Achieving functional and esthetic results when placing a dental implant requires an adequate amount of quality bone. Many implant sites that are not suitable for dental implants due to inadequate bone height or width may be regenerated to allow successful implant placement. In fact, in the U.S. bone grafts are used in 49% of dental implant procedures to ensure sufficient bone height and width.\(^1\)

Our broad line of grafting products and ancillary instruments addresses all aspects of bone and soft tissue regeneration, allowing you to consistently achieve predictable clinical and esthetic results. The BioHorizons complete line of Regeneration products provides you with solutions to restore your patients to their intended functionality and appearance.

[Images: Inadequate bone width for successful implant placement, Bone graft along with a membrane to contain the graft at graft site, Adequate bone width regenerated for placement of a dental implant.]
**Excellent Biological Barrier**

- Biocompatible acellular dermal matrix
- Supports regeneration of host bone
- Multiple sizes to adapt to defect site

**Function and esthetics**
Guided Bone Regeneration (GBR) utilizing membranes can regenerate alveolar bone thereby widening the scope of implant indications. However membranes that resorb too slowly or do not resorb at all can lead to compromised esthetics and function. Conversely, AlloDerm GBR is remodelled into the host tissue producing enhanced soft tissue and esthetics.¹

**AlloDerm GBR technology**
AlloDerm GBR allograft tissue is processed using LifeCell’s patented matrix-preserving technology to remove epidermal and dermal cells, leaving behind an intact matrix consisting of collagens, elastin, vascular channels and proteins. The matrix supports the body’s intrinsic tissue regeneration functions.

**AlloDerm GBR minimizes challenges**
Wound dehiscence and membrane exposure are particular concerns in GBR procedures, and can lead to a reduction in the amount of regenerated bone. However, AlloDerm GBR exposed during a GBR procedure has been shown to maintain the barrier function thus allowing the body to regenerate underlying bone.²

**Guided Bone Regeneration**
AlloDerm GBR is a biocompatible regenerative tissue matrix *(thickness range: 0.5 - 0.9mm)* that readily adapts to graft sites and can also be secured with sutures or tacks.

Photos courtesy of Dr. Craig Misch, Sarasota, Florida

Extraction sites grafted with Grafton® DBM

AlloDerm GBR in place as barrier membrane

Excellent hard and soft tissue results

*AlloDerm GBR is not available in all countries.*
**Grafton® DBM**

**Clinically Proven Bone Graft Substitute**

- Validated for osteoinduction in an *in vivo* model
- Superior osteoconduction through Bone Fiber Technology
- Multiple forms offer excellent handling characteristics
- Biocompatible with a history of safety

**Multiple forms of Grafton DBM**

Different formulations allow clinicians to use Grafton DBM (demineralized bone matrix) in a wide range of defects. Grafton DBM is available as Matrix Plugs, Putty in a jar or syringe, Flex, and Paste in a syringe.

**Osteoinductive**

Grafton DBM has been proven osteoinductive in the athymic rat model and has the most robust osteoinductive response of all the DBM product offerings tested. Only Grafton DBM is indicated as a bone void filler, bone graft extender and bone graft substitute.

**Osteoconductive**

Grafton DBM incorporates patented DBF (demineralized bone fibers) technology to ensure superior osteoconductivity. Studies show that a graft material which provides a scaffolding for new bone to build upon helps in the healing process.

**Multiple applications**

- Extraction site grafting
- Sinus grafting
- Periodontal regeneration
- Ridge Augmentation

**Periodontal Regeneration**

Post-op histological analysis indicates presence of bone and periodontal ligament opposite the notch demonstrating Grafton DBM's ability to induce periodontal regeneration.

Photos courtesy of Dr. James Mellonig, San Antonio, Texas

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*Grafton DBM is not available in all countries.*
Ideal particle size - ideal composition

Mineross is a mixture of mineralized allograft cortical and cancellous bone chips. The slower resorbing cortical component maintains space and volume while the cancellous chips provide a relatively faster resorbing osteoconductive scaffold for the rapid ingrowth of bone cells that deposit new bone and remodel the graft into host bone.

Mineross offers the convenience of having cortical and cancellous chip combination in one vial. Mineross has demonstrated excellent outcomes in a wide range of bone regeneration procedures.

Multiple applications

- Ridge and sinus augmentation
- Socket grafting
- Periodontal defects
- Grafting for implant placement
- Composite grafting with Grafton DBM

Ref. Code | Description
--- | ---
MO-C0.5 | Vial: 0.5cc
MO-C1.0 | Vial: 1.0cc
MO-C2.5 | Vial: 2.5cc

Mineross facilitates new bone formation through retaining the inherent osteoconductive properties of human bone. Mineross serves as a scaffold for the in-growth of bone cells which replace and ultimately remodel the graft into host bone.
Mem-Lok®

Merging Cell Biology & Technology

- Highly purified biocompatible Type I Collagen membrane of bovine origin
- Predictable resorption time of 26-38 weeks
- Cell occlusive membrane prevents soft tissue ingrowth
- Macromolecular pore size allows vital nutrient diffusion
- Favorable handling characteristics for various procedures
- Resists tearing while suturing

Ref. Code Description
RCM-ML1520 Resorbable Collagen Membrane: 15mm x 20mm
RCM-ML2030 Resorbable Collagen Membrane: 20mm x 30mm
RCM-ML3040 Resorbable Collagen Membrane: 30mm x 40mm

Mem-Lok is available in these convenient sizes. Examples are shown to scale.

