



Biomatlante
Biologics Solutions

eXpert in bone regeneration

In'Oss™

MBCP™ Technology

Moldable Synthetic Bone Graft

Microporous Resorbable

Biphasic Calcium Phosphate





Moldable Synthetic Bone Graft

Microporous Resorbable Biphasic Calcium Phosphate

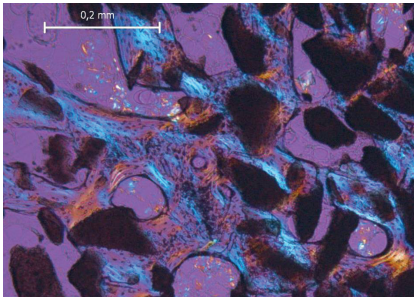
In'Oss™ is a moldable bone graft, made of MBCP™ Technology.

Developped to improve clinician handling during bone grafting procedures, In'Oss™ can fit to the different size and shape of the grafting sites.

In'Oss™, is an optimal balance between MBCP™ micro granules and an absorbable hydrogel, acting as a carrier for rapid vascularization and mineralization.

In'Oss™ preserves the original graft shape and bone volume. It is gradually absorbed within a few months and is replaced by vital architected bone.

In'Oss™ is ready to use and avoid the hydratation and manipulation phases.



4 months bone remodelling with haversian system - Goat model

Unique Concept for Bone Augmentation

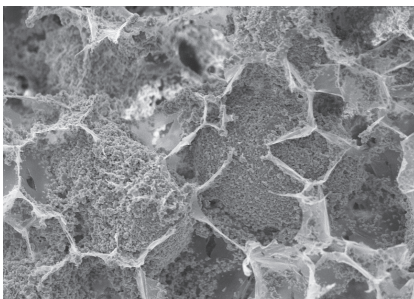
In'Oss™ is an interconnected microporous structure.

Hydrogel creates larges spaces between MBCP™ microporous particles to form extra spaces for cells spreading and fluids diffusion.

In'Oss™ chemistry encourages the rapid formation of natural bone and the growth of capillary blood vessels throughout matrix.

These materials have been shown to be perfectly biocompatible and absorbable.

Moldable / Ready to use / Volume stable / Osteoconductive



Interconnected structure between the microporous granules and hydrogel

Ready to use

In'Oss™ is supplied in sterile syringe ready to use. No pre-mixing is required with blood or saline solution. In'Oss™ plasticity conforms to bone defect.

Safe

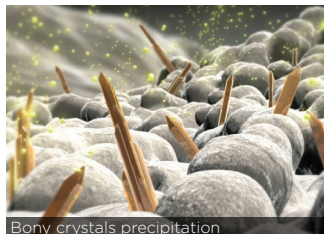
In'Oss™ Putty is safe and has excellent biocompatibility.

MBCP™ Bone Graft Particles have been the topic of extensive clinical studies over the last 30 years with clinical results comparable to Autologous Bone.

