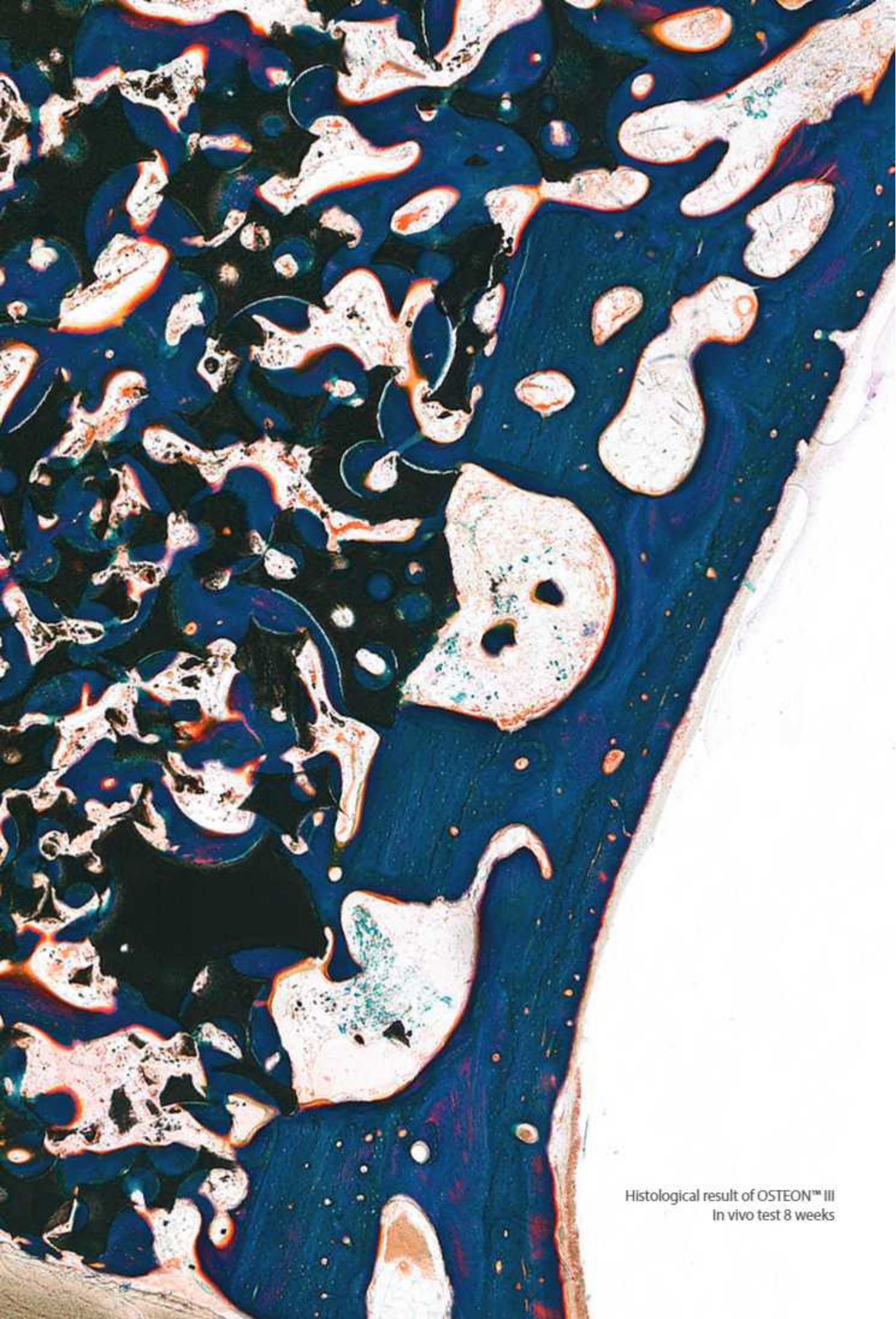


Regeneration

Bone Grafting & Soft Tissue Management

Dentium

For Dentists By Dentists



Histological result of OSTEON™ III
In vivo test 8 weeks

Regeneration Products Information

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Bone Graft Materials

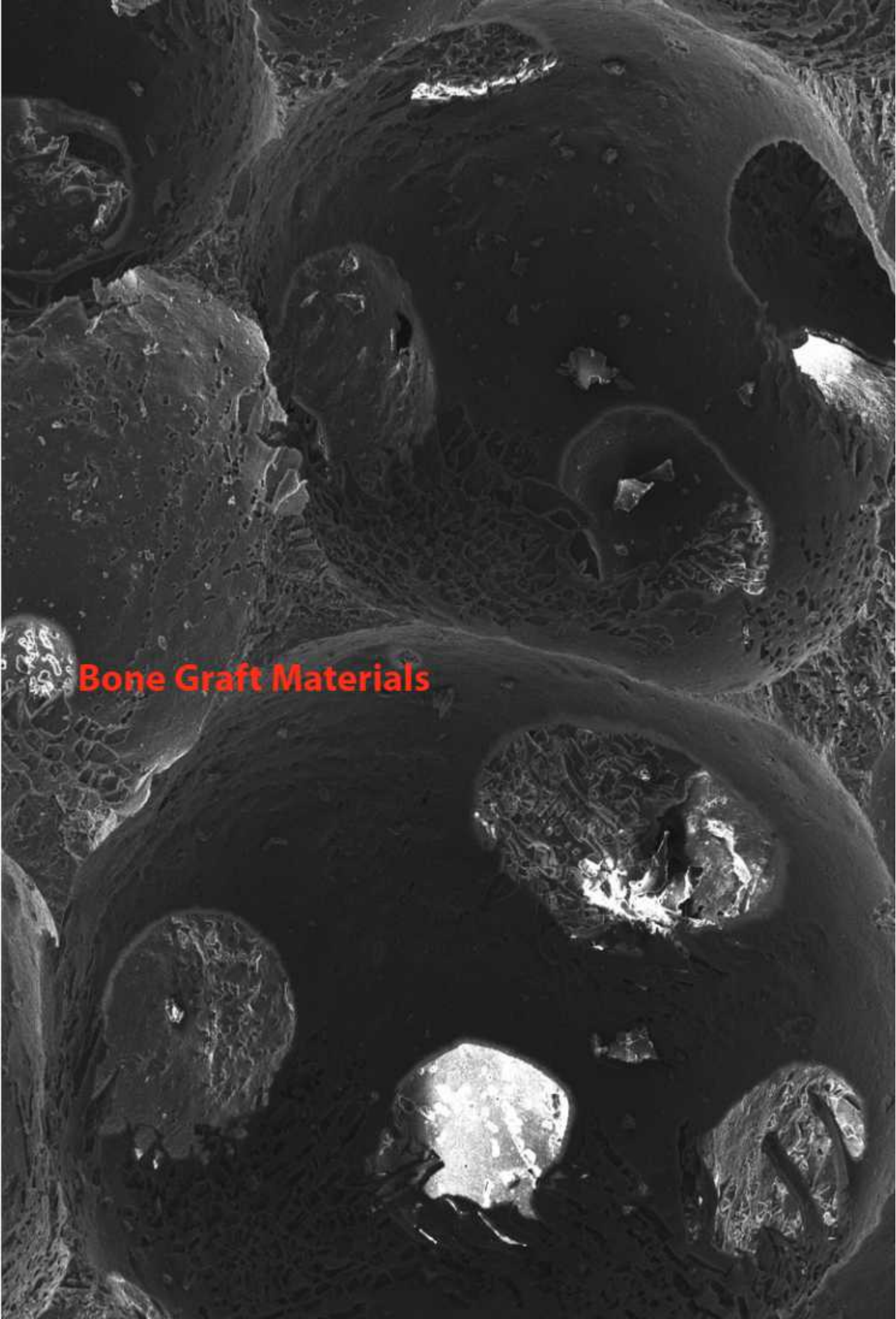
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Dentium

For Dentists By Dentists


Bone Graft Materials

OSTEON™ III



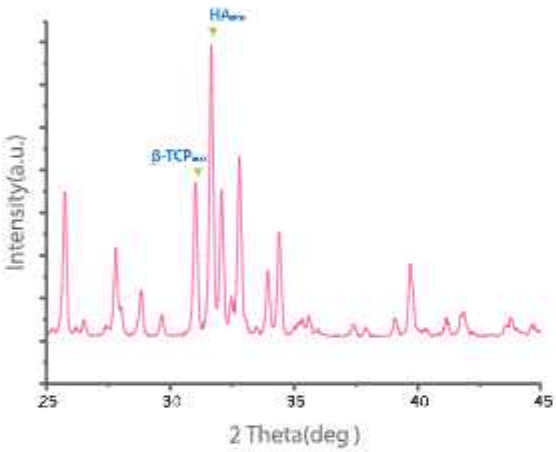
Applications

- Ridge augmentation
