bone substitutes

tissue t

bone & tissue regeneration



ALLOGRAFTS

maxgraft®

ALLOGRAFT

clinical outcome.

PROCESSED HUMAN

maxgraft[®] is a sterile and safe

allograft product from selected

human organ and tissue donors.

processed by the Cells⁺ Tissue-

bank Austria. The human collagen

is responsible for fast integration

block grafts. The excellent bio-

logical regeneration capability of

maxgraft[®] results in a predictable



cerabone®

THE NATURAL BOVINE **BONE SUBSTITUTE**

cerabone® is a long-term stable, particularly safe bone substitute, which is produced from the femoral material cerabone® with the and water only (free of chemical additives). The human-like bone structure of cerabone® with its three-dimensional pore-network and bioactive surface promotes the adhesion and invasion of bone forming cells resulting in complete integration of the granules into newly formed bone matrix.

PROPERTIES

- 100% pure natural bone mineral
- 1200°C maximum safety
- Human-like bone structure - Rough, hydrophilic surface
- favoring optimal cell adhesion and blood absorption - High volume stability
- Easy handling

INDICATIONS:

IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY: Sinus lift / Horizontal and vertical augmentation / Periodontal bone defects / Peri-implant defects / Socket and ridge preservation / Furcation defects (class I and II)



cerabone[®] **plus** WITH HYALURONATE

cerabone[®] plus combines the established bovine bone grafting heads of cattle by a unique 1200°C well-known properties of hyaluronic manufacturing process utilizing heat acid. cerabone® plus forms a sticky bone material upon hydration that provides unique application comfort and healing as well as flexibility of by allowing both easy uptake and delivery to the site of application.

PROPERTIES

- Osteoconductivity and volume - Natural mineralized collagen stability of cerabone® - Preserved biomechanical + proven properties of hyaluronate properties
- Sticky and malleable following - Osteoconductive properties supporting natural and controlled tissue remodeling
- Efficient defect filling and time-saving application Easy defect contouring
- Minimized displacement of single granules during application

PROPERTIES

hvdration

INDICATIONS:

IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY: Horizontal and vertical augmentation / Peri-implant defects / Periodontal intrabony defects / Socket and ridge preservation / Sinus lift / Furcation defects (class I and II)

Bone augmentation without

autograft harvesting

- No donor site morbidity

- 5 years shelf life at 5-30°C

INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY: **GRANULES:** Localized augmentation of the ridge for future implant placement / Reconstruction of the ridge for prosthetic therapy / Filling of osseous defects, such as extraction sockets / Elevation of maxillary sinus floor / Regeneration of peridontal bone defects / BLOCKS: A highly effective alternative to traditional block grafting / **Ridge augmentation**



maxgraft[®] cortico

ALLOGENIC CORTICAL **STRUTS FOR THE SHELL** TECHNIQUE

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 timeconsuming harvesting and splitting of autologous cortico-cancellous bone blocks



maxgraft[®] bonering

cancellous ring from human donor bone. The ring allows implant placement and bone augmentation in one step. Therefore the ring technique requires no second surgical procedure. It shortens treatment time till full restoration about by months and therefore increases patient acceptance.

maxgraft®

CUSTOMIZED ALLOGENIC BONE BLOCK

maxresorb[®] shows an ideal bone block enables complex homogenous, biphasic, composition the viscous properties of maxresorb® horizontal and vertical augmentation of 60% hydroxyapatite (HA) and by using the latest 3D-CAD/CAM 40% beta-tricalcium phosphate technology. The perfect three-(β-TCP). This composition is dimensional precision fit significantly reflected in the controlled resorption defect, maxresorb[®] inject is a of maxresorb®, which results in an non-hardening and ready to use reduces valuable surgery time, making autologous bone initial integration of the particles harvesting and manual adjustment followed by a continous resorption. unnecessary, thus diminishing the donor-site morbidity.