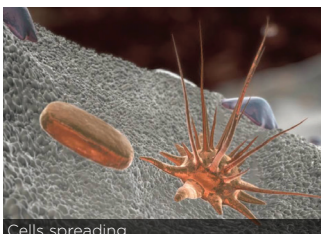
Easy & Fast



In'Oss™ placement



Bony crystals precipitation

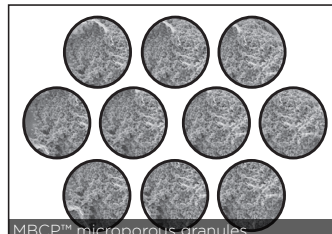


Cells spreading

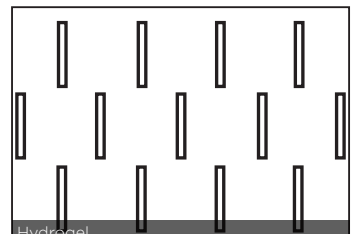


Architected bone growth at the expense of the bone graft

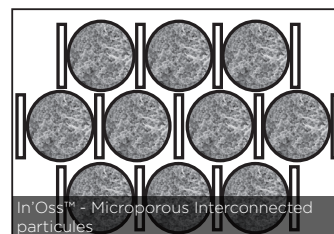
Concept



MBCP™ microporous granules



Hydrogel

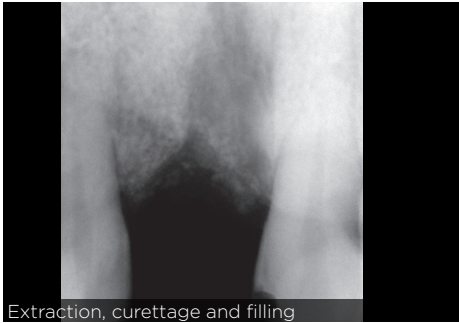


In'Oss™ - Microporous Interconnected particles

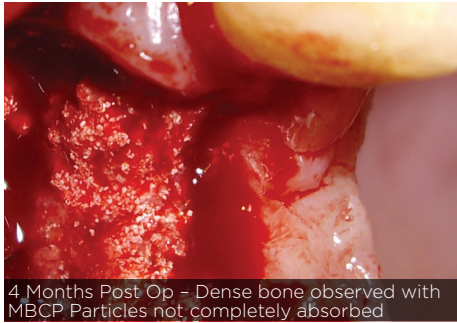
Complete and progressive vital bone regeneration

Scaffold of choice for Alveolar Regeneration *

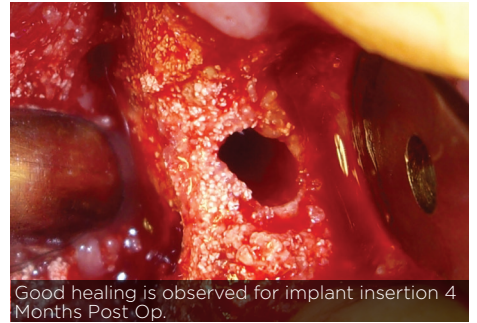
Alveolar Regeneration with implant placement



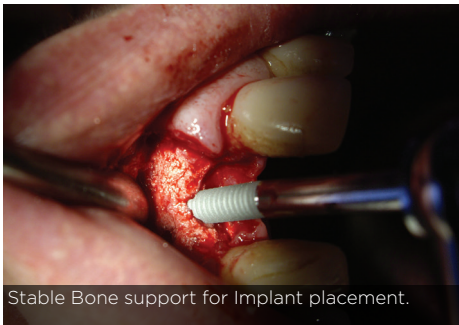
Extraction, curettage and filling



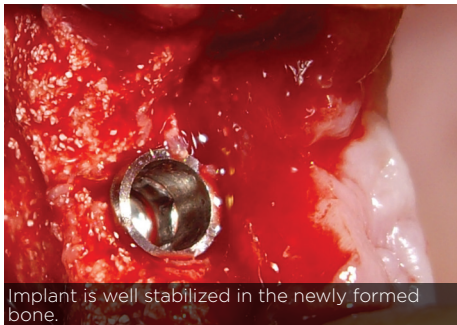
4 Months Post Op - Dense bone observed with MBCP Particles not completely absorbed



Good healing is observed for implant insertion 4 Months Post Op.



Stable Bone support for Implant placement.



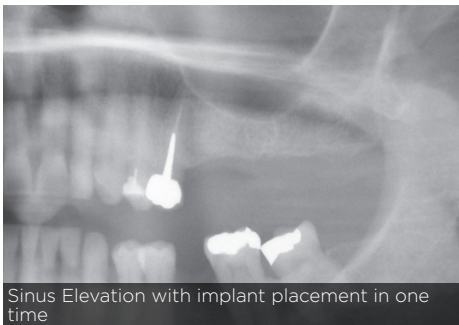
Implant is well stabilized in the newly formed bone.



Control X-Ray showing the bone volume obtained.

Scaffold of choice for Sinus Augmentation *

Sinus Augmentation with In'Oss™



Sinus Elevation with implant placement in one time



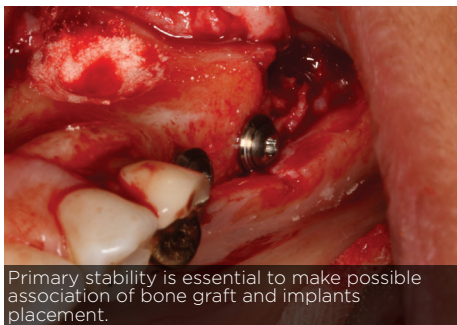
Bone window



Sinus filled with In'Oss™



Implants Placement



Primary stability is essential to make possible association of bone graft and implants placement.



