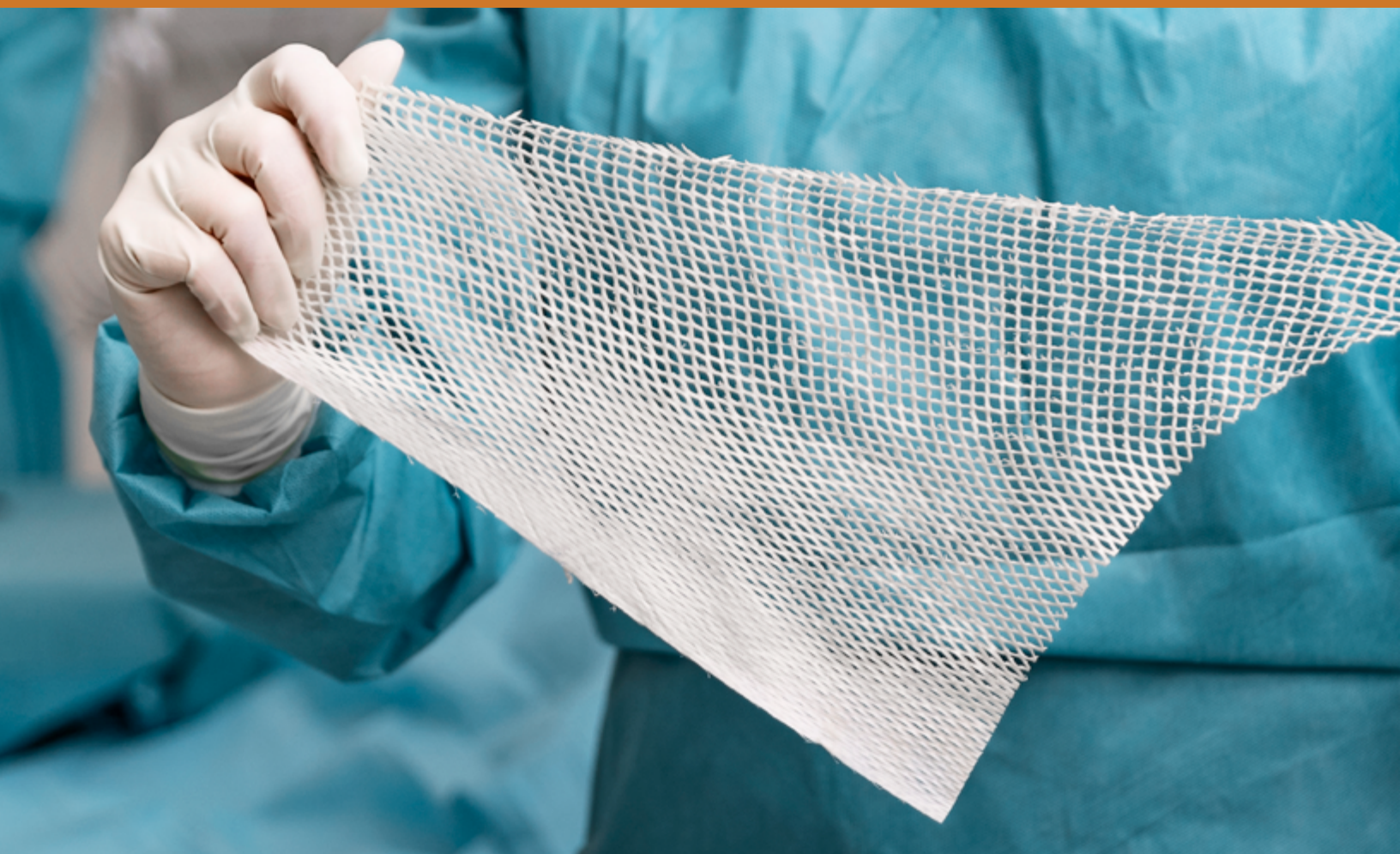
KERECIS®

GraftGuide®

Fish skin application for burns

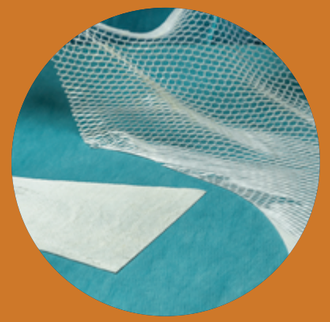


GraftGuide®

GraftGuide is intact fish skin used to regenerate tissue in surgical, traumatic, and acute wounds.[3] Because there is no known risk of viral or prion disease transfer from Nort Atlantic cod to humans, the fish skin only needs mild processing with our proprietary method.[2]

