







TABLE OF CONTENTS

Introduction

- 1 *Puros*[®] and the *Tutoplast*[®] Process
- 2 Hard Tissue Augmentation
- 3 Soft Tissue Augmentation
- 4 Barrier Membranes
- 5 Graft Containment
- 6 Sinus Lift Solutions
- 7 Wound Dressings
- 7 Surgical, Restorative and Educational Offerings
- 8 Application Guide
- 9 References





There's no comparison.

Zimmer Dental now offers the most comprehensive line of regenerative biologics available. This ever-expanding range of solutions provides the breadth and depth that clinicians need to complete regenerative procedures, while broadening the success of their practice.

$\bigcirc \bigcirc \bigcirc$	
\bigcirc \bigcirc \bigcirc \bigcirc	
	\bigcirc
0	0
0	

THE POWER OF PUROS ALLOGRAFTS

Clinicians around the globe have counted on the *Puros* family of allografts for hard and soft tissue augmentation procedures for years. The brand's renowned reputation is based on:*

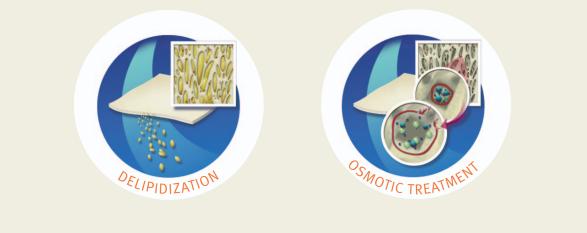
- Consistent, clinically documented and predictable processing and configuration¹
- Allowing for creation of healthy, solid bone²⁻⁴
- Rapid, predictable turnover shown in human clinical studies⁵⁻⁸
- Natural, easy-to-use, terminally sterile options¹
- Quick hydration, five-year shelf life and storage at room temperature⁹

* Puros DBM is the exception. Please reference page 5 for more information.

THE PROPRIETARY TUTOPLAST PROCESS

The proprietary *Tutoplast* Process assures the highest standard of tissue safety and quality with minimal risk of disease transmission.^{1,9} That's why, for over 40 years, *Tutoplast*-processed tissues have been safely used in more than three million procedures.⁹

Puros and the Tutoplast Process





THE BENEFITS OF THE MULTI-STEP TUTOPLAST PROCESS

In the span of 39 days, the process preserves the valuable minerals, collagen matrix and tissue integrity while inactivating pathogens and gently removing unwanted materials, such as cells, antigens and viruses^{1,9}—resulting in predictable, reliable and sterile allografts.

Hard Tissue Augmentation

PUROS CORTICO-CANCELLOUS PARTICULATE ALLOGRAFT

KEY BENEFIT: *Puros* Cortico-Cancellous Particulate Allograft is a unique anatomic-based mix of 70% cortical and 30% cancellous bone particulate, designed to provide "The Best of Both Worlds". *Puros* Cortico-Cancellous Particulate Allograft is used in procedures where space maintenance and faster remodeling are desired.^{*} This implant combines the clinical advantages of both *Puros* Cortical and Puros Cancellous Particulate Allograft materials.

CLINICAL ADVANTAGES:

()

 $\bigcirc \bigcirc$

- Retains osteoconductive properties due to the preservation of the natural bone matrix collagen and mineral composition; trabecular pattern; and original porosity,²⁻¹⁰ enabling the ingrowth of vascular and cellular connective tissue⁸
- Provides time-saving convenience by eliminating the need to mix various graft materials
- Both cortical and cancellous particulates come from a single donor

Designed for clinical use in:

- Sinus lift/sinus floor elevation
- Ridge augmentation

* Cancellous bone has been shown to remodel faster than sintered bovine bone.

Catalog Number	Description
68800	Puros Cortico-Cancellous Particles, 0.5cc, 250-1000
68801	Puros Cortico-Cancellous Particles, 1cc, 250-1000
68802	Puros Cortico-Cancellous Particles, 2cc, 250-1000
68803	Puros Cortico-Cancellous Particles, 0.5cc, 1000-2000
68804	Puros Cortico-Cancellous Particles, 1cc, 1000-2000
68805	Puros Cortico-Cancellous Particles, 2cc, 1000-2000



PUROS CANCELLOUS PARTICULATE ALLOGRAFT

KEY BENEFIT: *Puros* Cancellous Particulate Allograft has a history of well-documented clinical results, is an easy-tohandle choice for predictable bone regeneration and acts as an osteoconductive scaffold for new bone formation.²⁻¹⁰

CLINICAL ADVANTAGES:

- In large-volume applications, prospective studies have documented faster bone regeneration at 6 months than grafts containing sintered bovine bone matrix^{5,6}
- Le B, Burstein J, Sedghizadeh PP, found use of tenting screws in combination with *Puros* Allograft resulted in an average 9.7mm vertical augmentation in 4 to 5 months¹¹
- In small-volume applications, regeneration of hard bone has been reported as early as 3 to 5 months^{7,8,12}
- Retains osteoconductive properties due to the preservation of the natural bone matrix collagen and mineral composition; trabecular pattern; and original porosity,^{2,10} enabling the ingrowth of vascular and cellular connective tissue⁸

Shown clinically successful in:

- Regeneration of periodontal bone and furcation defects^{2,10}
- Osseous defect regeneration^{2,6-8,10,12}
- Regeneration of extraction sockets^{7,8} and gaps around block grafts^{7,8,12,13}
- Horizontal alveolar crest augmentation^{7,8,12,13} and sinus augmentation^{5,6}

Catalog Number	Description
68210	Puros Cancellous Particles, 0.5cc, 250-1000
68211	Puros Cancellous Particles, 1cc, 250-1000
68209	Puros Cancellous Particles, 2cc, 250-1000
68212	Puros Cancellous Particles, 0.5cc, 1000-2000
68213	Puros Cancellous Particles, 1cc, 1000-2000
68214	Puros Cancellous Particles, 2cc, 1000-2000

