

GTR

CENTURY

CENTURY-GTR
GUIDED TISSUE REGENERATION

The Structure of Regeneration

Nano-structured bio-mimetic hydroxyapatite

The C-Bone synthetic bone substitutes line is based on bio-mimetic and nano-structured hydroxyapatite. C-Bone hydroxyapatite is a calcium phosphate biomaterial that is very similar to the human bone structure, composition and size of nano-crystals. The Ca/P ratio of 1.67 is almost identical to that of human bone apatite. C-Bone is available in 4 different formats: dense granules, porous chips, injectable paste and moldable crunch, in a wide range of sizes.

C-Bone is a bio-mimetic bone substitute. Its high surface/volume ratio makes it an ideal scaffold for osteointegration and regeneration of bone defects. The highly porous and interconnected structure is ideally osteoconductive, promoting cellular colonization, nutrient exchange and an early vascularization.

Thanks to specific composition and nano-metric dimension of composing crystals, C-Bone bone substitutes are completely degraded by osteoclastic activity and physiologically remodeled into new vital bone tissue.

- Complete biocompatibility
- Highly porous and interconnected structure to support optimal osteoconduction
- High surface/volume ratio for a better biological response
- Excellent chemical-physical stability
- Complete remodeling in physiological times

C-BONE



Porous granules of nano-structured HA, with an irregular shape similar to cancellous bone chips, with 500-1000 µm and 1-2 mm granulometry in different volumes and in single or multiple packs. Also available in filter cap syringes.

C-Bone Porous Granules

CBO-P0501	HA porous granules	(0.5-1 mm)	0.5cc-0.4 gr	1 bottle/box
CBO-P0506	HA porous granules	(0.5-1 mm)	0.5cc-0.4 gr	6 bottles/box
CBO-P1001	HA porous granules	(0.5-1 mm)	1cc-0.75 gr	1 bottle/box
CBO-P1006	HA porous granules	(0.5-1 mm)	1cc-0.75 gr	6 bottles/box
CBO-P20101	HA porous chips	(1 -2 mm)	1cc-0.75 gr	1 bottle/box
CBO-P20201	HA porous chips	(1 -2 mm)	2cc-1.50 gr	1 bottle/box
CBO-P20501	HA porous chips	(1 -2 mm)	5cc-3.75 gr	1 bottle/box
CBO-P050S1	HA porous granules in a syringe with filter cap	(0.5-1 mm) 0.5 cc		1 syringe/box
CBO-P050S3	HA porous granules in a syringe with filter cap	(0.5-1 mm) 0.5 cc		3 syringes/box

Indication: Filling of small and medium-size bone defects, maxillary sinus lifts, peri-implant defects, and post-extraction sockets

Resorbtion time: 6-8 months



Dense granules of nano-structured HA, with regular spherical shape with 500-1000 µm and 1-2 mm granulometry, in different volumes and in single or multiple packs.

C-Bone Dense Granules

CBO-D0501	HA dense granules	(0.5-1 mm)	0.5cc-0.4 gr	1 bottle/box
CBO-D0506	HA dense granules	(0.5-1 mm)	0.5cc-0.4 gr	6 bottles/box
CBO-D1001	HA dense granules	(0.5-1 mm)	1cc-0.75 gr	1 bottle/box
CBO-D1006	HA dense granules	(0.5-1 mm)	1cc-0.75 gr	6 bottles/box
CBO-D2001	HA dense granules	(0.5-1 mm)	2cc-1.50 gr	1 bottle/box
CBO-D20201	HA dense granules	(1 -2 mm)	2cc-1.50 gr	1 bottle/box

Indication: Filling of small and medium-size bone defects, maxillary sinus lifts, peri-implant defects, and post-extraction sockets

Resorbtion time: 12-14 months



Macro-porosity
200-500 μm

Micro-porosity
2-3 μm

Nano-porosity
40-80 nm

GUIDED TISSUE REGENE- RATION

C-MEMBRANE

The Natural Shield

Collagen membrane for GTR

C-Membrane is an absorbable membrane used for shielding the implantation site from soft tissue infiltration, avoiding interference of non-osteogenic tissues with bone regeneration. It is made from highly pure type I atelocollagen of equine origin. It can be easily placed in site after bone grafting and requires no fixation. Its 3 dimensional structure adapts to the bone graft surface and provides a natural shield. It is consequently re-absorbed in about 4-6 weeks.

C-Membrane RS

C-Membrane RS presents a rough side characterized by less compact fibers with an increased surface area. Once positioned with the rough side in direct contact with the recipient's bone and the graft, it guarantees greater stability of the latter and of the membrane itself.

- Small post-extractive socket protection
- Sinus bone access coverage in sinus lift procedures
- Protection of peri-implant bone defects
- Closure of small tears of the sinus membrane
- Restoration of small bone dehiscences

■ 4 to 6 weeks protection time

■ Equine type I atelocollagen

■ Totally safe and biocompatible

■ Easy to apply

■ Fully absorbable



C-MEMBRANE

C-Membrane offers a wide range of different formats of collagen membranes, available in single and multiple packages.