4 Months - Control X-Ray showing the bone volume obtained.

How to use it



Remove the blister from the sterile pouch.

In'Oss™ does not necessitate any mixing prior to placement. It is dispensed in a pre-mixed state and can be placed directly into the defect site from the syringe. It can also be used as a graft extender mixed with Allograft/Autograft.



In'Oss™ is not an hardening bone graft, complete closure with membrane or good sutures is recommended during healing time.

ISO 13485
Read the Instructions for use
Medical Device: Class III

Biomatlante Therapeutical Solutions

Option 1 : ●●● Option 2 : ●● Association : ●

| MBCP+™ Osteogenic Granules S 0.5-1mm | MBCP+™ Osteogenic Granules L 1-2mm | MBCP™ Gel Micro Granules | In'Oss™ Putty | EZ Cure™ Membrane |
|---|---|-----------------------------|------------------|----------------------|
|---|---|-----------------------------|------------------|----------------------|

IMPLANTOLOGY

| | | | | |
|--|-----------|-----|-----------|--------|
| Sinus lift Augmentation In 2 steps - Minimum Crest Hight < 4-5mm In 1 step - Minimum Crest Hight < 5mm with primary stability | ●●● | | ●● ●●● | ● ● |
| Vertical Ridge Augmentation | | ●●● | ●●● | ● |
| Horizontal Alveolar Ridge Augmentation | ●● | ●●● | ●●● | ● |
| Alveolar regeneration - Extraction socket Without implant placement With implant placement | ●●● ●● | | ●● ●●● | ● ● |

PERIODONTOLOGY

| | | | | | |
|----------------------|----|--|-----|----|---|
| Infra-osseus pockets | ●● | | ●●● | ●● | ● |
| Furcations | | | ●●● | ●● | ● |

OTHERS

| | | | | | |
|--------------------|----|-----|--|--|--|
| Autograft Extender | ●● | ●●● | | | |
|--------------------|----|-----|--|--|--|

References

- The safety and efficacy of an injectable bone substitute in dental sockets demonstrated in a human clinical trial. Weiss P., Layrolle P., Clergeau LP., Enckel B., Pilet P., Amouriq Y., Daculsi G., Giumelli B., Biomaterials. 2007 Aug;28(22):3295-305.
- Maxillary Sinus Bone Grafting with an Injectable Bone Substitute: a Sheep Study, A. Saffarzadeh, O. Gauthier, and al., Key Engineering Materials Vols. 254-256 (2004) pp. 193-196
- Tricalcium phosphate/hydroxyapatite biphasic calcium phosphate (BCP) bioceramics , in Bioceramics and theirs clinical applications, Daculsi G., LeGeros R., T. Kokubo editor, Woodhead publishing, 2008, pp 395-4242
- A New Injectable Bone Substitute Concept (MBCP Gel ™): First Clinical Results in Human Maxillo-Facial Surgery, Pierre Weiss, Léon Philippe Clergeau, Bénédicte Enckel, Yves Amouriq, Bernard Giumelli, Alain Jean and Guy Daculsi, Key Engineering Materials Vols. 284-286 (2005) pp. 1053-1056
- Five Years Clinical Follow up Bone Regeneration with CaP Bioceramics Clemencia Rodriguez, Alain Jean, and Guy Daculsi, Key Engineering Materials Vols. 361-363 (2008) pp. 1339-1342
- Assessment of Cancellous Bone Architecture after Implantation of an Injectable Bone Substitute, Catherine A. Davy, O. Gauthier, and al., Key Engineering Materials Vols. 254-256 (2004) pp. 55-5842

* Data on files, Biomatlante

Manufacturer :
Biomatlante
ZA Les Quatre Nations
5 Rue Edouard Belin
44360 Vigneux de Bretagne - France

www.biomatlante.com

CE 0123

Distributed by:

MBCP+™, MBCP™, In'Oss™ and Ez Cure™ are trademarks of Biomatlante