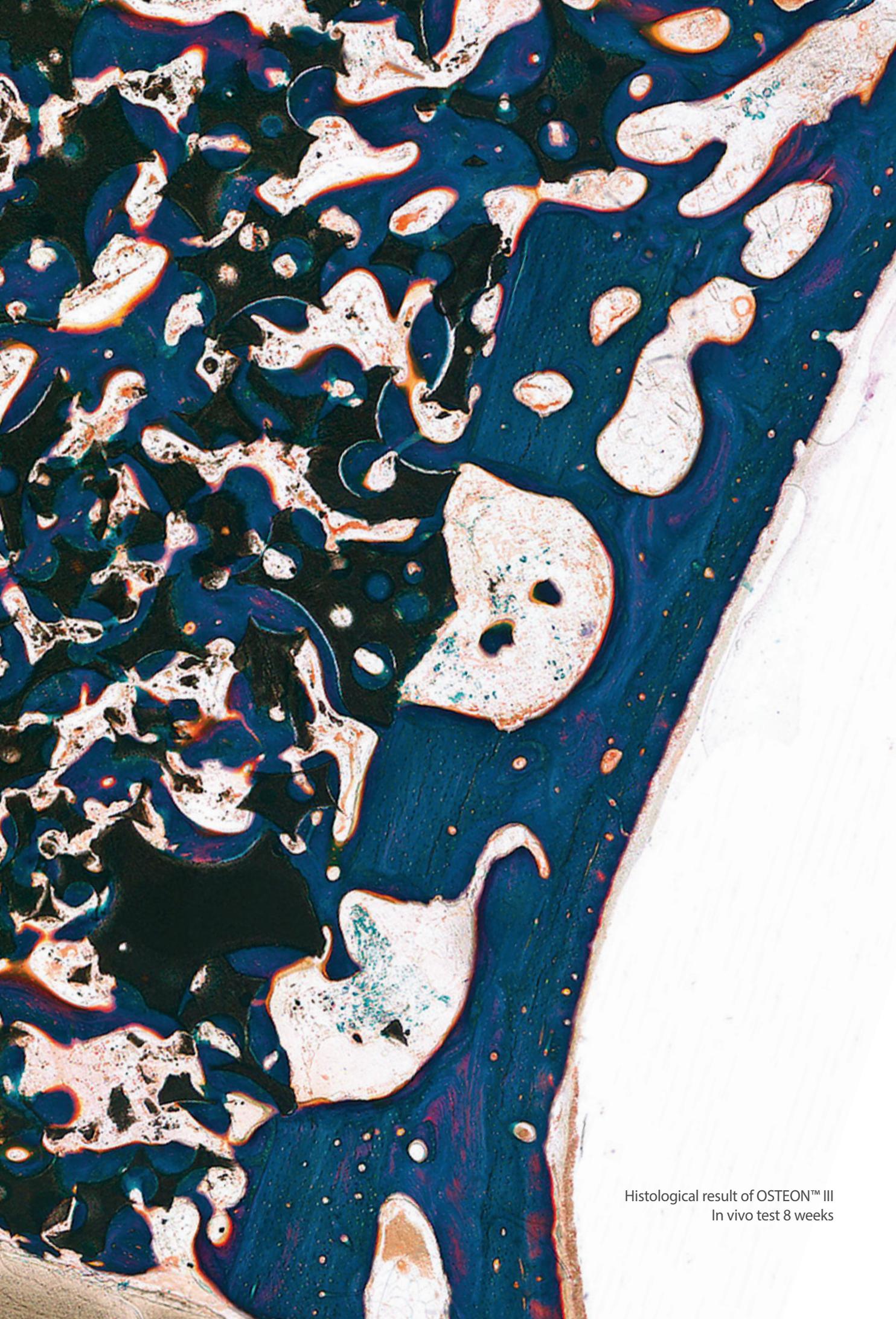
A microscopic image of bone tissue, showing a complex network of trabeculae and marrow spaces. The image is stained with a combination of blue and orange/red dyes, highlighting the mineralized bone matrix and the cellular components of the marrow. The overall appearance is highly textured and porous.

