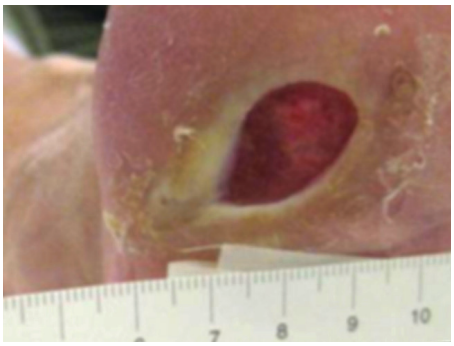


Figure 7A. Diabetic foot ulcer on bottom of right foot at presentation.

Figure 7B. Wound at week 4.

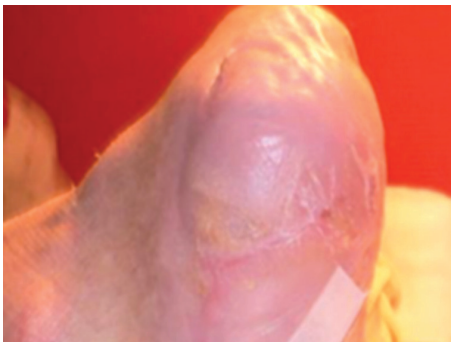


Figure 7C. Wound fully reepithelialized at week 14.

Case study images courtesy of Dr. Finn Gottrup, Professor of Surgery, MD, DMSci. As with any case study, the outcomes should not be interpreted as a guarantee or warranty of similar results. Individual results may vary depending on the patient's circumstances and condition.

Treat early, don't wait

Early treatment of wounds with Promogran Prisma Matrix and Promogran Matrix dressings may help improve healing rates versus standard treatments.[15-18]

As wounds age, the likelihood of healing or improvement decreases.[16] Don't wait for a wound to stall. Help your patients get back to living their lives sooner.

The collective evidence below shows that Promogran Matrix Family dressings help to improve wounds versus a control, and that wounds treated early in duration have higher healing rates. Thus, treating wounds earlier with Promogran Matrix Family dressings may help improve healing rates over standard treatments.

Wounds treated early have higher rates of healing or improvement.[16,17]

- An RCT on DFUs (n=276) showed a trend of healing among DFUs with less than 6 months' duration when treated with Promogran Matrix Family versus moistened gauze control (45% vs. 33%, p=0.056)[17]
- A prospective randomized multi-center study of Venous Leg Ulcers (VLUs) (n=56) showed a significant correlation between ulcer duration and healing using a multivariate analysis (p=0.004)[16]

Early usage

of Promogran Matrix Family may lead to improved success rate[15-18]

Promogran Matrix Family helps to improve healing rates

An RCT on VLUs (n=73) showed at 12 weeks a higher reduction in wound area with Promogran Matrix than the Control group (median decrease 82.4% vs. 44.6%, p<0.001).[18]

Median wound area reduction
12 week period

p<0.001

An RCT on DFUs (n=39) showed more wounds treated with the Promogran Matrix Family had greater than 50% reduction in wound area at week 4 (79% vs. 43%, p=0.035).[15]

Median wound healing
at 4 weeks

p=0.035

> I would use it as our only collagen. All collagens are not created equal.
>
> **Dorothy (Dot) Weir, RN, CWON, CWS**
> Dot Weir is a paid consultant of Solventum.

Indicated for use together

Promogran Prisma Matrix is the only collagen dressing labeled for use with ActiV.A.C. Therapy System.

Promogran Prisma Matrix is indicated for use with Solventum™ V.A.C.® Peel and Place Dressing*

Improved healing outcomes when used in combination vs. ActiV.A.C. Therapy System alone.[19]

Promogran Prisma Matrix can be used in combination with the ActiV.A.C. Therapy Unit and associated foam dressings:

- Solventum™ V.A.C.® Granufoam™ Dressings
- Solventum™ V.A.C.® Simplace™ Dressings
- **Solventum™ V.A.C.® Peel and Place Dressings**

V.A.C.® Granufoam Dressing and V.A.C.® Simplace Dressings can be used with either Solventum™ V.A.C.® Drape or Solventum™ Dermatac™ Drape. Please refer to the complete Instructions for Use (IFU) provided in the Promogran Prisma Matrix dressing packages.

