# Protecting Your Success with Our Proven Membrane

Geistlich Bio-Gide® Geistlich Bio-Gide® Compressed Geistlich Bio-Gide® Shape Geistlich Bio-Gide® Perio



leading regeneration

### Geistlich Bio-Gide<sup>®</sup> is the leading collagen membrane in North America for oral tissue regeneration<sup>1,2</sup>

Geistlich Bio-Gide<sup>®</sup> is a resorbable collagen membrane that integrates with surrounding tissues to protect the initial coagulum and then optimally degrades to allow for early vascularization and the cascade of biologic events leading to regeneration.<sup>3-5</sup>









### **Proven with Predictable Outcomes**

For more than 20 years Geistlich Bio-Gide<sup>®</sup> has been proven to provide predictable outcomes due to these key properties:

The bilayered, natural

collagen structures

provide prompt

and homogeneous

vascularization

for uneventful

and optimum

bone healing.

- > Unique bilayer structure
- > Uneventful wound healing<sup>6</sup>
- > Optimum bone healing<sup>7</sup>
- > Prompt and homogeneous vascularization<sup>8</sup>
- > Optimal barrier time

### Unique Biological Structures Interaction

Comprised of a smooth layer and a rough, open-pored layer that together promote reliable bone regeneration and excellent tissue integration.<sup>9</sup>

### Long-Term Success

The barrier function has been engineered to resorb once the protective period is complete, leading to predictable formation of complex soft tissue structures.

### **Proven Collagen Expertise**

Our proprietary process yields natural structures containing native collagen fibers which allow the body to reliably accept and integrate into the material. The preservation of native fibers ensures that vital building blocks are present to promote the initial biologic processes of cell adhesion and proliferation.<sup>10-12</sup>

### **Unique Bilayer Structure**

The bilayer structure of Geistlich Bio-Gide<sup>®</sup> is a semi-permeable membrane that permits nutrition transfer and fast vascularization through its natural bilayer structure. This unique bilayer structure is designed with both a cell occlusive and a fibrous surface which protects the site during healing and allows for the deposition of proteins.<sup>13</sup>

These properties, in combination with an optimally-timed barrier function, prevent premature growth of soft tissue into the defect and create an environment for the appropriate cascade of biological events.<sup>3,5,8,9,14-19</sup> This intentional design ensures optimal regenerative healing of bone and soft tissue.

### Vascularization Leads to Integration<sup>8</sup>

Immunohistochemical representation of angiogenesis and tissue integration. PD Dr. Schwarz, Düsseldorf, Germany.



"The use of Geistlich Bio-Gide" resulted in fewer implant losses, compared to other membranes. The most predictable outcome is achieved with Geistlich Bio-Gide"."<sup>21</sup>

– Wolfram Knöfler



Scan for more information on Geistlich Bio-Gide

### Geistlich Bio-Gide®



#### More bone volume and improved bone quality lead to a higher implant survival rate<sup>20</sup>



### **Built for Regeneration**

### Advantages of Early Vascularization

supports bone formation <sup>3.17</sup>
wound stabilization <sup>5.15</sup>
oxygen and nutrient transfer <sup>5.17</sup>
tissue integration <sup>5.8</sup>
uneventful wound healing <sup>15.19</sup>

### Early and Complete Vascularization

Membrane vascularization is a key step in bone and periodontal regeneration with Geistlich Bio-Gide<sup>®</sup>.



2 Weeks\* New bone formation is adjacent to the defect and underneath Geistlich Bio-Gide<sup>\*3</sup>



2 Weeks Wound healing is characterized by ongoing bone formation.

\* KEY



6 Weeks Continual filling of the inter-trabecular spaces where maturation to lamellar bone begins.<sup>3,14</sup>

Geistlich Bio-Gide\* Geistlich Bio-Oss Collagen newly formed bone



**12 Weeks** Blood vessels surrounded by newly formed trabeculae of woven bone.

For clinical indications where both a physical matrix and a barrier are needed, Geistlich Bio-Oss<sup>®</sup> provides the volume and space preservation necessary to make it a natural companion to proven Geistlich Bio-Gide<sup>®</sup>.

