Product Catalog

Dental bone and tissue regeneration

soft tissue
education
hard tissue
The botiss regeneration system:
Innovation, Safety, Reliability, and Aesthetics

botiss biomaterials offers you a unique systematic BTR approach – the complete regenerative biomaterial portfolio for Implantology, Oral and CMF Surgery, and Periodontology at hand. We all know – no single bone graft or soft tissue biomaterial can suit all medical needs, biological situations, and indications. Factors, such as indication, age, hygiene, biotype, bone height, and treatment plan, require a sophisticated approach with different, coordinated products.

To achieve optimal, predictable results, we offer you the botiss regeneration system. It includes all long-term proven biological materials (e.g., bovine, synthetic, allografts, collagen, granules, blocks, membranes, and soft tissue matrices), which can be used in various combinations for each specific indication. All products are manufactured according to the highest quality standards and are strictly biological (i.e., no chemical cross-linking).

Patient’s safety, ease of use, reliable and predictable treatment results – these are your and our first priorities. The products of the botiss regeneration system have proven their success in terms of safety, efficacy, and reliability in a multitude of preclinical and clinical studies and, most importantly, in the daily clinical work, with hundreds of thousands of patients world-wide.

We substantially invest in research and education. Unique innovations, such as mucoderm®, maxgraft® bonebuilder, and maxresorb® flexbone, the concept of high-quality learning and education with the botiss academy, and our international bone & tissue days are the results of our partnership with world-wide renowned academic research institutes, global opinion leaders, and practitioners in their daily clinical environment.

botiss biomaterials is one of the leading companies in the field of dental bone and tissue regeneration. The botiss regeneration system is available in over 100 countries worldwide via a global network of distribution partners and employees, who are committed experts in the field of oral surgery and implantology.

We proudly welcome you to the botiss regeneration system community. We invite you to share your experiences and suggestions with us, which are precious to further improve our products or develop new product concepts.

Dr. Drazen Tadic
dt@botiss.com
Oliver Bielenstein
ob@botiss.com
Natural bovine bone graft

Owing to its reliability and treatment predictability, bovine bone grafting material is the material of choice for the majority of dentists. cerabone® is a highly reliable, dimensionally stable and safe bone graft.

Indications:
- Implantology
- Periodontology
- Oral and CMF Surgery
  - Sinus lift
  - Horizontal and vertical augmentation
  - Intraosseous defects
  - Peri-implant defects
  - Extraction sockets
  - Furcation defects

Properties
- Natural bovine bone grafting material
- Long-term volumetric stability
- No foreign body or inflammatory reaction
- Rough surface, optimal cell adhesion, and blood absorption
- Interconnective porosity for rapid revascularization
- Safe and sterile
- Easy handling

cerabone® is derived from the mineral phase of bovine bone, which shows strong resemblance to the human bone with regard to chemical composition, porosity, and surface structure. The pronounced hydrophilicity of the cerabone® surface supports a fast uptake of blood or saline, thus improving handling. Likewise, its three-dimensional porous network enables a fast penetration and adsorption of blood and serum proteins and serves as a reservoir for proteins and growth factors. The unique manufacturing process based on high-temperature heating removes all organic and potentially antigenic components, making the material absolutely safe and free of proteins. cerabone® is the leading natural bovine bone grafting material of German origin, as demonstrated by its clinical and scientific success.

SEM: cerabone® macro- and micropores resembling human bone

SEM: cerabone® microporosity; ideal surface roughness for faster cell attachment

Histology of cerabone® six months after sinus lift: Optimal integration and bone healing with cerabone®

<table>
<thead>
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<th>Particle Size</th>
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cerabone® block

cerabone® block

bone regeneration

cerabone®
maxresorb®
maxresorb® inject
collacone® max
maxgraft®
maxgraft® bonering
maxgraft® cortico
maxgraft® bonebuilder
maxresorb®

Synthetic biphasic calcium phosphate

maxresorb® is an innovative, safe, reliable, and fully synthetic bone substitute material that is characterized by controlled resorption properties and outstanding handling characteristics.

maxresorb® is composed of 60% hydroxyapatite (HA) and 40% beta-tricalcium phosphate (β-TCP).