PUROS CORTICAL PARTICULATE ALLOGRAFT

KEY BENEFIT: *Puros* Cortical Particulate Allograft is an easy way to naturally regenerate long-lasting bone, with the particles having the density and strength of cortical autograft.¹ It can be used alone or as a composite graft in space maintenance and volume enhancement procedures.¹⁴

CLINICAL ADVANTAGES:

- Without sacrificing ridge contour, cortical particles remodel into both a dense, lamellar structure as well as natural, viable bone—with similar density to native bone¹³
- Park and Wang reported an average gain of 1.8mm in bone thickness when used in a "sandwich" technique for the treatment of localized buccal dehiscence defects¹⁵
- One study found that by combining "sandwich" and mucogingival pouch flap techniques, there was a 1.5 to 3.5mm gain in mean ridge thickness, and an 84% to 100% gain in mean ridge height¹⁶

Shown clinically successful in:

- Sinus augmentation^{17,18}
- Alveolar ridge augmentation^{13,15,16}
- "Tent" and "sandwich" grafting techniques¹⁶

Catalog Number	Description
68271	Puros Cortical Particles, 0.5cc, 250-1000
68272	Puros Cortical Particles, 1cc, 250-1000
68273	Puros Cortical Particles, 2cc, 250-1000
68274	Puros Cortical Particles, 0.5cc, 1000-2000
68275	Puros Cortical Particles, 1cc, 1000-2000
68276	Puros Cortical Particles, 2cc, 1000-2000

 \bigcirc

 \bigcirc

O PUROS DEMINERALIZED BONE MATRIX (DBM) PUTTY AND PUTTY WITH CHIPS

KEY BENEFIT: This moldable putty, comprised of 100% demineralized allograft, is sterilized using the proprietary Cancelle[™] SP DBM Process. This process sterilizes DBM Putty and Putty with Chips while inactivating or removing bacteria, viruses, fungi and spores, but preserves the biological integrity and natural collagen structure of bone. *Puros* DBM Putty with Chips has both cancellous and cortical mineralized chips for osteoconductivity as well as osteoinductive potential.*

CLINICAL ADVANTAGES:

- Pliable putty maintains its form and resists migration in a fluid environment
- Ready-to-use moldable formulation offers excellent handling and time-saving convenience
- Every donor lot is tested for osteoinductive (OI) potential and inflammatory response in an *in vivo* ectopic rat assay* after sterilization²³
- Puros DBM Putty and Putty with Chips are terminally sterilized to SAL 10⁶ using low-temperature, low-dose gamma irradiation, which has been shown to not significantly impact the OI score results in an *in vivo* rat assay²⁴
 - *Findings from an *in vivo* rat assay are not necessarily predictive of human clinical results.



PUROS BLOCK ALLOGRAFT

KEY BENEFIT: By eliminating the need to harvest an autogenous block graft, *Puros* Block Allografts save time, help to reduce pain and can shorten the patient's rehabilitation period.

- A clinically documented solution for effectively restoring volume to severely resorbed ridges^{3,4,19}
- Outcomes have been comparable to those generally reported for autogenous block grafting, but without the need for a second surgery to harvest bone^{1,20-22}
- Clinical reports have documented the ability to stabilize implants 5 to 6 months after grafting^{3,4,19}
- Retains osteoconductive properties due to the preservation of the natural bone matrix collagen and mineral composition, trabecular pattern and original porosity^{1,3,4}

Catalog Number	Description
00-1105-005-01	Puros DBM Putty, 0.5cc
00-1105-010-01	Puros DBM Putty, 1cc
00-1105-020-01	Puros DBM Putty, 2cc
00-1105-005-02	Puros DBM Putty with Chips, 0.5cc
00-1105-010-02	Puros DBM Putty with Chips, 1cc
00-1105-020-02	Puros DBM Putty with Chips, 2cc

Catalog Number	Description
68220	Puros Block Allograft, 10mm
68221	Puros Block Allograft, 15mm

Hard Tissue Augmentation



INGENIOS[™] HA SYNTHETIC BONE PARTICLES

KEY BENEFIT: Long-lasting *IngeniOs* HA Synthetic Bone Particles are the newest extension of bone graft substitutes from Zimmer Dental. These 100% non-biologic particles are made of pure-phase hydroxyapatite (HA), a composition similar to HA found in naturally-occurring bone.

CLINICAL ADVANTAGES:

- Long-lasting osteoconductive support with negligible resorption over time to help provide long-term graft stability and maintenance of volume and esthetic contours
- Up to 80% interconnected porosity allowing for vascularized bone formation, osseointegration and the natural remodeling process to occur within the graft framework⁵⁸
- Radiopacity of material making it easy to identify on an X-ray
- Can be used as a bone graft mix-in to provide radiopacity or long-term volume preservation

Designed for clinical use in:

- Augmentation of the atrophied alveolar ridge
- Sinus lift/sinus floor elevation
- Support of a membrane in guided tissue regeneration (GTR)
- Other multi-walled defects of the alveolar process

Catalog Number Description

0-802501	IngeniOs HA Synthetic Bone Particles, 0.25cc, 250-1000
0-800501	IngeniOs HA Synthetic Bone Particles, 0.5cc, 250-1000
0-801001	IngeniOs HA Synthetic Bone Particles, 1cc, 250-1000
0-802001	IngeniOs HA Synthetic Bone Particles, 2cc, 250-1000
0-900501	IngeniOs HA Synthetic Bone Particles, 0.5cc, 1000-2000
0-901001	IngeniOs HA Synthetic Bone Particles, 1cc, 1000-2000
0-902001	IngeniOs HA Synthetic Bone Particles, 2cc, 1000-2000