3M™ Promogran Prisma™ Collagen Matrix with ORC and Silver

Solventum™ ActiV.A.C.™ Therapy System

Benefits of combined use positively impact wound healing outcomes

Wounds treated with ActiV.A.C. Therapy System and Promogran Prisma Matrix showed a

40% reduction in wound area

vs. only 9% with ActiV.A.C. Therapy System alone.[19]

Patients were

9.5% more likely to heal or improve

with the combination of ActiV.A.C. Therapy System and Promogran Prisma Matrix vs. ActiV.A.C. Therapy System alone.[19]

*Indication only valid when used in conjunction with Solventum™ ActiV.A.C.™ Therapy System

Healthy granulation tissue formed after

6 days

Sacral pressure injury treated with Promogran Prisma Matrix and ActiV.A.C. Therapy System

A 70-year-old male presented with a non-healing sacral pressure injury. Previous medical history included paraplegia, multiple sclerosis and hypertension. ActiV.A.C. Therapy System was initiated. After 3 days, Promogran Prisma Matrix dressing with ActiV.A.C. Therapy System was started. After 6 days, healthy granulation tissue was observed in the wound bed.

Figure 1A. Wound at presentation (Day 0)

Figure 1B. Wound after 3 days of Promogran Prisma Matrix dressings and ActiV.A.C. Therapy System (Day 6)

Figure 1C. Application of Promogran Prisma Matrix dressings and ActiV.A.C. Therapy System (Day 6)

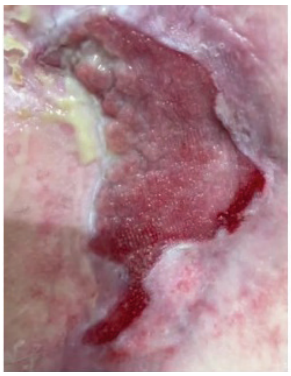


Figure 1D. Wound after 6 days of Promogran Prisma Matrix dressings and ActiV.A.C. Therapy System (Day 9)

Case study images courtesy of Dr. Michael N. Desvigne, MD, FACS, CWS, FACCWS. As with any case study, the outcomes should not be interpreted as a guarantee or warranty of similar results. Individual results may vary depending on the patient's circumstances and condition.

Promogran Matrix Family

Promogran Matrix and Promogran Prisma Matrix *without* ActiV.A.C. Therapy System

Promogran Matrix and Promogran Prisma Matrix, when used without ActiV.A.C. Therapy System, are intended for the management of exuding wounds. Under the supervision of a health care professional, Promogran Matrix Family may be used for the management of:

- Diabetic ulcers
- Venous ulcers
- Pressure ulcers
- Ulcers caused by mixed vascular etiologies
- Full thickness & partial thickness wounds
- Donor sites and other bleeding surface wounds
- Abrasions
- Traumatic wounds healing by secondary intention
- Dehisced surgical wounds

Promogran Matrix and Promogran Prisma Matrix may be used under compression therapy with healthcare professional supervision.