This mild processing preserves the skin's natural qualities[2], including its three-dimensional structure, mechanical properties, molecular organization, and composition.[1-4]

GraftGuide promotes healing with minimal impairment of functionality and positive cosmetic outcomes.[4] The product is homologous to human skin[1] and when applied to damaged tissue, such as a burns or wounds, helps to support the body's own cells to regenerate tissue.[5-12]



GraftGuide Meshed 3-to-1 is designed to easily expand across large, partial-thickness burns while preventing the rebound effect sometimes experienced when grafts with lesser expansion ratios are stretched across large burns.

This reduced rebound effect combined with strength and durability makes affixation easier and quicker for large surface area wounds. The larger expansion ratio also helps reduce "tenting" that can occur when 2-to-1 pre-meshed grafts or solid grafts are applied to burns with significantly uneven wound beds.

GraftGuide® Micro

GraftGuide Micro is intact fish skin that has been fragmented. It offers more surface area than the non-fragmented version, and is designed to adhere to, and fill, deep wound spaces and irregular geometries.

Intended Use

The product is indicated for the management of wounds including:

- Partial and full-thickness wounds
- Trauma wounds including second-degree burns
- Surgical wounds

Features and Benefits

GraftGuide pioneers the use of fish skin for the management of burn wounds.

- Provides a natural microbial barrier[1], protecting against environmental insults
- Preserves the structure and porosity of the fish skin graft[1], ideal for cellular ingrowth[1,10]
- Adheres to burn wounds in a variety of shapes and sizes, including mobile joints
- Resists shearing forces, allowing early physiotherapy[10]
- Supports the restoration of the skin's pigmentation, while minimizing scarring[4,6,10-12,15]

GraftGuide® Mano

GraftGuide Mano is intact fish skin specifically designed to reduce operation time when managing burn injuries, with the product's unique shape allowing it to easily cover the complex 3D structure of the hand. It is available in two sizes, medium and large, and in either left or right versions, for use in palmar or dorsum applications.

Kerecis Mechanism of Action

Kerecis patented fish skin is only gently processed, preserving its homologous structure to human skin. This product has had its cells removed and a native structure largely unaffected by processing, both traits recognized as optimal for a tissue replacement product.[13]

INTACT MOLECULAR ORGANIZATION
Fish skin is homologous to human skin[2]

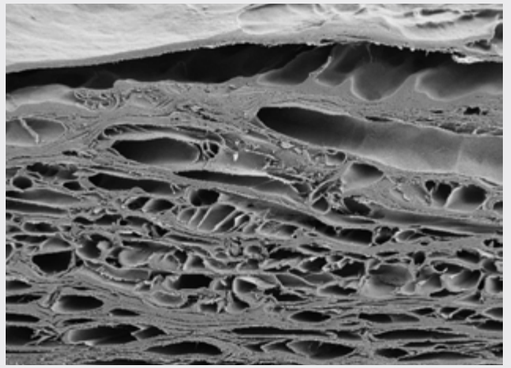
THREE-DIMENSIONAL STRUCTURE
Intact structure provides a framework to support tissue regeneration with limiting scarring[14]

NATURAL MECHANICAL PROPERTIES
Naturally strong, handles like skin, and easy to suture or staple[3]

PRESERVED MOLECULAR CONTENT
Chemical complexity of the fish skin supports rapid cell ingrowth and neovascularization[1]