- Extraction site & osteotomy
- Sinus lift
- Periodontal defect

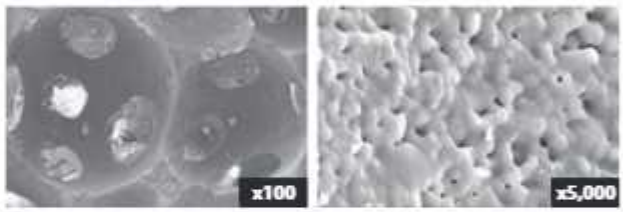
Composition

OSTEON™ III = HA 60% + β-TCP 40%

OSTEON™ III is a biphasic calcium phosphate composed of 60% HA (Hydroxyapatite) and 40% β-TCP (Beta-tricalcium phosphate)



Microstructure



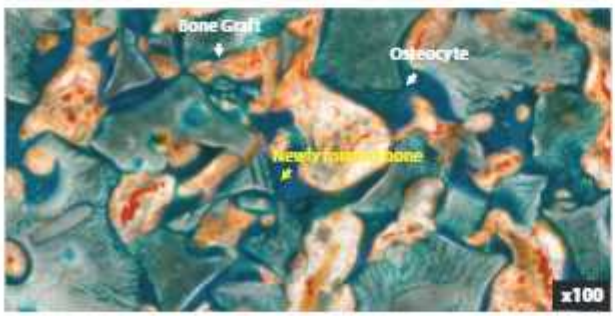
Macropore | Micropore

Characteristics of OSTEON™ III

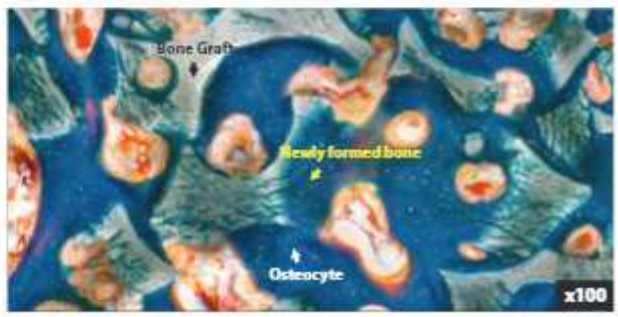
- Easy manipulation
- Excellent wettability
- Osteoconductive synthetic bone graft
- Porosity : 80%