Promogran Prisma Matrix *with* ActiV.A.C. Therapy System

Promogran Prisma Matrix when used with the ActiV.A.C. Therapy System, is intended for the management of exuding wounds. Under the supervision of a healthcare professional, Promogran Prisma Matrix with the ActiV.A.C. Negative Pressure Wound Therapy System may be used only for the management of:

- Venous ulcers
- Pressure ulcers
- Diabetic ulcers
- Partial-thickness burns
- Traumatic wounds healing by secondary intention
- Dehisced surgical wounds

For a copy of the Instructions for Use please visit https://eifu.solventum.com/

3M™ Promogran Prisma™ Collagen Matrix with ORC and Silver*			
Item code	**Each/Carton/Case**	**Size**	**HCPCS code**
MA028	10 ea/ct - 4 ct/cs	4.34 sq. in. Hexagon	A6021
MA123	10 ea/ct - 4 ct/cs	19.1 sq. in. Hexagon	A6022
3M™ Promogran Prisma™ Rope Collagen Matrix with ORC and Silver			
Item code	**Each/Carton/Case**	**Size**	**HCPCS code**
MA032	6 ea/ct - 4 ct/cs	3/8" x 3/8" x 12 5/8" Rope	A6024
3M™ Promogran™ Collagen Matrix with ORC			
Item code	**Each/Carton/Case**	**Size**	**HCPCS code**
PG004	10 ea/ct - 4 ct/cs	4.34 sq. in. Hexagon	A6021
PG019	10 ea/ct - 4 ct/cs	19.1 sq. in. Hexagon	A6022

*Indicated for use with Solventum™ ActiV.A.C.™ Therapy System

Promogran Prisma Matrix and ActiV.A.C. Therapy System

Promogran Prisma Matrix when used with the ActiV.A.C. Therapy System is intended for the management of exuding wounds. Under supervision of a health care professional, Promogran Prisma Matrix with ActiV.A.C. Therapy System may be used for the management of:

- Venous ulcers
- Pressure ulcers
- Diabetic ulcers
- Partial-thickness burns
- Traumatic wounds healing by secondary intention
- Dehisced surgical wounds

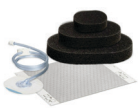
For detailed instructions on how to apply Promogran Prisma Matrix in combination with ActiV.A.C. Therapy System, please refer to the Instructions for Use (IFU) for both products at: https://eifu.solventum.com/

Solventum™ V.A.C.® Therapy Dressings and Accessories (indicated for combined use)

All-in-One Dressing Kits

	Product	Foam dressing size	Overall dressing size	Max wound depth	Qtys*	SKU
	Solventum™ V.A.C.® Peel and Place Dressing Kit, Small	6.1 × 8.6 cm	16.9 × 20.6 cm	2 cm or less, pre-cut hole center	Case of 5	EZ5SML
	Solventum™ V.A.C.® Peel and Place Dressing Kit, Medium	11.1 × 16.6 cm	23.7 × 29.2 cm	4 cm or less, pre-cut hole center	Case of 5	EZ5MED
	Solventum™ V.A.C.® Peel and Place Dressing Kit, Large	13.6 x 24.2 cm	26 x 35.6 cm	6 cm or less, pre-cut hole offset	Case of 5	EZ5LRG

