

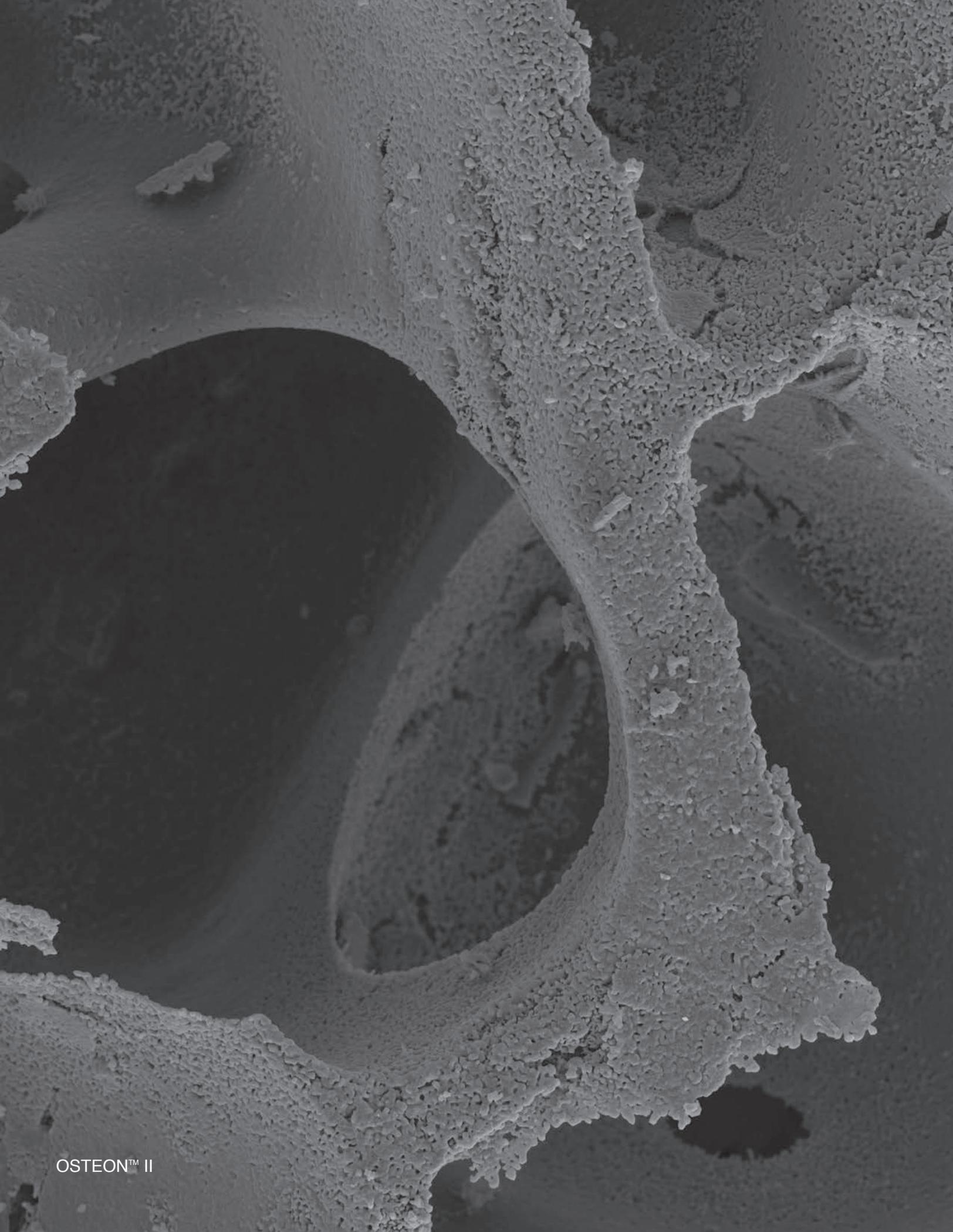


Regeneration

Bone Grafting & Soft Tissue Management

DentiumUSA

Developed by Clinicians for Clinicians



OSTEON™ II

Table of Contents

Bone Graft Material	
OSTEON™	04
OSTEON™II	07
Membrane	
Collagen Membrane	10

OSTEON™

Application of OSTEON™

- Cystic cavities
- Sinus lifts

Composition of OSTEON™

HA scaffold coated with β -TCP
Osteoconductive biphasic calcium phosphate

OSTEON™ = HA 70% + β -TCP 30%

Characteristics of OSTEON™

- 100% synthetic bone graft material
- Interconnected porous structure similar to that of human cancellous bone
- Osteoconductive material as a bone growth scaffold