Animal Test

Rabbit calvaria model, 4-8 weeks



4 weeks



8 weeks

OSTEON™ II



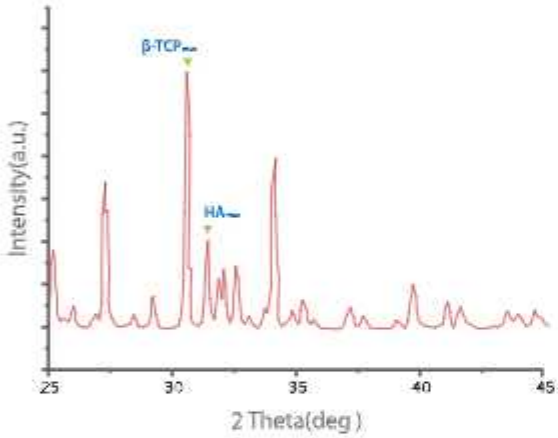
Applications

- Ridge augmentation
- Extraction site & osteotomy
- Cystic cavities
- Sinus lift
- Periodontal defect

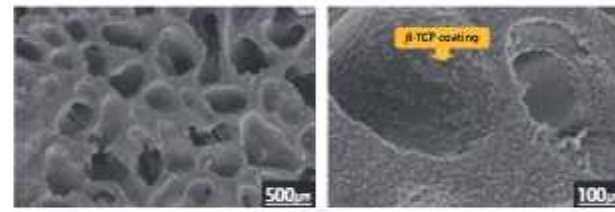
Composition

OSTEON™ II = HA 30% + β-TCP 70%

Osteoconductive biphasic calcium phosphate with higher β-TCP



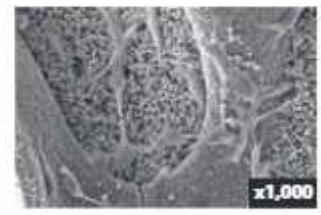
Microstructure



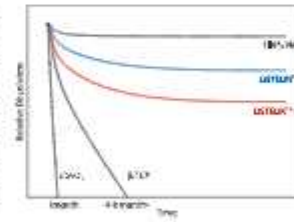
Characteristics of OSTEON™ II

- Highly resorbable due to higher β-TCP content
- Easy manipulation
- Excellent wettability
- Osteoconductive synthetic bone graft
- Pore size : 250㎛
- Porosity : 70%

Cell Adhesion Test



In Vitro Dissolution Test



Animal Test

12 weeks follow up in rabbit calvaria model



OSTEON™



OSTEON™ II

OSTEON™ 3 Collagen



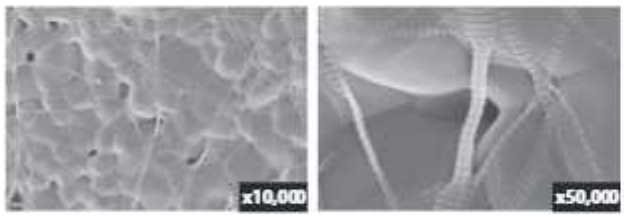
Applications

- Simple grafting (volume up)
- Ridge augmentation
- Extraction socket grafting
- Cystic cavities
- Periodontal defect

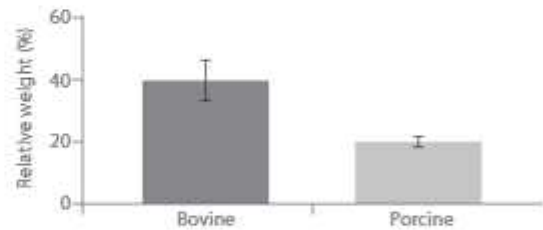
Characteristics of OSTEON™ 3 Collagen

- Bone void filler composed of synthetic bone graft (OSTEON™ III) and natural Type I Collagen
- Moldable to various defect shapes after being wet
- Easy handing, thus allowing reduced chair time
- OSTEON™ III has 80% porosity as a result of highly interconnected macro and micro-pores beneficial for new bone formation
- Collagen is absorbed within several weeks after helping the initial shaping

Microstructure



In Vitro Degradation



Animal Test



- Animals : Rabbit calvaria model
- Period : 3 weeks

OSTEON™ II Collagen



Applications

- Simple grafting (volume up)
- Ridge augmentation
- Extraction socket grafting
- Cystic cavities
- Periodontal defect

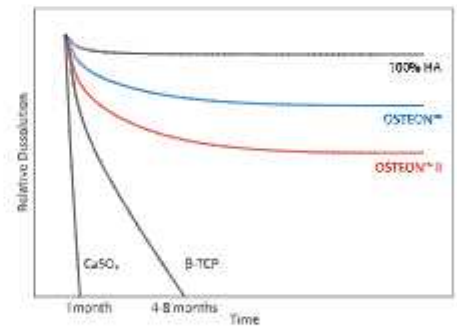
Characteristics of OSTEON™ II Collagen

- Bone void filler composed of synthetic bone graft (OSTEON™ II) and natural type I collagen
- Moldable to various defect shape after being wet
- Easy handling, thus shortened operation time
- OSTEON™ II is highly resorbable due to higher β-TCP content (HA:β-TCP=30:70)
- Collagen is absorbed within several weeks after helping the initial shaping