INGENIOS $\ensuremath{\beta}$ -TCP BIOACTIVE SYNTHETIC BONE PARTICLES

KEY BENEFIT: Resorbable *IngeniOs* β-TCP Bioactive Synthetic Bone Particles are the next generation of bone graft substitutes from Zimmer Dental. These 100% nonbiologic particles are made of pure-phase beta tricalcium phosphate (β-TCP) that is silicated, providing the potential for increased bioactivity.⁵⁹⁻⁶⁰

CLINICAL ADVANTAGES:

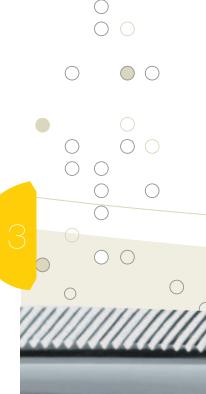
- Fully resorbable, non-biologic particles designed to resorb in balance with replacement by naturally-regenerating mineralized bone
- Up to 75% interconnected porosity designed to enable ingrowth of health bone tissue⁵⁸
- Radiopacity of material making it easy to identify on an X-ray
- Can be used as a bone graft mix-in to extend volume or add radiopacity

Designed for clinical use in:

- Augmentation or reconstructive treatment of the alveolar ridge
- Filing of infrabony periodontal defects
- Filling of defects after root resection, apicoectomy and cystectomy
- Filling of extraction sockets to enhance preservation of the alveolar ridge

Catalog Number Description

0-602501	IngeniOs ß -TCP Bioactive Synthetic Bone Particles, 0.25cc, 250-1000
0-600501	IngeniOs ß -TCP Bioactive Synthetic Bone Particles, 0.5cc, 250-1000
0-601001	IngeniOs ß -TCP Bioactive Synthetic Bone Particles, 1cc, 250-1000
0-602001	IngeniOs ß -TCP Bioactive Synthetic Bone Particles, 2cc, 250-1000
0-700501	IngeniOs ß -TCP Bioactive Synthetic Bone Particles, 0.5cc, 1000-2000
0-701001	IngeniOs ß -TCP Bioactive Synthetic Bone Particles, 1cc, 1000-2000
0-702001	IngeniOs ß -TCP Bioactive Synthetic Bone Particles, 2cc, 1000-2000



PUROS DERMIS ALLOGRAFT TISSUE MATRIX

KEY BENEFIT: Ideal for aesthetic case requirements, *Puros* Dermis Allograft Tissue Matrix is a high-quality, natural, biocompatible matrix that is sterilized and preserved through the proprietary *Tutoplast* Process to provide an easy-to-use, biocompatible, regenerative solution. It assimilates into the body's normal tissuehealing process at the histological level.^{9,25}

CLINICAL ADVANTAGES:

- Reduces morbidity and saves valuable chair time by eliminating the need to harvest an autogenous graft²⁵
- Provides an excellent healing environment and acts as a scaffold for the patient's own tissue to grow into and regenerate vital soft tissue^{26,27}
- Exhibits multidirectional strength²⁷ and exceptional adaptability to surface contours²⁸
- Maintains space to allow for angiogenesis and tissue remodeling, and increases the volume of attached gingiva and connective tissue^{26,27}
- Retains the natural collagen matrix, elastic content and mechanical properties of native dermis¹
- Easy to use with four convenient sizes and two different thicknesses—can be cut to shape for specific surgical procedures
- Rehydrates in seconds, no refrigeration required, packaged sterile without residual antibiotics⁹

PUROS DERMIS MAY BE USED IN THE FOLLOWING:

- Both horizontal and vertical soft tissue augmentation^{26,27}
- Periodontal/peri-implant soft tissue management
- Guided tissue regeneration procedures



Soft Tissue Augmentation





Catalog Number	Description - Thin	Catalog Number	Description - Thick
68794	Puros Dermis Tissue Matrix, 10x10mm, 0.3-0.8mm	68793	Puros Dermis Tissue Matrix, 10x10mm, 0.
68795	Puros Dermis Tissue Matrix, 10x20mm, 0.3-0.8mm	68790	Puros Dermis Tissue Matrix, 10x20mm, 0.
68796	Puros Dermis Tissue Matrix, 10x40mm, 0.3-0.8mm	68791	Puros Dermis Tissue Matrix, 10x40mm, 0.
68797	Puros Dermis Tissue Matrix, 20x40mm, 0.3-0.8mm	68792	Puros Dermis Tissue Matrix, 20x40mm, 0.8

BIOMEND® AND BIOMEND® EXTEND ABSORBABLE COLLAGEN MEMBRANES

KEY BENEFIT: Absorbable membranes that are rigid enough to create and maintain space, protect graft materials and help stabilize the blood clot in the wound during the critical healing period.²⁹ *BioMend* absorbs in 8 weeks²⁹⁻³¹ and *BioMend Extend* absorbs in 18 weeks.^{29,32}

CLINICAL ADVANTAGES:

 \bigcirc

 \bigcirc

- Cell-occlusive—prevents epithelial cell migration and maintains space for regeneration of periodontal ligament and bone³⁰
- Eliminates second-stage surgery for membrane removal, reducing wound trauma and surgical chair time^{29,30}
- Allows integration of connective tissue flaps and passage of essential nutrients^{29,30}
- Derived from bovine tendon, Type 1 collagen enhances primary wound coverage via its chemotactic ability to attract fibroblasts²⁹
- Clinical use does not elicit inflammatory response³⁰
- Promotes wound healing through clot stabilization, wound stability and hemostasis²⁹
- Excellent handling—tear resistant, pliable and easy to handle even when hydrated³³—yet rigid enough to create and maintain space
- Non-friable and suturable; can be easily modified and positioned^{30,33}

Catalog Number	Description
0103	BioMend Membrane, 15x20mm
0105	BioMend Membrane, 20x30mm
0107	BioMend Membrane, 30x40mm
0140	BioMend Extend Membrane, 15x20mm
0141	BioMend Extend Membrane, 20x30mm
0142	BioMend Extend Membrane, 30x40mm



PUROS PERICARDIUM ALLOGRAFT MEMBRANE

KEY BENEFIT: *Puros* Pericardium Allograft Membrane provides a long-lasting barrier when an optimum balance of strength and handling for graft containment is necessary. It is an outstanding choice in cases such as *Puros* Block Allograft coverage and large ridge augmentation procedures, where adaptability to surface contours is essential.