### **Improved Bone Quality and Quantity**

Geistlich Bio-Gide<sup>®</sup> provides excellent wound stability and graft containment. As demonstrated in the histological images below, the use of Geistlich Bio-Gide<sup>®</sup> with Geistlich Bio-Oss<sup>®</sup> results in significantly more bone formation and complete osseo-integration than without a membrane.



Average new bone without Geistlich Bio-Gide<sup>®</sup>, connective tissue encapsulation of Geistlich Bio-Oss<sup>®</sup>

Red: New bone Yellow: Geistlich Bio-Oss<sup>®</sup> White: Connective tissue/bone marrow





Average new bone with Geistlich Bio-Gide<sup>®</sup>, complete osseointegration of Geistlich Bio-Oss<sup>®</sup>

Red: New bone Yellow: Geistlich Bio-Oss<sup>®</sup> particles White: Connective tissue/bone marrow

### **Geistlich Bio-Gide**<sup>®</sup>

**Extended Product** Range

### Geistlich **Bio-Gide**<sup>®</sup>Compressed

Geistlich Bio-Gide<sup>®</sup> Compressed is a resorbable collagen membrane possessing the same biological properties as Geistlich Bio-Gide°.

### An Alternative Handling Option:

#### Suited for dentists who prefer a more **compact** membrane:

- > Compressed membrane, firmer feel
- > Smoother and more denser surface compared to Geistlich Bio-Gide®
- > Easier to trim

### Geistlich **Bio-Gide**<sup>®</sup>Shape

Geistlich Bio-Gide<sup>®</sup> Shape is a pre-trimmed resorbable collagen membrane designed for the treatment of non-intact extraction sockets.

### A Predictable Solution<sup>22-27</sup> for Ridge Preservation:

- > Convenient Developed and shaped specifically for non-intact extraction sockets
- > Easy Handling Application Slower uptake of moisture prolongs the time available for the exact positioning of the material
- > Uneventful wound healing in an open healing situation
- > Ready to Use: Pre-Trimmed for clinical use reduces preparation time

### Geistlich **Bio-Gide**<sup>®</sup>**Perio**

Geistlich Bio-Gide® Perio is a resorbable collagen membrane with specific handling characteristics that make it ideal for periodontal indications.

### Modified Structure Provides:

- > Slower uptake of moisture into the barrier
- > Prolonged working time

#### Sterilized Templates for a Wide Range of Defects:

The outer blister pack includes four sterile templates, perforated to easily distinguish them from the membrane. These water repellent templates can be placed repeatedly in the region of the defect to allow customization of the template before cutting the membrane to the precise shape.

### For Open Healing

> Firmer surface facilitates easier cutting of the material

# Lateral Ridge Augmentation in the Posterior Mandible

### with Geistlich Bio-Gide®

**Objective:** Replacement of a failed 4 unit bridge #22 - #19, with a fixed prosthetic replacement. Implants to be placed following lateral ridge augmentation.

**Conclusion:** Following 8 months of healing, the augmented site showed sufficient bone width that was assessed with a CT scan. After examination of the bone width the implants were placed in the desired position.

8 month healing At re-entry sufficient width for implant placement



John M. Sisto D.D.S. Park Ridge, IL. USA





### Treatment of an Non-Intact Extraction Socket

### with Geistlich Bio-Gide<sup>®</sup> Shape

**Objective:** Maintain alveolar ridge dimensions following atraumatic tooth extraction.

**Conclusion:** The alveolar height and width were maintained, resulting in a good esthetic outcome.





### Horizontal Ridge Augmentation in the Posterior Mandible of a 90-Year-Old Female



with Geistlich Bio-Gide<sup>®</sup> Compressed

**Objective:** Replace a 90 year-old woman's failed bridge with horizontal ridge augmentation and implant place

**Conclusion:** The horizontal ridge augmentation procedure resulted in adequate bone for implant therapy. Implants for #19 and #20 were placed using a surgical guide based on a diagnostic wax up.