Foam Dressing Kits

	Product	Description		Qtys*	SKU
	Solventum™ V.A.C.® Granufoam™ Dressing Kit, Small	• 1 V.A.C.® Granufoam Dressing (10 × 7.5 × 3.2 cm) • 1 sheet of V.A.C.® Drape	• 1 Solventum™ SensaT.R.A.C.™ Pad with connector • 1 disposable ruler	Case of 5 Case of 10	M8275051/5 M8275051/10
	Solventum™ V.A.C.® Granufoam™ Dressing Kit, Medium	• 1 V.A.C.® Granufoam Dressing (18 × 12.5 × 3.2 cm) • 2 sheets of V.A.C.® Drape	• 1 Solventum™ SensaT.R.A.C.™ Pad with connector • 1 disposable ruler	Case of 5 Case of 10	M8275052/5 M8275052/10
	Solventum™ V.A.C.® Granufoam™ Dressing Kit, Large	• 1 V.A.C.® Granufoam Dressing (26 × 15 × 3.2 cm) • 2 sheets of V.A.C.® Drape	• 1 Solventum™ SensaT.R.A.C.™ Pad with connector • 1 disposable ruler	Case of 5 Case of 10	M8275053/5 M8275053/10
	Solventum™ V.A.C.® Simplace™ EX Dressing Kit, Medium	• 2 spiral V.A.C.® Granufoam Spiral Dressing (14.7 × 17.4 × 1.75 cm, fully unwound: 81.3 cm)	• 1 sheet of V.A.C. Drape and 2 drape strips • 1 Solventum™ SensaT.R.A.C.™ Pad with connector • 1 disposable ruler	Case of 5	M8275045/5
	Solventum™ Dermatac™ Drape w/ V.A.C.® Granufoam™ Dressing Kit, Small	• 1 V.A.C.® Granufoam Dressing (10 × 7.5 × 3.2 cm) • 1 sheet of Dermatac Drape	• 1 Solventum™ SensaT.R.A.C.™ Pad with connector • 1 disposable ruler	Case of 5 Case of 10	DTGF05PKS DTGF10PKS
	Solventum™ Dermatac™ Drape w/ V.A.C.® Granufoam™ Dressing Kit, Medium	• 1 V.A.C.® Granufoam Dressing (18 × 12.5 × 3.2 cm) • 1 sheet of Dermatac Drape	• 1 Solventum™ SensaT.R.A.C.™ Pad with connector • 1 disposable ruler	Case of 5 Case of 10	DTGF05PKM DTGF10PKM
	Solventum™ Dermatac™ Drape w/ V.A.C.® Granufoam™ Dressing Kit, Large	• 1 V.A.C.® Granufoam Dressing (26 × 15 × 3.2 cm) • 2 sheets of Dermatac Drape	• 1 Solventum™ SensaT.R.A.C.™ Pad with connector • 1 disposable ruler	Case of 5 Case of 10	DTGF05PKL DTGF10PKL

*For insurance-bill claims orders, default quantities will be shipped unless otherwise specified. Payor restrictions may apply.
**See V.A.C.® Peel and Place Dressing IFU for more information on wounds appropriate for these dressings.