Regeneration

Bone Grafting & Soft Tissue Management

Dentium
For Dentists By Dentists



Histological result of OSTEON™ III
In vivo test 8 weeks



Regeneration Products Information

Table of Contents

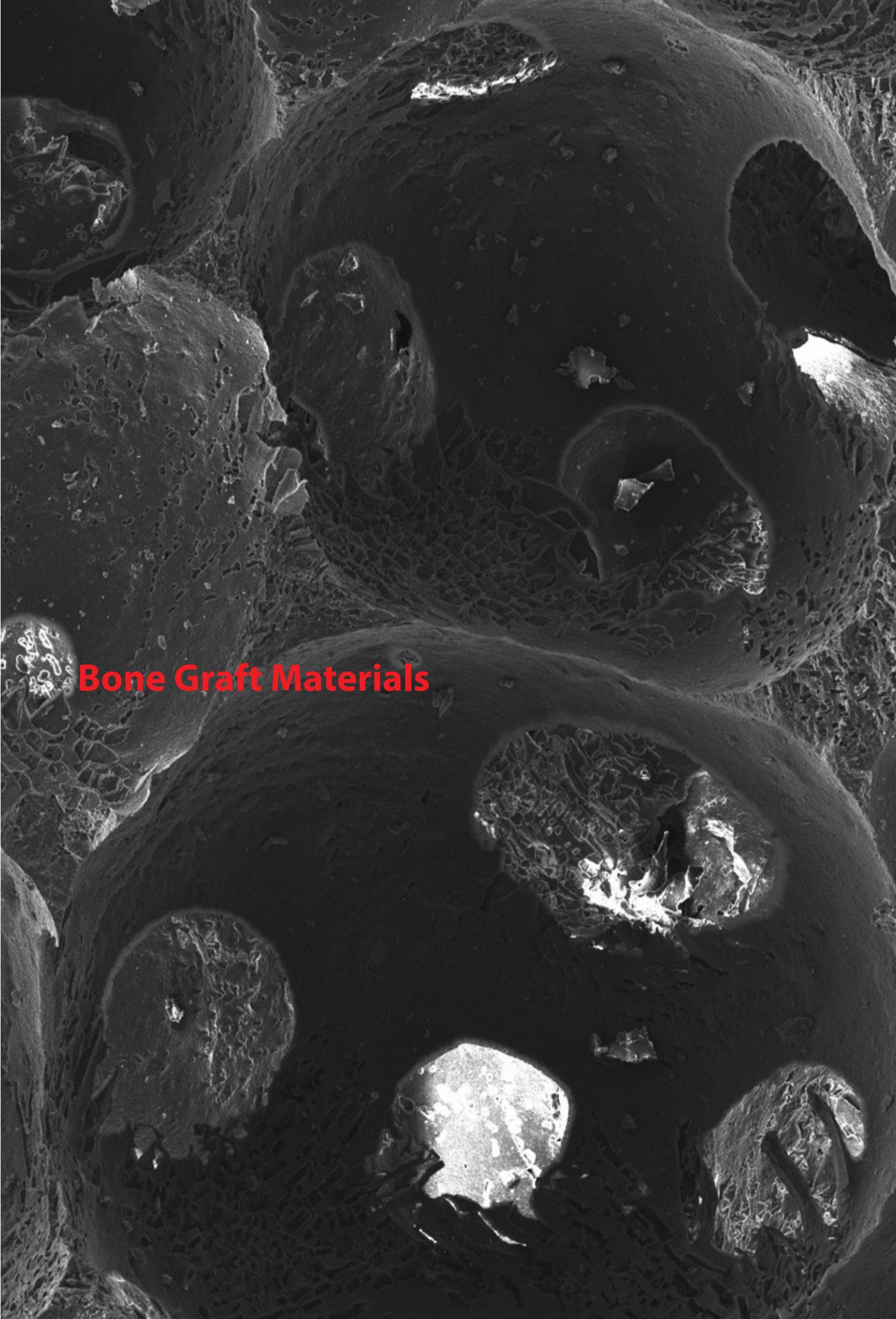
Bone Graft Materials

OSTEON™ III	6
OSTEON™ II	7
OSTEON™ 3 Collagen	8
OSTEON™ II Collagen	9
Order Information	10

Membrane Materials

Collagen Graft	12
Collagen Membrane-P	13
Collagen Membrane	14
HA Collagen Membrane	15
Order Information	16

Dentium
For Dentists By Dentists



Bone Graft Materials

OSTEON™ III

Applications

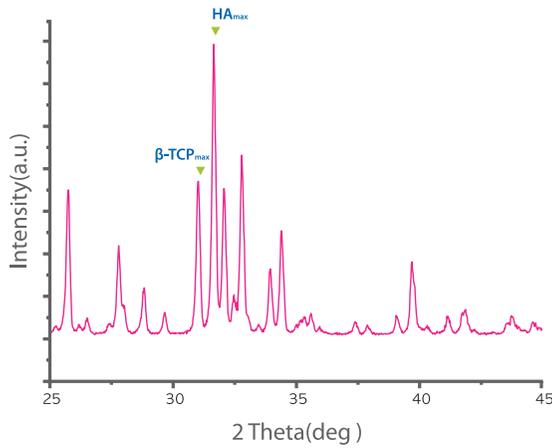
- Ridge augmentation
- Extraction site & osteotomy
- Sinus lift
- Periodontal defect



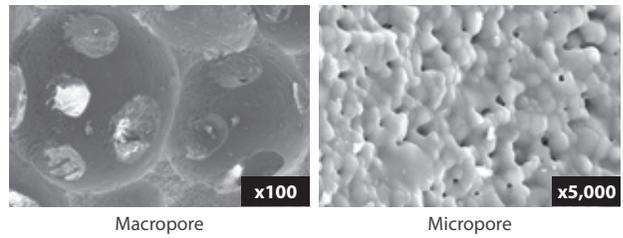
Composition

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



Characteristics of OSTEON™ III

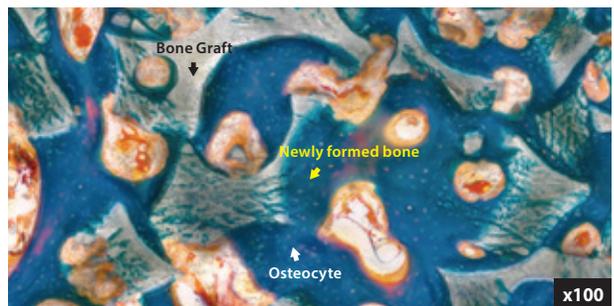
- Easy manipulation
- Excellent wettability
- Osteoconductive synthetic bone graft
- Porosity : 80%

