

PermeaDerm® Application



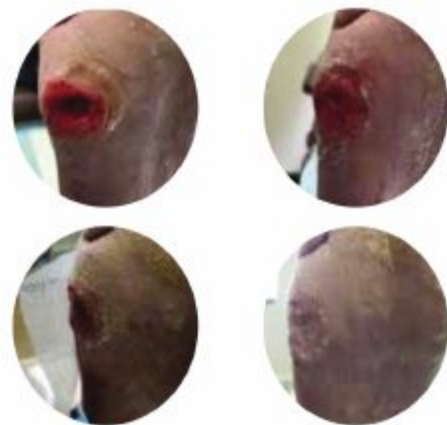
Note: Appropriate compression ensures the excellent adherence!

Clinical Cases

PermeaDerm® B acute wound



PermeaDerm® C on DFU, healed in 20 days with 3 applications



PermeaDerm® G applied on 3ys old infant 20% TBSA, scald burns on bilateral hands/fingers



Day 0, PermeaDerm® G application

1 week

3 week

7 weeks

Indications

PermeaDerm® C



Chronic Wounds

- Pressure sores
- Venous ulcers
- Diabetic ulcers
- Chronic vascular ulcers

Surgical wounds

- Donor sites/grafts
- Post-Moh's
- Post-laser surgery
- Podiatric
- Wound dehiscence

Acute wounds

- Abrasions
- Lacerations
- 2nd degree burns
- Skin tears
- Draining wound

PermeaDerm® B



Partial thickness burn wounds
Donor sites
Coverage of meshed autograft

PermeaDerm® G



Debrided partial thickness hand burns

Order Information

	Product Code	Size		Product Code	Size
PermeaDerm® B (Burns)	B1051000	5.0x10.0" (12.7x25.4cm)	PermeaDerm® G (Glove)	G1XS0000	Extra Small
	B2101500	10.0x15.0" (25.4x38.1cm)		G2S00000	Small
	B4153000	15.0x30.0" (38.1x76.2cm)		G3M00000	Medium
PermeaDerm® C (Chronic Wounds)	C1250500	2.5x5.0" (6.4x12.7cm)		G4L00000	Large
	C2050500	5.0x5.0" (12.7x12.7cm)		G5XL0000	Extra Large
	C3252500	2.5x2.5" (6.4x6.4cm)			

References:

1. Kopp J, Jiao X, et al. Membrane cell grafts(MCG), fresh and frozen, to cover full thickness wounds in athymic nude mice.
2. Aubrey Woodroof, Richard Phipps, et al. Evolution of a Biosynthetic Temporary Skin Substitute: A Preliminary Study. Colynn Woeller, Aubrey Woodroof and Richard Phipps. Variable porosity temporary skin substitutes coupled with a new anti-scarring agent.
3. Wound Oxygenation Comparing Skin Substitutes and Dressings, Woodroof, et al., ePlasty March 2023
4. USAISR Wounded Warrior Program
5. Editorial, Journal of Wound Care, 2021 Oct, Path to One and Done, Aubrey E Woodroof, Gail K Naughton, Fiona M Wood, Robert J Christy, Shanmugasundaram Natesan, William I Hickerson

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Bring disruptive innovation to
healthcare



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PermeaDerm® Biosynthetic Wound Matrix

Flexing the Power to Heal



**TRIUM
BIOMEDICAL**

PermeaDerm® Biosynthetic Wound Matrix

Innovative Product PermeaDerm®

- Ultrathin
- Transparent
- Excellent physical attributes
transparency, strength, stretchability, stability
- Easy to secure
- Excellent shelf life

Improved User Experience

- Effective adherence
- Proliferation acceleration
- Wound barrier & nerve protection
- Single application
(superficial wounds)
- Visualization of wound healing

Enhanced Clinical Outcome

- Improved healing environment
- Effective wound closure
- Diminish pain
- Lower scar formation*

* Only based on clinical study, need more data to support.

- Reduce inflammation
- Support proliferation
- Accelerate epithelialization
- Improve by remodeling intervention

A Biosynthetic Matrix (BSM) Technology

Epidermal Analogue

Silicone Membrane

Enabling oxygen, carbon dioxide and exudate to diffuse to/from the wound as needed

Slits: Enhance fluid management

Ultrathin(0.5mm): Analogue dermal thickness

Transparent : Visual

Highly flexible: Compliant with anatomy

Hydrophilic: Sustains optimal healing environment

Mode of Action - R.A.S.E.



Reconstruction of Skin Barrier & ECM

- Prevents contamination and protect inner vessel & nerves.
- Monitors and maintains moisture balance.
- Provides extracellular matrix environment



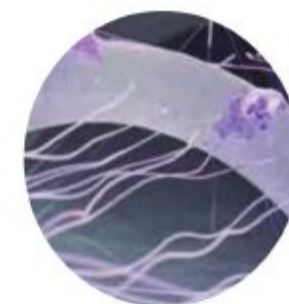
Primary Adherence

- Analogue ECM (bio-components) achieved within 5hrs.¹ allowing interaction with fibrin to form a clot within the micro-support system



Secondary Adherence

- 3D structure achieved within 72hrs¹ facilitating cell migration, proliferation and ingrowth



Epithelialization

- Re-epithelialization achieved and wound healed



Dermal Analogue

3D micro scaffold

Knitted synthetic fiber:

