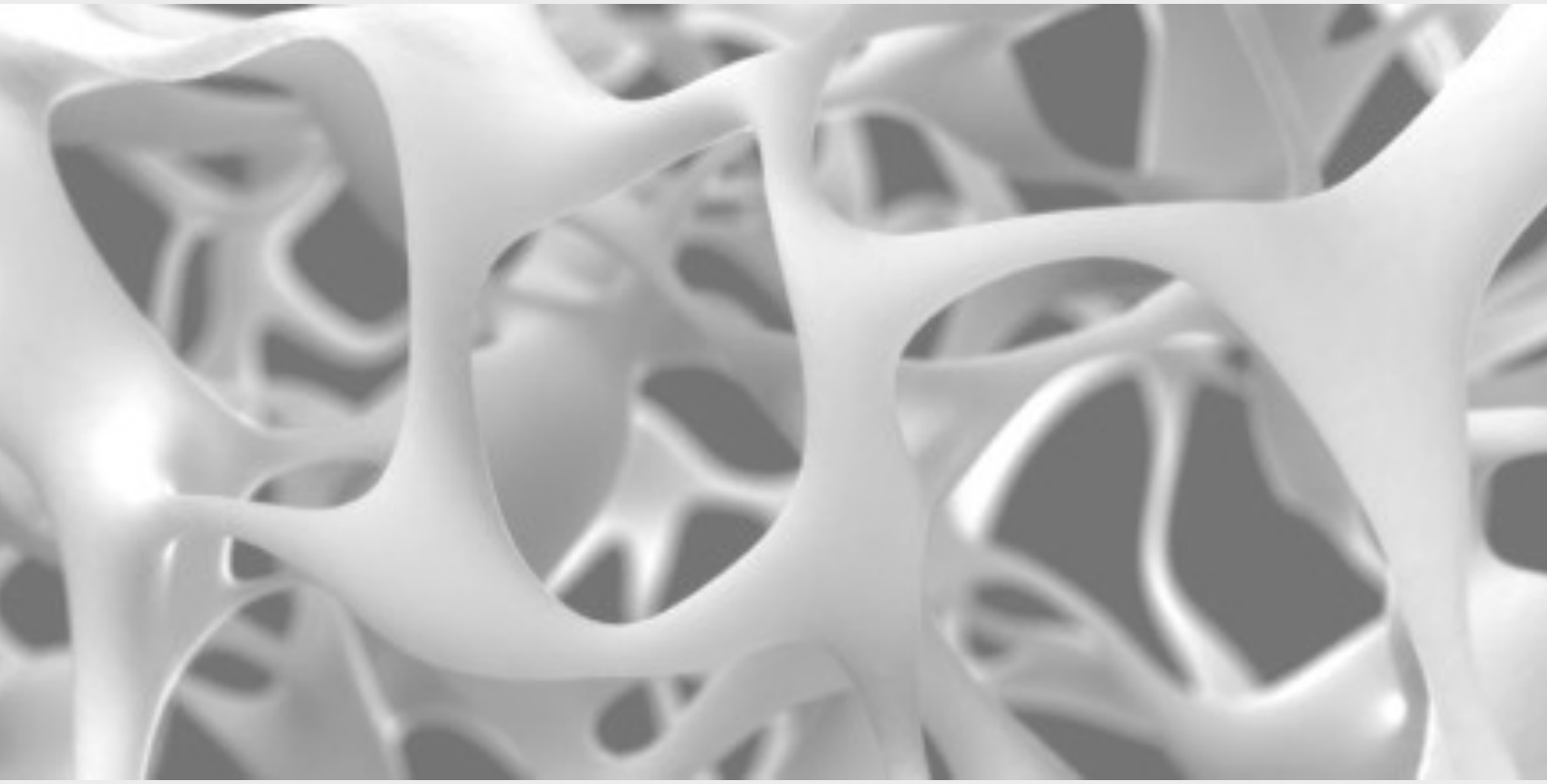
BIOPLANT
bone tissues

MAGGI Biotechnology



BONE TISSUE

TECHNOLOGY AND EXPERIENCE

Natural bone tissue of equine origin

Preserved bone scaffold [1,2]