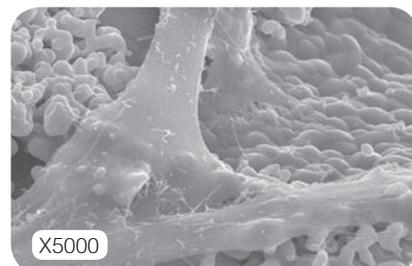
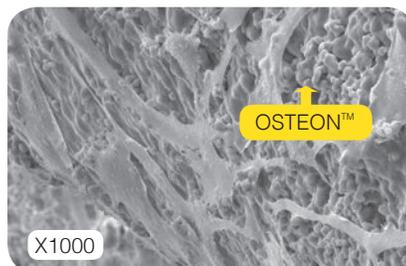
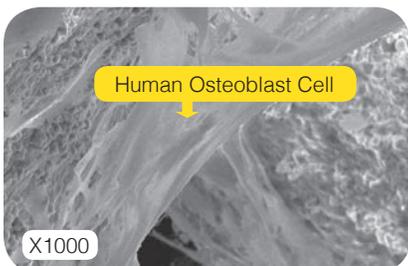


OSTEON™



Human Bone

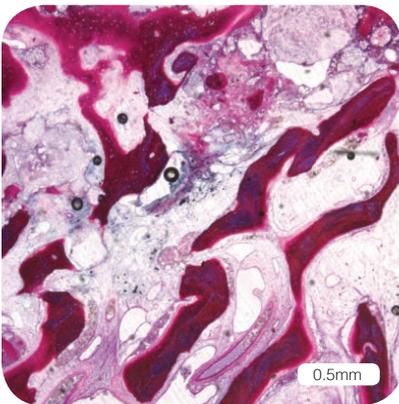
Cell Adhesion Test



The Osteoblast cell was well attached and spread on OSTEON™ surface.

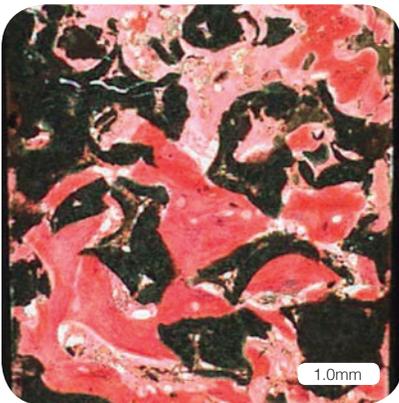
Human History

6.5 months after Sinus Graft Surgery



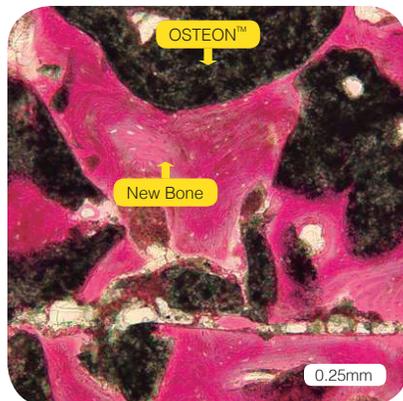
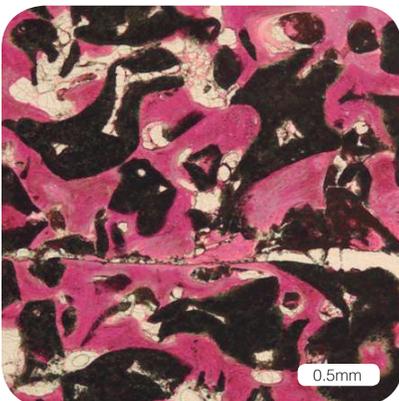
OSTEON™ area = 1.24mm² (17.1%)
New Bone area = 1.63mm² (22.7%)