PROPERTIES

- Osteoconductive properties supporting natural and controlled tissue remodeling
- Preservation of biomechanical properties - High volume stability and

IMPLANTOLOGY, ORAL AND

INDICATIONS:

residual bone height)

PROPERTIES

placement

- One step procedure -

- Reduced surgical and

augmentation and implant

simultaneous bone

IMPLANTOLOGY, ORAL AND CMF SURGERY: Vertical augmentation (in combination / Single tooth gap / Edentulous space maxilla and mandibula / Sinus floor elevation (4 mm - 1 mm

INDICATIONS:

IMPLANTOLOGY, ORAL AND CMF SURGERY: Horizontal and vertical augmentation with low-grade horizontal augmentation) / Extensive bone defects / Atrophic

treatment time - High patient acceptance

PROCESSED ALLOGENIC BONE RING

bonebuilder

maxgraft[®] bonering is a prefabricated The individually designed allogenic

PROPERTIES

- Osteoconductive properties supporting natural and controlled
- tissue remodeling Rough and hydrophilic surface - Preservation of biomechanical - High interconnected porosity
- properties - Sterile without antigenic effects
- Five years shelf life at 5-30°C

resorption protection - Five years shelf life at 5-30°C

INDICATIONS:

CMF SURGERY: Vertical augmentation / Horizontal augmentation / Complex threedimensional augmentations / Single tooth gaps / Fenestration defects

SYNTHETICS



maxresorb[®]

SYNTHETIC BIPHASIC **CALCIUM PHOSPHATE**



maxresorb[®] inject

SYNTHETIC INJECTABLE **BONE PASTE**

Owing to its specific composition, inject allow perfect shaping, molding, fitting and complete bonding to the surrounding bone surface of the bone paste. The syringe design allows direct and easy application to the defect site. Once applied, maxresorb[®] inject is gradually replaced by new bone.

PROPERTIES

- Synthetic and resorbable
- Controlled resorption/remodeling
- 60% HA/40% B-TCP
- Osteoconductive

PROPERTIES

- Non-hardening bone paste
- Synthetic, safe and resorbable
- Easy handling and ready to use
- Viscous and moldable
- Optimal adaptation to surface contours
- Active HA nanoparticles
- Contains maxresorb[®] granules (60% HA/40% β-TCP)

INDICATIONS:

IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY: Sinus lift / Ridge augmentation / Intraosseous defects / Socket preservation / Osseous defects / Furcation defects

INDICATIONS:

IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY: Sinus lift / Intraosseous defects / Socket preservation / Osseous defects / Regeneration of small and contained defects

botiss regeneration system



PRODUCT PORTFOLIO: botiss-DENTAL.com

bone & tissue

regeneration

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PUBLICATIONS & EDUCATION: botiss-CAMPUS.com

regeneration



SYNTHETIC

COLLAGEN



permamem® **HIGH-DENSITY PTFE BARRIER** MEMBRANE

Non-resorbable, biologically inert and biocompatible membrane made of highdensity polytetrafluoroethylene (PTFE). permamem[®] maintains its structural characteristics both during the initial implantation and over the whole healing time. Due to its dense structure the membrane acts as an efficient barrier against bacterial and cellular penetration, and can therefore be used for open healing in certain indications.

PROPERTIES

- 100% synthetic PTFE barrier membrane
- Ultra-thin (~0.08 mm)
- Impervious to bacteria due to dense structure
- Easily removable due to minimal tissue ingrowth into the surface structure
- No need for primary soft tissue closure (indication-dependent)
- Easy recovery thanks to blue color
- Rounded edges for minimal tissue trauma

INDICATIONS:

IMPLANTOLOGY. PERIODONTOLOGY AND ORAL AND CMF SURGERY: Socket and ridge preservation (open healing) / Horizontal and vertical augmentation / Fenestration and dehiscence defects / Intraosseous defects (1 to 3 walls) / Furcation defects (class I and II)



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. It is very thin and provides a naturally long barrier function based on the specific composition and structure of the pericardial collagen fibres. Owing to the preservation of the natural biomechanical properties of the pericardium, Jason[®] membrane exhibits beneficial handling characteristics such as a remarkable tear resistance and effective surface adaptation.