Animal Test

Rabbit calvaria model, 4-8 weeks



4 weeks



8 weeks

OSTEON™ II

Applications

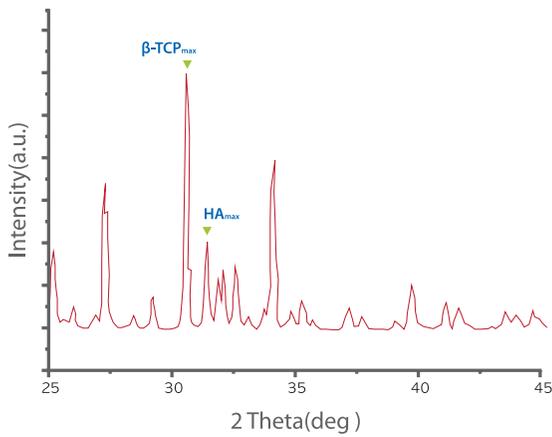
- Ridge augmentation
- Extraction site & osteotomy
- Cystic cavities
- Sinus lift
- Periodontal defect



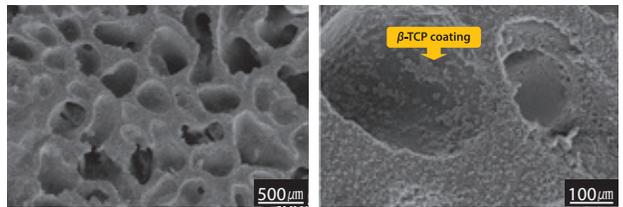
Composition

OSTEON™ II = HA 30% + β -TCP 70%

Osteoconductive biphasic calcium phosphate with higher β -TCP



Microstructure



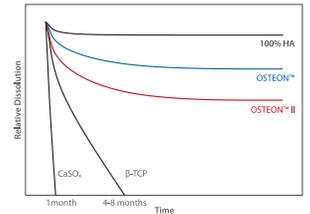
Characteristics of OSTEON™ II

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

Cell Adhesion Test



In Vitro Dissolution Test



Animal Test

12 weeks follow up in rabbit calvaria model



OSTEON™ I



OSTEON™ II

OSTEON™ 3 Collagen

Applications

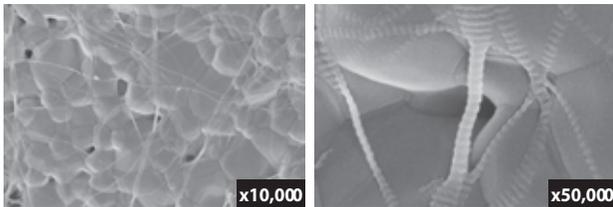
- Simple grafting (volume up)
- Ridge augmentation
- Extraction socket grafting
- Cystic cavities
- Periodontal defect



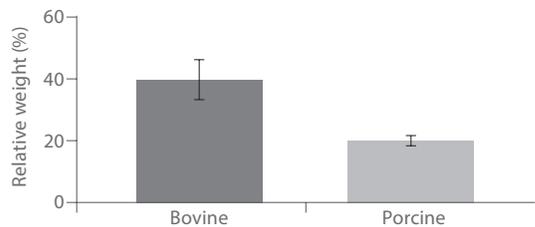
Characteristics of OSTEON™ 3 Collagen

- Bone void filler composed of synthetic bone graft (OSTEON™ III) and natural Type I Collagen
- Moldable to various defect shapes after being wet
- Easy handling, 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

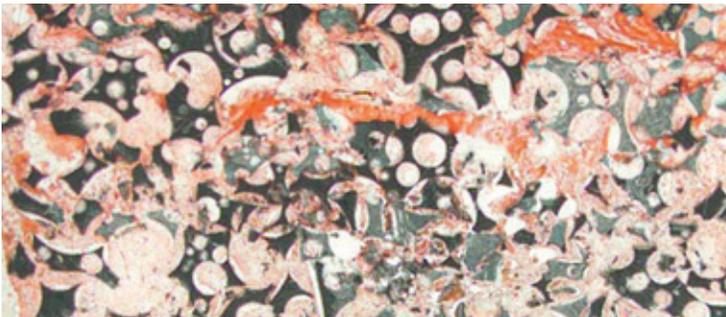
Microstructure



In Vitro Degradation



Animal Test



- Animals : Rabbit calvaria model
- Period : 3 weeks

OSTEON™ II Collagen

Applications

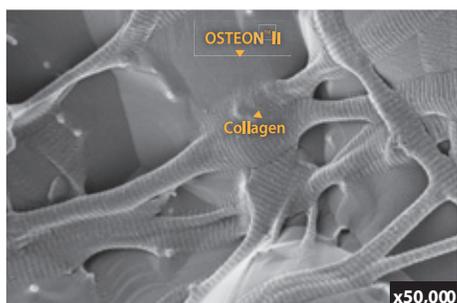
- Simple grafting (volume up)
- Ridge augmentation
- Extraction socket grafting
- Cystic cavities
- Periodontal defect