John Kim, D.M.D., Rocky Mount, NC.USA

### **Treatment of an Intrabony Defect**

### with Geistlich Bio-Gide® Perio

**Objective:** Functional and esthetic reconstruction of chronic periodontitis with deep intrabony defects.

**Conclusion:** After controlling the periodontal disease, this guided tissue regeneration technique leads to a long-term stable bony situation with an esthetic soft tissue appearance.



3 78%

Linear defect fill after 6 months with Geistlich Blo-Gide<sup>®1</sup>

In a 90-year-old patient



#### Dr. Marco Zeltner Horgen, Switzerland









#### Dr. Frank Bröseler Aachen, Germany







# Geistlich

### **Everything you need** for bone regeneration in one partner



That's why we've expanded our offerings to include quality products which complement the use of the Geistlich regenerative portfolio.













**Biologic Growth Factor GEM 21S<sup>°</sup>** 

## **Membrane Product Range**



Bio-Gide Compressed

### **Geistlich Bio-Gide**\*

Product Number	Product Description	Quantity/Volume	
20151	Geistlich Bio-Gide®	13 x 25 mm	
20152	Geistlich Bio-Gide®	25 x 25 mm	
500710	Geistlich Bio-Gide®	30 x 40 mm	
20153	Geistlich Bio-Gide®	40 x 50 mm	

### Geistlich Bio-Gide<sup>®</sup> Compressed

Product Number	Product Description	Quantity/Volume	
500363	Geistlich Bio-Gide® Compressed	13 x 25 mm	
500374	Geistlich Bio-Gide <sup>®</sup> Compressed	20 x 30 mm	



Geistlich Bio-Gide <sup>®</sup> Shape			
Product Number	Product Description	Quantity/Volume	
500377	Geistlich Bio-Gide <sup>®</sup> Shape	14 x 24 mm	

Bio-Gide Perio

#### Geistlich Bio-Gide® Perio

Product Number	Produc
20148	Geistli

Combi-Kit Collagen

erio-System Comhi-

### **Geistlich Combi-Kit Collagen** Geistlich Bio-Gide® & Geistlich Bio-Oss Collagen®

Product Number	Product Description	Quantity/Volume
20146	Geistlich Combi-Kit Collagen	Geistlich Bio-Gide® 16 x 22 mm Geistlich Bio-Oss Collagen® 100 mg

### **Geistlich Perio-System Combi-Pack** Geistlich Bio-Gide® Perio & Geistlich Bio-Oss Collagen®

Product Number	Product Description	Quantity/Volume
20147	Geistlich Perio-System Combi-Pack	Geistlich Bio-Gide® Perio 16 x 22 mm Geistlich Bio-Oss Collagen® 100 mg

Ge P
16 16
1

Description	Quantity/Volume
n Bio-Gide® Perio	16 x 22 mm

Geistlich Pharma North America, Inc. Princeton, NJ 08540 Customer Care Toll-free: 855-799-5500 info@geistlich.com https://geistlich.us

### Geistlich

### **Your Partner** in a Strong **Foundation**

#### Assurance

Your assurance, our long-term evidence. Scientifically proven in over 1400 publications.

#### **Proven Outcomes**

*Over 15 million successfully* treated patients worldwide.<sup>28</sup>

#### **Trustworthy**

Every 15 seconds a Geistlich product is used.<sup>28</sup>

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### For more information, please visit: www.geistlich.us

CAUTION: Federal law restricts these devices to sale by or on the order of a dentist or physician.

For more information on contraindications, precautions, and directions for use, please refer to the Instructions for Use at: https://www.geistlich-na.com/dentalprofessionals/instructions-for-use