PROPERTIES

- Naturally long barrier function - Multi-directional strength and tear resistance
- No artificial cross-linking
- No stickiness after hydration
- Excellent surface adaptation
- Easy manipulation
- Can be applied dry or wet
- Low thickness, no swelling upon hydration

INDICATIONS:

IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY: Horizontal and vertical augmentation / Ridge reconstruction / Socket and ridge preservation / Sinus lift / Fenestration and dehiscence defects / Intraosseous defects (1 to 3 walls) / Furcation defects (class I and II)

collprotect[®] membrane NATIVE COLLAGEN MEMBRANE

collprotect[®] membrane is a native collagen membrane made of porcine dermis, which is intended for dental bone and soft tissue regeneration. The natural, hemostatic effect of collagen enables early wound stabilization and supports the natural healing. Moreover, the collprotect® membrane displays a good surface adaptation and tissue integration and is ideal for most indications where an intermediate stability and easy handling are required.

PROPERTIES

- Natural compact, open porous collagen structure
- No artificial cross-linking
- Natural rough surface for cell adhesion and migration
- Pores facilitate blood vessel ingrowth and angiogenesis
- Controlled degradation
- Natural collagen supports blot clot formation/wound healing
- Easy application in dry or wet status

INDICATIONS:

IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY: Protection and covering of the Schneiderian membrane / Sinus lift / Socket preservation / Horizontal ridge augmentation / Fenestration and dehiscence defects / Intraosseous defects (1 to 3 walls) / Furcation defects (class I and II)



mucoderm[®] **3D-STABLE SOFT TISSUE** (COLLAGEN) GRAFT

Acellular collagen matrix that offers a safe alternative to autologous soft tissue transplants in a diverse range of soft tissue grafting indications. mucoderm® is derived from porcine dermis that undergoes a multi-step purification process. After implantation mucoderm® is continuously remodeled into patients own soft tissue.

collafleece[®] / collacone[®]

COLLAGEN HEMOSTAT (SPONGE / CONE)

Wet-stable, porcine collagen with highly efficient hemostatic properties. The natural porous collagen structure supports the hemostasis and controls the natural healing of the wound.

PROPERTIES

- Rapid revascularization and tissue integration
- Soft tissue regeneration/augmentation
- avoiding palatal autograft harvesting - Complete remodeling into patient's own
- tissue in ~6-9 months
- Can be easily applied and fixed by sutures - Can be cut into procedure-specific

IMPLANTOLOGY, PERIODONTOLOGY

Recession coverage / Soft tissue grafting in

combination with GBR/GTR / Broadening

of attached gingiva / Closure of extraction

sockets / Thickening of peri-implant soft

tissue / Oral wound coverage after transplant

AND ORAL AND CMF SURGERY:

harvesting or tumour surgery

PROPERTIES

- Stabilization of blood clot and efficient local hemostasis
- Maintains integrity in the presence
- of blood and during application
- Fast resorption (2-4 weeks)
 - Easy application
 - Wound protection
 - Supports wound healing

INDICATIONS:

IMPLANTOLOGY, PERIODONTOLOGY AND CMF SURGERY: Minor oral wounds / Biopsy harvesting sites / Bone block and soft tissue transplant harvesting sites / Extraction sockets / Internal sinus lift

shape



INDICATIONS:



INSTRUMENTS



PROPERTIES

- 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



titan pin set FOR MEMBRANE FIXATION

During the application of modern GBR techniques, barrier membranes are indispensable to achieve 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.

collagen & barriers

soft tissue

bone & tissue regeneration