Collagen Membranes

CTM-15201	15 x 20 x 0.2 mm	1 pc
CTM-15206	15 x 20 x 0.2 mm	6 pcs
CTM-152010	15 x 20 x 0.2 mm	10 pcs
CTM-20201	20 x 20 x 0.2 mm	1 pc
CTM-20206	20 x 20 x 0.2 mm	6 pcs
CTM-202010	20 x 20 x 0.2 mm	10 pcs
CTM-25251	25 x 25 x 0.2 mm	1 pc
CTM-25256	25 x 25 x 0.2 mm	6 pcs
CTM-252510	25 x 25 x 0.2 mm	10 pcs
CTM-20301	20 x 30 x 0.2 mm	1 pc
CTM-20306	20 x 30 x 0.2 mm	6 pcs
CTM-30401	30 x 40 x 0.2 mm	1 pc

Indication: Protection of peri-implant bone defects | Closure of small tears of the sinus membrane | Restoration of small bone dehiscences | Post-extractive socket protection | Sinus bone access coverage in sinus lift procedures

Resorbtion time: 6-8 weeks

Protection time: 4-6 weeks



Collagen Membranes RS (Rough Side)

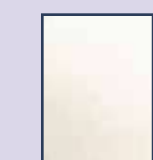
CTM-2020RS	20 x 20 x 0.2 mm	1 pc
CTM-2525RS	25 x 25 x 0.2 mm	1 pc
CTM-3040RS	30 x 40 x 0.2 mm	1 pc

Indication: Protection of peri-implant bone defects | Closure of small tears of the sinus membrane | Restoration of small bone dehiscences | Post-extractive socket protection | Sinus bone access coverage in sinus lift procedures

Resorbtion time: 6-8 weeks

Protection time: 4-6 weeks

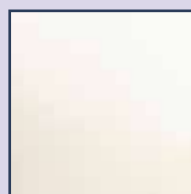
1:1 Scale drawings



15 x 20 x 0.2 mm



20 x 20 x 0.2 mm



25 x 25 x 0.2 mm



20 x 30 x 0.2 mm



30 x 40 x 0.2 mm



The Natural Biocompatibility

Natural bone substitutes

C-Bone X is the line of natural bone substitutes of equine origin developed through the EstRem process (Esterification Cell-Removal Technology).

This innovative “tissue processing” allows to obtain totally biocompatible grafts, belonging to the C-Bone X *MATRIX* configuration, whose bone matrix is fully preserved in its organic and inorganic components, to be used as scaffolds with optimal osteoconductive characteristics.

The grafts of the C-Bone X *DEM* configuration are instead obtained following an additional phase of controlled demineralization: while maintaining the three-dimensional osteoconductive structure typical of bone matrices, they are extremely flexible and able to adapt easily even to bone defects with curvilinear profiles and surfaces.

Finally, C-Bone X *APATITE* – made of pure natural hydroxyapatite – is obtained through a further process of controlled thermocatalysis. Its excellent osteoconductive properties allow the formation of new vascularized bone tissue between the spaces of its porous structure and the intergranular ones, allowing a rapid and complete osseointegration of the grafts.

C-Bone X MATRIX

- Respect for the biological and biomechanical characteristics of bone tissue
- Natural scaffold for optimal osteoconduction
- Complete remodeling in physiological modalities and times
- Wide range of granular bone grafts and cancellous bone blocks

C-Bone X MATRIX is the line of natural bone substitutes of equine origin with a fully preserved extra-cellular matrix, produced using the patented EstRem process which guarantees the highest safety and biocompatibility profile, preserving all the biological and bio-mechanical characteristics functional for tissue regeneration.

Indication: Treatment of periodontal and peri-implant defects; preservation of the post-extraction socket; small and large sinus lifts; horizontal and vertical ridge increases.



C-Bone X MATRIX Block

CXM-SB1020F1 C-Bone X MATRIX cancellous block 10 x 20 x 6 mm 1 pc

Resorbtion time: 4-6 months with a complete remodeling in 8-12 months

Once rehydrated, the block can be milled, drilled and then fixed with screws.



MATRIX cancellous granules with 250-1000 μm granulometry, available in different volumes and in single or multiple packs.

C-Bone X MATRIX Cancellous Granules (0.25-1 mm)

CXM-S011	MATRIX cancellous granules	(0.25-1 mm)	1.0 cc	1 bottle/box
CXM-S016	MATRIX cancellous granules	(0.25-1 mm)	1.0 cc	6 bottles/box
CXM-S021	MATRIX cancellous granules	(0.25-1 mm)	2.0 cc	1 bottle/box
CXM-S026	MATRIX cancellous granules	(0.25-1 mm)	2.0 cc	6 bottles/box
CXM-S041	MATRIX cancellous granules	(0.25-1 mm)	4.0 cc	1 bottle/box

Resorbtion time: 4-6 months



MATRIX cancellous granules with 250-1000 μm granulometry in syringe, available in single or multiple packs.