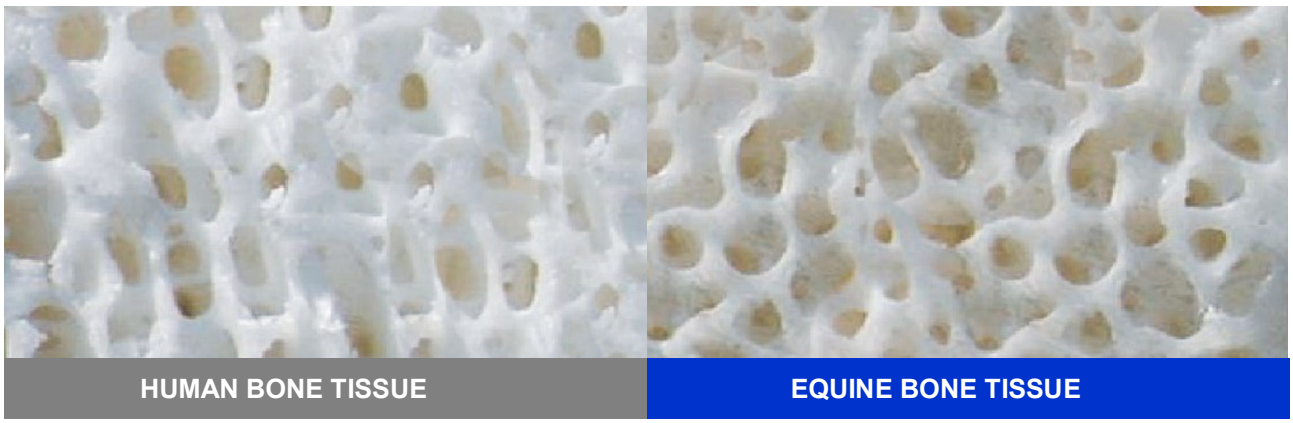
Maggi srl has been operating since 1995 in the field of deantigenization of equine bone tissues. This kind of material is increasingly used in the field of bone regeneration supported by numerous Education [3,4]

It has a structure with morphology and chemical composition identical to human bone tissue [5]. In the portion of the equine femur used to obtain the raw material bone morphology is comparable to human morphology.

There are no diseases communicable between equine and human.

Enzymatic based deangenization which allows to maintain intact the microstructure[6] of the bone crystal ensuring rapid osteoitegration and resorption times physiological within 12 months.

The raw material derives from equines of Spanish origin intended for food consumption human and controlled by the veterinary system and by the competent health authority.
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HUMAN BONE TISSUE | EQUINE BONE TISSUE

1 Hutmacher D.W, Schantz JT, Lam CX, Tan KC, Lim TC (2007). State of the art and future directions of scaffold-based bone engineering from a biomaterials perspective. J Tissue Eng Regen Med; 1(4): 245-60.

2 Al Ruhaimi, K. A. (2001). Bone graft substitutes: a comparative qualitative histologic review of current osteoconductive grafting materials. International Journal of Oral & Maxillofacial Implants, 16(1).

3 Nevins, M., Cappetta, E. G., Cullum, D., Khang, W., Misch, C., Ricchetti, P., ... & Kim, D. M. (2014). Socket preservation procedure with equine bone mineral: a case series. International Journal of Periodontics & Restorative Dentistry, 34.

4 Di Stefano, D. A., Greco, G. B., & Riboli, F. (2016). Guided Bone Regeneration of an Atrophic Mandible with a Heterologous Bone Block. Craniomaxillofacial Trauma and Reconstruction, 9(01), 088-093.

5 Hillier, M. L., & Bell, L. S. (2007). Differentiating human bone from animal bone: a review of histological methods. Journal of forensic sciences, 52(2), 249-263.).

6 Bedini, R., Meleo, D., Pecci, R., & Pacifici, L. (2008). The use of microtomography in bone tissue and biomaterial three-dimensional analysis.Annali dell'Istituto superiore di sanità, 45(2), 178-184.

BIOPLANT

LYOPHILIZED GRANULAR BONE TISSUE

- Natural bone tissue containing native collagen
- Easy to position thanks to its high hydrophilicity
- Re-absorbable in a period ranging from 6 to 12 months
- °C Deantigenated by enzymatic system at 37 ° C
- β Sterilized with beta rays
- Can be stored at room temperature for 5 years



Product description	Granule size	Volume	Reference
Cancellous granulate	**3 - 4 mm.**	**5 cc.**	**OTG-05**
		10 cc.	**OTG-10**
		20 cc.	**OTG-20**
		30 cc.	**OTG-30**
		50 cc.	**OTG-50**
		100 cc.	**OTG-100**

7 AN ENZYMATIC DEANTIGENATION PROCESS ALLOWS ACHIEVING PHYSIOLOGICAL REMODELING AND EVEN OSTEOPROMOTING BONE GRAFTING MATERIALSS. Pagnutti, S. Maggi, D. A. Di Stefano, M. Ludovichetti

BIOPLANT BLOCK

BONE FABRIC IN SPONGIOSO BLOCK

Natural bone tissue containing native collagen

After rehydration it becomes easily manipulated (milling, cutting etc.)

