

[BIOMATERIALS]

Straumann® Biomaterials
Master any challenge.
Product portfolio





COMPREHENSIVE

Our comprehensive portfolio provides you with exactly the choices you need to master challenging treatments, including surgical periodontal regeneration, bone regeneration, and soft-tissue management.



INDIVIDUAL SOLUTIONS

We understand that a one-size-fits all solution does not help you meet every challenge. That's why we provide individual solutions for your unique challenges.



POWERFUL

Whether it's volume preservation, natural esthetic results, we provide what you need to meet your challenges, backed by scientific evidence and powered by innovation.

Straumann Group Biomaterials. What challenge are you going to master today?

Modern dentistry requires specific solutions to ensure maximum performance and safety.

We understand that your cases are as individual as your patients. That's why we offer products you feel comfortable with and can depend on, day in, day out. You can trust in the experience and expertise that is synonymous with Straumann®, to deliver the right solution for various clinical situations. Whatever your patient needs: from a volume preserving xenograft, to the natural results of an allograft, or a well-balanced combination, our innovative solutions provide you with exactly what you need to master your challenges.

Together with our strategic partners, Straumann® now provides a carefully selected and comprehensive portfolio in oral regeneration. Our unique biologics, complete guided bone regeneration (GBR) portfolio and innovative custom solutions are designed to help you master the challenges you might face in your daily practice.

Content

| Allograft | Bovine | Porcine | Synthetic |
|--|---|---|---|
|  |  |  |  |

BONE GRAFTS

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| Allograft | Bovine | Porcine | Synthetic |
|---|---|---|---|
|  |  |  |  |

SOFT TISSUE GRAFTS



AlloGraft Dermal Matrix
Cell-occlusive human dermis



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STRAUMANN® EMDOGAIN®



Straumann® Emdogain®
Enamel matrix derivative for hard and soft tissue regeneration



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Straumann® Emdogain® MI
Mastering periodontal regeneration with minimally invasive surgery



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WOUND HEALING



Straumann Regenomer
Self-expanding biodegradable collagen matrix (Block or Plug)



30



Our entire biomaterials portfolio is
now available for purchase on eShop!
Straumann.us/eshop



Straumann® AlloGraft Granules

Processed human allograft

Straumann® AlloGraft is 100% derived from donor bone provided by LifeNet Health®, the worldwide leading tissue bank and organ procurement organization. It's the trusted bone regeneration solution most similar to a patient's own bone that provides a strong start and greater confidence for you and your patients.



FEATURES AND BENEFITS

| | |
|--|--|
| Proven Safety Record | <ul style="list-style-type: none"> • Since 1995, more than 5 million bio-implants processed using Allowash technology have been distributed by LifeNet Health with no disease transmission |
| Consistent Reliability | <ul style="list-style-type: none"> • Processed using a proprietary and patented Allowash XG technology for a predictable and sterile allograft, while maintaining biomechanical and biochemical properties • Rigorous process, including terminal sterilization using gamma irradiation after packaging |
| Demonstrated Effectiveness | <ul style="list-style-type: none"> • Scientifically and clinically demonstrated to provide an effective scaffold for new bone growth • Shown to deliver strong structural support, rapid bone regeneration, and volume preservation^{1,2} |
| Flexibility to Fit Clinical Needs | <ul style="list-style-type: none"> • Range of particulate types to complement a range of clinical indications and choices • Best suited for sinus lifts, extraction sockets, horizontal augmentations, furcation defects, intraosseous defects, peri-implant dehiscence defects, and fenestration defects prior to or after dental implant placement |

PROPERTIES

| Attribute | Description |
|---------------------|----------------|
| Origin | Human tissue |
| Sterility | SAL 10-6 |
| Remodeling Time | 3 – 6+ months* |
| Storage Temperature | 2°C to 37°C |
| Shelf Life | 3 years |

*Remodeling time will vary depending on type of allograft used. See Allograft Datasheet for more details.

AVAILABLE IN THE FOLLOWING TYPES AND SIZES

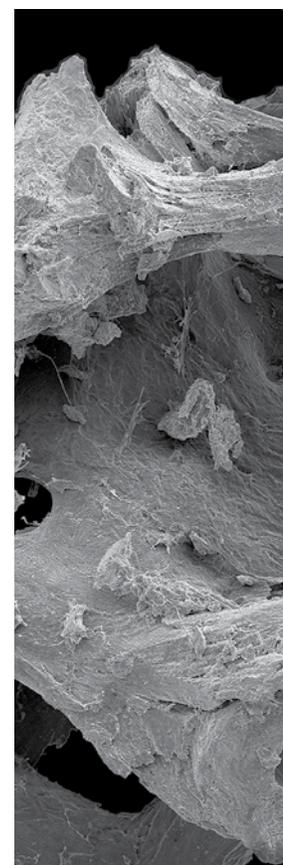
| AlloGraft Cortical Min/Demin Mix (80/20) | | |
|--|--------------|---------|
| Art.No. | Granule size | Content |
| 070.234 | 250-1000 µm | 0.5 cc |
| 070.235 | 250-1000 µm | 1.0 cc |
| 070.236 | 250-1000 µm | 2.0 cc |
| 070.237 | 250-1000 µm | 2.5 cc |

| AlloGraft Demineralized Cortical | | |
|----------------------------------|--------------|---------|
| Art.No. | Granule size | Content |
| 070.222 | 250-1000 µm | 0.25 cc |
| 070.223 | 250-1000 µm | 0.5 cc |
| 070.224 | 250-1000 µm | 1.0 cc |
| 070.225 | 250-1000 µm | 2.0 cc |

| AlloGraft Cortical Cancellous Mix (50/50) | | |
|---|--------------|---------|
| Art.No. | Granule size | Content |
| 070.255 | 250-1000 µm | 0.25 cc |
| 070.226 | 250-1000 µm | 0.5 cc |
| 070.227 | 250-1000 µm | 1.0 cc |
| 070.228 | 250-1000 µm | 2.0 cc |
| 070.232 | 250-1000 µm | 2.5 cc |

| AlloGraft Mineralized Cancellous | | |
|----------------------------------|--------------|---------|
| Art.No. | Granule size | Content |
| 070.229 | 250-1000 µm | 0.25 cc |
| 070.212 | 250-1000 µm | 0.5 cc |
| 070.213 | 250-1000 µm | 1.0 cc |
| 070.214 | 250-1000 µm | 2.0 cc |
| 070.231 | 250-1000 µm | 2.5 cc |
| 070.215 | 1000-2000 µm | 0.5 cc |
| 070.216 | 1000-2000 µm | 1.0 cc |
| 070.217 | 1000-2000 µm | 2.0 cc |

| AlloGraft Mineralized Cortical | | |
|--------------------------------|--------------|---------|
| Art.No. | Granule size | Content |
| 070.206 | 250-710 µm | 0.5 cc |
| 070.207 | 250-710 µm | 1.0 cc |
| 070.208 | 250-710 µm | 2.0 cc |
| 070.218 | 250-1000 µm | 0.25 cc |
| 070.219 | 250-1000 µm | 0.5 cc |
| 070.220 | 250-1000 µm | 1.0 cc |
| 070.221 | 250-1000 µm | 2.0 cc |
| 070.230 | 250-1000 µm | 2.5 cc |





Straumann® XenoGraft

Non-sintered granules

Straumann® XenoGraft, for bone defect treatment, is methodically processed from bovine bone, extensively tested to eliminate antigenicity and provides a favorable environment for new bone growth. Its limited resorption rate delivers extended stability, a critical advantage in cases that require a strong framework for long-term tissue support or esthetic needs.