10 months after Sinus Graft Surgery



OSTEON™ area = 3.04mm² (35.5%)
New Bone area = 2.38mm² (27.7%)

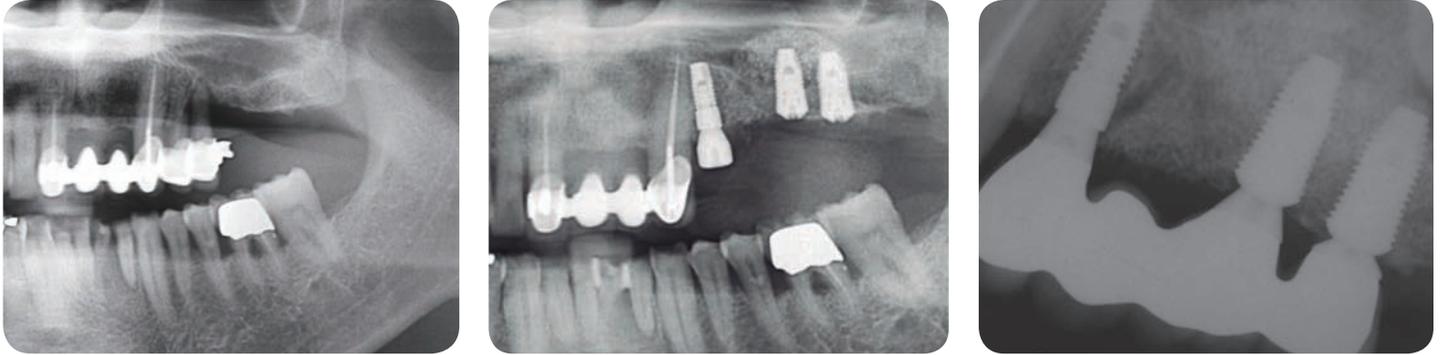
21 months after Sinus Graft Surgery



OSTEON™ area = 6.30mm² (40.4%)
New Bone area = 5.12mm² (33.0%)

Clinical Case

OSTEON™ Sinus Case (Sinus grafting-Lateral approach)



After 9 months

OSTEON™ Lifting Case (Sinus grafting-Crestal approach)



Products

Product	REF	Particle Size (mm)	Volume (cc)
OSTEON™ (Vial Type)	GBG0305	0.3~0.5	0.25 / .050 / 1.00
	GBG0510	0.5~1.0	
	GBG1020	1.0~2.0	
OSTEON™ Sinus (Syringe Type) *For Lateral Approach	GBG0510SS	0.5~1.0	0.50
	GBG1020SS	1.0~2.0	
OSTEON™ Lifting (Syringe Type) *For Crestal Approach	GBG0305LS	0.3~0.5	0.25
	GBG0510LS	0.5~1.0	

