Solutions for Venous Leg Ulcer Care

Getting your patients back on their feet.
What is a venous leg ulcer?

A venous leg ulcer (VLU) is an open skin lesion that usually occurs on the medial aspect of the lower leg between the ankle and the knee as a result of chronic venous insufficiency (CVI) or ambulatory venous hypertension, and that shows little progress towards healing within 4-6 weeks of initial occurrence.¹

Impact of VLUs

VLUs are the most common type of lower extremity wound, afflicting approximately 1% of the western population during their lifetime. VLUs also represent a significant burden for patients and healthcare systems.²

Therapy goals for VLUs

Venous leg ulcer management includes a combination of best practice skin and wound care principles with a therapeutic goal of reducing chronic edema and promoting wound healing:¹³,¹⁴

- Periwound skin protection
- Identification and management of wound infection and suspected biofilm
- Exudate management
- Compression therapy

Compression therapy: The gold standard for VLU management

Compression therapy has been shown to increase the rate of healing compared to no compression.² Research indicates that a bandage or multi-layer compression system that is capable of creating an inelastic sleeve provides stiffness that effectively supports venous pump mechanisms.⁸,⁹

Additional hemodynamics effects of compression therapy include:¹⁰,¹¹,¹²,¹³

- Reduced venous ambulatory hypertension and venous pooling
- Improved venous and lymphatic return
- Reduced chronic edema and inflammation
- Reduced leg pain

The annual cost to treat VLUs in the U.S. is estimated to be $14.9 billion.⁵

55% recurrence

55% of healed VLUs reoccur within the first 12 months of closure.⁶

28% of patients

28% of patients experience >10 VLU episodes in their lifetime.⁷
3M™ Coban™ 2 Two-Layer Compression System

The Coban™ 2 Two-Layer Compression System provides effective compression therapy, which has been shown to contribute to effective VLU management through edema reduction, decreased pain, and improvement in a patient’s daily activities. Coban™ 2 Compression System is easy to apply and remove and is designed to stay in place, increasing patient compliance and the potential for more effective treatment.

VLU healing rate

In two large, well-controlled, retrospective analyses comparing Coban™ 2 Compression System to two other compression systems, Coban™ 2 Compression System demonstrated increased healing rates with a reduction in patient management costs.

Quality of life

A retrospective analysis of 675 patient records who had a newly-diagnosed venous leg ulcers compared Coban™ 2 Compression System to two other compression systems. Treatment with Coban™ 2 Compression System demonstrated better health related quality of life.

Quality-adjusted life years (QALYs)

<table>
<thead>
<tr>
<th>Coban™ 2 Two-Layer Compression System</th>
<th>Urgo KTwo™</th>
<th>PROFORE™</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.413 QALYs</td>
<td>0.404</td>
<td>0.396</td>
</tr>
</tbody>
</table>

p<0.05

†Refer to Instructions for Use

‡Once compression has been initiated
Wound healing starts with addressing underlying issues such as bioburden and inflammation. Biofilm, present in greater than 70% of chronic wounds, causes persistent inflammation and poor wound healing. Effective wound management strategies may include the use of topical advanced wound care products to help address the underlying issues of biofilm, bioburden and inflammation.

### Protect skin

Skin damage such as maceration, erythema and weeping are often associated with VLUs. Research supports routine protection of periwound skin from excess exudate, mechanical trauma, and protection of at-risk, compromised skin as essential parts of wound management and wound bed preparation.²⁰

3M™ Cavilon™ No Sting Barrier Film
A gentle, effective and CHG-compatible solution for routine skin protection.

3M™ Cavilon™ Advanced Skin Protectant
Creates a highly durable, ultra-thin barrier that attaches to wet, weepy skin and lasts up to seven days — providing long lasting skin protection.

### Prepare wound bed

Wound healing starts with addressing underlying issues such as bioburden and inflammation. Biofilm, present in greater than 70% of chronic wounds, causes persistent inflammation and poor wound healing. Effective wound management strategies may include the use of topical advanced wound care products to help address the underlying issues of biofilm, bioburden and inflammation.