Embedded in silicone membrane to stabilize structure throughout the healing process

Medical grade silicone carrier:

Structure (500um) permits cell migration

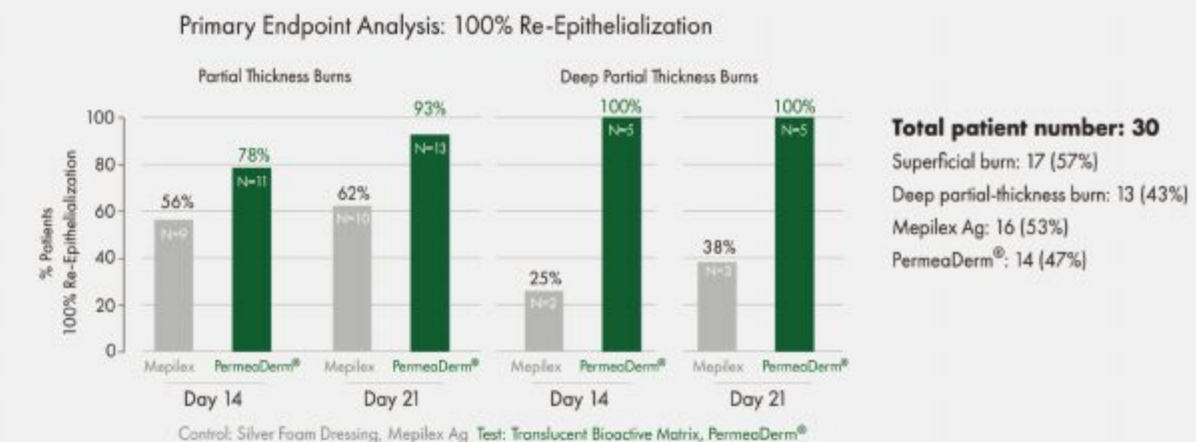
Knitted layer enlarges contact area and helps stimulate proliferation and ADHERENCE of cells

Bio-coating

Biological components are added to coating to increase hydrophilic and hygroscopic properties enabling a moist, but not wet environment conducive to healing

Accelerated Healing

Percentage of Patients Achieving 100% Re-Epithelialization is higher with PermeaDerm®. PermeaDerm® results in a higher number of patients meeting the primary endpoint at Day 14, irrespective of lesion classification.

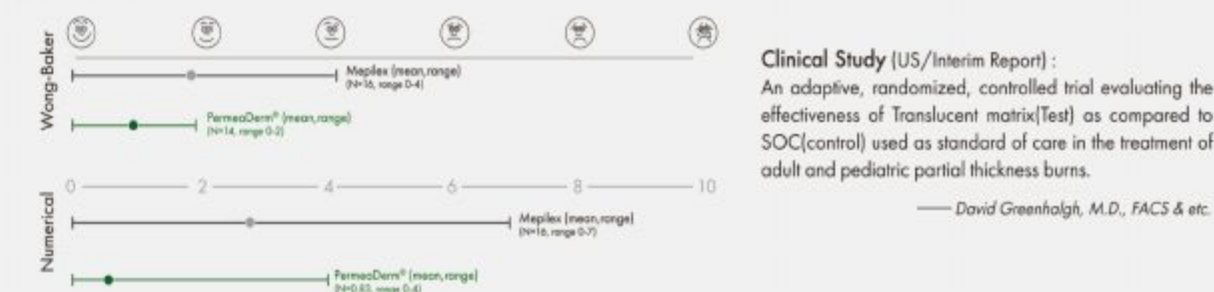


Clinical Study (US/Interim Report) :
An adaptive, randomized, controlled trial evaluating the effectiveness of translucent matrix (Test) as compared to SOC (control) used as standard of care in the treatment of adult and pediatric partial thickness burns.

— David Greenhalgh, M.D., FACS & etc.

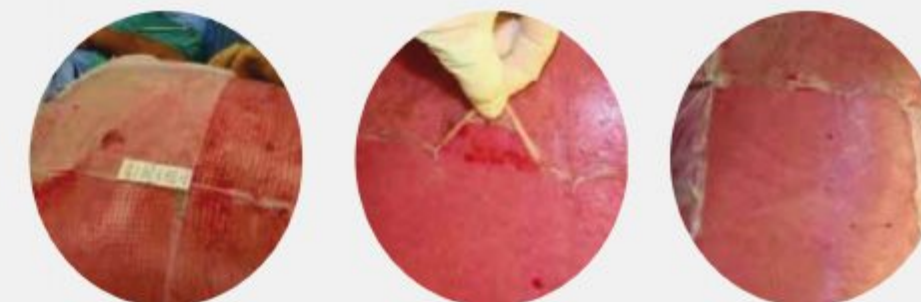
Pain Alleviation

The physical attributes of PermeaDerm® performed better in an open wound, especially for nerve protection and may provide topical sedation to alleviate pain as well as help reduce inflammation. PermeaDerm® is more friendly to pediatric and large TBSA.



Reliable Quality of Wound Closure with Single Application

Better epithelialization on large uniform superficial burn



The prototype of PermeaDerm® shows faster and greater secondary adherence which results in healing difference compared to Biobrane®

Area A: Biobrane®
Area B: Prototype of PermeaDerm®