References

1. Chowdhry, Saeed A., Yeni Nieves-Malloure, Mark Camardo, Julie M. Robertson, and Joshua Keys. "Use of oxidised regenerated cellulose/collagen dressings versus standard of care over multiple wound types: a systematic review and meta-analysis." International Wound Journal 19, no. 2 (2022): 241-252.
2. Schultz GS, Ladwig G, Wysocki A. Extracellular Matrix: a review of its roles in acute and chronic wounds. World Wide Wounds. 2005; Accessed August 19, 2020. http://www.worldwidewounds.com/2005/august/Schultz/Extrace-Matric-Acute-Chronic-Wounds.html.
3. Wagermaier W, Fratzl P. Collagen. In: Moeller M, Matyjaszewski K, eds. Polymer Science: A Comprehensive Reference. 1st ed. Elsevier Focal Press Science and Tech. 2012:35–55.
4. Postlewaite AE, Seyer JM, Kang AH. Chemotactic attraction of human fibroblasts to type I, II and III collagens and collagen-derived peptides. Proc Nat Acad Sci USA. 1978;75(2):871–875.
5. Cullen, Breda, Paul W. Watt, Charlotte Lundqvist, Derek Silcock, Richard J. Schmidt, Declan Bogan, and Nicholas D. Light. "The role of oxidised regenerated cellulose/collagen in chronic wound repair and its potential mechanism of action." The international journal of biochemistry & cell biology 34, no. 12 (2002): 1544-1556.
6. Bourdillon, Katie A., Craig P. Delury, and Breda M. Cullen. "Biofilms and delayed healing–an in vitro evaluation of silver-and iodine-containing dressings and their effect on bacterial and human cells." International Wound Journal 14, no. 6 (2017): 1066-1075.
7. Solventum Posters and Data on File. 05-1193237.
8. Serena, Thomas E., Breda M. Cullen, Simon W. Bayliff, Molly C. Gibson, Marissa J. Carter, Lingyun Chen, Raphael A. Yaakov et al. "Defining a new diagnostic assessment parameter for wound care: elevated protease activity, an indicator of nonhealing, for targeted protease-modulating treatment." Wound Repair and Regeneration 24, no. 3 (2016): 589-595.
9. Weitz, J. I., S. L. Landman, K. A. Crowley, S. Birken, and F. J. Morgan. "Development of an assay for in vivo human neutrophil elastase activity Increased elastase activity in patients with alpha 1-proteinase inhibitor deficiency." The Journal of clinical investigation 78, no. 1 (1986): 155-162. doi:10.1172/JCI112545. Cited by: Ferreira, Ana V., Ilana Perelshtein, Nina Perkas, Aharon Gedanken, Joana Cunha, and Artur Cavaco-Paulo. "Detection of human neutrophil elastase (HNE) on wound dressings as marker of inflammation." Applied microbiology and biotechnology 101, no. 4 (2017): 1443-1454.
10. Gibson, D., B. Cullen, R. Legerstee, K. G. Harding, and G. Schultz. MMPs Made Easy. Wounds International 1 (1): 1–6. 2009.
11. Hasmann, Andrea, Ulrike Gewessler, Elisabeth Hulla, Konstantin P. Schneider, Barbara Binder, Antonio Francesko, Tzanko Tzanov et al. "Sensor materials for the detection of human neutrophil elastase and cathepsin G activity in wound fluid." Experimental dermatology 20, no. 6 (2011): 508-513.
12. Serena, T., B. Cullen, S. Bayliff, M. Gibson, D. DeMarco, J. Galbraith, N. Le, M. Mancinelli, M. Sabo, and J. Samies. "Protease activity levels associated with healing status of chronic wounds." Poster presented at: Wounds UK, Harrogate (2011).
13. Cullen B, Smith R, McCulloch E, Silcock D, Morrison L. Mechanism of action of Promogran, a protease modulating matrix for treatment of diabetic foot ulcers. Wound Rep Regen 2002; 10: 16-25.
14. Snyder, Robert J., Deborah Richter, and Mary Ellen Hill. "A retrospective study of sequential therapy with advanced wound care products versus saline gauze dressings: comparing healing and cost." Ostomy wound management 56, no. 11A (2010): 9-15.
15. Gottrup, Finn, Breda Mary Cullen, Tonny Karlsmark, Morten Bischoff-Mikkelsen, Lorraine Nisbet, and Molly Camilla Gibson. "Randomized controlled trial on collagen/oxidized regenerated cellulose/silver treatment." Wound Repair and Regeneration 21, no. 2 (2013): 216-225.
16. Cullen, Breda, Molly Gibson, and Lorraine Nisbet. "Early adoption of collagen/ORC therapies improves clinical outcome." Wound Repair and Regeneration 20, no. 5 (2012): A92.
17. Veves, Aristidis, Peter Sheehan, and Hau T. Pham. "A randomized, controlled trial of Promogran (a collagen/oxidized regenerated cellulose dressing) vs standard treatment in the management of diabetic foot ulcers." Archives of surgery 137, no. 7 (2002): 822-827.
18. Vin, F., L. Teot, and S. Meaume. "The healing properties of Promogran in venous leg ulcers." Journal of wound care 11, no. 9 (2002): 335-341.
19. Hou, Yuefeng, and Leah Griffin. "Comparative Effectiveness of Negative Pressure Wound Therapy with and Without Oxidized Regenerated Cellulose/Collagen/Silver-ORC Dressing." Advances in Wound Care 14, no. 6 (2025): 285-294.

Note: Specific indications, contraindications, warnings, precautions, and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application. Rx only.

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For more information, please refer to the following resources:

- Contact your local Solventum representative
- Call Solventum Negative Pressure Wound Therapy 24/7 Support at 1-800-275-4524
- Call Solventum Customer Care at 1-800-228-3957
- Visit Solventum.com

Solventum, formerly 3M Health Care

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