FEATURES AND BENEFITS

| | |
|------------------------------------|---|
| Excellent Biocompatibility | <ul style="list-style-type: none"> • Deproteinized and delipidized, then terminally sterilized via gamma irradiation • Optimal balance of calcium and phosphate, comparable to human bone |
| Dependable Stability and Strength | <ul style="list-style-type: none"> • Volume preservation by providing a long-lasting framework for excellent space maintenance. • Slow resorption rate provides extended stability |
| Optimal Osteointegration | <ul style="list-style-type: none"> • Low crystallinity provides a favorable surface to which new bone can adhere • High porosity supports osteoconduction, enhancing integration of new bone |
| Flexibility to Meet Clinical Needs | <ul style="list-style-type: none"> • Combine with Straumann AlloGraft to augment mechanical strength and to maintain ideal space for maximum bone volume • Best suited for sinus lifts and horizontal augmentations |

PROPERTIES

| Attribute | Description |
|---------------------------|---|
| Origin | Bovine cancellous bone particles |
| Composition | Calcium phosphate (100 % pure hydroxyapatite, mineral phase) |
| Degradation kinetics | Long-term integration of bovine particles, very slow, limited degradation |
| Healing-/integration time | 6–9 months (depending on defect) |
| Storage temperature | 15–25 °C |
| Shelf life | 3 years (from date of production) |

APPLICATION AND HANDLING

Rehydration

Rehydration in blood or saline solution is recommended and facilitates handling and application.

Application

- Straumann® XenoGraft can be delivered to the surgical site with surgical curette or periosteal elevator after wetting with blood or saline solution.
- Ensure maximum contact between the graft material and well vascularized, bleeding bone surface to facilitate ingrowth of new blood vessels and bone forming cells.
- A bioabsorbable membrane should be placed over the graft.

Wound closure

Ensure that soft tissue coverage of the grafted site is complete

and free of tension

Healing time and Re-entry

The appropriate healing time is patient- and site-dependent and has to be decided by the clinician based on his diagnosis of the patient's individual situation.

A minimum healing period of six months is recommended before re-entry to ensure stable integration of particles.

Combining with Allograft

Combining of Straumann XenoGraft with allogeneic bone combines the advantages of both materials; the biological potential of allograft and the long-term stability of Straumann® XenoFlex lead to fast regeneration of vital, strong bone.

Combining with autologous bone

Combined use of Straumann XenoGraft with autologous bone bring about a biological activity (osteo-inductive and osteo-genetic properties of autologous bone) and may support faster regeneration and improved formation of new bone.



1,000× magnification



5,000× magnification



20,000× magnification

Available in the following sizes

| Code | Volume (g/cc) | Granules Size (mm) | Product |
|-------------|----------------|--------------------|--|
| S1-0210-025 | 0.25 g/0.55 cc | 0.2–1.0 mm | Straumann XenoGraft granules in bowl-type glass vial |
| S1-0210-050 | 0.5 g/1.3 cc | | |
| S1-0210-100 | 1.0 g/2.4 cc | | |
| S1-0210-200 | 2.0 g/4.5 cc | | |
| S1-1020-025 | 0.25 g/0.68 cc | 1.0–2.0 mm | Straumann XenoGraft granules in bowl-type glass vial |
| S1-1020-050 | 0.5 g/1.55 cc | | |
| S1-1020-100 | 1.0 g/2.9 cc | | |
| S1-1020-200 | 2.0 g/5.0 cc | | |



Straumann® XenoFlex

Collagenated xenograft block and syringe

Straumann XenoFlex is a biomimetic composite material that resembles the native bone in its basic biphasic composition of 10% porcine collagen and 90% bovine bone. It has beneficial handling characteristics and the ability to be shaped to match the individual defect situation. Straumann XenoFlex – an efficient, easy to handle, volume stable solution for the treatment of bone defects.



FEATURES AND BENEFITS

| | |
|---|---|
| Osteoconductivity | <ul style="list-style-type: none"> • The natural structure of Straumann XenoFlex with interconnected porous granules and purified collagen facilitates the adhesion and invasion of bone forming cells and results in complete integration of the implant due to the ingrowth of cells and blood vessels.³ |
| Healing environment and volume stability | <ul style="list-style-type: none"> • The collagen portion of Straumann XenoFlex supports the initial healing environment and binding of the granules to the defect.⁴ • The collagen creates the environment favorable for bone generation and is decomposed after a certain time (weeks).⁴ • The granules undergo superficial resorption only. • The granules provide excellence space maintenance and predictably integrate into newly formed bone ensuring volume maintenance and a strong long lasting matrix for successful placement of dental implants. |
| Safety | <ul style="list-style-type: none"> • In order to assure maximum safety, organic components are completely removed by solvent and temperature treatment (> 500 °C) during the manufacturing process of Straumann Xenoflex. • The final sterility of Straumann XenoFlex is ensured by gamma irradiation. |
| Spongy consistency after hydration | <ul style="list-style-type: none"> • After hydration Straumann XenoFlex changes to a slightly spongy consistency enabling excellent handling and defect application. • The collagen fibers have intrinsic hemostatic properties facilitating the adhesion of proteins and signaling molecules from the blood to the embedded granules to further improve the fast bony integration of Straumann XenoFlex.³ |
| Easy handling and application | <ul style="list-style-type: none"> • Straumann XenoFlex can be easily cut to the needed size and shape in dry and wet condition. • The product can be placed into defect in one piece using tweezers shortening operation time. |

PROPERTIES

| Attribute | Description |
|---------------------------|--|
| Origin | Bovine cancellous bone particles Porcine collagen type I |
| Composition | 90 % Calcium phosphate (100 % pure hydroxyapatite, mineral phase) 10 % Type I Collagen |
| Degradation kinetics | Fast binding at defect site due to 10 % of porcine collagen, very slow superficial degradation of bovine particles. Long term osseous integration of particles into newly formed bone matrix |
| Healing-/integration time | 6–9 months (depending on defect) |
| Storage temperature | 2–30 °C |
| Shelf life | 3 years (from date of production) |

APPLICATION AND HANDLING

Rehydration

Rehydration in blood or saline solution is recommended and facilitates handling and application.