Absorbable in a period ranging from 8 to 12 months

It can be fixed with screws without pre-drilling

°C Deantigenated by enzymatic system at 37 ° C

β Sterilized with beta rays

Can be stored at room temperature for 5 years



Product description	Dimension	Volume	Reference
Bioplant cancellous block	**10 x 10 x 20 mm.**	**2 cc.**	**OST-01B**
	20 x 20 x 10 mm.	**4 cc.**	**OST-01**
	50 x 40 x 5 mm.	**10 cc.**	**OST-02**
	40 x 30 x 10 mm.	**12 cc.**	**OST-02B**
	50 x 40 x 10 mm.	**20 cc.**	**OST-03**
	20 x 15 x 8 mm.	**2,4 cc.**	**OST-01D**
Bioplant cancellous Cylinder	⌀ **9 x 20 mm.**		**OST-19**
	⌀ **11 x 20 mm.**		**OST-20**

BIOPLANT FEMORAL HALF HEAD

CANCELLOUS BONE TISSUE

- Natural bone tissue containing native collagen
- After rehydration it becomes easily manipulated (milling, cutting etc.)
- Absorbable in a period ranging from 8 to 12 months
- It can be fixed with screws without pre-drilling
- °C Deantigenated by enzymatic system at 37 ° C
- β Sterilized with beta rays
- Can be stored at room temperature for 5 years





Product description	Dimension	Reference
Bioplant	**∅ 60 x 20 mm.**	**OST-04**
Bioplant Elasta *	**∅ 65 x 7 mm.**	**OST-FS7**

* The bone tissues of the Elasta series after rehydration (5 - 7 minutes) take on the consistency of a rubber sheet.

The mat under the cup was cut into discontinuous concentric circles to adapt to the cup without forming folds.

BIOPLANT WEDGE

CANCELLOUS BONE TISSUE

- Natural bone tissue containing native collagen
- After rehydration it becomes easily manipulated (milling, cutting etc.)
- Absorbable in a period ranging from 8 to 12 months
- It can be fixed with screws without pre-drilling
- °C Deantigenated by enzymatic system at 37 ° C
- β Sterilized with beta rays
- Can be stored at room temperature for 5 years





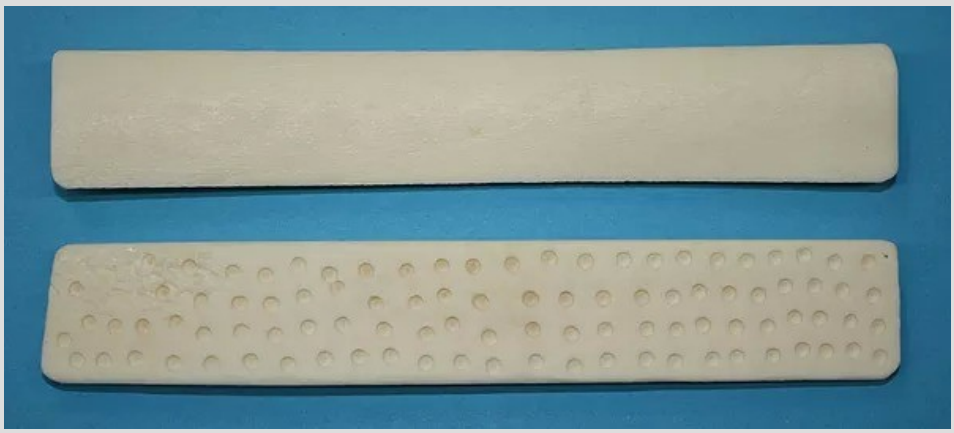
Cancellous wedge for plaque

Product description	Dimension	Volume	Reference
Cancellous wedge	**40 x 30 x 10 mm.**	**6 cc.**	**OST-05**
	40 x 30 x 15 mm.	**9 cc.**	**OST-05B**
	50 x 40 x 10 mm.	**10 cc.**	**OST-06**
	50 x 40 x 15 mm.	**15 cc.**	**OST-06B**
	50 x 20 x 20 mm.	**10 cc.**	**OST-07**
Cancellous wedge for plaque	**50 x 40 x 7,5 mm.**	**7,5 cc.**	**OST-75P**
	50 x 40 x 10 mm.	**10 cc.**	**OST-10P**
	50 x 40 x 12,5 mm.	**12,5cc.**	**OST-125P**

BIOPLANT CORTICAL SPLINT

CORTICAL BONE TISSUE

- Natural bone tissue containing native collagen
- After rehydration it becomes manipulable (milling, cutting etc.)
- Not reabsorbable
- Secure by cerclage
- °C — Deantigenated by enzymatic system at 37 ° C
- β — Sterilized with beta rays
- Can be stored at room temperature for 5 years



Product description	Dimension	Volume	Reference
Cortical splint	**80 x 20 x 6 mm.**	**9,6 cc.**	**OST-08**
	100 x 20 x 6 mm.	**12 cc.**	**OST-09**
	120 x 20 x 6 mm.	**14,4 cc.**	**OST-10**
	150 x 20 x 6 mm.	**18 cc.**	**OST-15**
	220 x 20 x 6 mm.	**26,4 cc.**	**OST-22**

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www.maggiortopedia.com

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