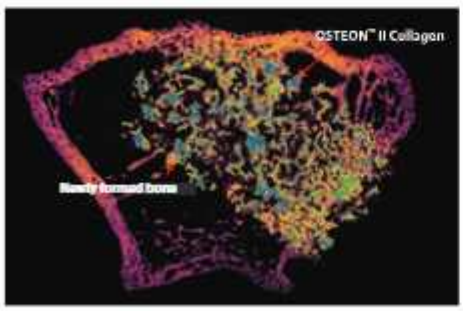
Microstructure



In Vitro Dissolution



Animal Test



- Animals : New zealand white rabbit
- Implantation area: Femur
- Period : 6 weeks
- CT image

Order Information

OSTEON™ III

Type	REF	Size (mm)	Volume (cc)
Vial type	3G0205010 3G0205025 3G0205050 3G0205100 3G0205200	0.2~0.5	0.1/0.25/0.5 1.0/2.0
	3G0510010 3G0510025 3G0510050 3G0510100 3G0510200	0.5~1.0	0.1/0.25/0.5 1.0/2.0
	3G1020010 3G1020025 3G1020050 3G1020100 3G1020200	1.0~2.0	0.1/0.25/0.5 1.0/2.0
Sinus (Syringe type)	3G0510050S 3G1020050S	0.5~1.0 1.0~2.0	0.5
Lifting (Syringe type)	3G0205025L 3G0510025L	0.2~0.5 0.5~1.0	0.25

OSTEON™ II

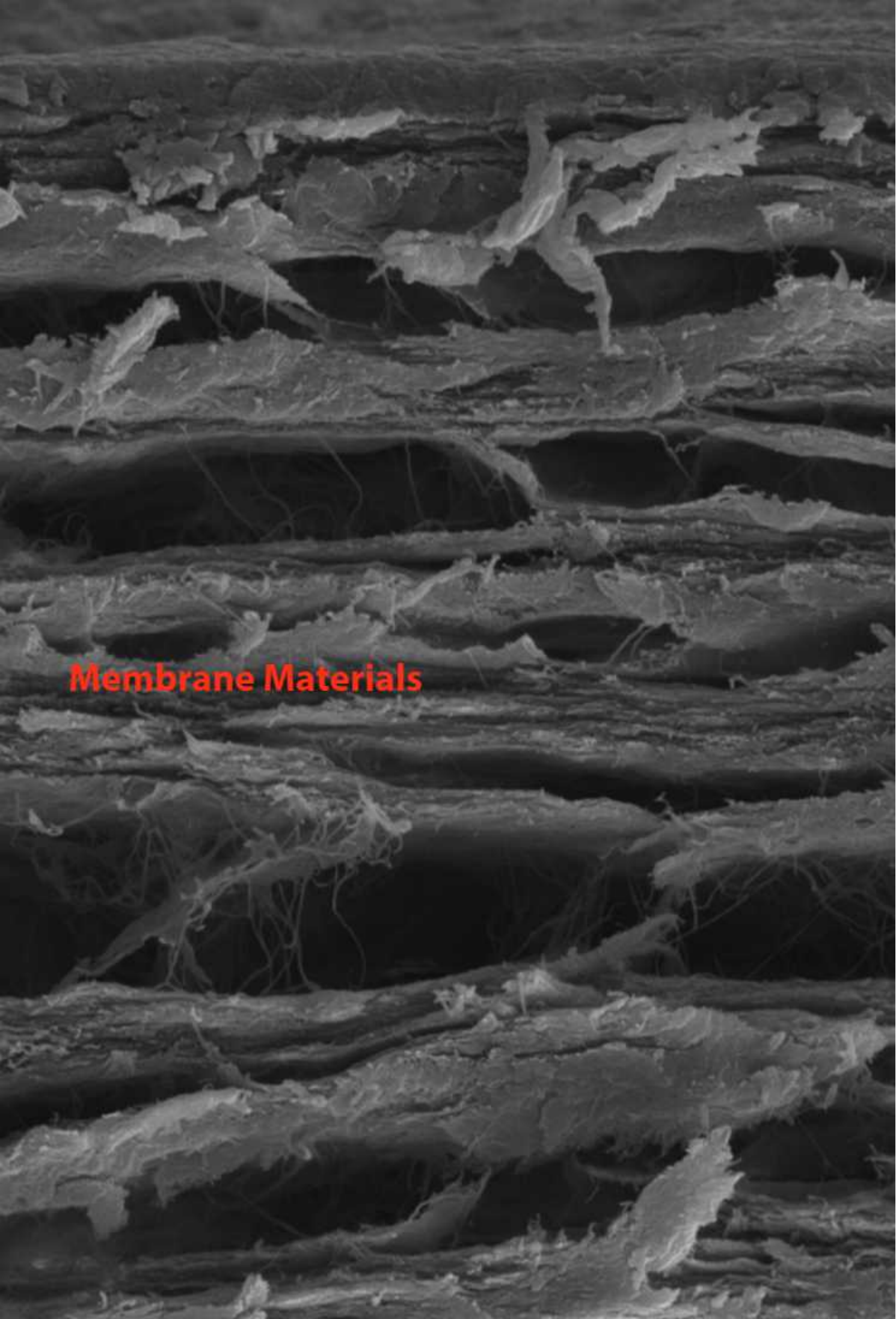
Type	REF	Size (mm)	Volume (cc)
Vial type	DT7G0205010 DT7G0205025 DT7G0205050 DT7G0205100 DT7G0205200	0.2~0.5	0.1/0.25/0.5 1.0/2.0
	DT7G0510010 DT7G0510025 DT7G0510050 DT7G0510100 DT7G0510200	0.5~1.0	0.1/0.25/0.5 1.0/2.0
	DT7G1020010 DT7G1020025 DT7G1020050 DT7G1020100 DT7G1020200	1.0~2.0	0.1/0.25/0.5 1.0/2.0
Sinus (Syringe type)	DT7G0510050SS DT7G1020050SS	0.5~1.0 1.0~2.0	0.5
Lifting (Syringe type)	DT7G0205025LS DT7G0510025LS	0.2~0.5 0.5~1.0	0.25