The unique synthesis-based production process ensures a completely homogeneous distribution of both mineral phases. The peculiar composition of maxresorb® promotes the fast formation of new vital bone, ensuring a long-term mechanical and volume stability. The osteoconductivity of maxresorb® is achieved by a matrix of interconnecting pores (with a size ranging between 200 and 800 μm) and a very high porosity of approx. 80%. The high microporosity and nano-structured surface facilitate the uptake and adsorption of blood, proteins, and stem cells. The macropores are ideal for the ingrowth of osteogenic cells and the bony integration.

maxresorb® granules

Art.-No. Particle Size Content
20005 0.5 – 1.0 mm (S) 1 × 0.5 ml
20010 0.5 – 1.0 mm (S) 1 × 1.0 ml
20105 0.8 – 1.5 mm (L) 1 × 0.5 ml
20120 0.8 – 1.5 mm (L) 1 × 2.0 ml

maxresorb® blocks

Art.-No. Dimension Content
21201 20 x 10 x 10 mm 1 × block
21221 20 x 20 x 10 mm 1 × block

Properties
- 100% synthetic and resorbable
- Volume and mechanical graft stability
- 60% HA/40% β-TCP
- Osteoconductive
- Ultra-high interconnected porosity
- Safe, reliable and sterile
- Hydrophilic surface

Indications:
- Implantology
- Periodontology
- Oral and CMF Surgery
- Sinus lift
- Ridge augmentation
- Intraosseous defects
- Extraction sockets
- Osseous defects
- Furcation defects

maxresorb® inject

Synthetic injectable bone paste

maxresorb® inject is a unique and highly innovative, injectable bone graft paste, with excellent resorption properties.

The gel-based composite includes active hydroxyapatite and granules (composed of 60% HA and 40% β-TCP). While maxresorb® promotes the fast formation of new vital bone and maintains the mechanical graft stability, maxresorb® inject is gradually replaced by mature new bone. The highly viscous maxresorb® inject paste allows the perfect shaping, molding, fitting, and complete bone bonding to the surrounding bone surface of the defect. maxresorb® inject is a non-hardening synthetic bone paste.

maxresorb® inject paste

Properties
- Injectable and easy handling
- Non-hardening bone graft paste
- Synthetic, resorbable, and safe
- Viscous and moldable
- Active hydroxyapatite crystals
- 60% HA/40% β-TCP granules
- Osteoconductive
- Ultra-high interconnected porosity

Indications:
- Implantology
- Periodontology
- Oral and CMF Surgery
- Sinus lift
- Intraosseous defects
- Extraction sockets
- Osseous defects
- Furcation defects

maxresorb® inject paste

Product Specifications
maxresorb® inject

Art.-No. Unit Content
22005 1 x syringe 1 x 0.5 ml
22010 1 x syringe 1 x 1.0 ml
22025 1 x syringe 1 x 2.5 ml

maxresorb® inject paste

Ideal blood adherence

The ideal hydrophilicity of maxresorb® granules ensures excellent handling characteristics when in contact with blood.

maxresorb® inject - Easy handling and good moldability

maxresorb® inject surface structure

Unique Regenerative Four-Phase Activity

water/gel carrier-guided vascularization
active HA cell activation, biologic regeneration
biphasic Ca/P balanced resorption and bone formation, volume stability
**collacone® max**
Calcium phosphate collagen cone

**Properties**
- Has a form-fitted cone shape for an easy application
- Adapts to the defect contours
- Maintains space and avoids soft tissue collapse
- Reduces the need for subsequent augmentative procedures
- Improves the aesthetic outcome of the final prostheses

**Product Specifications**

<table>
<thead>
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<th>Dimension</th>
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<td>293001</td>
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<td>height ~16 mm</td>
<td>1 x cone</td>
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<tr>
<td></td>
<td></td>
<td>width on top ~11 mm, bottom width ~7 mm</td>
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**Bundle collacone® max and mucoderm® soft tissue punch**

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<td>1 x collacone® max</td>
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<td></td>
<td>1 x mucoderm® punch (Ø 10 mm)</td>
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**maxgraft®**
Processed human allograft

**maxgraft® granules**
- A steriley, high-safety allograft product, derived from human-donor bone, processed by Cells-Tissuebank Austria (C-TBA), a high-quality bone bank, is regulated, audited, and certified by the Austrian Federal Office for Safety in Health Care and fulfills the highest EU safety standards.