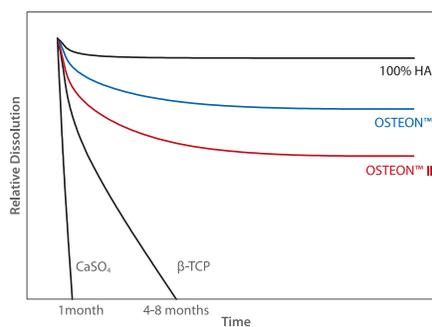
Characteristics of OSTEON™ II Collagen

- 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

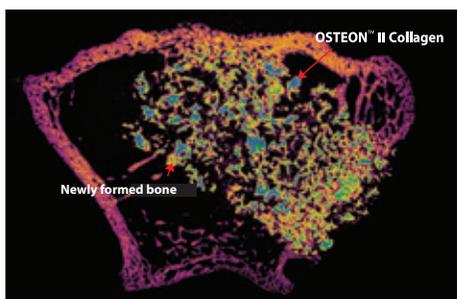
Microstructure



In Vitro Dissolution



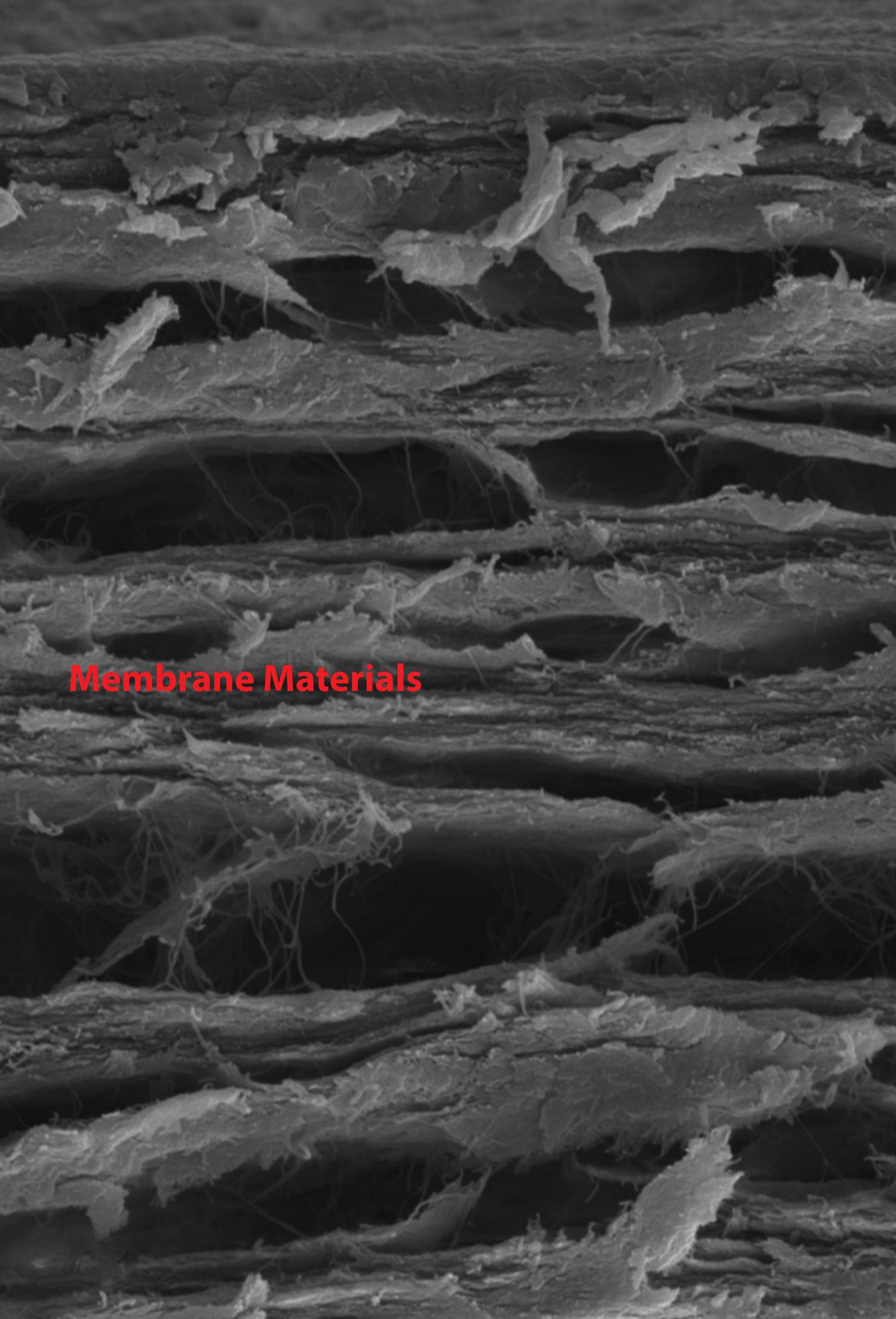
Animal Test



- 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

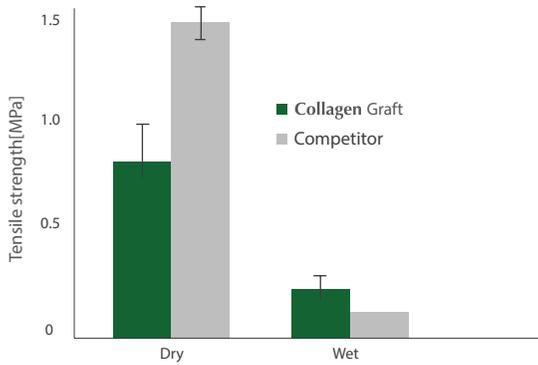
- Gynival augmentation
- Alveolar ridge reconstruction
- Root coverage



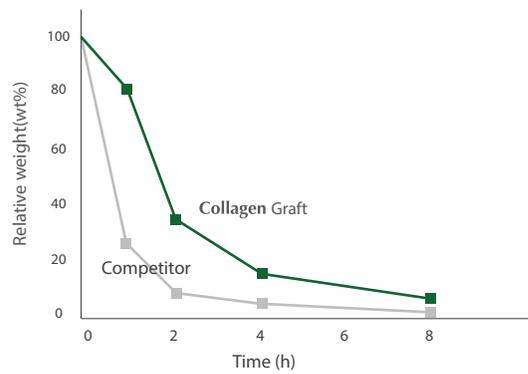
Characteristics of Collagen Graft

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

Tensile Strength

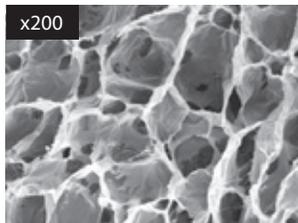
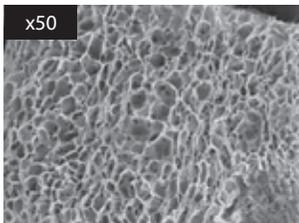


In Vitro Degradation

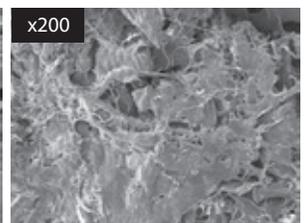
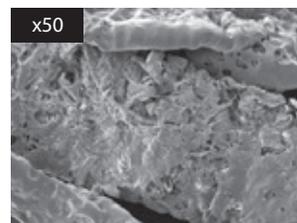


Microstructure

Porous Layer



Dense Layer



Collagen Membrane-P

Applications

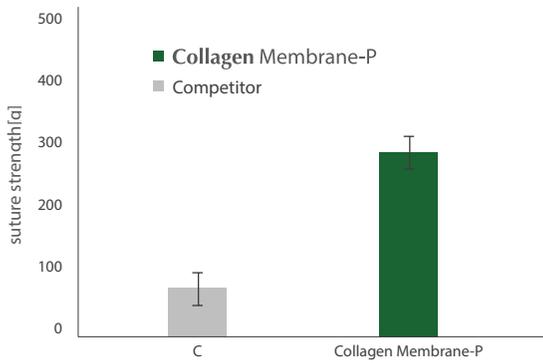
- Periodontal defects
- Ridge augmentation
- Sinus Lift
- GBR procedure