Application

- Straumann® XenoFlex may be cut to the needed size in dry form or after hydration in blood or saline solution (using tweezers and scissors).
- Ensure maximum contact between the graft material and well vascularized, bleeding bone surface to facilitate ingrowth of new blood vessels and bone forming cells.
- A bioabsorbable membrane should be placed over the graft.

Wound closure

Ensure that soft tissue coverage of the grafted site is complete and free of tension

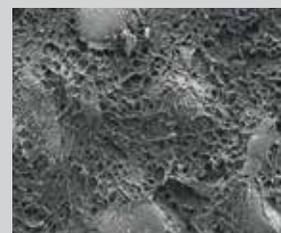
Healing time and Re-entry

The appropriate healing time is patient- and site-dependent and has to be decided by the clinician based on his diagnosis of the patient's individual situation.

A minimum healing period of six months is recommended before re-entry to ensure stable integration of particles.



50 × magnification



100 × magnification



50,000 × magnification

Available in the following sizes

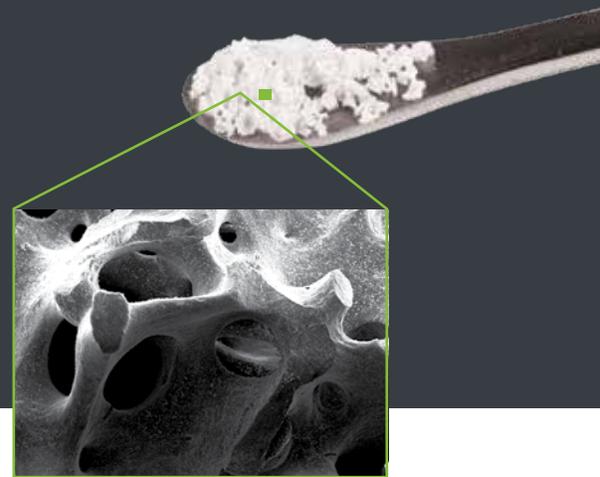
| Code | Dimension L×W×H (mm) | Product |
|--------------|-------------------------|-------------------------------|
| NI-0110-005 | 6 × 6 × 3, 50 mg | Straumann XenoFlex Block |
| NI-0110-010 | 6 × 6 × 6, 100 mg | |
| NI-0110-025 | 7 × 8 × 9, 250 mg | |
| NI-0110-050 | 9 × 10 × 11, 500 mg | |
| Code | Dimension ∅ × L (mm) | Product |
| NI-0110-025S | 4.6 × 40, 250 mg | Straumann XenoFlex Syringe |
| NI-0110-050S | 5.6 × 45, 500 mg | |



Straumann® cerabone®

Bovine granules

Straumann cerabone provides dependable stability and strength and predictably integrates into newly formed bone ensuring volume maintenance and a strong, long-lasting matrix to support the successful placement of dental implants.



FEATURES AND BENEFITS

| | |
|---|---|
| <p>Osteoconductivity</p> | <ul style="list-style-type: none"> • High porosity and rough surface morphology account for the osteoconductive properties. • The bone structure of Straumann cerabone with interconnected pores facilitates the adhesion and invasion of bone forming cells and results in complete integration of the implant due to the ingrowth of cells and blood vessels. |
| <p>Volume stability</p> | <ul style="list-style-type: none"> • Straumann cerabone undergoes superficial resorption only. • The granules provide dependable stability and predictably integrate into newly formed bone. • This ensures volume maintenance and a strong long lasting matrix for successful placement of dental implants. |
| <p>Sterility</p> | <ul style="list-style-type: none"> • The proprietary manufacturing process of Straumann cerabone is based on high temperature heating (> 1200 °C) that completely removes and eliminates all organic components and albuminous impurities (proteins, antigenic components, potential bacteria, viruses and prions). • Gamma-irradiation ensures final sterility of Straumann cerabone. |
| <p>Biocompatibility</p> | <ul style="list-style-type: none"> • The high temperature production process eliminates all organic components. |
| <p>Hydrophilicity</p> | <ul style="list-style-type: none"> • The interconnected pores and rough surface morphology of Straumann cerabone facilitate excellent hydrophilicity and support adhesion of proteins and signaling molecules from the blood to further improve the fast bony integration of Straumann cerabone. |
| <p>Easy handling and application</p> | <ul style="list-style-type: none"> • Straumann cerabone particles absorb liquid quickly and adhere to each other after mixing, thereby facilitating handling and application into the defect. |

PROPERTIES

| Attribute | Description |
|--------------------------|--|
| Origin | Bovine cancellous bone |
| Composition | 100 % pure natural bone mineral (calcium phosphate) |
| Porosity | 65–80 % |
| Mean pore size | 600–900 µm |
| Degradation kinetics | Very slow superficial degradation of particles, osseous integration of particles into newly formed bone matrix |
| Healing/integration time | 6–9 months |
| Storage temperature | 5–25 °C |
| Shelf life | 3 years |

APPLICATION AND HANDLING

Rehydration

Rehydration of Cerabone in blood from the defect site or saline solution is not required but recommended, as it facilitates handling and application of the particles.

Application

- Avoid compressing the particles during application. Non compacted particles leave space for blood vessel ingrowth and formation of new bone matrix.
- Fill the defect as completely as possible.
- Ensure maximum contact between the graft material and viable bone in a well vascularized area.
- The granules should be secured with a membrane to prevent motion and migration and to ensure undisturbed bone regeneration.

Healing time and re-entry

The appropriate healing time is patient- and site-dependent and has to be decided by the clinician based on the assessment of the patient's individual situation. A minimum healing period of six months is recommended before re-entry to ensure stable integration of particles.

Particle size

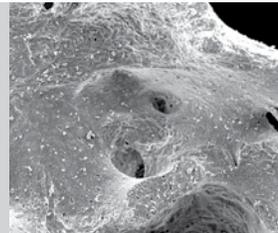
Use of small granules gives better surface contouring, especially in the esthetic region. Use of large particles enables a better revascularization of larger defects.

Mixing with allograft

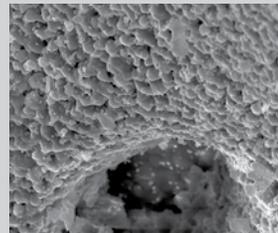
Mixing of Cerabone with allogeneic bone combines the advantages of both materials; the biological potential of allograft and the long-term stability of Cerabone lead to fast regeneration of vital, strong bone.