OSTEON™ 3 Collagen

Type	REF	Size (mm)	Particle size (mm)
Cylinder	ND3CC0605 ND3CC0610	Ø6.0 x 5.0 Ø6.0 x 10.0	0.2~1.0

OSTEON™ II Collagen

Type	REF	Size (mm)	Particle size (mm)
Cylinder	OTCC 0605 M OTCC 0610 M	Ø6.0 x 5.0 Ø6.0 x 10.0	0.2~1.0


Membrane Materials

Collagen Graft



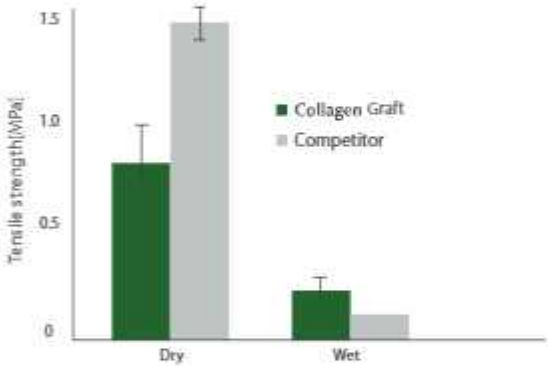
Applications

- Gyngival augmentation
- Alveolar ridge reconstruction
- Root coverage

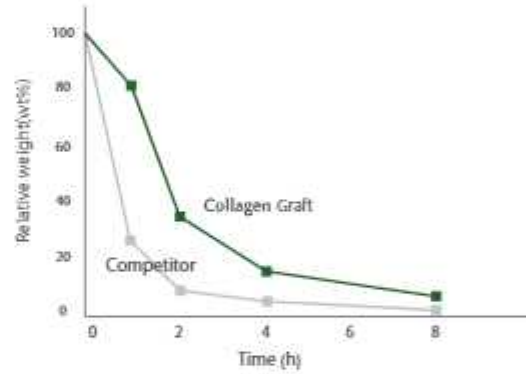
Characteristics of Collagen Graft

- Double layered : Dense layer + Porous layer
- Faster soft tissue healing by promoted epithelization
- Function for hemotasis and wound site protection

Tensile Strength

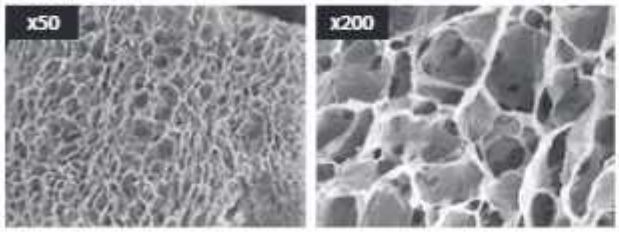


In Vitro Degradation

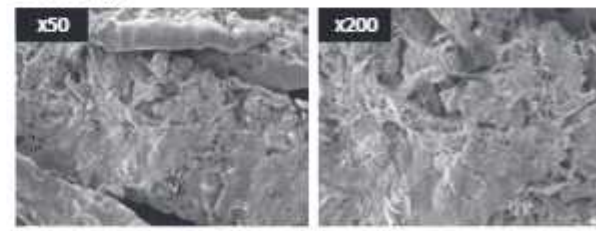


Microstructure

Porous Layer



Dense Layer



Collagen Membrane-P

Applications

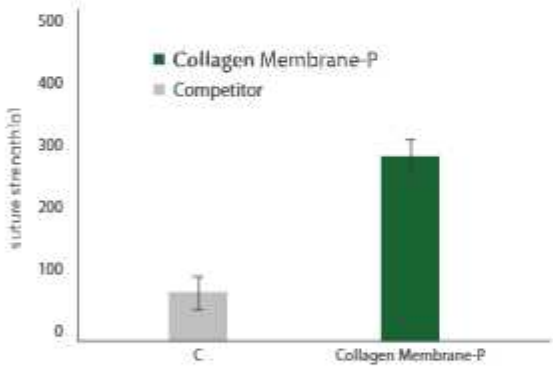
- Periodontal defects
- Ridge augmentation
- Sinus Lift
- GBR procedure