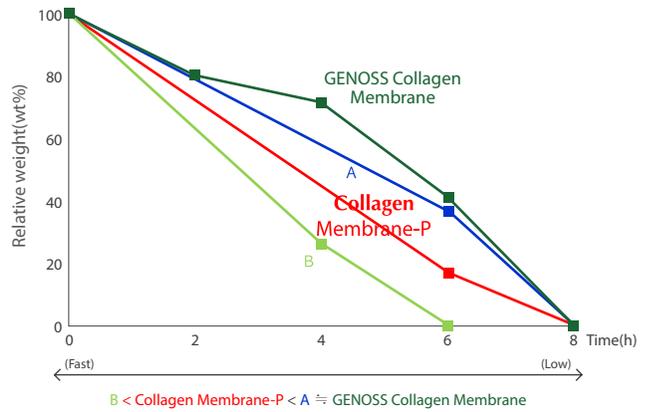
Characteristics

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

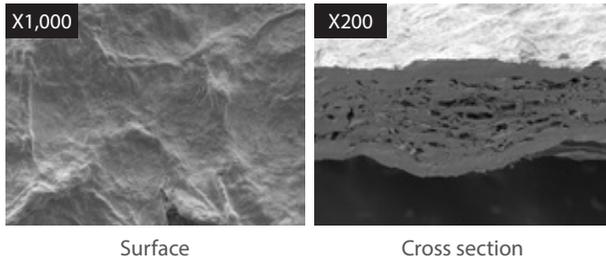
Suture strength



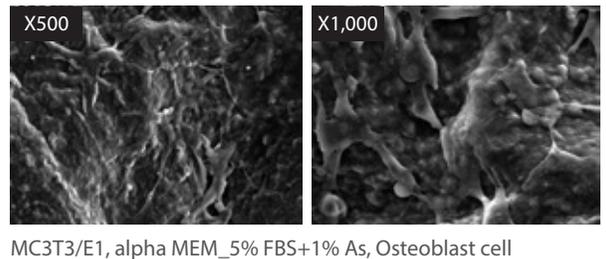
In Vitro Degradation



Microstructure



Cell Adhesion



Collagen Membrane

Applications

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

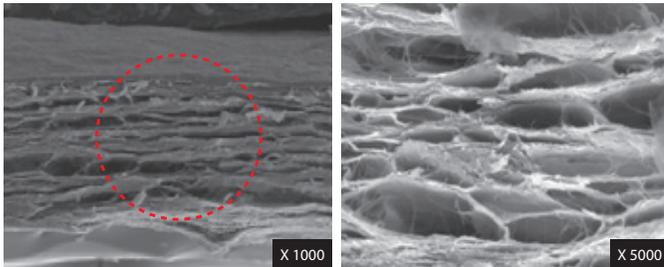
Characteristics of Collagen Membrane

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

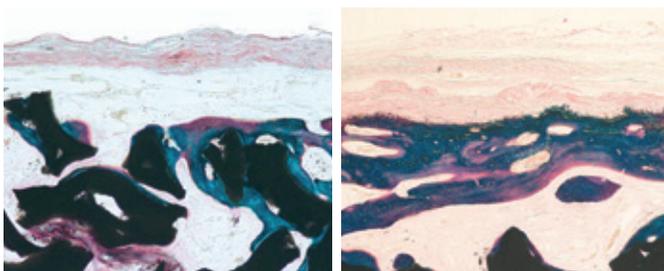
- Thinner membrane (300 μ m) with multiple layers for easy manipulation and sufficient mechanical strength in surgery
- Resorption period of 6 months to provide enough time for stabilizing graft materials and supporting bone growth
- Multiple-layered structure enables more effective bone regeneration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



Microstructure



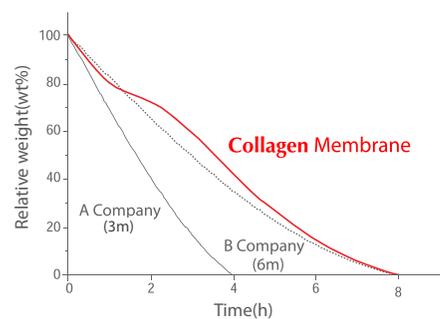
Animal Test



Rabbit calvaria model, 6 weeks

12 weeks

In Vitro Degradation



HA Collagen Membrane

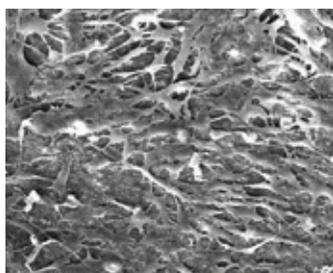
Applications

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

Characteristics of HA Collagen Membrane

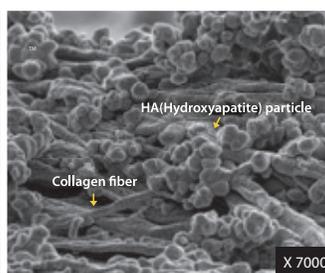
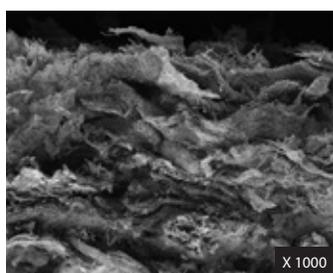
- Resorbable barrier membrane
- Osteoconductive due to HA particles
- New bone formation through the membrane
- Highly pure type I collagen

Cell adhesion

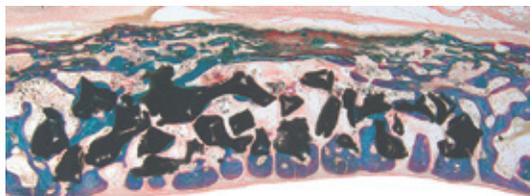


MC3T3 / E1 (Osteoblast cell X500)