**Properties**
- Preserved biomechanical properties
- Sterile – no antigenic effects
- Storable at room temperature for five years
- Osteoconductive properties supporting natural and controlled tissue remodelling

**Indications:**
- Implantology, Periodontology and Oral and CMF Surgery
- Socket and ridge preservation
- Intrarosseous defects
- Peri-implant defects
- Defects after root resection, apicectomy and cystectomy

**Product Specifications**

<table>
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<tr>
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<td>0.5 – 2.0 mm</td>
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<tr>
<td>30040</td>
<td>0.5 – 2.0 mm</td>
<td>1 x 4.0 ml</td>
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**maxgraft® cortico-cancellous granules**

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<tr>
<td>31040</td>
<td>0.5 – 2.0 mm</td>
<td>1 x 4.0 ml</td>
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**maxgraft® blocks**
- Localized augmentation of the ridge for future implant placement
- Ridge augmentation
- Osseseous defects
- Extraction sockets
- Elevation of maxillary sinus floor
- Repair of intrabony periodontal defects

**maxgraft® blocks:**
- A predictable and highly effective alternative to traditional block grafting
- Ridge augmentation

maxgraft® is a sterile, high-safety allograft product, derived from human-donor bone, processed by Cells-Tissuebank Austria (C-TBA), a high-quality bone bank, is regulated, audited, and certified by the Austrian Federal Office for Safety in Health Care and fulfills the highest EU safety standards.
maxgraft® bonering
Processed allogenic bone ring

The maxgraft® bonering technique

maxgraft® bonering is a prefabricated ring of processed allogenic donor bone, which is placed press-fit into a trephine drill-prepared ring bed. At the same time, an implant is inserted into the ring. The bony integration of both maxgraft® bonering and the implant occurs via the surrounding vital bone.

Ring bed preparation

After the determination of the position of the implant with the planator tip, the ring bed is prepared with the trephine. Subsequently, the planator allows an even paving of the local bone for optimal contact with maxgraft® bonering and, in addition, removes the cortical layer; this ensures an improved graft revascularization.

The height of maxgraft® bonering is adjustable to the defect. The maxgraft® bonering technique enables vertical bone augmentation and direct implant insertion.

Compared to the classical two-stage augmentation with bone blocks, this technique reduces the entire treatment period by several months and saves the re-entry.

maxgraft® bonering is suitable for vertical and horizontal augmentation and promotes new bone formation, therefore simplifying the surgical treatment.

Advantages

- Simultaneous implant placement and bone augmentation
- No second surgical procedure
- Significant reduction of treatment time

www.botiss-bonering.com

One-stage bone augmentation and implant placement

Soft tissue management

Smoothing

Sharp edges should be smoothed to avoid soft tissue perforation and to support wound healing. Moreover, maxgraft® bonering should be covered with a slowly resorbable bone regeneration material (e.g., cerabone®) to fill the residual defect volume and to avoid potential adaption resorption of the graft.

After covering the graft with a collagen membrane (Jason® membrane), a tension-free suturing of the operation site must be applied to avoid tissue perforation and graft exposure.

maxgraft® bonering surgical kit

With this surgical kit, botiss biomaterials provides all necessary instruments to apply the maxgraft® bonering technique. The kit includes two convenient sizes of trephines, which precisely match the maxgraft® bonering diameters. The planators allow the paving of the local bone to create a congruent and fresh contact surface of the implant area. The diamond disc and the diamond tulip can be used to shape maxgraft® bonering for an excellent adjustment to the local bone and for an improved soft tissue healing. Altogether, these instruments allow optimal preconditions for the bony ingrowth of maxgraft® bonering. All instruments are made of high-quality surgical steel.

Product Specifications

maxgraft® bonering 3.3
(Height 10 mm, recommended for implant diameters from 3.3 - 3.6 mm)

<table>
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<td>33170</td>
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maxgraft® bonering 4.1
(Height 10 mm, recommended for implant diameters from 4.1 mm)

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<th>Art.-No.</th>
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<td>33110</td>
<td>bonering fix</td>
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maxgraft® bonering 3.3
(Height 10 mm, recommended for implant diameters from 3.3 - 3.6 mm)

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<td>33110</td>
<td>bonering fix</td>
<td>1 x</td>
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maxgraft® cortico
Shell technique with allogenic bone plates

maxgraft® cortico is a prefabricated plate made of processed allogenic bone. Similarly to the autogenous bone, it can be used for the shell technique.

maxgraft® cortico was developed to avoid the donor-site morbidity and to prevent the time-consuming harvesting and splitting of autologous cortico-cancellous bone blocks.