Mixing with autologous bone

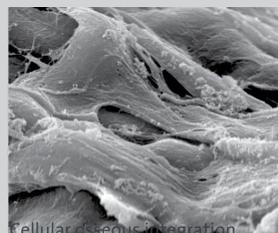
Mixing of Cerabone with autologous bone adds a biological activity (osteoinductive and osteogenetic properties of autologous bone) and supports faster regeneration and improved formation of new bone.



Three-dimensional pore-network



Hydrophilic, rough surface



Cellular, osseous integration

Available in the following sizes

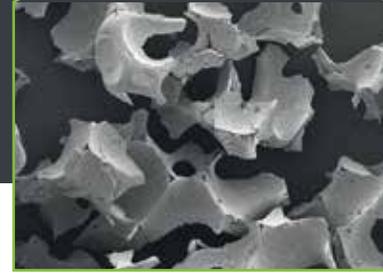
| Code | Description | Product |
|---------|---------------------------|-------------------------|
| BS-1510 | 0.5–1.0 mm, 1×0.5 cc (ml) | Cerabone small granules |
| BS-1511 | 0.5–1.0 mm, 1×1.0 cc (ml) | |
| BS-1512 | 0.5–1.0 mm, 1×2.0 cc (ml) | |
| BS-1515 | 0.5–1.0 mm, 1×5.0 cc (ml) | |
| BS-1520 | 1.0–2.0 mm, 1×0.5 cc (ml) | Cerabone large granules |
| BS-1521 | 1.0–2.0 mm, 1×1.0 cc (ml) | |
| BS-1522 | 1.0–2.0 mm, 1×2.0 cc (ml) | |
| BS-1525 | 1.0–2.0 mm, 1×5.0 cc (ml) | |



Straumann® BoneCeramic®

Synthetic Biphasic calcium phosphate granules

One of the most documented alloplastics in the market, which offers a state-of-the-art scaffold with controlled resorption for vital bone regeneration without compromising on volume preservation.



FEATURES AND BENEFITS

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|--|--|
| <p>Effective Regeneration Material</p> | <ul style="list-style-type: none"> • Engineered to support restoration and preservation of bone volume • Gradually resorbs as it is replaced by new bone |
| <p>Dependable Performance</p> | <ul style="list-style-type: none"> • Excellent handling characteristics • Consistent and reproducible quality because it's totally synthetic |
| <p>Flexibility to Meet Clinical Needs</p> | <ul style="list-style-type: none"> • Can be used alone or in combination with autogenous bone • Best suited for peri-implant dehiscence defects, fenestration defects, sinus lifts, extraction sockets, and horizontal augmentations |
| <p>Supports Ongoing Bone Regeneration</p> | <ul style="list-style-type: none"> • 28.35% average of newly formed mineralized bone versus 22.27% with bovine bone mineral, 6 to 8 months post augmentation ($p = 0.6024$)⁵ • Trend of increase in mineral bone formation over healing time⁵ • Bone vitality was 100% in all cores harvested⁵ • Significant increase in mean bone area fraction over healing time in a mix with autogenous bone, in sinus floor elevation⁶ |

PROPERTIES

| Attribute | Description |
|--------------------------|---|
| Origin | Synthetic |
| Composition | Biphasic calcium phosphate (60 % hydroxyapatite (HA), 40 % β -tricalcium phosphate (β -TCP)) |
| Porosity | 90 % |
| Pore size | 100–500 μ m |
| Degradation kinetics | Natural (cell-mediated) resorption process; fast resorption of β -TCP, slow resorption of HA |
| Healing/integration time | 6 months |
| Storage temperature | Room temperature |
| Shelf life | 5 years |

APPLICATION AND HANDLING

Rehydration

Rehydration in blood from the defect site or saline solution is recommended and facilitates handling and application.

Application

- Avoid compressing the particles during application; non-compacted particles leave space for blood vessel ingrowth and formation of new bone matrix.
- Fill the defect as completely as possible.
- Ensure maximum contact between the graft material and viable bone in a well vascularized area.

Covering

When working with particulate bone regeneration materials, the augmentation site should always be covered with a barrier membrane to ensure undisturbed osseous regeneration and to prevent migration of the particles into the oral cavity.

Wound closure

Ensure that soft tissue coverage of the grafted site is complete and free of tension.

Healing time and re-entry

The appropriate healing time is patient- and site-dependent and has to be decided by the clinician based on the assessment of the patient's individual situation. A healing period of six months is recommended before re-entry to ensure stable integration of particles.

Particle size

The small granules are preferably used in the esthetic region to give a better surface contouring. It is also beneficial to use smaller granules in smaller defect sites like periodontal defects.

The large granules enable enhanced revascularization of larger defects.

Mixing with autologous bone

Mixing of Straumann® BoneCeramic® with autologous bone adds a biological activity (osteoinductive and osteogenetic properties of autologous bone) and supports faster regeneration and improved formation of new bone.

Available in the following sizes

| Code | Size, amount | Product |
|---------|--------------------------|--------------------------------|
| 070.198 | 400 – 700 μ m 0.25 g | Straumann BoneCeramic granules |
| 070.199 | 500 – 1000 μ m 0.5 g | |
| 070.200 | 500 – 1000 μ m 1.0 g | |

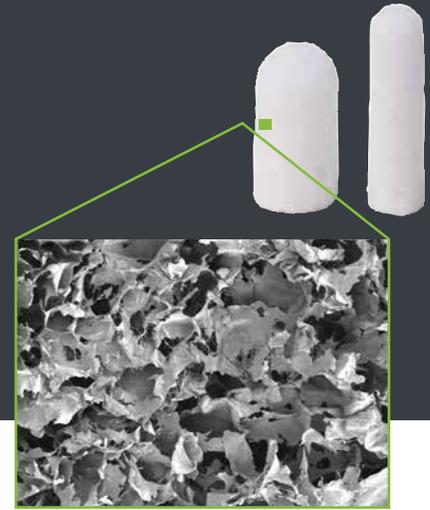
BONE GRAFTS

Straumann® SocketPlug

Carbonate Apatite Plug



A sterile, biocompatible bone graft composite plug for use in periodontal, oral, and maxiofacial surgery.