Microstructure



Animal Test



Rabbit calvaria model, 12 weeks

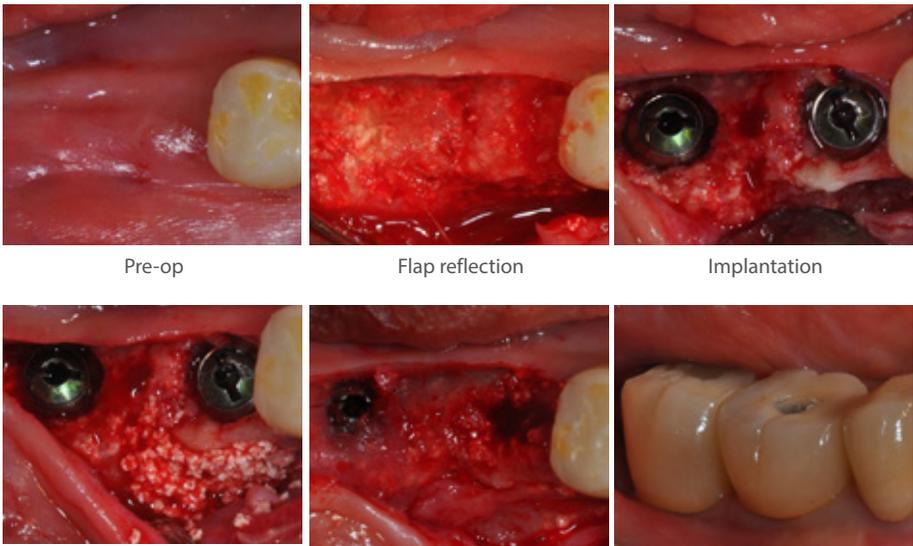
Order Information

Collagen Graft	Type	REF	Size (mm)	Thickness (mm)
	Square type	CSD 1010	10 X 10	3
		CSD 1020	10 X 20	
CSD 1520		15 X 20		
		CSD 2030	20 X 30	
	Round type	CSD 10 C	Ø10	3
Collagen Membrane-P	Type	REF	Size (mm)	Thickness (mm)
	Square type	GPCM1020	10 X 20	0.3
		GPCM1520	15 X 20	
GPCM2030		20 X 30		
Collagen Membrane	Type	REF	Size (mm)	Thickness (mm)
	Square type	GCM 1020	10 X 20	0.3
		GCM 1520	15 X 20	
GCM 2030		20 X 30		
HA Collagen Membrane	Type	REF	Size (mm)	Thickness (mm)
	Square type	GCHM 1020	10 X 20	0.3
		GCHM 1520	15 X 20	
GCHM 2030		20 X 30		