Preparation of the augmentation area

The proper size of the plate is estimated after the elevation of the mucosal flap or preoperatively using a digital planning software. Using a diamond disc, the plate is then cut extraorally.

Indications:
- Vertical augmentation
- Horizontal augmentation
- Complex three-dimensional augmentations
- Single tooth gaps
- Fenestration defects

Fixation and adaption

The plate is positioned within a certain distance by predrilling through the plate and local bone; fixation is performed with osteosynthesis screws to create a fixed compartment. To prevent the perforation of the soft tissues, the sharp edges has to be removed, e.g., by using a diamond ball.

Augmentation of a frontal mandibular defect

Properties
- Osteoconductive
- Natural and controlled remodelling
- Conserved biomechanical parameters
- Sterile, no antigenic effect
- Five-year shelf life

Fixation and adaption

Advantages
- Established augmentation technique with new material
- Significant reduction of operation time
- No donor-site morbidity
- No limitation of augmentation material

Filling and wound closure

The space between local bone and cortical plate can be filled with a variety of different particulated bone grafting materials. Then, the augmentation area needs to be covered with a barrier membrane (Jason® membrane, colprotect® membrane) and a tension-free and saliva-proof closure must be applied.

Product Specifications

maxgraft® cortico
Art.-No.  Dimension  Content
31251  cortical strut, 25 x 10 x 1 mm  1 x
31253  cortical strut, 25 x 10 x 1 mm  3 x

cortico trimmer
Art.-No. Content
34000 cortico trimmer  1 x

Natural bone regeneration

To facilitate osteogenesis, allogenic particles can be used to fill the defect. The preserved human collagen provides an excellent osteoconductivity and enables a complete remodelling. Mixing with autologous chips or particulated PRF matrices can support the ossification.

www.botiss.com
maxgraft® bonebuilder provides an allogenic bone implant, which is individually adjusted to the bone defect by CAD/CAM technique. With maxgraft® bonebuilder, the harvesting of the autologous bone is no longer required for the treatment of extensive defects. Donor-site morbidity, operation time, and costs may be significantly reduced.

After placement, the maxgraft® bonebuilder block is fixed with osteosynthesis screws. The residual defect volume should be filled with bone regeneration material and the augmentation site covered with a collagen membrane.

The strong capillary action of the three-dimensional, porous trabecular bone network enables a fast and efficient penetration of fluids, nutrients, and blood, resulting in an excellent handling as well as a reliable and predictable outcome.

Indications:
- Extensive bone defects
- Atrophic maxilla/mandible
- Horizontal and vertical augmentation

Advantages:
- Individualized allogenic bone implant
- Significantly reduced operation time
- Improved wound healing

maxgraft® bonebuilder technology
In-house planning
botiss biomaterials virtually designs patient-matched allogenic bone implants based on the CT/DVT-scan of the bone defect. The design of the bone implant undergoes a final inspection by the clinical user and is, by individual order, released for production. The botiss biomaterials partner Cells+Tissuebank Austria (C+TBA) receives a *.stl milling file and the patient-matched allogenic bone implant is produced under clean-room conditions. The resulting allogenic bone implant is ready for insertion into the defect and requires only minor adjustments.

After placement, the maxgraft® bonebuilder block is fixed with osteosynthesis screws. The residual defect volume should be filled with bone regeneration material and the augmentation site covered with a collagen membrane.

The strong capillary action of the three-dimensional, porous trabecular bone network enables a fast and efficient penetration of fluids, nutrients, and blood, resulting in an excellent handling as well as a reliable and predictable outcome.

