Introducing Biomet 3i™ Membranes:

OsseoGuard® And NEW OsseoGuard Flex™

- Protects Sites For Consistent Results During Grafting Procedures
- Biocompatible To Encourage Integration And Support Soft-Tissue Healing
- Choose Between Two Levels Of Drapability For Ease Of Use In Various Clinical Scenarios
- Resorption Profiles Suited For The Healing Time Required In Many GBR Procedures

OsseoGuard® Membranes Provide Clinicians One Solution At A Time

- Years Of Clinical Experience And Documentation In Scientific Publications
- Highly Purified Collagen Naturally Aids In The Wound Healing Process
- Unique Crosslinking Techniques Yield An Optimal Balance Between Handling And Resorption
- Membranes Are Fully Resorbed In Six To Nine Months
“The OsseoGuard® Membrane has the best handling characteristics of any resorbable barrier I’ve used. Its stiffness makes it easy to insert and it remains in place with flap closure even without tacking.”
– Dr. Paul Ricchetti†, United States
OsseoGuard® Resorbable Membranes Are Easy To Use For Site Protection

Today, clinicians are treating an increased number of patients using Guided Bone Regeneration (GBR) in conjunction with implant therapy, which has led to an increased use of resorbable membranes. In addition to providing graft material containment and a barrier to soft-tissue cell invasion, studies have shown that using a membrane in most Guided Bone Regeneration (GBR) procedures can positively affect the outcome of those procedures. Cases in which a membrane was used have been linked to higher implant survival rates, as well as an increased percentage of vital bone formation in sinus grafts when compared to sinuses grafted without a membrane.

In response to the growing need for a resorbable collagen membrane, OsseoGuard® and the NEW OsseoGuard Flex™ Membranes for site protection. Clinicians now have the opportunity to select a membrane based on their particular handling characteristic preferences. If a clinician prefers a membrane that has more space maintenance capability, OsseoGuard® may be the membrane of choice. On the other hand, if a clinician prefers a membrane that has less memory and therefore a higher degree of conformance to a defect, OsseoGuard Flex™ may be the membrane of choice.

Both OsseoGuard® and the NEW OsseoGuard Flex™ Membranes are sourced from closed New Zealand herds. These membranes can be trimmed and placed dry or hydrated, and do not require side-specific placement. These membranes also have a pore size that allow them to be occlusive to gingival and epithelial cells while still permeable to essential nutrients and gases.

OsseoGuard® and OsseoGuard Flex™ Membranes provide four Dimensions Of Success when grafting: predictability, ease of use, aesthetic soft-tissue healing and a long resorption profile.
OsseoGuard® Membrane

The OsseoGuard® Membrane is designed for optimal strength, resorption and handling. For the regeneration of hard and soft tissues in Guided Bone Regeneration (GBR) or Guided Tissue Regeneration procedures (GTR), a membrane should exhibit several characteristics, one of which is strength. Adequate mechanical strength is necessary to support suturing of the membrane for stability. The OsseoGuard® Membrane demonstrates a suture pull-out strength that is significantly higher than that of BioMend® due to its unique fibrillar matrix structure.4

A unique manufacturing process is also what creates a longer resorption profile and the excellent handling characteristics of the OsseoGuard® Membrane. The six-to-nine month resorption profile is suited for the healing time required in many GBR procedures.5

Made with highly purified, bovine, Type I Achilles Tendon collagen, the OsseoGuard® Membrane acts as a protective barrier against soft-tissue invasion of a defect space. By applying the membrane in the following indications, the OsseoGuard® Membrane can facilitate the regeneration of hard tissues in a variety of defects:

- **Localized Ridge Augmentation/Future Site Preparation**
- **Peri-implant Bone Defects**
- **Extraction Sockets**
- **Bone Regeneration After Root Resection**
- **Sinus Window Coverage**

“Defects were grafted with freeze-dried mineralized bone allograft and covered with an OsseoGuard® Membrane. Primary closure was achieved.”

“Clinical Images Provided By: Dr. Michael Sonick”

“Healing after six weeks. Note excellent soft-tissue response.”