Implantation with GBR on missing molar area

Dr. Dong-Wook Chang / Win Dental Clinic Recommended treatment

OSTEON™ III

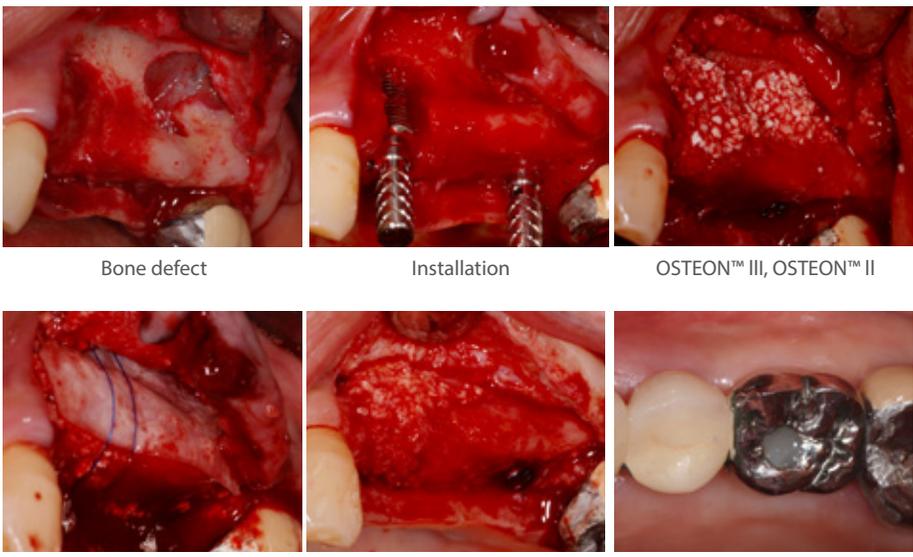


Pre-op Flap reflection Implantation

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

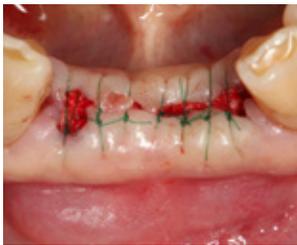
OSTEON™ II Collagen



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



Flap reflection

OSTEON™ II Collagen

Healing 4 Months

OSTEON™ II Collagen
OSTEON™ II
Collagen Membrane



OSTEON™ II
SuperLine 3614SE

Collagen Membrane

Follow up 1year 10months

Recommended treatment



Pre-op

Extraction

OSTEON™ II Collagen

OSTEON™ II
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

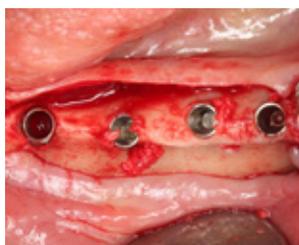
**OSTEON™ II Collagen
Collagen Graft**