- Retains the natural collagen matrix and mechanical properties of native pericardium due to the proprietary *Tutoplast* Process¹
- Inhibits epithelial cell migration and maintains space for periodontal ligament and bone regeneration³⁰

Catalog Number	Description
68770	Puros Pericardium Membrane, 15x20mm
68771	Puros Pericardium Membrane, 20x30mm
68772	Puros Pericardium Membrane, 30x40mm

Barrier Membranes



COPIOS® PERICARDIUM MEMBRANE

KEY BENEFIT: *CopiOs* Pericardium Membrane is made of bovine material that provides a long-lasting,³⁴ conformable barrier—strong⁹ enough to meet most clinical needs and supple enough to adapt to challenging graft contours.

CLINICAL ADVANTAGES:

- Clinically demonstrated performance in guided bone regeneration procedures,^{35,36} where ease of manipulation and adaptability to surface contours is essential
- Shown to provide a stable, long-lasting barrier during healing and integration of *Puros* Allografts, and staged or immediately placed implants^{35,36}
- Supports an aesthetic soft tissue response^{35,36} through facilitation of cell attachment and proliferation and remodeling into vascularized, connective tissue^{35,37}
- Retains the structure and composition of natural tissue due to the proprietary *Tutoplast* Process,¹ leading to optimal performance and handling^{35,36}

ZIMMER® SOCKET REPAIR MEMBRANE

KEY BENEFIT: *Zimmer* Socket Repair Membrane is designed to assist wound healing in alveolar facial plate repair and residual ridge preservation following atraumatic, flapless single-root tooth extraction.

CLINICAL ADVANTAGES:

- Socket grafting can help to preserve bone volume for implant placement³⁸
- The socket repair procedure is a flapless technique designed to preserve natural soft tissue architecture and vascularity³⁹
- Guided bone regeneration is performed inside the socket by lining the defect with the bioabsorbable collagen membrane prior to filling with bone graft material³⁹—the membrane is designed to stabilize the graft material and block fibrous tissue ingrowth⁴⁰
- An external extension of the membrane is folded over the top of the socket and sutured to the palatal/lingual soft tissue to help contain the graft material³⁹ and aid in stabilizing the clot for healing²⁹
- Membrane is usually completely resorbed 26 to 38 weeks following surgery*

*When not exposed, the resorption rate is 26 to 38 weeks; if left exposed, resorption time is shorter.

Catalog Number	Description
77776	CopiOs Pericardium Membrane, 15x20mm
77777	CopiOs Pericardium Membrane, 20x30mm
77778	CopiOs Pericardium Membrane, 30x40mm

Catalog Number	Description
0154	Zimmer Socket Repair Membrane, 10x20mm

 \bigcirc

 $\bigcirc \bigcirc$

 $\bigcirc \bigcirc$

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

ZIMMER CURV[™] PRE-SHAPED COLLAGEN MEMBRANES

KEY BENEFIT: Pre-shaped collagen membranes for both anterior and posterior configurations. *Zimmer CurV* is designed for custom molding to the defect site to retain graft material, such as *Puros* Particulate Allograft, when fixated with conventional methods (i.e., tacks or screws).

- Designed to retain graft material during the bone remodeling process, allowing vertical bone growth where desired
- Pliable when hydrated, able to be shaped and trimmed to fit most defect sites
- Holds particulate to control and minimize migration
- Doesn't require additional structural support, such as tenting screws or titanium mesh
- Biocompatible, resorbable Type 1 bovine collagen that does not require removal

Catalog Number	Description
0174	Zimmer CurV, Posterior
0175	Zimmer CurV, Anterior

Graft Containment

ZIMMER COLLAGEN CAPSULES AND WEDGE

KEY BENEFIT: Unique membranes for focused bone augmentation. Available in hollow shapes and wedge configurations, designed to retain graft materials to support where and in what shape bone grows.

CLINICAL ADVANTAGES:

- Focused bone augmentation for use in sinus lift and socket wall repair procedures
- The only 3-D, biocompatible, resorbable membrane matrix that can be delivered dry or hydrated
- Minimizes wasted bone graft materials
- Enables horizontal and vertical containment that helps prevent graft migration

COLLAGEN CAPSULES COME IN THREE VERSATILE SIZES AND MAY BE USED:

- For lateral sinus lift procedures
- In conjunction with grafting material to regenerate deficient or fractured socket walls
- To assist in repairing tears in the Schneiderian membrane
- With Collagen Capsule Delivery Instruments for placement and positioning, or with the *Zimmer* Sinus Lift Balloon

ZIMMER COLLAGEN WEDGE MAY BE USED:

- To repair tears in the sinus membrane or support wound healing of major tears
- By clinicians to tack the thicker, reinforced edge to the wall
- To aid in wound healing following dental surgery

Catalog Number	Description
0170	Zimmer Collagen Capsule, Small
0171	Zimmer Collagen Capsule, Medium
0172	Zimmer Collagen Capsule, Large
0173	Zimmer Collagen Wedge, 23x38mm

COLLAGEN CAPSULE DELIVERY INSTRUMENTS:

• Surgical steel instruments designed to perform various tasks in general dentistry, including placing *Zimmer* Collagen Capsules



Catalog Number	Description
CDI01	Collagen Capsule Delivery Instrument, Thin
CDI02	Collagen Capsule Delivery Instrument, Thick

 \bigcirc

ZIMMER SINUS LIFT BALLOON

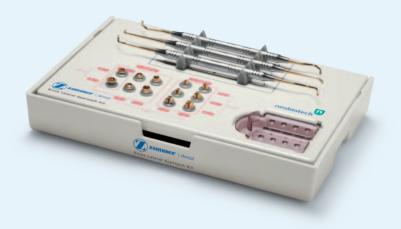
KEY BENEFIT: Zimmer Sinus Lift Balloon is a versatile, minimally invasive tool designed to gently and uniformly lift the Schneiderian membrane without the use of sharp instruments.