OSTEON™ II

Application of OSTEON™ II

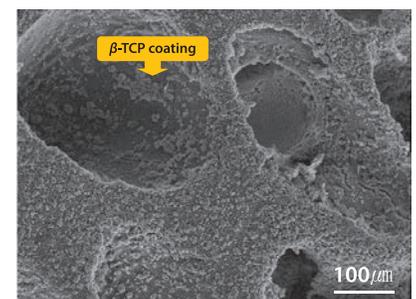
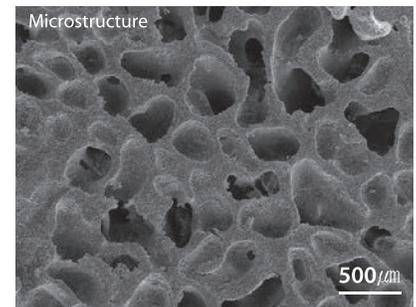
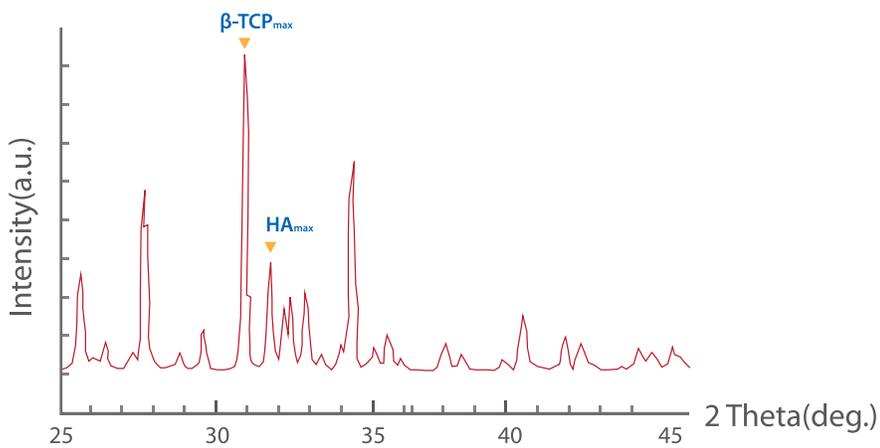
- Ridge augmentation
- Extraction sites
- Cystic cavities
- Sinus lifts
- Periodontal intrabony defects

Composition of OSTEON™ II

HA scaffold coated with β -TCP

Osteoconductive biphasic calcium phosphate with higher β -TCP as compared to OSTEON™

OSTEON™ II = HA 30% + β -TCP 70%

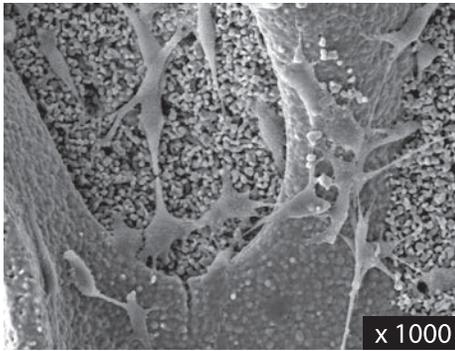


Characteristics of OSTEON™ II

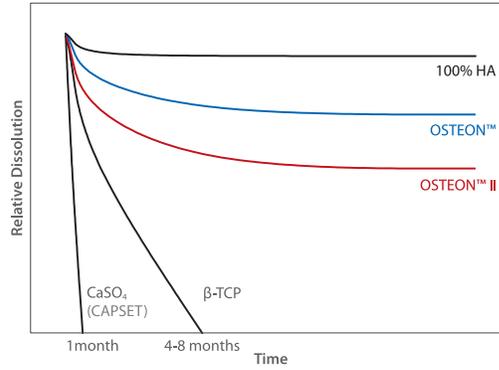
- 100% synthetic bone graft material
- Highly resorbable due to higher β -TCP content as compared to OSTEON™
- Easy manipulation
- Excellent wettability
- Pore size : 250 μ m
- Porosity : 70%