“The consistency and tear resistance are very good, even when wet.” — Dr. Roberto Cocchetto†, Italy
In order to evaluate the strength of the OsseoGuard® Membrane, a suture pull-out test is conducted by the manufacturer (Collagen Matrix, Inc.) on every lot of membranes produced.

A 3.0 suture is passed through the membrane approximately 3.0mm from the edge of the membrane. A knot is tied in the suture, leaving a loop to hook the suture onto a force gauge. The other end of the membrane is secured in a clamp. The suture is pulled at a rate of one inch per minute until the suture pulls out of the membrane. The average force required to pull a suture out of the OsseoGuard® Membrane from ten recent suture pullout tests is: .286kg +/- 0.090kg. This consistently verifies the mechanical strength necessary to support suturing the membrane for stability.

“The use of this kind of membrane retains the bone graft inside the sinus and the membrane’s great stiffness protects the schneiderian membrane.”
– Professor José Calvo†, Spain
The NEW OsseoGuard Flex™ Membrane is a resorbable collagen matrix membrane derived from highly purified Type I and Type III bovine dermis collagen. Based on technology similar to that of the OsseoGuard® Membrane, the NEW OsseoGuard Flex™ is engineered to yield flexibility, yet also retain a suitable resorption profile for procedures that necessitate a longer resorption time, such as Guided Bone Regeneration (GBR) procedures. Importantly, OsseoGuard Flex™ is also designed to be biocompatible and to effectively exclude undesirable soft-tissue cells from a defect site.

Many drapable membranes are difficult to handle because these may fold and stick to themselves at times. OsseoGuard Flex™ is flexible enough for grafting procedures like ridge augmentations, easy to handle and clinically manageable. The dermis collagen used to create OsseoGuard Flex™ requires less extrinsic crosslinking, thus creating a balance between flexibility and resorption profile.

This membrane is an option for defects in which more drapability may be advantageous. In fact, at least 8 out of 10 participants in a recent evaluation reported that they prefer the performance of the OsseoGuard Flex™ Membrane at placement when compared to Bio-Gide®, Ossix® Plus or Conform®.*

OsseoGuard Flex™ is designed to facilitate the desired aesthetic outcomes because it is flexible enough to drape over defects, limiting the occurrence of the edges of the membrane protruding through the soft tissue. In addition, the membrane is designed to allow soft tissue epithelialization in the event of an exposure. As a result of these characteristics, in a clinical evaluation, 9 out of 10 clinicians rated the overall performance of OsseoGuard Flex™ Membranes better than or equal to Bio-Gide® Membranes at the follow-up appointment.**

*n = 146  
**n = 29
Soft-tissue healing is not only important in a regenerative procedure for aesthetic purposes; it also becomes a major factor if the membrane is prematurely exposed. Some barrier membranes maintain the ability to aid in soft-tissue healing in the event of an exposure, thus limiting the amount of impaired bone healing that typically results from membrane exposure. OsseoGuard Flex™ has exhibited the ability to aid in gingival healing even when left exposed in posterior molar extraction sites.

OsseoGuard Flex™ is intended for use in oral surgical procedures as a resorbable membrane material in the following applications:

- **Peri-implant defects in immediate or delayed extraction sockets**
- **Localized ridge augmentation**
- **Alveolar ridge reconstruction**
- **Filling of bone defects**
- **GBR in dehiscence defects**
- **GTR in periodontal defects**

OsseoGuard® And OsseoGuard Flex™ Ordering Information

Both Membranes Are Available In Three Convenient Sizes, Are Double Sterile Packaged And Have A Shelf-Life Of Three Years.

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<th>Size: 15mm x 20mm</th>
<th>Size: 20mm x 30mm</th>
<th>Size: 30mm x 40mm</th>
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For A Membrane That Is Easy To Use, Try An OsseoGuard® Or OsseoGuard Flex™ Membrane!

www.biomet3i.com

†Clinicians have a financial relationship with BIOMET 3i, LLC resulting from speaking engagements, consulting engagements and other retained services.

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Manufactured By: Collagen Matrix, Inc.
Not Available In All Markets. Please Consult With Your Local BIOMET 3i Sales Representative For Availability.