CLINICAL ADVANTAGES:

- Helps to reduce the incidence of Schneiderian membrane perforations—a common incident that occurs in surgery up to 56% of the time⁴¹
- Traditional procedures result in 2 to 3mm of sinus lift, but when using the *Zimmer* Sinus Lift Balloon and 1cc of saline, the expected elevation is 6mm (± 0.5mm)
- Volume of graft material required is in direct proportion to the amount of fluid used to inflate the balloon; for example, 1cc of fluid corresponds with 1cc of graft material
- Serves as a delivery tool for *Zimmer* Collagen Capsules and other regenerative membranes, assuring the appropriate position of bone graft containment
- May be used in conjunction with both traditional and minimally invasive methods for osteotomy preparation

AVAILABLE IN THREE SINGLE-USE CONFIGURATIONS:

- Straight (crestal/Summers)
- Angled (lateral window/Caldwell-Luc)
- Micro-mini (crestal/Summers)



SINUS LATERAL APPROACH KIT

KEY BENEFIT: The Sinus Lateral Approach Kit provides the instruments and techniques for a sinus lift utilizing a lateral approach (modified Caldwell-Luc) procedure.

- Reamers designed to be used with conventional surgical motor handpiece at 2,000rpm for quick entry into the sinus
- LS-reamer, used to create the lateral wall osteotomy, has been designed to help avoid arterial blood vessels
- Instruments provide method of opening the lateral wall near the crest
- Minimal flap and smaller window size compared to conventional techniques
- Designed to control drilling depth up to 3.5mm without use of drill stops

Catalog Number	Description	Catalog Number	Description
14002	Zimmer Sinus Lift Balloon, Straight	SLAKIT	Sinus Lift Kit, Lateral Approac
4003	Zimmer Sinus Lift Balloon, Angled		
14004	Zimmer Sinus Lift Balloon, Micro-mini		

Sinus Lift Solutions



SINUS CRESTAL APPROACH KIT

KEY BENEFIT: The Sinus Crestal Approach Kit is minimally invasive, designed for creating an osteotomy into the inferior cortical bone without tearing the Schneiderian membrane.

CLINICAL ADVANTAGES:

- S-reamer head has been designed with a special blade structure to leave a thin bone disk between membrane and reamer—the reamer does not touch membrane directly
- Stoppers control the drilling depth of the S-reamer (10 pieces, 2 to 11mm) and can also be mounted on the bone spreader and bone condenser
- S-reamer can even be used for both misaligned and septum cases
- Kit provides a complete set of tools for performing a crestal sinus lift

Catalog Number	Description
SCAKIT	Sinus Lift Kit, Crestal Approach



RC SINUS LIFT KIT

KEY BENEFIT: The RC Sinus Lift Kit is a set of five instruments for use in releasing and elevating the Schneiderian membrane. Custom-designed instruments for both left- and right-sinus angulations. All instruments are designed with grooves for grip control, plus color and number coding to assist the clinician. Instrument #2 is also sold separately.

- Instrument #1 is designed for a greenstick fracture (both crestal and lateral) and the tip can also be used to pack particulate
- Instrument #2 is designed to start release of membrane from bone, working around the opening, into 2mm, with the round tip
- Instrument #3 is designed for releasing the membrane of normal-sized sinuses
- Instrument #4 is designed for releasing the membrane of larger-sized sinuses
- Instrument #5 is designed with two sides—Side A is used for delivery of graft material and Side B is used for packing graft material

Catalog Number	Description
RCSLK	Sinus Lift Kit, 5 Piece
2RC	Instrument #2



 \bigcirc \bigcirc \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

Wound Dressings

COLLATAPE® WOUND DRESSING

Can be used for localized ridge defects,⁴² socket grafting,⁴³ Schneiderian membrane tears,⁴⁴ subantral augmentations⁴⁵ and soft tissue donor sites.⁴⁶



COLLACOTE® WOUND DRESSING

Can be used for soft tissue recontouring,⁴⁷ sinus graft containment,⁴⁵ guided bone regeneration.⁴⁸ and sinus membrane perforation.^{44, 49}

COLLATAPE°, COLLACOTE° AND COLLAPLUG° WOUND DRESSINGS

KEY BENEFIT: Highly porous, absorbable⁵² collagen wound dressings control bleeding and stabilize blood clots while providing a matrix for tissue ingrowth.