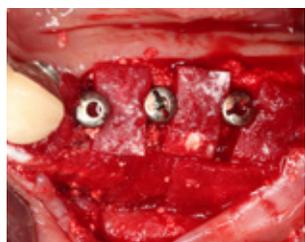
Pre-op



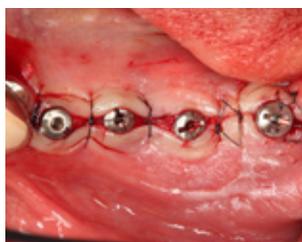
Flap reflection



NR Line



OSTEON™ II Collagen
& Collagen graft



Suture



Healing 2 months



Provisional restoration



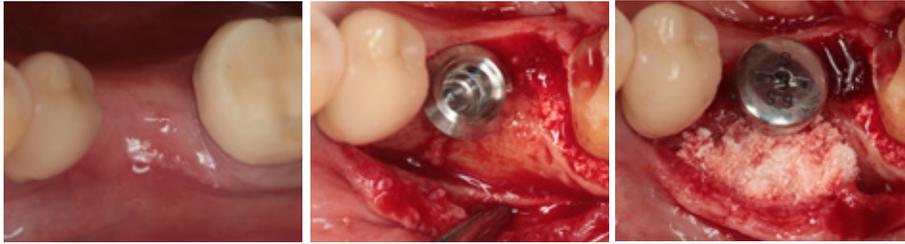
Impression



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

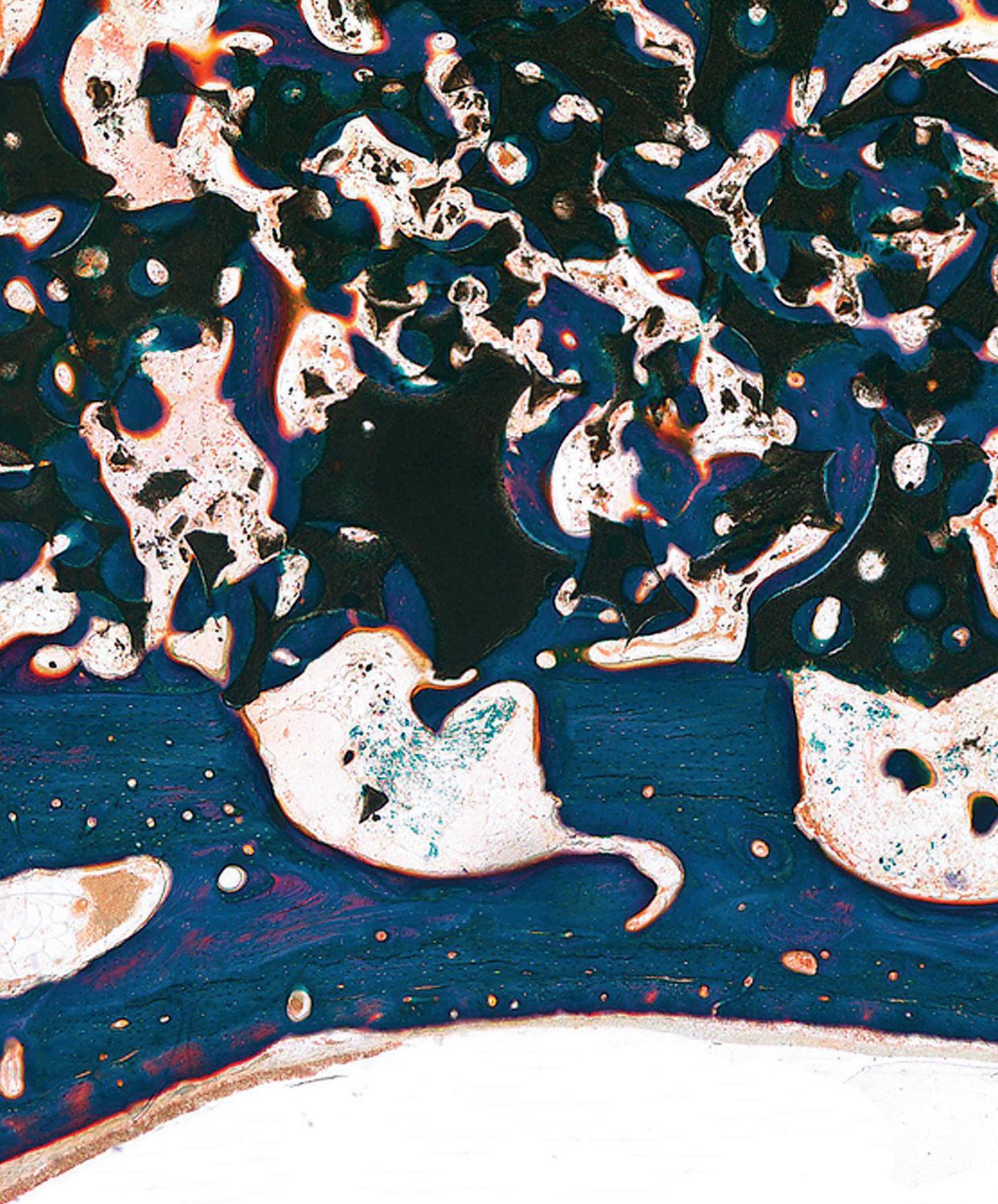


2nd Surgery

Final prosthesis

Follow up 6 months

Dentium
For Dentists By Dentists



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

Dentium
For Dentists By Dentists

RECO-1707 [REV.5]

HEAD OFFICE

501 Gyeonggi R&DB Center, 105 Gwanggyo-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Korea [443-270] Tel +82-31-888-5431 Fax +82-31-888-5430
www.dentium.com