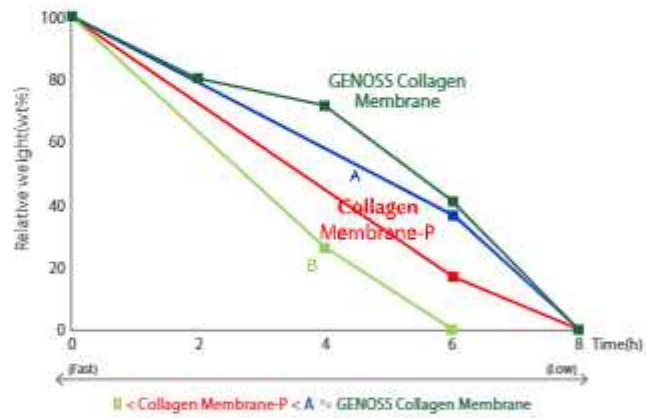
Characteristics

- Soft type resorbable barrier membrane with excellent manipulation
- Barrier function lasting for 4 months
- Highly pure type I collagen
- Both sides usable

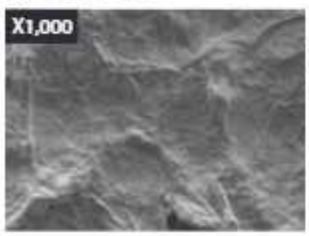
Suture strength



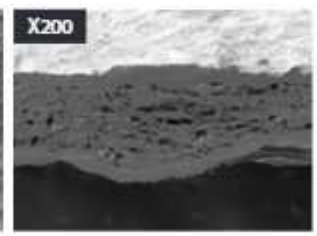
In Vitro Degradation



Microstructure

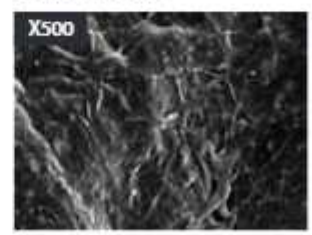


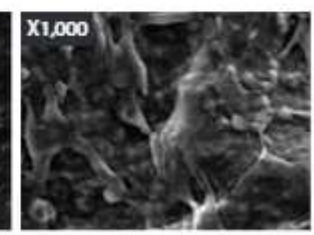
Surface



Cross section

Cell Adhesion





MC3T3/E1, alpha MEM_5% FBS+1% As, Osteoblast cell

Collagen Membrane

Applications

- Periodontal / infrabony defects
- Ridge augmentation
- Extraction sites (implant preparation / placement)
- Sinus lift
- GBR procedure

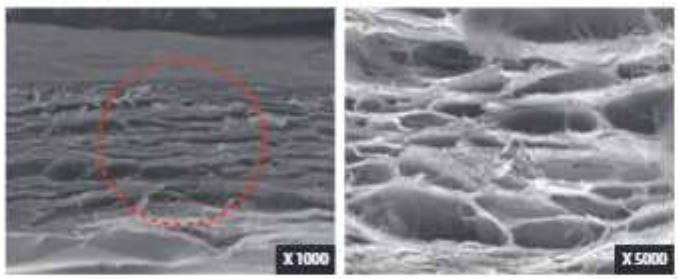


Characteristics of Collagen Membrane

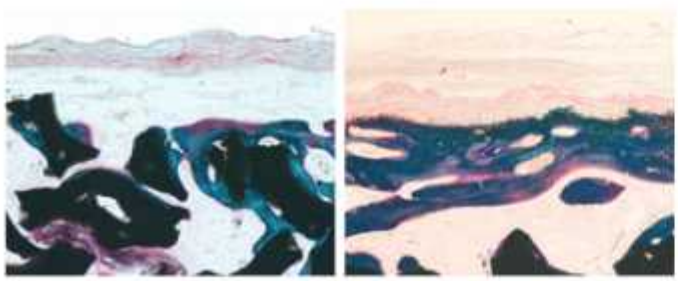
- Easy manipulation
- Both sides usable
- Barrier function lasting for 6 months
- Highly pure type I collagen

- Thinner membrane (300㎛) with multiple layers for easy manipulation and sufficient mechanical strength in surgery
- Resorption period of 6 months to provide enough time for stabilizing graft materials and supporting bone growth
- Multiple-layered structure enables more effective bone regeneration by sparing enough space for hard tissue formation and facilitates proliferation of osteoblast

Microstructure

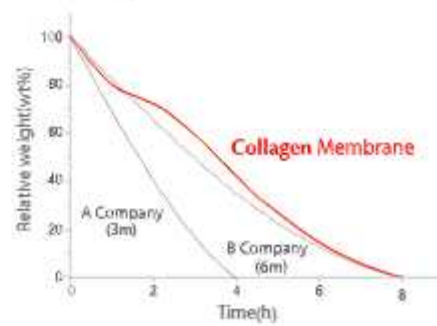


Animal Test



Rabbit calvaria model, 6 weeks　　12 weeks

In Vitro Degradation



HA Collagen Membrane

Applications

- Periodontal / Infrabony defects
- Ridge augmentation
- Extraction sites
- GBR procedure
- Sinus lift

Characteristics of HA Collagen Membrane

- Resorbable barrier membrane
- Osteoconductive due to HA particles
- New bone formation through the membrane
- Highly pure type I collagen

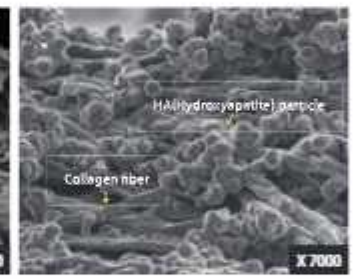
Cell adhesion



MC3T3 / E1 (Osteoblast cell X500)