FEATURES AND BENEFITS

| | |
|-------------------------|---|
| Safety | <ul style="list-style-type: none">• Sterilized by gamma radiation• Non-pyrogenic |
| Convenience | <ul style="list-style-type: none">• Storage at room temperature; no refrigeration needed• No rehydration needed• The collagen facilitates handling of the bone mineral particles and acts to minimize migration of the granules |
| Biocompatibility | <ul style="list-style-type: none">• Carbonate apatite structure of synthetic bone material is physically and chemically comparable to the mineralized matrix of human bone |
| Biofunctionality | <ul style="list-style-type: none">• The formation and ingrowth of new bone at the implantation site of Straumann SocketPlug is favored due to its trabecular architecture, interconnecting macro and micro pores and its natural consistency |

PROPERTIES

| Attribute | Description |
|---------------------|--|
| Origin | Synthetic bone graft material Bovine collagen type I |
| Composition | 80% synthetic calcium phosphate granules 20% Type I bovine achilles tendon collagen |
| Degradation | 9-12 months |
| Storage temperature | Room temperature |
| Shelf life | 3 years (from date of production) |

APPLICATION AND HANDLING

- After exposure of the bony defect with a mucoperiosteal flap, all granulation tissue must be carefully removed.
- If pre-hydration is desired, hydrate with patient's blood or sterile normal saline.
- In order to assure the formation of new bone, Straumann® SocketPlug should only be placed in direct contact with well vascularized bone. Cortical bone should be mechanically perforated.
- Loosely pack Straumann® SocketPlug into the osseous defect using a sterile instrument. Do not use excessive force, as this will result in compression of the particles and loss of trabecular architecture.
- Overfilling of the defects should be avoided.
- The mucoperiosteal flaps should be sutured to achieve primary closure, if possible. A surgical dressing may be placed over the wound for one to two weeks.
- If primary wound closure cannot be achieved completely, further immobilization of the flap (e.g., by incision through the periosteum) should be performed and/or a bioabsorbable membrane should be placed over the bone graft site.



Single tooth extraction site.



Atraumatic extraction was completed leaving a 4-wall defect. Straumann SocketPlug was placed (dry) and compressed to fill the entire socket.



PTFE suture was then placed over the socket to secure the plug.

Case photos provided by Dr. Scott Weiskopf

Available in the following sizes

| Code | Size, amount | Product |
|---------|--------------------------|----------------------|
| 070.051 | 10 mm x 20 mm, 5 per box | Straumann SocketPlug |
| 070.052 | 6 mm x 25 mm, 5 per box | |



Jason[®] membrane

Porcine pericardium resorbable collagen membrane

The Jason membrane is a native collagen membrane obtained from porcine pericardium, developed and manufactured for dental tissue regeneration. Biomechanical and biological properties of the natural pericardium are preserved during the production process.



FEATURES AND BENEFITS

| | |
|---|--|
| <p>Native collagen structure preserved during the production process</p> | <ul style="list-style-type: none"> • High tensile strength due to the biomechanical properties of the pericardium. • Allows a wide range of fixation methods, including pinning and suturing, despite the thinness of ~ 0.15 mm. |
| <p>Slow degradation time due to the natural honeycomb-like and multi-layered collagen structure with an increased content of collagen type III</p> | <ul style="list-style-type: none"> • The resulting prolonged barrier function makes the membrane the recommended choice particularly for large augmentative procedures. |
| <p>Low thickness of only 0.15 mm</p> | <ul style="list-style-type: none"> • Facilitates soft tissue manipulation, particularly in challenging thin biotypes, making primary closure achievable. |
| <p>Easy handling and application</p> | <ul style="list-style-type: none"> • Can be cut to shape and size in dry or wet conditions. • Does not stick to itself and to instruments. • Can be easily repositioned, if needed. • Exceptional adaptability to surface contour after rehydration. |

PROPERTIES

| Attribute | Description |
|---------------------|---|
| Origin | Porcine pericardium |
| Composition | Native collagen type I and III |
| Structure | Natural multilayered collagen structure, not side-specific |
| Thickness | 0.05–0.35 mm (~ 0.15 mm) |
| Fixation | Generally not required due to good surface adaptation, but possible (pinning, suturing, screwing) |
| Degradation time | Slow degradation with prolonged barrier function (3-6 months) |
| Storage temperature | Room temperature (< 30 °C) |
| Shelf life | 3 years |

APPLICATION AND HANDLING

Rehydration

The Jason® membrane can be applied dry or rehydrated in sterile saline solution or blood. The initial placement of the dry membrane with subsequent application of the graft material is particularly advantageous for lateral augmentation of defects outside the ridge contour. After rehydration the Jason membrane exhibits an exceptional adaptability to surface contours. Since it is not sticky, it can be easily repositioned, if required.

Placement

The Jason membrane should be cut and placed to overlap the defect walls by at least 2–3 mm. This way, the membrane is in close contact with the bone, and lateral ingrowth of gingival connective tissue can be prevented.

Fixation

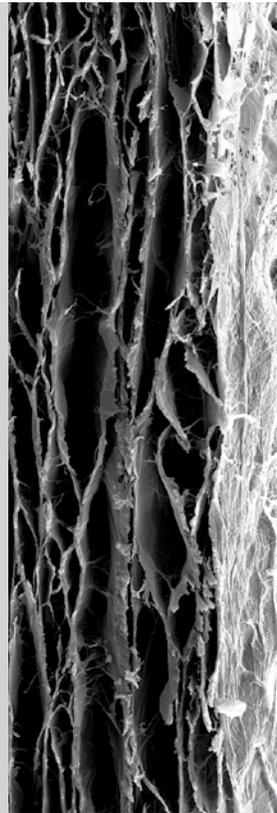
The Jason membrane exhibits a remarkable multi-directional tear resistance. Therefore, it can easily be pinned, sutured or even screwed without rupturing. But the excellent adhesion of the membrane to the bony walls makes additional fixation unnecessary in most cases.

Exposure

Exposure of the Jason membrane should be avoided, since fast bacterial resorption significantly reduces the barrier function of the thin membrane. In case of a dehiscence, the wound usually heals without complications by formation of free granulation tissue.

Shaping

The Jason membrane can be cut to the desired shape and size with a pair of scissors – while maintaining sterility. It may be helpful to use appropriate templates for defining the required size of the membrane.



