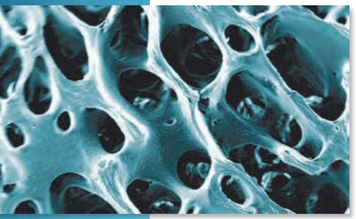
Enzymatic process

Zymo-Teck®: the secret of quality grafts



Bioteck bone substitutes are obtained from equine bone tissue treated with **Zymo-Teck®**. This exclusive proprietary process is based on the utilization of lytic enzymes operating at controlled temperatures. This enables the complete elimination of the antigen components of the tissue, without the mineral phase undergoing any changes. The unmodified bone mineral component is recognized as endogenous by the osteoclasts, thereby allowing for the total remodeling of the graft, which is completely replaced, in physiological time, by new patient vital bone tissue.
The best possible condition for osseointegrated implants.

enzymatic process

beta ray sterilization

safety and **quality**

total **biocompatibility**

complete **remodeling**

BIOTECK®
The science of bone tissue

Bioteck S.p.A.

Headquarters:
Via E. Fermi 49 - 36057 Arcugnano (Vicenza) - Italy
Tel. +39 0444 289366 - fax: +39 0444 285272
info@bioteck.com - www.bioteck.com

Production and R&D Center:
Via G. Agnelli, 3 - 10020 Riva presso Chieri (Turin) – Italy

Headquarters

Bioteck® is an Italian company producing bone substitutes and protective membranes that are successfully used in orthopaedics, neurosurgery, oral and maxillofacial surgery.
Founded in 1995, the company continues to grow constantly and now operates in more than 50 countries around the world. A firm commitment to scientific research forms the basis for the innovative solutions offered by **Bioteck®** products. The company collaborates on numerous national and international research projects, which have driven the basis research and helped in writing important chapters in bone biology.
The in-depth knowledge acquired by **Bioteck®** through its research ensures the absolute quality of its products, which are subjected to strict environmental and quality controls, thereby guaranteeing a product meeting the highest quality and safety standards. **Bioteck®** applies a policy of total transparency, opening up the doors of its Production and R&D Center for the monitoring of its innovative manufacturing process and the intense scientific research carried out by its staff.

Production and R&D Center

concept: mauro fortani - vi cod. Y_BG_CAT_ENG rev. 20160323

Biochemical Laboratory/Quality Control

Quality and safety guarantee

Bioteck manufactures and distributes its bone substitutes and membranes for Maxillofacial and Oral Surgery in more than 50 Countries:

BIO-GEN® - natural osteconductive bone substitutes featuring denatured bone collagen.
BIOCOLLAGEN® - natural collagen membranes, also available as gels, for guided bone regeneration.
HEART® - natural equine pericardium membranes for guided bone regeneration
OSTEOPLANT® - natural osteconductive bone substitutes featuring preserved, native bone collagen.

For more information:

ISO 9001

ISO 13485

BIOTECK®
The science of bone tissue

total biocompatibility

ideal osteoconduction

complete remodeling

natural bone substitutes

bio-gen	granules, gel, putty and blocks
osteoplant	sheets and membranes
biocollagen	gel and membranes
heart	pericardium membranes
DBM	granules, paste and gel

BIOTECK®
The science of bone tissue

Granules

Bio-Gen granules are a total osteoclastic remodeling bone substitute, which can be used for all types of bone defects.

Clinical uses
- recommended for small size, four walls bone defects (cancellous)
- recommended for larger size bone defects (cortical)

Remodeling time:
- 4 - 6 months (cancellous)
- 8 - 12 months (cortical)

