



Fast Regeneration

Restored Motion

Product Brochure

The Clinical Situations

Clinical situations may be challenging. The patients you see on a daily basis require fast, effective treatment for a range of full-thickness wounds. Your goal is to help the patient to get back to normal life while managing the overall treatment costs.

Challenges of full-thickness wound injuries and grafting:

- Fast revascularization of grafts
- Exposed tendon and bones
- Patient functionality and scarring
- Multiple operating-room requirements and procedures



A 42-year-old male presented with a flame burn, 42% TBSA on chest and neck. Early excision was performed on day four.*



A 64-year-old female presented with an infected dog bite on the dorsum of the hand. After one month of pre-treatment in a general hospital, the wound bed was still necrotic.**



A 60-year-old male with diabetic foot syndrome and a history of obesity and coronary heart disease, presented with a gangrenous right foot.*



A 42-year old female presented with a basal cell carcinoma in the face. The cancer was excised widely, resulting in a deep dermal wound.**

* Courtesy of E. Dantzer, Toulon, France
** Courtesy of U. Hug, MD, Luzern, Switzerland

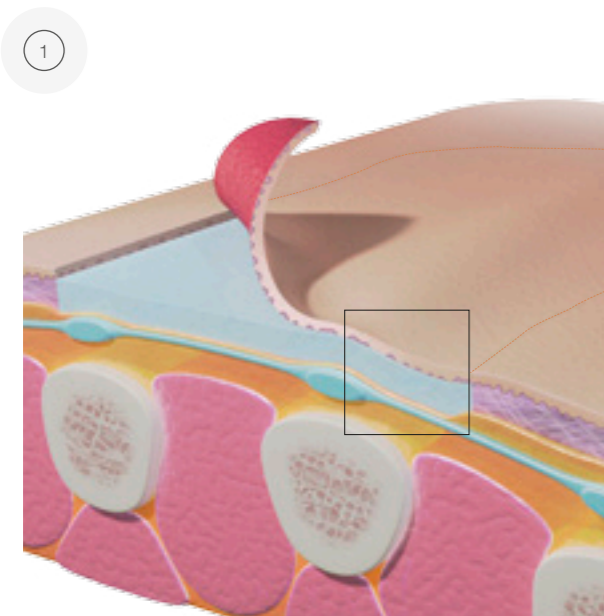
* Courtesy of D. Luedi, Langenthal, Switzerland
** Courtesy of N. Lilgenau, MD, Vienna, Austria

The Key Factor of the Success

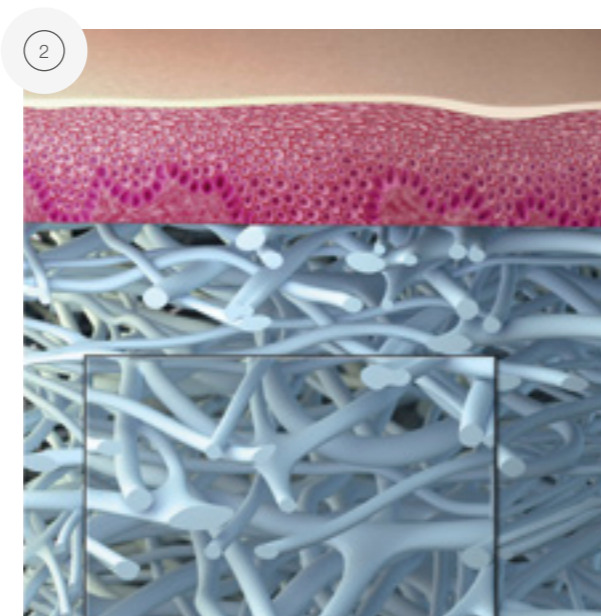
The key factor of the MatriDerm® Dermal Matrix success is our Advanced CryoSafe™ Method that preserves the native biological properties of the collagen elastin matrix.