Available in the following sizes

| Code | Description | Product |
|-----------|-------------|----------------|
| BS-681520 | 15×20 mm | Jason membrane |
| BS-682030 | 20×30 mm | |
| BS-683040 | 30×40 mm | |



Straumann® Membrane Flex™

Porcine peritoneum resorbable collagen membrane

Made from intact porcine peritoneum, Membrane Flex is a reliable and strong collagen membrane for everyday cases. It offers exceptional flexibility and biomechanical strength, and resorbs predictably. What's more, it naturally conforms to defects and contours. Once in place, it can be firmly anchored to surrounding tissue, with minimal risk of tearing or detachment.*



FEATURES AND BENEFITS

| | |
|---|--|
| Desirable handling characteristics | <ul style="list-style-type: none"> • Not side specific. • Can be placed dry or hydrated. • Even when hydrated, does not adhere to gloves or instruments. • Can be easily repositioned for precise placement. • Takes sutures or tacks with ease, for simple yet secure placement. |
| Dependable strength | <ul style="list-style-type: none"> • Proven biomechanical strength enhances fixation assurance.* |
| Predictable & controlled resorption | <ul style="list-style-type: none"> • Protects the graft area from unwanted soft tissue infiltration during the initial phase of healing while still allowing for healthy nutrient transfer. • Resorbs predictably over 3 to 4 months as new host collagen is simultaneously regenerated.* |
| Highly purified porcine peritoneum and minimal crosslinking | <ul style="list-style-type: none"> • The intact tissue of porcine peritoneum provides inherent strength which is further minimally crosslinked, leading to predictable resorption, and desirable handling characteristics. |

*Data on file with manufacturer

PROPERTIES

| Attribute | Description |
|---------------------|--|
| Origin | Porcine peritoneum |
| Composition | Types I and III collagen |
| Structure | Minimally cross-linked with glutaraldehyde |
| Thickness | 0.3 mm |
| Degradation time | 3 - 4 months |
| Storage temperature | Room temperature (15–30 °C) |
| Shelf life | 3 years |

APPLICATION AND HANDLING

Rehydration

Can be placed dry or hydrated. Even when hydrated, the membrane does not adhere to gloves or instruments. If the clinician prefers the handling characteristics of the hydrated collagen, the membrane can be hydrated in sterile water or saline solution for approximately five minutes prior to final placement.

Shaping

Can be trimmed to the size and shape of the defect in the dry or wet state using sharp, sterile scissors.

Placement

Not side specific, and either side can be placed facing the bone. The membrane easily drapes over defects and naturally conforms to contours. It can be easily repositioned for precise placement if necessary.

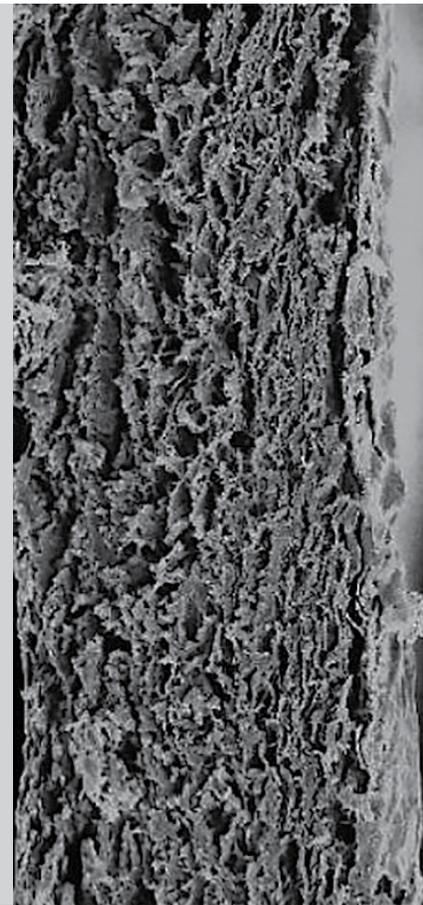
Straumann® Membrane Flex should overlap the walls of the defect by at least 2 mm to allow complete bone contact and to prevent gingival connective tissue invasion below the material.

Fixation

Fixation may be indicated to avoid displacement due to loading or mobilization. It takes sutures or tacks with ease. It can be affixed by resorbable tacks, or sutured in place using absorbable sutures and a noncutting needle.

Exposure

The mucoperiosteal flap is sutured over the collagen membrane and the wound should be closed completely to avoid accelerated resorption due to membrane exposure. The membrane is expected to be resorbed in approximately 12 to 16 weeks.



Available in the following sizes

| Code | Description | Product |
|---------|-------------|------------------------------|
| 070.008 | 15×20 mm | Straumann® Membrane Flex™ |
| 070.009 | 20×30 mm | |
| 070.010 | 30×40 mm | |



Straumann® Membrane Plus™

Bovine tendon resorbable collagen membrane

Straumann Membrane Plus enhances graft stabilization and bone growth by providing soft tissue support and space maintenance over a predictable time frame. Meticulously manufactured from bovine material that is one of the purest forms of collagen, it's treated and sterilized to be biocompatible, and cross-linked for predictable resorption rates. With its easy handling characteristics, it's designed to be the easy way to provide critical support.



FEATURES AND BENEFITS

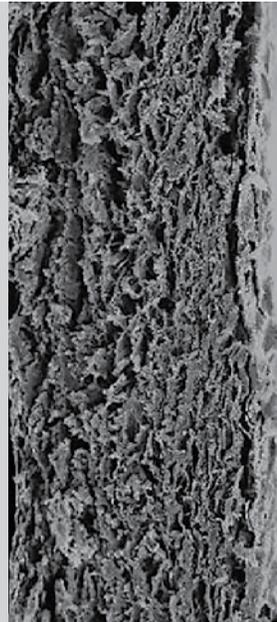
| | |
|---|---|
| Effective reinforcement | <ul style="list-style-type: none"> • Cell-occlusive to support bone regeneration, protecting the graft area from unwanted soft tissue infiltration during the initial phase of healing. • Predictably resorbs after 6 months, eliminating the need for a second surgery for removal. |
| Durable and long lasting | <ul style="list-style-type: none"> • Composed of multiple layers of type 1 collagen, providing soft tissue support. • Slow resorption over 6 months. • Cross-linking allows for reliable performance even if exposed. |
| Flexibility to meet clinical needs | <ul style="list-style-type: none"> • Combine with Straumann AlloGraft and/or Straumann XenoGraft to maintain ideal space and long-term cell occlusion for maximum bone volume. • Provides support for peri-implant dehiscence defects, fenestration defects, sinus lifts, and horizontal or ridge augmentations. |
| Easy to handle | <ul style="list-style-type: none"> • Rigid membrane, yet only 0.3mm thick. • Drapability facilitates ease of use. • Not side specific, enabling easy placement. • Minimal hydration creates optimal bio-adaptability. • Minimal suturing needed, potentially reducing procedure time and patient discomfort. |

PROPERTIES

| Attribute | Description |
|---------------------|-----------------------------|
| Origin | Bovine tendon |
| Composition | Type I collagen |
| Structure | Bovine collagen (Type 1) |
| Thickness | 0.3 mm |
| Degradation time | 6 months |
| Storage temperature | Room temperature (15–30 °C) |
| Shelf life | 2 years |

APPLICATION AND HANDLING

- Not side specific, for ease of application
- It can be applied dry or hydrated
- Although a rigid membrane, it is only 0.3 mm so primary closure is achievable.