C-Bone X MATRIX Cancellous Granules in filter cap syringe

CXM-S001S	MATRIX cancellous granules in filter cap syr. (0.25-1 mm) 0.5 cc	1 syringe/box
CXM-S003S	MATRIX cancellous granules in filter cap syr. (0.25-1 mm) 0.5 cc	3 syringes/box

Resorbtion time: 4-6 months



MATRIX cortical granules with 250-1000 μm granulometry, available in different volumes and in single or multiple packs.

C-Bone X MATRIX Cortical Granules (0.25-1 mm)

CXM-C011	MATRIX cortical granules	(0.25-1 mm)	1.0 cc	1 bottle/box
CXM-C016	MATRIX cortical granules	(0.25-1 mm)	1.0 cc	6 bottles/box

Resorbtion time: 8-12 months



MATRIX Mix granules with 250-1000 μm granulometry, available in different volumes and in single or multiple packs.

C-Bone X MATRIX Mix Granules (0.25-1 mm)

CXM-M001	MATRIX Mix granules	(0.25-1 mm)	0.5 cc	1 bottle/box
CXM-M006	MATRIX Mix granules	(0.25-1 mm)	0.5 cc	6 bottles/box
CXM-M011	MATRIX Mix granules	(0.25-1 mm)	1.0 cc	1 bottle/box
CXM-M016	MATRIX Mix granules	(0.25-1 mm)	1.0 cc	6 bottles/box

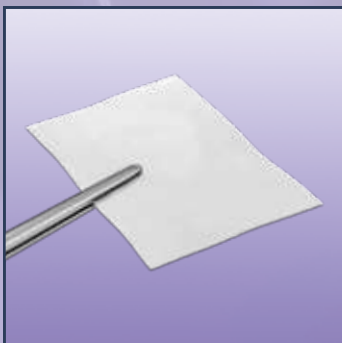
Resorbtion time: 8-12 months

C-Bone X DEM

- Collagen matrix preserved and unaltered
- Flexible grafts thanks to the controlled demineralization process
- Accelerated osseointegration
- Promotes cell adhesion and healing of the bone defect
- Complete remodeling in physiological modalities and times

The C-Bone X DEM grafts have a structure that facilitates cell adhesion and accelerates the osseointegration process, as well as being extremely flexible and able to easily adapt even to bone defects with curved profiles and surfaces.

Indication: Alveolar ridge preservation; sinus lift with vestibular access; horizontal ridge increases; vertical ridge augmentation with implant placement.



C-Bone X DEM Cortical Membrane

CXD-CM2525A1 25 x 25 x 0.2 mm 1 pc

CXD-CM2525A3 25 x 25 x 0.2 mm 3 pcs

Demineralized cortical membrane for long-lasting protection in the reconstruction of severe bone defects. Once rehydrated it can be folded to conform to the implant site. The membrane needs fixation.

Protection time: 6 months

C-Bone X APATITE

- Elimination of all organic components
- Preservation of only the bone mineral in the form of natural hydroxyapatite
- Completely safe and biocompatible fabric
- Excellent osteoconduction and maintenance of the implant volume
- Excellent bone integration, slow resorption and long stay in the implant site

C-Bone X APATITE is indicated in all those cases where the resorption of the graft is to be limited or delayed to maintain its volume over time in a stable manner.

Indication: Filling of small and medium-size bone defects, maxillary sinus lifts, peri-implant defects, and post-extraction sockets



Apatite cancellous granules with 250-1000 µm granulometry, available in different volumes and in single or multiple packs.

C-Bone X APATITE Cancellous Granules (0.25-1 mm)

CXA-S001	APATITE cancellous granules	(0.25-1 mm)	0.5 cc	1 pc
CXA-S006	APATITE cancellous granules	(0.25-1 mm)	0.5 cc	6 pcs
CXA-S011	APATITE cancellous granules	(0.25-1 mm)	1.0 cc	1 pc
CXA-S016	APATITE cancellous granules	(0.25-1 mm)	1.0 cc	6 pcs
CXA-S021	APATITE cancellous granules	(0.25-1 mm)	2.0 cc	1 pc
CXA-S026	APATITE cancellous granules	(0.25-1 mm)	2.0 cc	6 pcs
CXA-S041	APATITE cancellous granules	(0.25-1 mm)	4.0 cc	1 pc

Resorbtion time: > 12 months

English version



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#ScienceMeetsPassion

C-TECH
CENTURY IMPLANT TECHNOLOGIES

Via Cesare Battisti n. 2 - 40123, Bologna - ITALY
Tel. +39 051 6661817 - info@c-tech-implant.com
www.c-tech-implant.com

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c-tech-implant.com

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