The MatriDerm® Dermal Matrix Mode of Action

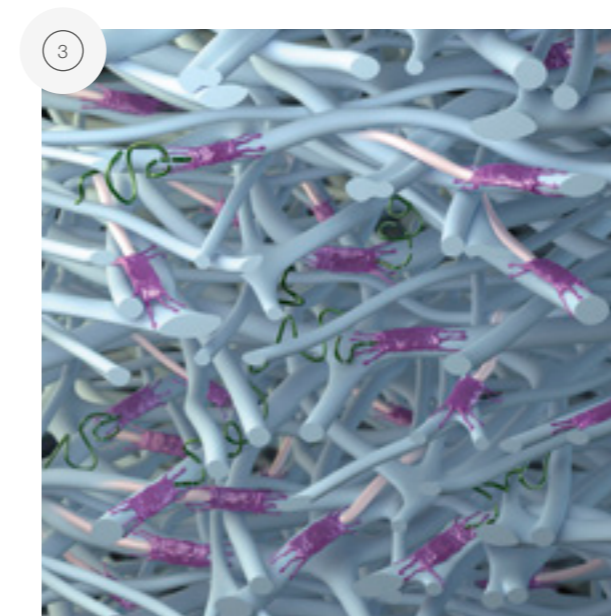
MatriDerm® Dermal Matrix is a unique collagen elastin matrix, which serves as a dermal replacement scaffold.



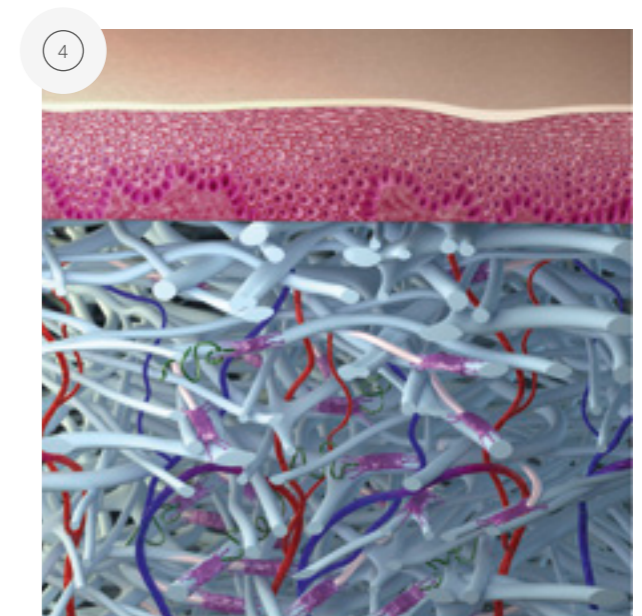
In a cost-effective One-Step Procedure, MatriDerm® Dermal Matrix is placed on the wound bed and covered with a split-thickness skin graft.



MatriDerm® Dermal Matrix provides a native three-dimensional collagen elastin matrix to facilitate cell migration and guided healing.^{8, 10, 11}



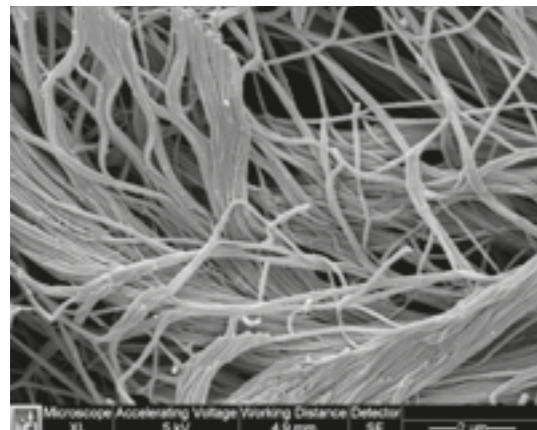
Fibroblasts are guided by the native collagen elastin scaffold ensuring structured healing and formation of a neo-dermis.^{8, 10, 11}



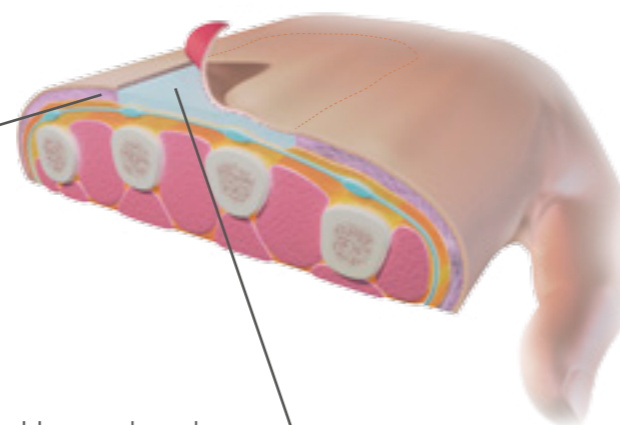
Enhanced neo-angiogenesis and formation of microvessels ensuring supply and optimal split-thickness skin graft take.^{1, 5, 6, 7, 9, 14}