15mm x 20mm 20mm x 30mm 30mm x 40mm

Extraction Socket Grafting for Ridge Preservation

Biological barrier membrane with mechanical strength and resorption kinetics optimized for guided bone regeneration.

Photos courtesy of Dr. Lewis C. Cummings, Kingwood, Texas

References

1. IDATA RESEARCH INC., 2006
4. NAMSA Study # 7613
5. Data on File. 04-007A Summary report osteoinduction of competitor materials in the athymic rat. GRAFTON DBM Gel as compared to the osteoinductivity of OsteoNovel®, Dynagraft® II, AlloMatrix®, DBM®, Accell® DBM 100, Integro® DBM and Orthoblast® II when measured in the athymic rat.
6. GRAFTON DBM forms and GRAFTON PLUS DBM Paste are FDA 510(k) cleared for use as a bone void filler, bone graft extender and bone graft substitute.

* Not a predictor of human performance.
**AutoTac® System Kit**

- Efficient “no touch” tack system
- Convenient one-handed delivery system
- Effective stabilization of membrane

The BioHorizons AutoTac System Kit efficiently and effectively fixes membranes to underlying bone with the push of a button on the patented AutoTac Delivery Handle. The 2.5mm titanium alloy tacks remain securely in place through the healing process.

<table>
<thead>
<tr>
<th>Ref. Code</th>
<th>Description</th>
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<tr>
<td>400-270</td>
<td>AutoTac System Kit includes:</td>
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<tr>
<td></td>
<td>• Delivery Handle</td>
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<tr>
<td></td>
<td>• Autoclavable Titanium Tack Cassette (pre-loaded with 21 Titanium Tacks)</td>
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<tr>
<td></td>
<td>• Forceps</td>
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<tr>
<td></td>
<td>• Sterilization Tray</td>
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**Bone Fixation Screw Kit**

- Compact kit that is conveniently organized
- Drills may be used with both latch-type and friction grip handpieces
- Precise engineering to ensure effective delivery of screw

The BioHorizons Bone Fixation Screw Kit is precision-machined with titanium alloy components and is immensely helpful for stabilizing block grafts in onlay bone grafting procedures. The kit is conveniently organized for efficient retrieval of instruments and screws. Cortical bone drills (for both latch-type and friction-grip handpieces), flexible titanium mesh and multiple screw sizes offer the versatility to meet clinical demands.

<table>
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<tr>
<td></td>
<td>• 24 Screws</td>
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<tr>
<td></td>
<td>- (6) 1.4 x 8mm Micro Screws</td>
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<tr>
<td></td>
<td>- (6) 1.4 x 10mm Micro Screws</td>
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<tr>
<td></td>
<td>- (6) 2.0 x 10mm Mini Screws</td>
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<tr>
<td></td>
<td>- (6) 2.0 x 12mm Mini Screws</td>
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<tr>
<td></td>
<td>• Flexible Micro Mesh</td>
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<tr>
<td></td>
<td>• Comprehensive Instrument Set</td>
</tr>
<tr>
<td></td>
<td>• Screwdriver Body</td>
</tr>
<tr>
<td></td>
<td>• Autoclavable Screw Block with Lid</td>
</tr>
</tbody>
</table>

*AutoTac System Kit and Bone Fixation Screw Kit are not available in all countries.*
Bone Grafting Instruments

- Complete line of Bone Regeneration instruments
- Broad range of instruments to meet surgical needs
- Superior instrument design, materials and technology

**Periotome Set**
Available in 4 different blade configurations - thick, thin and angled - and are color coded for easy identification. Gold and blue periotomes are indicated for buccal and lingual sides of the tooth. Gray and green periotomes are for the mesial and distal side of the tooth. Purchased as a complete set or individually.

**Membrane Placement Instrument**
Combination pointed and curved narrow placement design is ideal for use with periodontal membranes. The pointed end allows for membrane manipulation. The curved end is used for membrane positioning in and around flaps.

**Double Hinged Rongeur**
Used for trimming and recontouring alveolar and cortical bone. Also used to harvest bone from donor sites. The double action mechanism permits greater force to be exerted at the tip with minimal force at the handles.

**Bone Mill**
Hand-held bone mill used to create particulate bone from harvested autogenous bone.

**Bone Grafting Syringe**
Introduces graft material into the recipient site. 7mm diameter tube for injecting large amounts of bone material. Curved end facilitates introduction of the graft in difficult to reach areas.

**Misch Sinus Graft Retractor**
Permits easy access and reflection of the mucosal flap along the zygomatic arch to expose the sinus window. 10mm flare.

**Trephines**
For use in harvesting autogenous bone. Set includes 6 trephines (2mm, 4mm, 6mm, 8mm, 10mm and 12mm) and autoclavable bur cushion. May also be purchased individually. Bur cuts to a maximum depth of 9.8mm. Used with latch-type contra-angle handpieces.

Please ask your BioHorizons product support specialist for more information on these and many other BioHorizons instruments. Products shown not to scale.
Not all products shown or described in this literature are available in all countries.

Grafton® DBM and MinerOss® are processed by Osteotech, Inc. AlloDerm® and AlloDerm® GBR™ are processed by LifeCell. Mem-Lok® is manufactured by Collagen Matrix, Inc.

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