Product Specifications
maxgraft® bonebuilder
Art.-No. Content
PMIa Individual planning and production of a bone transplant
max. dimensions 23 × 13 × 13 mm

maxgraft® bonebuilder dummy
Art.-No. Content
32100 Individual 3D-printed model of the patient's defect and the plastic bonebuilder block (for demonstration purposes)

Indications:
- Extensive bone defects
- Atrophic maxilla/mandible
- Horizontal and vertical augmentation

Advantages:
- Individualized allogenic bone implant
- Significantly reduced operation time
- Improved wound healing

www.botiss-bonebuilder.com

soft tissue regeneration

mucoderm®
Jason® fleece
collacone®
collprotect® membrane
Jason® membrane
titan pin set
**mucoderm®**

3D-stable soft tissue (collagen) graft

**Properties**
- Rapid revascularization and integration
- Soft tissue replacement without palatal autograft harvesting
- Complete remodeling into patient’s own tissue
- Resorption time of approx. six to nine months
- Can be easily applied and fixed
- Can be cut into procedure-specific shape

**Indications:**
- Implantology, Periodontology and Oral and CMF Surgery
- Treatment of gingival recessions
- Soft tissue grafting in combination with GBR/GTR
- Broadening of attached gingiva
- Closure of extraction sockets

**Product Specifications mucoderm®**

<table>
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<td>20 × 30 mm</td>
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<td>703040</td>
<td>30 × 40 mm</td>
<td>1 matrix</td>
</tr>
<tr>
<td>710210</td>
<td>Ø 10 mm</td>
<td>1 punch*</td>
</tr>
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**mucoderm®** is a natural type I/III collagen matrix derived from porcine dermis that undergoes a multi-stage purification process, which removes all potential immunogens. The remaining matrix is a membrane that consists of collagen and elastin.

**mucoderm®** is integrated and remodelled into the patient’s own soft tissue through a natural enzymatic process. The natural collagen structure of mucoderm, which is the result of a multi-step purification/cleaning process, serves as scaffold for soft tissue cells and blood vessels. During the healing, the mucoderm matrix is vascularized and integrated into the surrounding tissue. mucoderm represents a suitable and safe alternative to the autologous soft tissue graft for a variety of indications.

**Jason® fleece**

Collagenic hemostat (Sponge)

**Indications:**
- Implantology, Periodontology and Oral and CMF Surgery
- Minor oral wounds
- Protection of Schneiderian Membrane
- Extraction sites
- Biopsy sites
- Periodontal bone defects

**Product Specifications Jason® fleece**

<table>
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<td>692510</td>
<td>50 × 50 mm</td>
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**Jason®** fleece is a pH-neutral, wet-stable fleece made of native collagen with a highly efficient hemostatic effect. The well-known effect of collagen is induced by the adhesion of platelets to the collagen fibrils.

As a consequence, platelets aggregate and release coagulation factors by degranulation. This initiates the coagulation cascade that leads to hemostasis. Jason® fleece promotes the formation and stabilization of the blood coagulum and can be applied for wound protection and to support wound healing (i.e., biopsy harvesting sites, coverage of augmentation sites). Jason® fleece is completely resorbed by natural processes occurring in the body within two to four weeks. Jason® fleece is also available preloaded with Gentamycin (Jason® G).
collacone®
Collagenic hemostat (Cone)

collacone® is a wet-stable and moldable cone made of natural collagen. As a completely resorbable and hemostatic wound coverage, it is intended for application in fresh extraction sockets in the daily clinical practice.

Indications:
- Closure of extraction sites
- Biopsy sites
- Minor oral wounds
- Control and stop of bleeding in extraction sockets or biopsy sites
- Internal sinus lift

Properties
- Resorption within two to four weeks
- Stabilization of blood clot and efficient local hemostasis
- Maintains integrity in the presence of blood and during application
- Wound protection
- Three-dimensional matrix for tissue ingrowth
- Controlled wound healing process
- Native collagen cone
- Promoting hemostasis

After tooth removal, the healing of an extraction socket requires the formation and maturation of a blood clot, followed by the infiltration of fibroblasts that replace the coagulum; finally, the application of a provisional matrix allows the formation of new bone tissue. The spongy structure of collacone® ensures an easy and fast application in extraction sockets. Notably, the structure of the cone is maintained after insertion into the defect.