BGS-15	*Bio-Gen cancellous granules*	1 btl / 0.5 g ≈ 1 cc	250 – 1000 µm
BGS-05	*Bio-Gen cancellous granules*	6 btl / 0.5 g ≈ 1 cc	500 – 1000 µm
BGS-10	*Bio-Gen cancellous granules*	1 btl / 0.5 g ≈ 1 cc	1000 – 2000 µm
BGS-09	*Bio-Gen cancellous granules*	6 btl / 0.5 g ≈ 1 cc	1000 – 2000 µm
BGS-11	*Bio-Gen cancellous granules*	6 btl / 1 g ≈ 2 cc	1000 – 2000 µm
BGS-23	*Bio-Gen cancellous granules*	6 btl / 1 g ≈ 2 cc	2000 – 3000 µm
BGS-21	*Bio-Gen cancellous granules*	1 btl / 2 g ≈ 4 cc	250 – 1000 µm
BGS-20	*Bio-Gen cancellous granules*	1 btl / 2 g ≈ 4 cc	500 – 1000 µm
BGS-22	*Bio-Gen cancellous granules*	1 btl / 2 g ≈ 4 cc	1000 – 2000 µm
BGC-05	*Bio-Gen cortical granules*	6 btl / 0.5 g ≈ 1 cc	500 – 1000 µm
BGM-10	*Bio-Gen cancellous/cortical granules*	6 btl / 0.25 g ≈ 0.5 cc	500 – 1000 µm
BGM-05	*Bio-Gen cancellous/cortical granules*	6 btl / 0.5 g ≈ 1 cc	500 – 1000 µm
BGM-20	*Bio-Gen cancellous/cortical granules*	1 btl / 2 g ≈ 4 cc	500 – 1000 µm

Gel Granules

Bio-Gen Mix Gel is a mixture consisting of Bio-Gen Mix cortical-cancellous granules and water-based gel. It is extremely practical and easy-to-handle. It can be applied directly in the graft site. Useful for all defect types.

Clinical uses:
- recommended for all types of defect
- excellent for maxillary sinus lift (Summers)
- excellent for very large periodontal defects

Remodeling time:
- 4 - 6 months (cancellous)
- 8 - 12 months (cortical)

BGM-GEL05	*Bio-Gen mix gel cancellous/cortical granules*	3 syr 0.5 ml	500 – 1000 µm
BGM-GEL1	*Bio-Gen mix gel cancellous/cortical granules*	3 syr 1 ml	500 – 1000 µm
BGM-GEL2	*Bio-Gen mix gel cancellous/cortical granules*	1 syr 2 ml	500 – 1000 µm

Demineralized Bone Matrix (DBM)

Bioteck Activagen and Angiostad are osteopromotive bone grafts containing Demineralized Bone Matrix (DBM).
Demineralization process completely exposes type I collagen and organic extracellular matrix, thus enhancing the bone healing process.

Clinical uses: in combination with Bioteck bone substitutes in order to improve the biological conditions favoring bone regeneration

OGS-AC5	*Activagen DBM granules*	3 btl	0.5 cc
OGS-ACM500	*Activagen DBM moldable paste*	3 syr	0.5 ml
OGS-ACM600	*Activagen DBM moldable paste*	3 syr	1 ml
OGS-GEL1	*Angiostad DBM gel*	3 syr	1 ml

Putty

Bio-Gen Putty is a moldable paste made of cancellous Bio-Gen granules and collagen from Achilles' tendon. It's easily moldable, hemostatic and sticks well to bone walls.

Clinical uses:
- recommended for small size, four walls bone defects
- excellent for post-extractive sockets

Remodeling time:
- 4 - 6 months

BGP-01	*Bio-Gen Putty dry (lyophilized) bone paste*	6 btl	0.5 cc

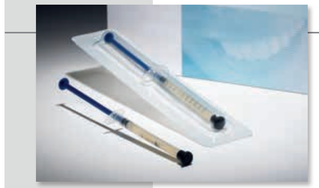
Collagen Membranes

Biocollagen is a membrane made of Achilles' tendon collagen for guided bone regeneration. Its protection time is 4-6 weeks, therefore it is indicated to cover small grafted sites only.