CLINICAL ADVANTAGES:

- Protect the wound bed⁵⁰
- 48% faster clotting than cotton gauze⁵³
- Provide matrix for tissue ingrowth^{47, 50}
- Hemostatic times: 2.0 to 2.5 minutes⁵³
- Absorb in about 10 to 14 days⁵³
- *CollaPlug®* Wound Dressing holds up to 60x own weight in fluid⁵⁴
- Greater than 90% open pores⁵⁶
- Supplied in convenient, sterile dispenser packs



Catalog Number	Description
0100	CollaTape Wound Dressing, 10/Pkg
0101	CollaCote Wound Dressing, 10/Pkg
0102	CollaPlug Wound Dressing, 10/Pkg

COLLAPLUG® WOUND DRESSING

Can be used for extraction sites and 4-wall sockets and biopsy sites.^{50, 51}

Surgical and Restorative Offerings







LOCATOR® ATTACHMENT

ZIMMER PATIENT SPECIFIC ABUTMENTS

RESTORATIVE SOLUTIONS

By streamlining the implant restorative process with a more versatile and innovative family of easy-to-use prosthetic options, Zimmer Dental is reinforcing its commitment to offering meaningful solutions to clinicians. From Contour and Short Abutments to HexLock® Patient Specific Abutments, Zimmer provides an extensive range of choices for your restorative needs.



SURGICAL SOLUTIONS

Zimmer Dental provides a comprehensive implant portfolio of innovative technologies, as well as a host of surgical tools, materials and instrumentation, all designed to meet and exceed the needs and expectations of dental clinicians.

Education

REVOLUTIONARY LEARNING FOR PRACTICE BUILDING

Zimmer Dental is committed to providing dental professionals with the educational programs needed to complement skill sets and help clinicians achieve unprecedented levels of professional satisfaction and success. As a market leader in the development of world-class implantology products, Zimmer Dental is uniquely positioned to provide unparalleled continuing education offerings through its state-of-the-art, hands-on learning programs offered at the Zimmer Institute.



Carlsbad, CA



ZIMMER INSTITUTE EAST Parsippany, NJ New York Metropolitan Area



ZIMMER INSTITUTE EUROPE Winterthur, Switzerland



ZIMMER INSTITUTE COLOMBIA Bogotá, Colombia

Contact a sales representative to find out how these many offerings may fit your clinical needs. For more information, please visit www.zimmerdental.com/education

0																		
0 0		Appl	icatic	n Gl	lide													
					GENERATIVE													
		S	E			hendor Ma Rec. 1-200	Hispando's Bir De marter Stor, 1-200 200		Solid				Hollow				•	R
OPTIONS	<i>Puros</i> Cancellous Particulate Allograft	Puros Cortical Particulate Allograft	Puros Cortical- Cancellous Particulate Allograft	<i>Puros</i> Demineralized Bone Matrix Putty	<i>Puros</i> Demineralized Bone Matrix Putty with Chips	<i>IngeniOs</i> HA Synthetic Bone Particles	IngeniOs ß-TCP Bioactive Synthetic Bone Particles	<i>Puros</i> Block Allograft	<i>CollaPlug®</i> Absorbable Wound Dressing	<i>CollaTape</i> ® Absorbable Wound Dressing	<i>CollaCote®</i> Absorbable Wound Dressing	<i>Zimmer</i> Socket Repair Membrane	<i>Zimmer</i> Collagen Capsules	<i>Zimmer</i> Collagen Wedge	BioMend® and BioMend® Extend Absorbable Collagen Membranes (RIGID)	Puros and CopiOs Pericardium Membranes (PLIABLE)	<i>Puros</i> Dermis Allograft Tissue Matrix	Zimmer CurV Pre-Shaped Collagen Membranes
IMPLANT PACKING / PERIODONTAL DEFECT	(0.5–1cc)			\checkmark			\checkmark								\checkmark			
4-WALL EXTRACTION SOCKET	(0.5–1cc)				\checkmark		\checkmark		\checkmark									
3-WALL EXTRACTION SOCKET	(0.5–1cc)				\checkmark		\checkmark					\checkmark	\checkmark					
SINUS LIFT (PER SINUS)	(2cc)	(2cc)	(2cc)		\checkmark	\checkmark	\checkmark			(For Schneiderian membrane tears)	\checkmark		\checkmark	\checkmark	(30x40mm)			
RIDGE AUGMENTATION, "SANDWICH" TECHNIQUE ^{16,55}	(1cc) (Inner)	(1cc) (Inner)	(1cc) (Inner)			\checkmark	\checkmark								\checkmark	\checkmark		\checkmark
BLOCK GRAFTING	(0.5cc) (To fill around edges)			\checkmark	\checkmark			(10-15mm)								(30x40mm)		
SOFT TISSUE AUGMENTATION											\checkmark						\checkmark	

ZIMMER DENTAL SOFT TISSUE OPTIONS

FORMULATION	WOUND DRESSINGS		SOFT TISSUE GRAFTS		
CLINICAL NEED	Wound healing	Wound healing Space creation and maintenance			Soft tissue augmentation
ZIMMER OPTIONS	CollaPlug® CollaTape® CollaCote®	<i>BioMend</i> and <i>BioMend</i> <i>Extend</i> Collagen Membranes	<i>Zimmer</i> Socket Repair Membrane	<i>CopiOs</i> Pericardium Membrane <i>Puros</i> Pericardium Allograft Membrane	<i>Puros</i> Dermis Allograft Tissue Matrix
BENEFITS	Time-tested	Shape memory	Pre-cut for extraction sockets	Strong and conformable	User-friendly
RESORPTION*	10-14 days56	8 weeks (<i>BioMend</i>) ⁵⁶ 18 weeks (<i>BioMend Extend</i>) ⁵⁶	26-38 weeks ^{57***}	8-24 weeks ³⁴	3-4 months (thin) 5-6 months (thick)

* Resorption rates may vary from patient to patient. ** May take up to 7 days. *** When not exposed, the resorption rate is 26-38 weeks; if left exposed, resorption time is shorter.