Homologous to Human Skin

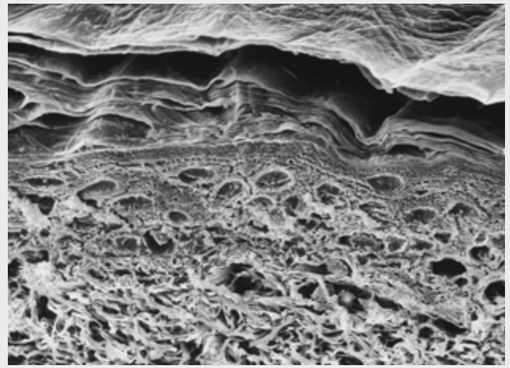
FISH SKIN



Epidermis

Dermis

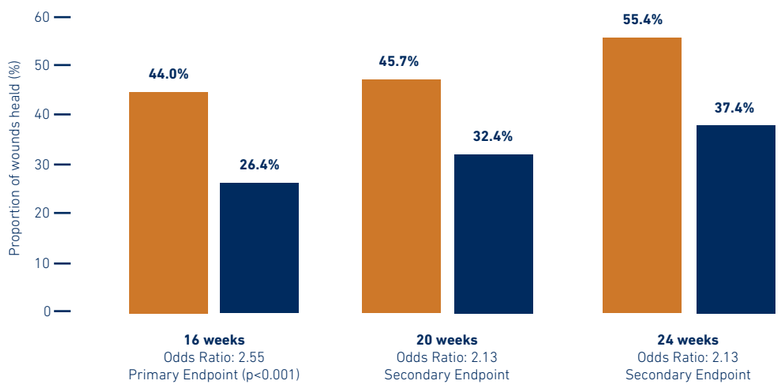
HUMAN SKIN



Largest RCT on DFUs with Exposed Bone or Tendon Brings New Hope for Patients

255 patients, 15 centers, UT Grades 2 & 3

Proportion of Wound Closure: IFSG vs. SOC



Learn More

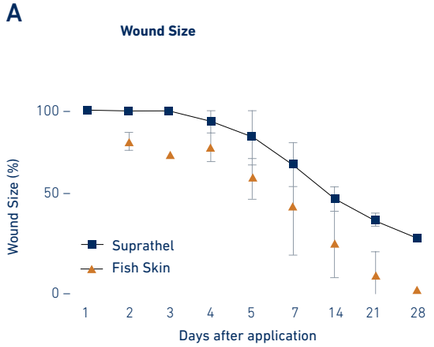
Intact fish skin heals 66% more wounds than SOC at 16 weeks

Intact Fish Skin Graft

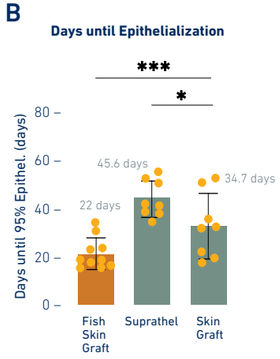
Standard of Care

The Use of Intact Fish Skin as a Novel Treatment Method for Deep Dermal Burns following Enzymatic Debridement: A retrospective case-control study

A



B



A) There was a significant reduction in wound size over time in fish skin treated wounds compared to Suprathel-treated wounds ($p < 0.001$). N = 12.
B) The application of the definitive wound closure to the point of 95% epithelialization: Suprathel (45.6 ± 6.6 days), STSG (34.7 ± 12.5 days), and fish skin graft (22 ± 6.3 days).

CONCLUSIONS

Enzymatic debridement in combination with intact fish skin grafts resulted in improved short term and long term outcomes.

- Faster burn healing
- Reduced need for autografting
- Better functional outcomes
- Better scar outcomes

Learn More

GraftGuide Cases

Healing by secondary intent with epithelialization of the skin resulting in desirable cosmetic and functional outcomes.[7, 15]

Case courtesy of Dr. Alfredo Cordova, MD, FACS, FAAST

93% TBSA Full Thickness Flame Wound

Background: 28 y/o Male with Schizophrenia. Poured gasoline and set himself on fire.
Previous Management: Allograft
Applications: Kerecis Meshed 2:1 Graft