SEM: collacone®
collacone® wet-stable, fast uptake of blood and stabilization of the blood coagulum

SEM: collacone® collagen fibers
three-dimensional network

collacone® is a wet-stable and moldable cone made of natural collagen. As a completely resorbable and hemostatic wound coverage, it is intended for application in fresh extraction sockets in the daily clinical practice.

collprotect® membrane
Native collagen membrane

collprotect® membrane is a native collagen membrane made of porcine dermis. Its multistep cleaning process ensures the removal of all antigenic and non-collagenous components, at the same time preserving its natural collagen structure.

The unique processing as well as the open-porous and the three-dimensional collagen structure of collprotect® membrane are the basis for its safe application in dental bone and tissue regeneration. Owing to its natural hemostatic function, the membrane enables early wound stabilization, thus supporting the natural wound healing. The rough surface of collprotect® membrane facilitates a fast integration into the surrounding soft tissue.

Indications:
- Three-dimensional natural collagen matrix
- Natural wound healing and blood clot support
- Easy application and handling in dry or wet status
- Rough and porous structure for cell guidance
- Natural collagen structure

Properties
- Three-dimensional natural collagen matrix
- Natural wound healing and blood clot support
- Easy application and handling in dry or wet status
- Rough and porous structure for cell guidance
- Natural collagen structure

Histology six weeks after implantation of collprotect® membrane in a rat model:
Blood vessels have penetrated the porous structure; collagen fibers are visible, and resorption proceeds without any inflammatory tissue response

SEM: collprotect® membrane
SEM: collprotect® membrane

The spongy structure of collacone® ensures an easy and fast application in extraction sockets. Notably, the structure of the cone is maintained after insertion into the defect.

SEM: collacone®
collacone® wet-stable, fast uptake of blood and stabilization of the blood coagulum

SEM: collacone® collagen fibers
three-dimensional network

collacone® is a wet-stable and moldable cone made of natural collagen. As a completely resorbable and hemostatic wound coverage, it is intended for application in fresh extraction sockets in the daily clinical practice.

Indications:
- Closure of extraction sites
- Biopsy sites
- Minor oral wounds
- Control and stop of bleeding in extraction sockets or biopsy sites
- Internal sinus lift

Properties
- Resorption within two to four weeks
- Stabilization of blood clot and efficient local hemostasis
- Maintains integrity in the presence of blood and during application
- Wound protection
- Three-dimensional matrix for tissue ingrowth
- Controlled wound healing process
- Native collagen cone
- Promoting hemostasis

After tooth removal, the healing of an extraction socket requires the formation and maturation of a blood clot, followed by the infiltration of fibroblasts that replace the coagulum; finally, the application of a provisional matrix allows the formation of new bone tissue. The spongy structure of collacone® ensures an easy and fast application in extraction sockets. Notably, the structure of the cone is maintained after insertion into the defect.

SEM: collacone®
collacone® wet-stable, fast uptake of blood and stabilization of the blood coagulum

SEM: collacone® collagen fibers
three-dimensional network

collacone® is a wet-stable and moldable cone made of natural collagen. As a completely resorbable and hemostatic wound coverage, it is intended for application in fresh extraction sockets in the daily clinical practice.

Product Specifications

<table>
<thead>
<tr>
<th>collacone®</th>
<th>Art.-No.</th>
<th>Shape</th>
<th>Dimension</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>S11112</td>
<td></td>
<td>~16 mm height, ~11 mm, bottom width ~7 mm</td>
<td>12 pieces (single sterile units)</td>
<td></td>
</tr>
</tbody>
</table>

Jason® membrane
Native pericardium GBR/GTR membrane

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

Owing to these unique properties, the Jason® membrane exhibits its beneficial handling characteristics such as a remarkable tear resistance and effective surface adaptation. Due to the natural comb-like and multilayered collagen structure with an increased content of collagen type III, the Jason® membrane shows a slow degradation. This ensures a prolonged barrier function, making the Jason® membrane our recommended choice particularly for large augmentative procedures.