References

- 1 Schoepf C. Allograft safety: efficacy of the Tutoplast[®] Process. *IMOI*. 2006;1:10-15.
- 2 Tsao YP, Neiva R, Al-Shammari K, Oh TJ, Wang HL. Effects of a mineralized human cancellous bone allograft in regeneration of mandibular Class II furcation defects. *J Periodontol.* 2006;77:416-425.
- 3 Keith JD Jr, Petrungaro P, Leonetti JA, Elwell CW Jr, Zeren KJ, Caputo C, et al. Clinical and histologic evaluation of a mineralized block allograft: results from the developmental period (2001-2004). *Int J Periodontics Restorative Dent.* 2006;26:321-327.
- 4 Leonetti JA, Koup R. Localized maxillary ridge augmentation with a block allograft for dental implant placement: case reports. *Implant Dent*. 2003;12:217-226.
- 5 Froum SJ, Wallace SS, Elian N, Cho SC, Tarnow DP. Comparison of mineralized cancellous bone allograft (Puros) and anorganic bovine bone matrix (Bio-Oss) for sinus augmentation: histomorphometry at 26 to 32 weeks after grafting. *Int J Periodontics Restorative Dent.* 2006;26:543-551.
- 6 Noumbissi SS, Lozada JL, Boyne PJ, Rohrer MD, Clem D, Kim JS, Prasad H. Clinical, histologic, and histomorphometric evaluation of mineralized solventdehydrated bone allograft (Puros) in human maxillary sinus grafts. J Oral Implantol. 2005;31:171-179.
- 7 Block MS, Finger I, Lytle R. Human mineralized bone in extraction sites before implant placement. Preliminary results. *J Amer Dent Assoc.* 2002;133:1631-1638.
- 8 Minichetti JC, D'Amore JC, Hong AYJ, Cleveland DB. Human histologic analysis of mineralized bone allograft (Puros) placement before implant surgery. J Oral Implantol. 2004;30:74-82.
- 9 Data on file with RTI Biologics, Inc.
- 10 Davi E, Aslan M, Simsek G, Yilmaz AB. The effects of bone chips dehydrated with solvent on healing bone defects. *JIMR*. 2002;30:168-173.
- 11 Le B, Rohrer MD, Prassad HS. Screw "tent-pole" grafting technique for reconstruction of large vertical alveolar ridge defects using human mineralized allograft for implant site preparation. J Oral Maxillofac Surg. 68:428-435, 2010.
- 12 Block MS, Degen M. Horizontal ridge augmentation using human mineralized particulate bone: preliminary results. *J Oral Maxillofac Surg*. 2004;62(Suppl 2):67-72.
- 13 Le B, Burstein J, Sedghizadeh PP. Cortical tenting grafting technique in the severely atrophic alveolar ridge for implant site development. *Implant Dent.* 2008;17:40-50.
- 14 Wang HL, Boyapati L. "PASS" principles for predictable bone regeneration. *Implant Dent*. 2006;15:8-17.
- 15 Park SH, Wang HL. Management of localized buccal dehiscence defect with allografts and acellular dermal matrix. *Int J Periodontics Restorative Dent*. 2006;26:589-595.
- 16 Park SH, Wang HL. Mucogingival pouch flap for sandwich bone augmentation: technique and rationale. *Implant Dent.* 2005;14:349-356.
- 17 Schlegel KA, Schultze-Mosgau S, Wiltfang J, Neukam FW, Rupprecht S, Thorwarth M. Changes in mineralization of free autogenous bone grafts used for sinus floor elevation. *Clin Oral Implants Res.* 2006;17:673-678.
- 18 Rubio de Rezende ML, Nasciemento de Melo LG, Hamata MM, Monteiro-Amado F. Particulate inlay nasal graft with immediate dental implant placement in a patient with repaired alveolar cleft; case report. Implant Dent. 2008;17:332-338.
- 19 Keith JD Jr, Salama MA. Ridge preservation and augmentation using regenerative materials to enhance implant predictability and esthetics. *Compend Contin Educ Dent*. 2007;28:614-623.

- 20 Schwartz-Arad D, Levin L, Sigal L. Surgical success of intraoral autogenous block onlay bone grafting for alveolar ridge augmentation. *Implant Dent.* 2005;14:131-138.
- 21 Levin L, Nitzan D, Schwartz-Arad D. Success of dental implants placed in intraoral block bone grafts. *J Periodontol.* 2007;78:18-21.
- 22 von Arx T, Buser D. Horizontal ridge augmentation using autogenous block grafts and the guided bone regeneration technique with collagen membranes: a clinical study with 42 patients. *Clin Oral Implants Res.* 2006;17:359-366.
- 23 Urist MR. Bone: Formation by autoinduction. *Science*. 1965;150:893-899.
- 24 Effect of terminal gamma sterilization on osteoinductivity. White paper available from RTI Biologics, Inc.
- 25 Greenspan DC, Hernandez R, Faleris J. Histology of surgically implanted Tutoplast[®] processed dermis; RTI Biologics, Inc.
- 26 Petrungaro P. Correction of iatrogenic gingival recession in the esthetic zone. *Inside Dentistry*. 2007;11:2-4.
- 27 Petrungaro P. Acellular dermal matrix tissue grafts. Inside Dentistry. 2010;6:34-42.
- 28 Onur R, Singla A. Solvent-dehydrated cadaveric dermis: a new allograft for pubovaginal sling surgery. *J Urol.* 2005:12:801-805.
- 29 Bunyaratavej P, Wang HL. Collagen membranes: a review. J Periodontol. 2001;72:215-229.
- 30 Wang HL, Carrol WJ. Guided bone regeneration using bone grafts and collagen membranes. *Implant Dent*. 2001;32(7):504-515.
- 31 Mundell RD, Mooney MP, Siegel MI, Losken A. Osseos guided tissue regeneration using a collagen barrier membrane. J Oral Maxillofac Surg. 1993;51:1004-1012.
- 32 Park SH, Lee KW, Oh TJ, Misch CE, Shotwell J, Wang HL. Effect of absorbable membranes on sandwich bone augmentation. *Clinical Oral Impl Res.* 2008;19:32-41.
- 33 Sevor JJ, Mellert RM, Cassingham RJ. Regeneration of dehisced alveolar bone adjacent to endosseous dental implants utilizing a resorbable collagen membrane: clinical and histologic results. *Int J Periodontics Restorative Dent*. 1993;13(1):71-83.
- 34 Rothamel D, Schwarz F, Sager M, Herten M, Sculean A, Becker J. Biodegradation of differently cross-linked collagen membranes: an experimental study in the rat. *Clin Oral Implants Res.* 2005;16(3):369-378.
- 35 Kistler S, Bayer G, Kistler F, Am Lech L. Experience with the biological Tutodent[®] membrane in implant practice. *Implantologie Zeitung Journal*. 2004;8(7):47-48.
- 36 Simsek B, Simsek S. Evaluation of success rates of immediate and delayed implants after tooth extraction. *Chinese Medical Journal*. 2003;116(8):1216-1219.
- 37 Steigmann M. Pericardium membrane and xenograft particulate grafting materials for horizontal alveolar ridge defects. *Implant Dent.* 2006;15:186-191.
- 38 Sclar AG. Ridge preservation for optimum esthetics and function: the "Bio-Col" technique. *Postgraduate Dentistry*. 1999;6:3-11.
- 39 Elian N, Cho SC, Froum S, Smith RB, Tarnow DP. A simplified socket classification and repair technique. *Pract Proced Aesthet Dent.* 2007;19:99-104, quiz 106.