3M™ Kerracel™ Ag Gelling Fiber Dressing
Kerracel™ Ag Gelling Fiber Dressing is the only gelling fiber with Ag Oxsalts™ (Ag³⁺), providing up to 6 times more power than traditional silvers (Ag¹⁺) to reduce the barriers that create a hostile wound environment.²⁵

3M™ Promogran Prisma™ Matrix
Promogran Prisma™ Matrix is comprised of a sterile, freeze-dried composite of 44% oxidized regenerated cellulose (ORC), 55% collagen and 1% silver-ORC. In the presence of exudate, it transforms into a soft, conformable, biodegradable gel, thus allowing contact with all areas of the wound. The dressing maintains an optimal healing environment that is conducive to granulation tissue formation, epithelialization and rapid wound healing.

**Significantly higher percentage of wounds healed**
A 12-week randomized controlled trial involving VLU patients (n = 30) showed wounds dressed with Promogran Prisma™ Matrix healed at 12 weeks (p = 0.04).²⁶

![Graph showing 73% for Promogran Prisma™ Matrix compared to 47% for Control]({"As demonstrated in vitro"}}
Optimize wound environment

Selecting products that help optimize the wound environment is important to healing. Things to consider include: maintaining an optimal environment through exudate management, providing protection from outside contaminants, and enabling easy application and removal.

Exudate management solutions

3M™ Kerramax Care™
Super-Absorbent Dressing
- Unique horizontal wicking layer draws up serous and viscous exudate, distributing it horizontally and vertically across the dressing, utilizing the full absorption capacity and preventing bulking.27,28
- Super-absorbent core locks in exudate, bacteria and MMPs29,30 to reduce the risk of maceration31 and infection transfer risk30 even under compression.32*
- Soft, non-woven material on both sides of the dressing allows either side to be placed on the wound and is comfortable for the patient,31 helping support patient compliance.

3M™ Tegaderm™
Silicone Foam Dressings
- Offers a significantly longer wear time than the leading competitive silicone foam dressings while being gentle to the skin.
- Unique multi-layer design absorbs and evaporates moisture away from the skin, helping reduce the potential for skin maceration and helping to promote an optimal healing environment.
- The unique patented delivery system enables easy application, even in challenging locations.

3M™ Tegaderm™
High Performance Foam Dressings
- Integrates innovative layer technology to absorb and evaporate moisture to help maintain an optimal wound healing environment.
- High absorbency and breathability helps reduce the risk of maceration.

Negative pressure wound therapy

Negative pressure wound therapy (NPWT) is a method that applies sub-atmospheric pressure through a foam dressing to create an environment that promotes wound healing by drawing wound edges together, removing exudate and infectious material and reducing edema.33,34

Based on wound assessment and clinical judgment, NPWT may be appropriate for VLU management. Evidence supports positive effects with the use of NPWT for wound management in general.3

3M offers a portfolio of proven NPWT options that are indicated for the management of venous insufficiency ulcers. The ActiV.A.C.™ Therapy System is a portable NPWT device for the mobile patient with SensaT.R.A.C.™ Technology and Seal Check™ Feature to help maintain pressure at the wound site and detect leaks. The Snap™ Therapy System is a mechanically powered disposable NPWT system that’s discreet, silent and lightweight — allowing patients to sleep with minimal interference and shower with the unit in place.

*As demonstrated in vitro
**3M data on file. LAB-05-385368. Median wear times. 4×4 and 6×6 dressings, based on in vivo studies EM-13977 and EM-13978.
3M solutions for VLU management

Your patients count on you to help reduce the pain and discomfort caused by VLUs. It’s possible when you employ best practices in compression therapy, skin and wound care to aid in their healing process.

**Provide therapeutic compression**
- Coban™ 2 Two-Layer Compression System
- Coban™ 2 Lite Two-Layer Compression System

**Protect skin**
- Routine skin protection
  - Cavilon™ No Sting Barrier Film
- At-risk or damaged skin protection
  - Cavilon™ Advanced Skin Protectant

**Prepare wound bed**
- Manage biofilm/bioburden
  - Kerracel™ Ag Dressing
  - Silvercel™ Non-Adherent Dressing
- Provide collagen
  - Promogran Prisma™ Matrix

**Optimize wound environment**

**Manage exudate**
- Kerramax Care™ Super-Absorbent Dressing
- Tegaderm™ Silicone Foam Dressings
- Tegaderm™ High Performance Foam Dressings
- Snap™ Therapy System

**Supports granulation**
- ActiV.A.C.™ Therapy System
Learn more about 3M products for your VLU patients.
Contact your 3M Account Manager or visit 3M.com/VLU for more information.