Cell Adhesion Test

Osteoblasts attached & spread well

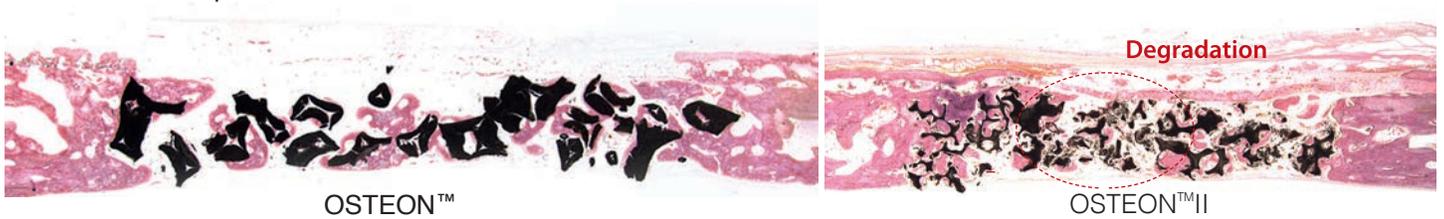


In Vitro Dissolution Test



Animal Test

12-weeks follow up in rabbit calvaria model



Clinical Case

Horizontal GBR

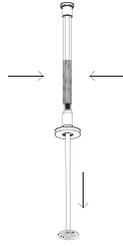


Products

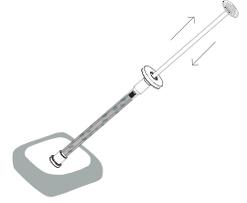
Product	REF	Particle Size (mm)	Volume (cc)		
OSTEON™ II (Vial Type)	DT7G0205025	0.2~0.5	0.25		
	DT7G0205050		0.50		
	DT7G0205100		1.00		
	OSTEON™ II Sinus (Syringe Type) *For Lateral Approach	DT7G0510025	0.5~1.0	0.25	
		DT7G0510050		0.50	
		DT7G0510100		1.00	
		OSTEON™ II Lifting (Syringe Type) *For Crestal Approach	DT7G1020025	1.0~2.0	0.25
			DT7G1020050		0.50
			DT7G1020100		1.00
OSTEON™ II Sinus (Syringe Type) *For Lateral Approach	DT7G0510050SS	0.5~1.0	0.50		
	DT7G1020050SS	1.0~2.0	0.50		
OSTEON™ II Lifting (Syringe Type) *For Crestal Approach	DT7G0205025LS	0.2~0.5	0.25		
	DT7G0510025LS	0.5~1.0	0.25		

Instruction for OSTEON™/ OSTEON™II Sinus & Lifting

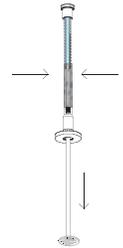
- ① Slightly retract the plunger and gently tap to loosen particles. Gently push plunger back into place.



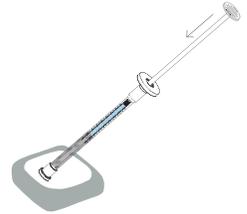
- ② Place syringe into a sterile dappen dish and retract plunger to draw liquid into the syringe.



- ③ To optimize delivery, OSTEON™ / OSTEON™II should be wetted and loosened sufficiently.



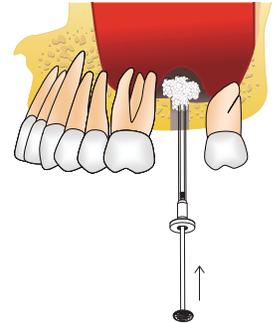
- ④ Expel excess liquid by applying very gentle pressure on the plunger.



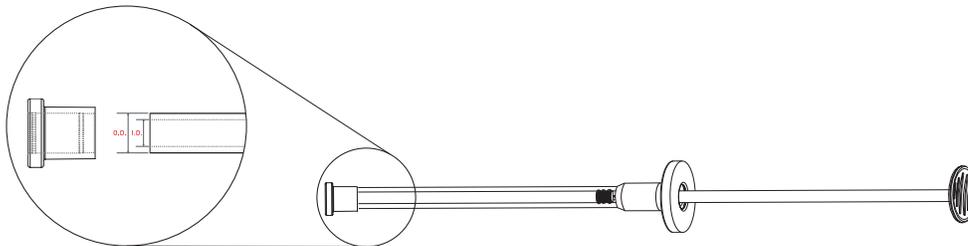
- ⑤ When sufficiently hydrated, OSTEON™ / OSTEON™II will expel with ease from the syringe. Before injecting OSTEON™ / OSTEON™II, remove the cap from the syringe.



- ⑥ Deliver OSTEON™ / OSTEON™II directly into the surgical site with the syringe.