Clinical uses:
- to protect small grafted sites
- to stabilize granular grafts

Protection time:
- 4 - 6 weeks

BCG-02	*Biocollagen collagen membrane*	6 btl	15 x 20 x 0.2 mm
BCG-01	*Biocollagen collagen membrane*	6 btl	25 x 25 x 0.2 mm
BCG-04	*Biocollagen collagen membrane*	1 pc	40 x 30 x 0.2 mm



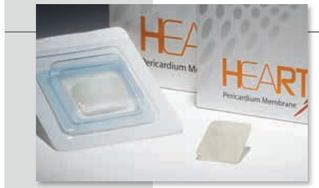
Collagen Gel

Biocollagen Gel is a resorbable collagen gel, made of collagen from natural Achilles' tendon and water-based gel. It may be used in place of traditional collagen membranes to protect small periodontal defects. It works as a hemostatic and is extremely easy-to-handle.

Clinical uses:
- to protect small peri-implant grafted sites (less than 3 threads exposed)
- to protect small periodontal grafted sites

Protection time:
- 4 - 6 weeks

BCG-GEL1	*Biocollagen Gel collagen gel*	3 syr 1 ml	



Heart Pericardium Membranes

The Heart membranes are obtained from natural pericardium. They still feature the native tridimensional structure of pericardium. Therefore, they are long lasting and resistant to suturing. Because of the their long protection time, Heart membranes are the ideal choice for the majority of surgeries.

Clinical uses:
- protection of medium to large bone grafts

Protection time:
- 3 - 4 months

HRT-003	*Heart pericardium membrane*	2 pc	15 x 20 x 0.2 mm
HRT-001	*Heart pericardium membrane*	1 pc	30 x 25 x 0.2 mm
HRT-002	*Heart pericardium membrane*	1 pc	50 x 30 x 0.2 mm

natural bone substitutes

Cortical Membranes

Osteoplant Cortical Membrane is a flexible cortical bone sheet that works as a long lasting (> 6 months) resorbable membrane.

Clinical uses:
- to protect grafted sites where regeneration is expected to be slow (horizontal and vertical augmentation)
- to maintain bone profiles (vestibular ridge reconstruction)

Protection time:
- 6 months (protection)
- 8 - 14 months (total remodeling)

OTC-CE	*Osteoplant cortical membrane*	1 pc	25 x 25 x 0.2 mm
OTC-CE2	*Osteoplant cortical membrane*	1 pc	50 x 25 x 0.2 mm

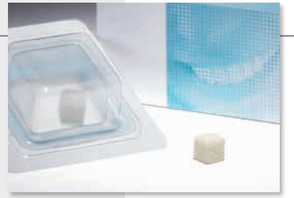
Cancellous or Cortical Flex Sheets

Osteoplant Flex devices are flexible, easy-to-handle, cortical or cancellous bone sheets. Given their flexibility, they adapt perfectly to the receiving site minimizing the risk of defective angiogenesis.
They need fixation with screws or similar devices.

Clinical uses:
- vertical ridge augmentation with concomitant implant placement (cortical sheet)
- horizontal ridge augmentation (cancellous sheet)
- sinus lift, to protect the Schneider membrane (Tulasne technique)

Remodeling time:
- 4 - 6 months (cancellous)
- 8 - 12 months (cortical)

OTC-C1	*Osteoplant flex cortical sheets*	1 pc	25 x 25 x 2-2.5 mm
OTC-S1	*Osteoplant flex cancellous sheets*	1 pc	25 x 25 x 3 mm



Cancellous Blocks

Bio-Gen cancellous blocks are tough, rigid blocks. They feature the same mechanical resistance to compression and elastic deformation of natural bone. They can be shaped with rotating instruments, or drilled, without breaking. They have to be fixed in place with screws or similar.

Clinical uses:
- horizontal or vertical/horizontal ridge augmentation (onlay) upper jaw only
- inlay grafts

Remodeling time:
- 6 - 8 months

BGB-11	*Bio-Gen cancellous block*	1 pc	10 x 10 x 10 mm
BGB-12	*Bio-Gen cancellous block*	1 pc	10 x 10 x 20 mm
BGB-30	*Bio-Gen cancellous wedge*	1 pc	25 x 10 x 5 mm (final 2 mm)