The MatriDerm® Dermal Matrix Difference

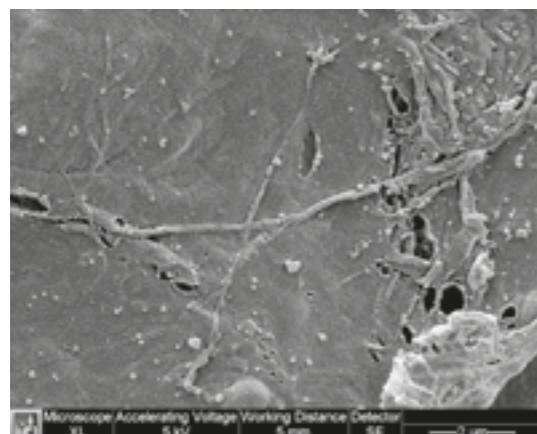
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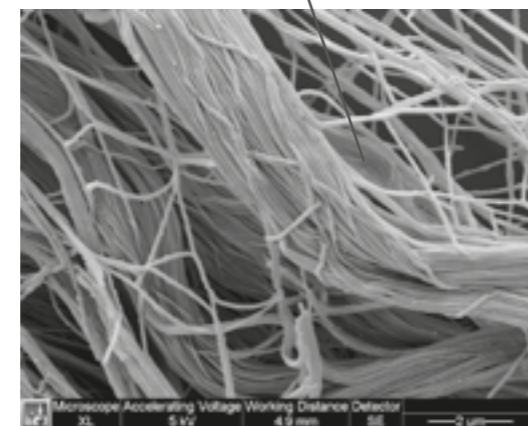
Human dermis



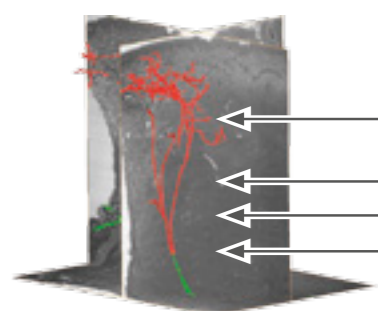
Human hand



Other processed dermal matrix



MatriDerm® Dermal Matrix



STSG*

MatriDerm® Dermal Matrix

Angiogenesis 15 days post implantation – courtesy of Prof. Kamolz, Austria

* Split-thickness skin graft

Why Processing Matters!

Structural integrity and biological activity of the collagen are highly dependent on differences in the manufacturing process.²

The unique MatriDerm® Dermal Matrix manufacturing process (Advanced CryoSafe™ Method) preserves the native collagen triple helical structure as well as the cellular binding sites of its collagen products, which is important for the cellular interaction.²

The MatriDerm® Dermal Matrix Difference

Elastin

- Triggers early vascularization^{3, 4, 5, 19} and may reduce risk of infection (re-vascularization allows for white blood cells to migrate to the site)^{18, 19}
- Significantly improves skin elasticity (compared to split-thickness skin graft alone)^{1, 5, 6, 7, 9}
- Enables early physical therapy and rehabilitation²⁰

Native collagen fibers

- Guided healing to avoid unstructured scar tissue^{8, 10, 11}
- Improved cell migration and reconstruction of new dermis^{10, 11}

One- and Multi-Step Procedure

- Can be used in a One-Step Procedure which saves time and money and enables an early patient mobilization
- If more than one step is needed the wound can already be grafted after 5-12 days

No chemical cross-linking

- Non-release of cell-toxic substances
- Improved cellular growth^{12, 13}

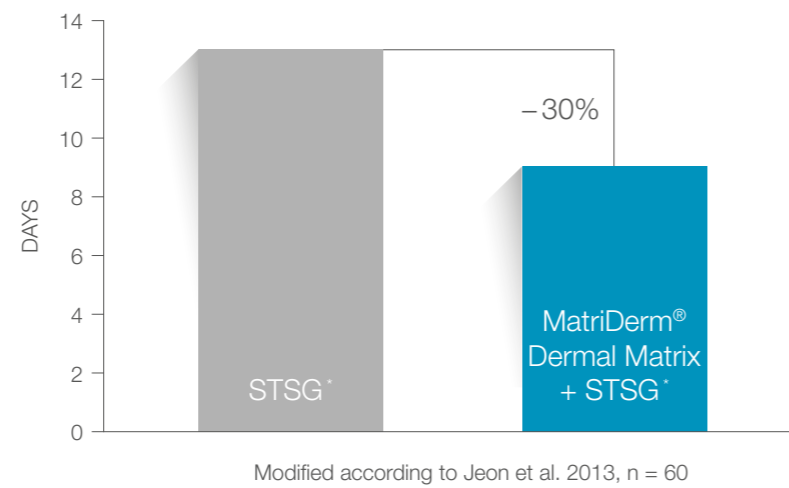
The Clinical Evaluation

Under clinical evaluation MatriDerm® Dermal Matrix has shown to be fast and effective in the management of a range of full-thickness wounds, helping patients back to normal life and reducing the overall cost of care.