Available in the following sizes

| Code | Description | Product |
|---------|-------------|------------------------------|
| GCM1020 | 10 x 20 mm | Straumann® Membrane Plus™ |
| GCM1520 | 15 x 20 mm | |
| GCM2030 | 10 x 30 mm | |



Straumann® Dermal Matrix

Acellular human dermis

Straumann AlloGraft Dermal Matrix is an acellular dermal matrix excellent for GTR/GBR and oral soft tissue correction in areas such as periodontal defects and ridge preservation.



FEATURES AND BENEFITS

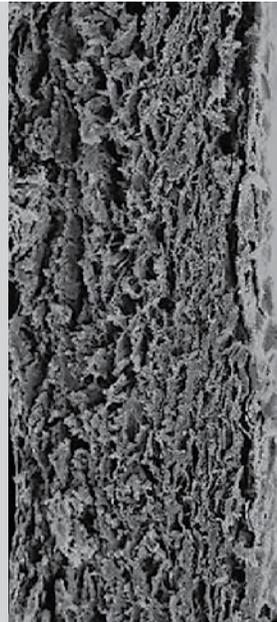
| | |
|---------------------------|--|
| Safe | • Packaged sterile with an SAL of 10^6 for increased patient safety. |
| Convenient storage | • Ambient temperature, no refrigeration is needed. |
| Biocompatible | • $\geq 97\%$ of DNA removed while retaining native growth factors, collagen and elastin. |
| Ready to use | • No rehydration needed. |
| Protects graft site | • Cell-occlusive natural membrane that protects grafted site from fluid and bacterial contamination. |
| Effective site remodeling | • Graft resorbs through normal site remodeling in 4-6 months following placement. |

PROPERTIES

| Attribute | Description |
|---------------------|-----------------------------|
| Origin | Human cadaver |
| Composition | Types I and III collagen |
| Structure | Acellular dermis |
| Thickness | 0.5 mm |
| Degradation time | 3 - 4 months |
| Storage temperature | Room temperature (15–30 °C) |
| Shelf life | 3 years |

APPLICATION AND HANDLING

- Ready to use out of package; no need to rinse/rehydrate, saving you the prep time.
- It is side specific. In general, when applied, the papillary side will face up while the reticular side is placed against the surgical wound or the most vascularized tissue.
- The dermis is packaged with the papillary side visible through the clear side of the packaging.



Available in the following sizes

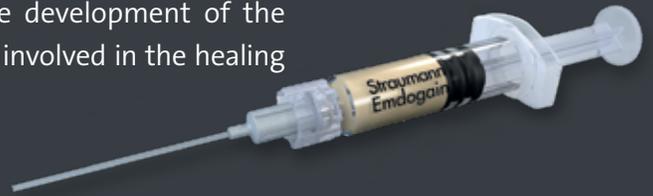
| Code | Description | Product |
|--------|----------------------------------|--|
| DM-150 | 0.76-1.25 mm thickness, 10x10 mm | Straumann® AlloGraft Dermal Matrix |
| DM-100 | 0.76-1.25 mm thickness, 15x20 mm | |
| DM-151 | 0.76-1.25 mm thickness, 10x40 mm | |
| DM-101 | 0.76-1.25 mm thickness, 20x40 mm | |
| DM-250 | 1.26-1.75 mm thickness, 10x10 mm | |
| DM-200 | 1.26-1.75 mm thickness, 15x20 mm | |
| DM-251 | 1.26-1.75 mm thickness, 10x40 mm | |
| DM-201 | 1.26-1.75 mm thickness, 20x40 mm | |



Straumann Emdogain

Enamel matrix derivative

Straumann Emdogain is a unique gel containing enamel matrix derivative. This mixture of natural proteins can induce biological processes that usually take place during the development of the periodontium and may stimulate certain cells involved in the healing process of soft and hard tissues.



Refer to the instructions for use available at ifu.straumann.com

FEATURES AND BENEFITS

| | |
|---|---|
| <p>Emdogain® induces true periodontal regeneration</p> | <ul style="list-style-type: none"> • Straumann Emdogain supports the regeneration of the lost hard and soft tissues of the periodontium, helping preserve the tooth. • Emdogain provides evidence-based regeneration of 3 periodontal tissues: cementum, periodontal ligament and alveolar bone. |
| <p>Emdogain increased the predictability of periodontal procedures</p> | <p>Emdogain leads to:</p> <ul style="list-style-type: none"> • Significantly improved clinical parameters in intra-osseous defects compared to open flap debridement procedures alone⁹ • increased root coverage achieved when used in a coronally advanced flap (CAF) compared to CAF alone¹⁰, and leads to results comparable to CAF + Connective Tissue Graft¹¹ |
| <p>Enhanced clinical outcomes</p> | <ul style="list-style-type: none"> • When used to treat intra-osseous defects, Emdogain contributes to improve your patients' dental prognosis • When used in oral surgical procedures in general, Emdogain reduces post surgical pain and swelling¹² |
| <p>Easy to apply</p> | <ul style="list-style-type: none"> • Because Emdogain is a gel, it is easy to apply, even in defects difficult to access |
| <p>Peace of mind for doctor and patient</p> | <ul style="list-style-type: none"> • Emdogain is backed by extensive and long term clinical documentation. It is documented in over 1000 scientific publications including 600 clinical publications¹³ and 10 year data^{11,14} |
| <p>Indications for Use</p> | <p>Emdogain is intended as an adjunct to periodontal surgery as a topical application onto exposed root surfaces. Emdogain is indicated for the treatment of the following conditions:</p> <ul style="list-style-type: none"> • Intrabony defects due to moderate or severe periodontitis • Mandibular degree II furcations with minimal interproximal bone loss • Gingival recession defects in conjunction with surgical coverage procedures such as the coronally advanced flap technique • Emdogain is also indicated for use in a minimally invasive surgical technique in esthetic zones to optimize tissue height for intrabony defects. Only in cases of wide defects or where soft tissue support is desired, Straumann Emdogain can be used in conjunction with a bone graft materials. |

PROPERTIES

| Attribute | Description |
|---------------------|--|
| Origin | Porcine unerupted tooth buds |
| Composition | Enamel matrix derivative, Propylene Glycol Alginate (PGA), water |
| Structure | Ready to use gel |
| Storage temperature | Cool storage in fridge (2–8 °C) |
| Shelf life | 2 years |

APPLICATION AND HANDLING

Emdogain® in oral regeneration

Periodontitis is associated with a loss of tooth-supporting tissues which is irreversible and the main reason for tooth loss if left untreated. Emdogain is considered the golden standard when it comes to inducing the regeneration of lost periodontal tissues in a safe, easy and predictable way. Long-term clinical studies have demonstrated that Emdogain can effectively help save teeth and revert gingival recessions.