Microstructure





Animal Test



Rabbit calvaria model, 12 weeks

Order Information

	Type	REF	Size (mm)	Thickness (mm)
Collagen Graft	Square type	CSD 1010 CSD 1020 CSD 1520 CSD 2030	10 X 10 10 X 20 15 X 20 20 X 30	3
	Round type	CSD 10 C	Ø10	3

	Type	REF	Size (mm)	Thickness (mm)
Collagen Membrane-P	Square type	GPCM1020 GPCM1520 GPCM2030	10 X 20 15 X 20 20 X 30	0.3

	Type	REF	Size (mm)	Thickness (mm)
Collagen Membrane	Square type	GCM 1020 GCM 1520 GCM 2030	10 X 20 15 X 20 20 X 30	0.3

	Type	REF	Size (mm)	Thickness (mm)
HA Collagen Membrane	Square type	GCHM 1020 GCHM 1520 GCHM 2030	10 X 20 15 X 20 20 X 30	0.3

Implantation with GBR on missing molar area

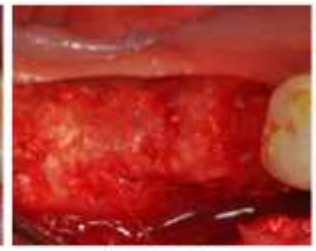
Dr. Dong-Wook Chang / Win Dental Clinic

Recommended treatment

OSTEON™ III



Pre-op



Flap reflection



Implantation



OSTEON™ III



Healing 3 months, 2nd surgery



Final prosthesis

Dr. Seung-Min Han / Seoul Ichon Dental Clinic

Recommended treatment

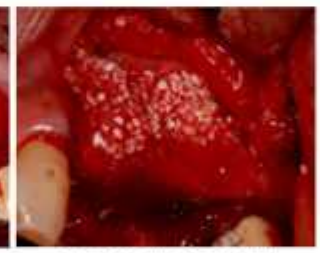
OSTEON™ III
OSTEON™ II
Collagen Membrane