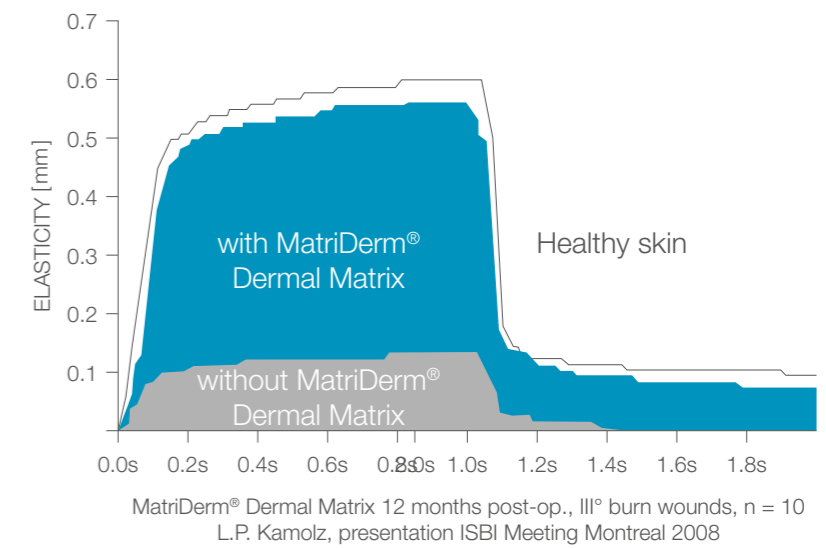
Fast

Shorter healing period with MatriDerm® Dermal Matrix



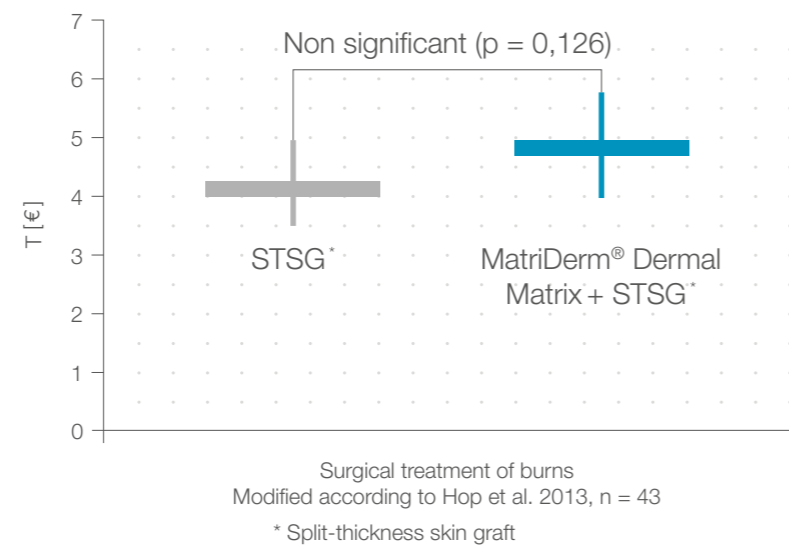
Quality of life

Determination of skin elasticity via Cutometer® measurement



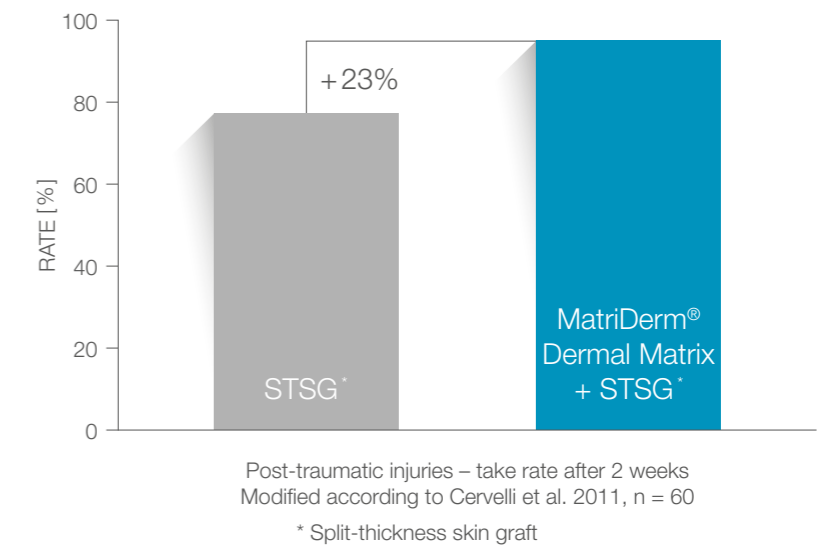
Cost effective

Total surgical treatment costs don't differ significantly from STSG*



Effective

Improved efficacy with MatriDerm® Dermal Matrix



The Clinical Evaluation

The long-lasting effect on scar quality by the use of MatriDerm® Dermal Matrix, even after 12 years, has been shown by Bloemen et. al¹:

- Improved scar parameter
- Improved scar appearance (cosmetic)

Burns*



Intraoperative



Intraoperative after the application of MatriDerm® Dermal Matrix



3 years postoperative



3 years postoperative

* Courtesy of E. Dantzer, Toulon, France
 ** Courtesy of U. Hug, MD, Luzern, Switzerland

Trauma**



Intraoperative after debridement



Intraoperative after the application of MatriDerm® Dermal Matrix and mesh graft



Stable wound closure
3 months postoperative



Full extension 2 years postoperative

Chronic Wound*



Preoperative