TREATMENT

Courtesy of Prof. Carlos Nemcovsky



Before treatment with Straumann® Emdogain®



20 years after treatment with Straumann Emdogain

Courtesy of Prof. Giovanni Zucchelli



Before treatment with Straumann Emdogain



8 months after treatment with Straumann Emdogain

Available in the following sizes

| Art.No. | Description |
|-----------------------------------|---|
| Multi packs: Emdogain® + PrefGel® | |
| 075.114W | 3 × Straumann Emdogain 0.3 ml + 3 × Straumann® PrefGel® 0.6 ml |
| 075.116W | 3 × Straumann Emdogain 0.7 ml + 3 × Straumann PrefGel 0.6 ml |
| Five packs | |
| 075.098W | 5 × Straumann Emdogain 0.15 ml |
| PrefGel® | |
| 075.203W | 5 × Straumann PrefGel 0.6 ml |



Straumann Emdogain MI

Mastering periodontal regeneration with minimally invasive surgery

Straumann Emdogain is a mix of enamel matrix proteins that, when applied to a clean root surface, form an extracellular matrix that facilitates true periodontal regeneration. Straumann Emdogain MI is the same trusted formulation, however the cannula is thinner for increased ease of use. Applying Straumann Emdogain MI in the esthetic zone using a minimally invasive surgical technique (MIST) leads to clinical improvements while limiting patient morbidity.^{7,8}



Refer to the instructions for use available at ifu.straumann.com

FEATURES AND BENEFITS

| | |
|---|---|
| <p>Emdogain® induces true regeneration</p> | <ul style="list-style-type: none"> • Straumann Emdogain supports the regeneration of the lost hard and soft tissues of the periodontium, helping preserve the tooth. • Emdogain provides evidence-based regeneration of three periodontal tissues: cementum, periodontal ligament and alveolar bone. |
| <p>Reduced pocket depths and increased clinical attachment</p> | <p>The combination of the minimally invasive surgical technique and Straumann Emdogain leads to significant reductions in probing depths and improvements in attachment levels while producing no detectable recession.¹¹</p> |
| <p>Minimally invasive approach</p> | <p>Compared to the conventional surgical treatment, the minimally invasive surgical technique is designed to reduce surgical trauma and increase wound stability. This leads to:</p> <ul style="list-style-type: none"> • reduced chair time • increased patient comfort • minimized side effects¹⁶ |
| <p>Easier access to pockets</p> | <p>Compared to the Emdogain cannula, which is 19 gauge, the Emdogain MI cannula is thinner - at just 23 gauge - which allows easier access to periodontal pockets when using the minimally invasive surgical technique.</p> |
| <p>Same trusted formulation</p> | <p>Emdogain is backed by extensive and long term clinical documentation. It is documented in over 1000 scientific publications including 600 clinical publications¹³ and 10 year data^{11,14}</p> |

PROPERTIES

| Attribute | Description |
|---------------------|--|
| Origin | Porcine unerupted tooth buds |
| Composition | Enamel matrix derivative, Propylene Glycol Alginate (PGA), water |
| Structure | Ready to use gel |
| Storage temperature | Cool storage in fridge (2–8 °C) |
| Shelf life | 2 years |

APPLICATION AND HANDLING

Emdogain® in oral regeneration

Periodontitis is associated with a loss of tooth-supporting tissues which is irreversible and the main reason for tooth loss if left untreated. Emdogain is considered the golden standard when it comes to inducing the regeneration of lost periodontal tissues in a safe, easy and predictable way. Long-term clinical studies have demonstrated that Emdogain can effectively help save teeth and revert gingival recessions.

TREATMENT

Pictures with courtesy of Dr. Orest G. Komarnyckyj, DDS, Phoenix, AZ



Left frontal incisor before treatment



PPD ≥ 9mm



3 years after treatment with Straumann® Emdogain® MI



PPD = 1 – 2 mm

Available in the following sizes

| Article Number | Product Name | Contents |
|----------------|----------------------|--|
| 075.132 | Emdogain® MI 0.15 ml | 1x Emdogain® MI 0.15 ml 1x PrefGel® 0.6 ml 2 Cannulas for minimally invasive surgery |
| 075.133 | Emdogain® MI 0.3 ml | 1x Emdogain® MI 0.3 ml 1x PrefGel® 0.6 ml 2 Cannulas for minimally invasive surgery |



Straumann Regenomer

Self-expanding biodegradable collagen matrix

Straumann Regenomer is a sponge-like resorbable and porous collagen matrix designed to be used as a wound dressing and bone filling augmentation material. The non-chemically cross-linked, highly purified dehydrothermal type I collagen is used to fill extraction sockets, which prevents gingival retraction and absorption of alveolar bone.



Refer to the instructions for use available at ifu.straumann.com

FEATURES AND BENEFITS

| | |
|--|--|
| <p>Excellent extraction socket preservation</p> | <p>Prevents gingival retraction and bone loss on extraction sockets.</p> |
| <p>Outstanding biocompatibility</p> | <p>Highly purified, soft, pliable and non-pyrogenic sponge-like collagen matrix. Non-chemical crosslinking allows for excellent tissue integration while maintaining structural integrity.</p> |
| <p>Easy handling and versatile options</p> | <ul style="list-style-type: none"> • Rehydrates quickly and adheres well to the defect shapes • Retains structural integrity when wet • Supplied in two presentations; block and plug • Can be easily manipulated into desired shapes and sizes for a better fit |

PROPERTIES

| Attribute | Description |
|---------------------|-------------------------------|
| Origin | Type I Collagen |
| Degradation time | Up to 4 weeks |
| Storage temperature | Room temperature (15 - 25 °C) |
| Shelf life | 3 years |

REFERENCE - CLINICAL CASE¹



Before extraction (radiograph) Extraction socket appearance Straumann® Regenomer® plug Application of Straumann® Regenomer®



Sutured for prevention of exfoliation Just after Straumann® Regenomer® grafting (radiograph) 1 week after Straumann® Regenomer® grafting 2 weeks after Straumann® Regenomer® grafting (radiograph)

Available in the following sizes

| Code | Description | Dimensions (mm) | Weight (mg) | No. per box |
|--------|-------------|-----------------|-------------|-------------|
| RSP1-S | Plug Type | 8 x 18 | 40 | 5 pcs. |
| RSP2-L | | 12 X 25 | 100 | |
| RSB1-S | Block Type | 6 X 5 X 7 | 10 | |
| RSB2-L | | 8 X 7 X9 | 20 | |

Master the challenge.

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