Syringe



Product	O.D.	I.D.
OSTEON™ / OSTEON™II Sinus	Ø 7.0mm	Ø 5.0mm
OSTEON™ / OSTEON™II Lifting	Ø 5.0mm	Ø 3.4mm

O.D : Syringe outer diameter

I.D. : Syringe inner diameter



Collagen Membrane

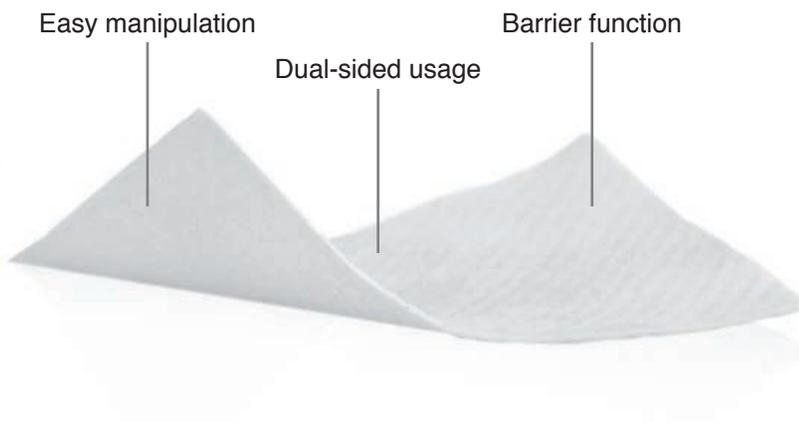
Biodegradable barrier membrane for guided bone / tissue regeneration

Application of Collagen Membrane

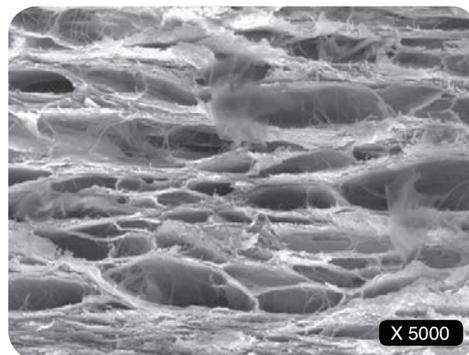
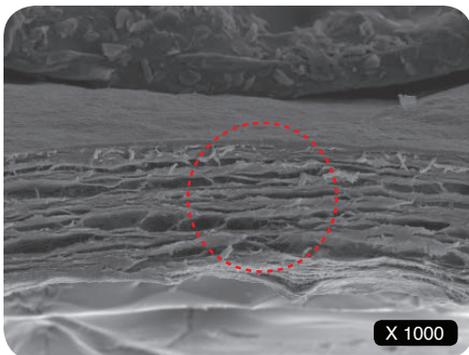
- Periodontal / intrabony defects
- Ridge augmentation
- Extraction sites (implant preparation / placement)
- Sinus lifts

Characteristics of Collagen Membrane

- Highly pure type 1 collagen derived from bovine tendon : New Zealand.
- Thin membrane (300 μ m) with multiple layers for easy manipulation and good mechanical strength in surgery.
- Resorption period provides 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 osteoblasts.
- Easy manipulation
- Dual-sided usage