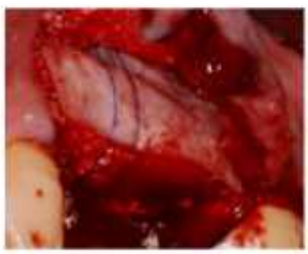
Bone defect



Installation



OSTEON™ III, OSTEON™ II



Collagen Membrane



Healing 4 months, 2nd surgery



Final prosthesis

Socket preservation

Recommended treatment

OSTEON™ II Collagen


Pre-op


Extraction


OSTEON™ II Collagen


Suture


Provisional restoration


Final prosthesis

Recommended treatment

OSTEON™ II Collagen


OSTEON™ II Collagen


OSTEON™ II Collagen


Suture


Provisional restoration


Final prosthesis


Follow up 4 years

Immediate implantation

Recommended treatment

OSTEON™ III
Collagen Graft


Pre-op


Implant Guide


Extraction & Flap reflection


NR Line 3011S


OSTEON™ III, Collagen Graft


Final prosthesis

Recommended treatment

OSTEON™ II
Collagen Membrane


Pre-op


Extraction & Flap reflection


Implantation #26 SuperLine 5010
#27 SuperLine 6012


Autogenous bone


OSTEON™ II


Collagen Membrane


Healing 3 months, 2nd surgery


Final prosthesis


Final prosthesis

Recommended treatment

OSTEON™ II Collagen



Pre-op



Extraction



Implantation SuperLine 3610, OSTEON™ II Collagen



Suture



Healing 2 months, 2nd surgery



Final prosthesis

Recommended treatment

OSTEON™ II



Pre-op



Extraction



Implant Guide



OSTEON™ II



Implantium II 3810



Post-op



Healing 2 months



Final prosthesis



Final prosthesis

Socket preservation for delayed implant placement

Recommended treatment

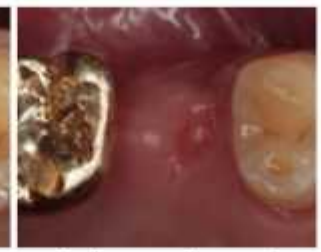
OSTEON™ II Collagen



Extraction socket



OSTEON™ II Collagen, Post-op



Healing 1 month 2 weeks



Healing 2 months 3 weeks



Implantation SuperLine 4508



Final prosthesis

Recommended treatment

OSTEON™ II Collagen
Collagen Membrane



Pre-on



Extraction socket



OSTEON™ II Collagen



Collagen Membrane



Healing 6 months



NR Line 3011S



OSTEON™ II Collagen



Final prosthesis



Follow up 1 year

Ridge preservation for delayed implant placement

Recommended treatment

OSTEON™ II Collagen
OSTEON™ II
Collagen Membrane


Flap reflection


OSTEON™ II Collagen


Healing 4 Months


OSTEON™ II
SuperLine 3614SE


Collagen Membrane

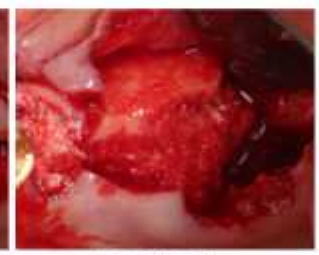

Follow up 1year 10months

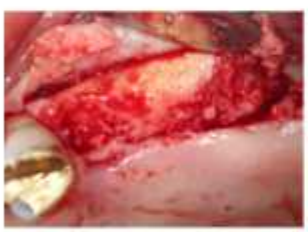
Recommended treatment

OSTEON™ II
OSTEON™ II Collagen


Pre-op


Extraction


OSTEON™ II Collagen


Healing 3 months, 2nd surgery


Implantation & OSTEON™ II


Healing 6 months


Healing 6 months


Final prosthesis


Follow up 3 months

Implant placement with GBR

Recommended treatment

OSTEON™ II Collagen Membrane


Pre-op


Implantation SuperLine 5008


Autogenous bone


OSTEON™ II


Collagen Membrane


Final prosthesis

Recommended treatment

OSTEON™ II Collagen Collagen Graft


Pre-op


Flap reflection


NR Line


OSTEON™ II Collagen & Collagen graft


Suture


Healing 2 months


Provisional restoration


Impression


Final prosthesis

Recommended treatment

OSTEON™ II Collagen



Pre-op



Implantation SimpleLine II
654310S



OSTEON™ II Collagen



Healing 2 weeks



Final prosthesis



Follow up 2 years 2 months

Recommended treatment

OSTEON™ II
Collagen Membrane



Using Ridge spreader drill



Implantation #23 SuperLine 4010
#24 SuperLine 4510



Autogenous bone graft



OSTEON™ II, Collagen Membrane



Collagen Membrane



Healing 5 months



2nd Surgery

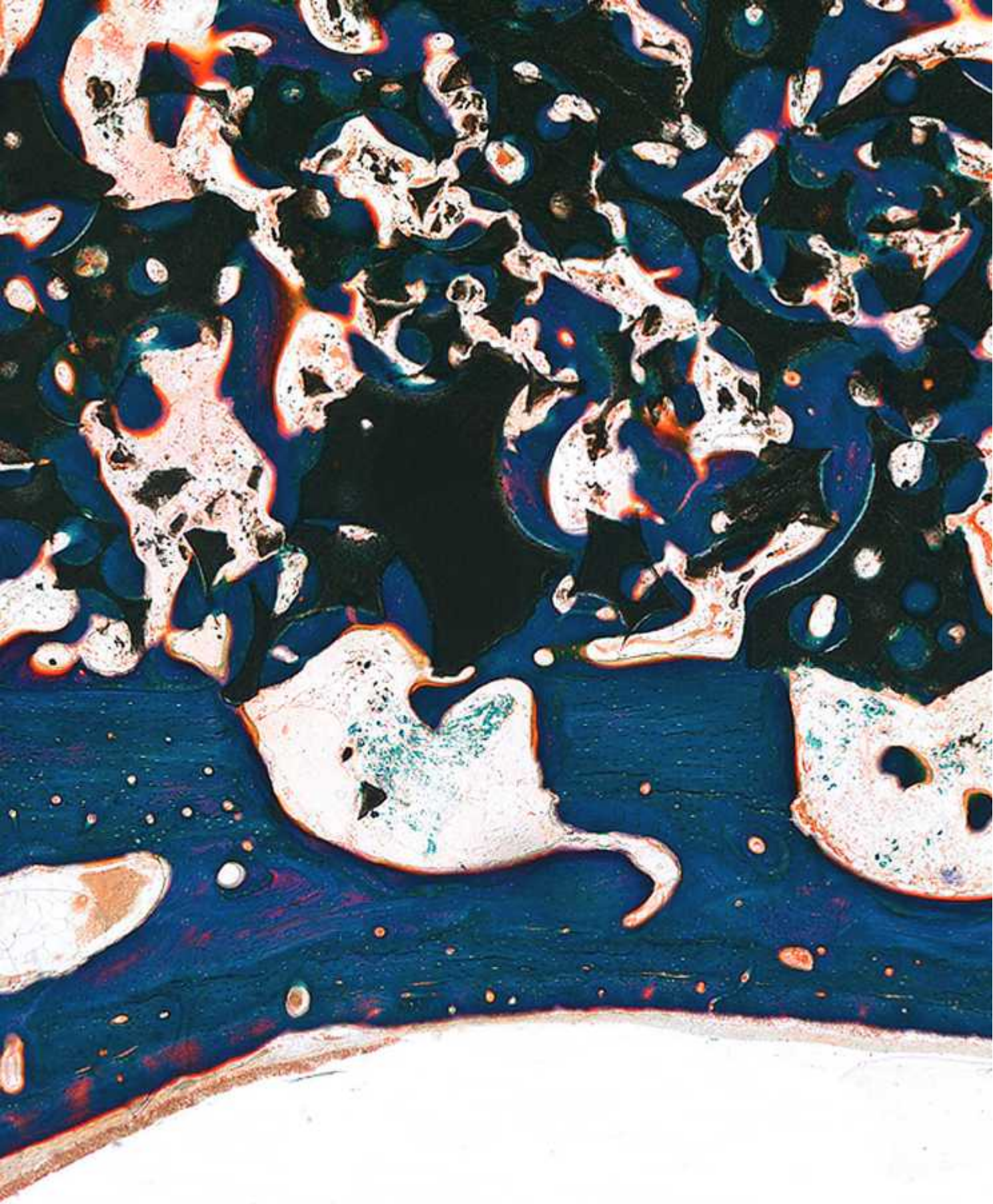


Final prosthesis



Follow up 6 months

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Specifications are subject to change without any notice.
Some products listed in this catalog are not available in the market due to pending approval.

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