DAY 0 DAY 0 DAY 15 DAY 27

Case courtesy of Jason M. Bregg, MD

Deep Partial-Thickness Hand Burn

Previous Management: Presented to the burn center on the same day as the injury with no previous treatment reported.
Applications: GraftGuide Mano (Size L)

DAY 0 DAY 2 DAY 2 DAY 5 DAY 17

Case courtesy of Ram Velamuri, MD, FACS, MS, DNB, MRCS-Ed

40% TBSA Burn

Previous Management: BTM was applied but removed due to infection that came up.
Applications: Graftguide Meshed 2:1

DAY 0 WEEK 1 2 WEKS 1 month post STSG

GraftGuide®

SOLID

Catalog # Box of 10	Catalog # Single Unit	Product Size	Coverage
50202S03D2D	50202S03D0D	7 x 10 cm	70
50202S21D2D	50202S21D0D	7 x 20 cm	140
50202S24D2D	50202S24D0D	250 cm²	250
50202S23D2D	50202S23D0D	300 cm²	300

MESHED 2:1

Catalog # Box of 10	Catalog # Single Unit	Product Size	Coverage
50202N03D2D	50202N03D0D	7 x 10 cm meshed 2:1	up to 126
50202N21D2D	50202N21D0D	7 x 20 cm meshed 2:1	up to 252
50202N24D2D	50202N24D0D	250 cm² meshed 2:1	up to 450
50202N23D2D	50202N23D0D	300 cm² meshed 2:1	up to 540

MESHED 3:1

Catalog # Box of 10	Catalog # Single Unit	Product Size	Coverage
50202O23B2D	50202O23B0D	300 cm² meshed 3:1	up to 840

GraftGuide® Micro

Catalog # Box of 10	Catalog # Single Unit	Product Size	Coverage
50202P32D2D	50202P32D0D	114 cm²	up to 114

GraftGuide® Mano

Catalog # Box of 10	Catalog # Single Unit	Product Type / Size	Coverage
50202N33D0D	50202N33D2D	Dorsum L/Palmar R / M	147
50202N34D0D	50202N34D2D	Dorsum R/Palmar L / M	147
50202N35D0D	50202N35D2D	Dorsum L/Palmar R / L	196
50202N36D0D	50202N36D2D	Dorsum R/Palmar L / L	196

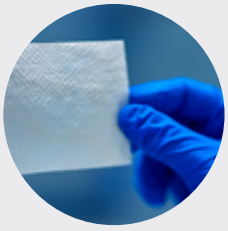
Sustainably Harvested in Iceland

Kerecis is pioneering the use of fish skin in the globally expanding cellular therapy and regenerative medicine market. It is the only regulatory cleared manufacturer of fish-skin-based medical devices for tissue regeneration in the world.

Kerecis fish skin is a byproduct of fish processing in Iceland. The fish are caught from sustainable wild fishing stocks in the North Atlantic Ocean.

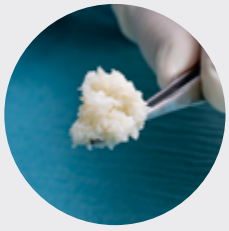
The Kerecis ISO 13485 manufacturing facilities are in the town of Isafjordur in the Westfjords region, 20 miles south of the Arctic Circle, and are powered by renewable energy.

KERECIS PRODUCT CONFIGURATIONS



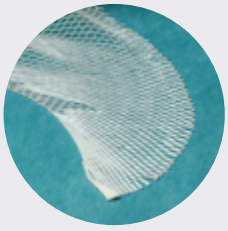
Solid

Fenestrated

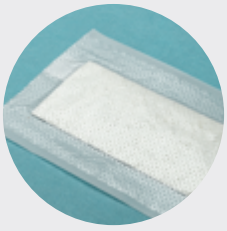


Fragmented

Meshed 2:1



Meshed 3:1



Integral Silicone

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kerecis®

OUR VISION
To extend life by supporting the body's own ability to regenerate

U.S. and international patents and trademarks granted and pending

KERECIS UNITED STATES
2101 Wilson Blvd., Suite 900
Arlington, Virginia 22201
+1 (703) 287-8752
vet@kerecis.com

www.kerecis.com