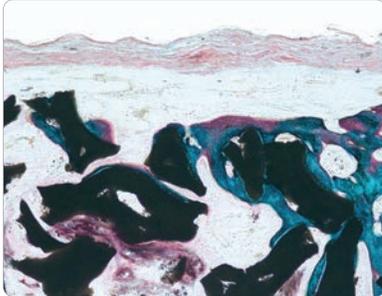
SEM Image



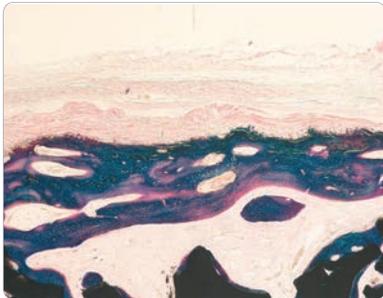
Animal Test

- Rabbit Calvaria Model, 6-12 weeks

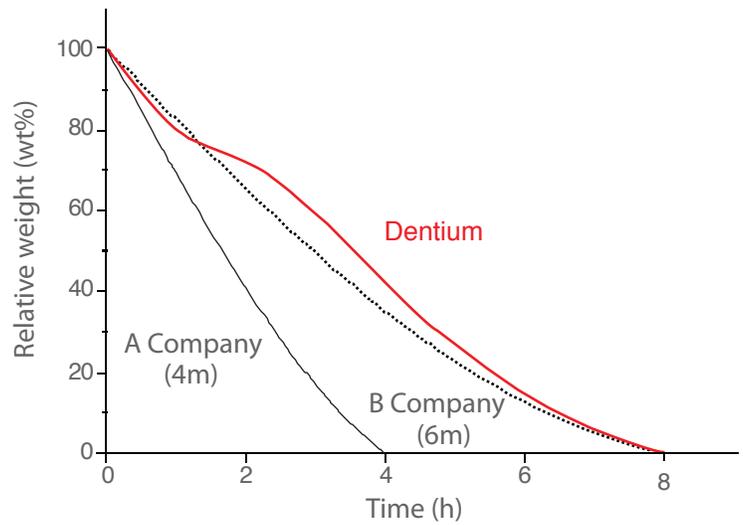
6 weeks



12 weeks

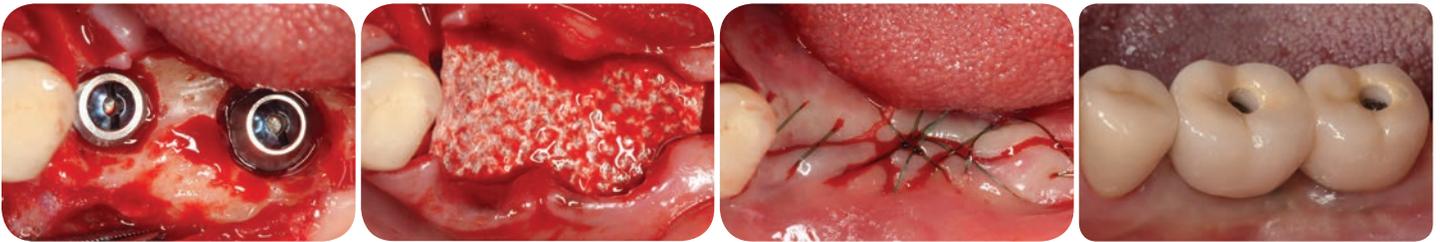


- Degradation character in collagenase solution

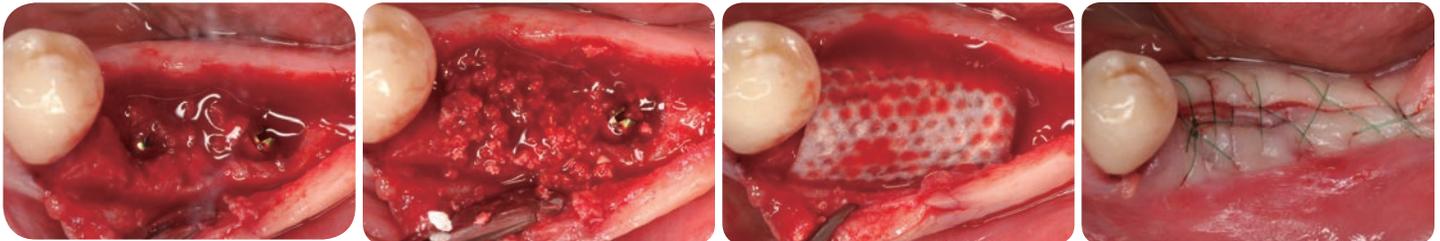


Clinical Case

GBR



GBR



Products

Product	REF	Size (mm)	Thickness (mm)
Collagen Membrane	GCM1020	10 X 20	0.3
	GCM1520	15 X 20	
	GCM2030	20 X 30	

Regeneration

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Specifications are subject to change without prior notice.

PN2874 - 2

L.A. Office / MFG

6761 Katella Ave. Cypress, CA 90630 Tel. 1-877-304-6752 Fax. 1-714-226-0019

N.Y. Office

180 Sylvan Ave. Englewood Cliffs, NJ 07632 Tel. 1-201-402-1390 Fax. 1-201-731-3042

Website / E-mail

www.dentiumusa.com , cs@dentiumusa.com