Indications:
Implantology, Periodontology and Oral and CMF Surgery
- Horizontal and vertical augmentation
- Ridge reconstruction
- Socket and ridge preservation
- Sinus lift
- Protection and covering of Schneiderian membrane
- Fenestration and dehiscence defects
- Intracapsular defects (1 to 3 walls)
- Furcation defects (class I and II)

Properties
- Prolonged barrier function
- Low-thickness native structure
- Easy manipulation, can be applied dry or wet
- No stickiness after rehydration
- Fast vascularization due to three-dimensional structure
- Multi-directional strength and tear resistance
- Excellent surface adaptation and reduced risk of swelling

Product Specifications
Jason® membrane

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Size</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>681520</td>
<td>15 x 20 mm</td>
<td>1 membrane</td>
</tr>
<tr>
<td>682030</td>
<td>20 x 30 mm</td>
<td>1 membrane</td>
</tr>
<tr>
<td>683040</td>
<td>30 x 40 mm</td>
<td>1 membrane</td>
</tr>
</tbody>
</table>

Histology of Jason® membrane 24 weeks after implantation in a rat model shows perfect integration without inflammatory reaction.

During the application of modern GBR and GTR techniques, barrier membranes are indispensable to achieve predictable and reliable results.

By fixation of the barrier membrane to the local bone, the application of the particulate bone regeneration material as well as the coverage of the augmentation site by the barrier membrane can be significantly simplified.

Using the one-piece applicator, titan pins can easily be taken up from the dispenser and applied to the fixation site. Distortion of the working-end during handling cannot occur.

Properties
titan pin set
for membrane fixation

- Utterly comfortable grip-ergonomics for easy uptake of titan pins
- Functional design
- Safe and easy opening by single-hand control
- Suitable for resorbable and non-resorbable membranes

Product Specifications
titan pin set

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>440000</td>
<td>titan pin set</td>
</tr>
<tr>
<td></td>
<td>1 x applicator</td>
</tr>
<tr>
<td></td>
<td>1 x dispenser for 15 titan pins</td>
</tr>
<tr>
<td>440310</td>
<td>titan pins 3 mm (10 pieces)</td>
</tr>
</tbody>
</table>

All parts are delivered unsterile and need to be sterilized before use.
## Hard tissue

### cerabone® granules

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Particle Size</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>33174</td>
<td>&lt; 2.0 mm</td>
<td>1 x cancellous ring, Ø 7 mm</td>
</tr>
<tr>
<td>33170</td>
<td>&lt; 2.0 mm</td>
<td>1 x cancellous ring, Ø 7 mm</td>
</tr>
</tbody>
</table>

### cerabone® Block

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Dimension</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1720</td>
<td>20 x 20 x 10 mm</td>
<td>1 x block</td>
</tr>
</tbody>
</table>

### collagen® max

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Shape</th>
<th>Dimension</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>252001</td>
<td>cone</td>
<td>Height 16 mm, width at top - 11 mm, bottom width - 7 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Bundle collagen® max and mucoderm® soft tissue punch**

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>251112</td>
<td>1 x collagen® max, 1 x mucoderm® punch (Ø 10 mm)</td>
</tr>
</tbody>
</table>

## Soft tissue

### Jason® membrane

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Size</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>683520</td>
<td>15 x 20 mm</td>
<td>1 membrane</td>
</tr>
<tr>
<td>693230</td>
<td>20 x 30 mm</td>
<td>1 membrane</td>
</tr>
<tr>
<td>693340</td>
<td>30 x 40 mm</td>
<td>1 membrane</td>
</tr>
</tbody>
</table>

### Jason® fleece

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Size</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>690312</td>
<td>30 x 20 mm</td>
<td>12 Pieces</td>
</tr>
<tr>
<td>690310</td>
<td>50 x 50 mm</td>
<td>10 Pieces</td>
</tr>
</tbody>
</table>

### Jason® G

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Size</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>600612</td>
<td>25 x 25 mm</td>
<td>10 Pieces</td>
</tr>
</tbody>
</table>

## Instruments

### titan pin set

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>440300</td>
<td>titan pin set</td>
</tr>
<tr>
<td>440310</td>
<td>titan pins, 3 mm</td>
</tr>
</tbody>
</table>

### boning fix

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>33010</td>
<td>boning fix</td>
</tr>
</tbody>
</table>

### boning kit

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>33030</td>
<td>1 x osteotome 7 mm</td>
</tr>
<tr>
<td>33040</td>
<td>1 x osteotome 8 mm</td>
</tr>
</tbody>
</table>

### cortico trimmer

<table>
<thead>
<tr>
<th>Art.-No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>34030</td>
<td>cortico-trimmer</td>
</tr>
</tbody>
</table>
Innovation.
Regeneration.
Aesthetics.

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