Intraoperative after the application of MatriDerm® Dermal Matrix and mesh graft



3 months postoperative



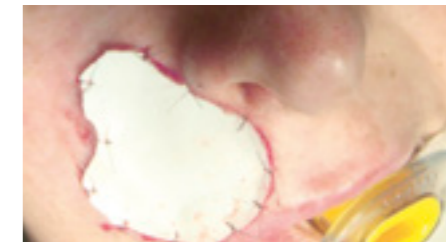
6 months postoperative

* Courtesy of D. Luedi, Langenthal, Switzerland
 ** Courtesy of N. Lilgenau, MD, Vienna, Austria

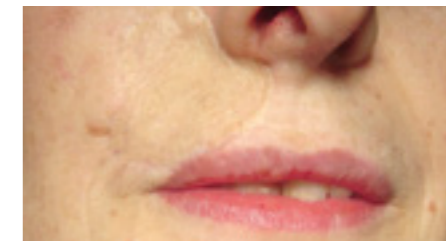
Cancer Excision**



After excision



Intraoperative after the dry application of MatriDerm® Dermal Matrix



7 months postoperative



7 months postoperative

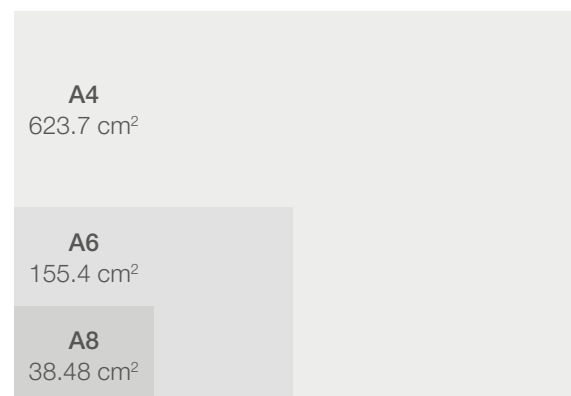
Fast Regeneration Restored Motion

- Fast integration & revascularization^{3, 4, 5, 10, 11}
- Effective closure of full-thickness injuries^{1, 7, 14}
- Cost-effective One-Step Procedure^{15, 16}
- Superior functional & aesthetic outcomes^{1, 7, 17}

	Ref. No.	Size
A4	83500 - 200	210 x 297 x 1 mm
	83400 - 200	210 x 297 x 2 mm
A6	83403 - 200	105 x 148 x 1 mm
	83401 - 200	105 x 148 x 2 mm
A8	83404 - 200	52 x 74 x 1 mm

52 mm

74 mm



MedSkin Solutions Dr. Suwelack AG
Josef-Suwelack-Strasse 2
48727 Billerbeck | Germany

P +49 (0)2543 2182-0

E info@medskin-suwelack.com

W www.medskin-suwelack.com

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