- 40 Yuen D, Junchaya C, Zuclich G, Ulreich JB, Lin H, Li S. A resorbable, reconstituted, type I collagen membrane for guided tissue regeneration and soft tissue augmentation. Society for Biomaterials, Sixth World Biomaterials Congress Transactions, p. 1288, 2000.
- 41 Wallace SS, Mazor Z, Froum SJ, Cho SC, Tarnow DP. Schneiderian membrane perforation rate during sinus elevation using piezosurgery: clinical results of 100 consecutive cases. *Int J Periodontics Restorative Dent.* 2007;27:413-419.
- 42 Callan DP, Salkeld SL, Scarborough N. Histologic analysis of implant sites after grafting with demineralized bone matrix putty sheets. *Implant Dent*. 2000;9:36-44.
- 43 Jackson BJ, Morcos I. Socket grafting: a predictable technique for site preservation. J Oral Implantol. 2007;33:353-364.
- 44 Pikos MA. Maxillary sinus membrane repair: report of a technique for large perforations. *Implant Dent*. 1999;8:29-34.
- 45 Smiler DG. The sinus lift graft: basic technique and variations. *Pract Periodontics Aesthetic Dent.* 1997;9:885-893.
- 46 Landsberg CJ. Implementing socket seal surgery as a socket preservation technique for pontic site development: surgical steps revisited - a report of two cases. J Periodontol. 2008;79:945-954.
- 47 Ceravalo FJ, Famili P, Li ST. Alveolar ridge augmentation utilizing collagen wound dressing. *Int J Oral Implantol*. 1987;4:15-18.
- 48 Ganz SD, Valen M. Predictable synthetic bone grafting procedures for implant reconstruction: part two. *J Oral Implantol.* 2002;28:178-183.
- 49 McAllister BS, Margolin MD, Cogan AG, Buck D, Hollinger JO, Lynch SE. Eighteen-month radiographic and histologic evaluation of sinus grafting with anorganic bovine bone in the chimpanzee. *Int J Oral Maxillofac Implants*. 1999;14:361-368.
- 50 Wang HL, Tsao YP. Mineralized bone allograft-plug socket augmentation: rationale and technique. *Implant Dent*. 2007;16:33-41.
- 51 Sclar AG. Strategies for management of single-tooth extraction sites in aesthetic implant therapy. J Oral Maxillofac Surg. 2005;62:90-105.
- 52 McBee WL, Koemer KR. Review of hemostatic agents used in dentistry. *Dent Today*. 2005;24:62-56.
- 53 Data on file with Integra LifeSciences Corporation (Lee White Clotting test, FDA submission data).
- 54 Stein MD, Salkin LM, Feedman AL, Glushkot V. Collagen sponge as a topical hemostatic agent in mucogingival surgery. *J Periodontol*. 1985;56(1):35-38.
- 55 Wang HL, Shotwell JL, Itose T, Neiva RF. Multidisciplinary treatment approach for enhancement of implant esthetics. *Implant Dent*. 2005;14:21-29.
- 56 Refer to package insert.
- 57 Data on file with Collagen Matrix, Inc.
- 58 Data on file with curasan AG.
- 59 Pietak AM, Reid JW, Stott MJ, Sayer M. Silicon substitution in the calcium phosphate bioceramics. *Biomaterial.* 28 (2008) 4023-4032.
- 60 C. Knabe, P. Ducheyne. Chapter 6 Cellular response to bioactive ceramics, In: *Handbook of Bioceramics* and their Applications. Ed: Prof. Dr. Tadashi Kokubo, Woodhead Publishing Inc., Cambridge, UK, 2008, p.133-164.

For more information about our Products, Regenerative Materials and Educational Opportunities, contact us:

1900 Aston Avenue Carlsbad, CA 92008-7308 USA

In the U.S. 1 (800) 854-7019 To fax an order 1 (888) 225-2483 Outside the U.S. +1 (760) 929-4300 Australia +61 (0)2 9950 5434 or 1 (800) 241-916 Canada +1 (905) 567-2073 or 1 (800) 265-0968 China +86 21 2211 5147 France +33 (0)1 45 12 35 35 Germany +49 (0)761 1 56 47 0 Israel +972 (0)3 6124242 Italy +39 043 855 5573 Spain +34 93 846 05 43

To receive our eNews visit us at http://www.zimmerdental.com/news_eNewsLetterSignUp.aspx

