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Behind The Best Indian Dentists

MedPark

NEW BONE NEW LIFE

FDA

CE 0477

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NEW BONE
NEW LIFE

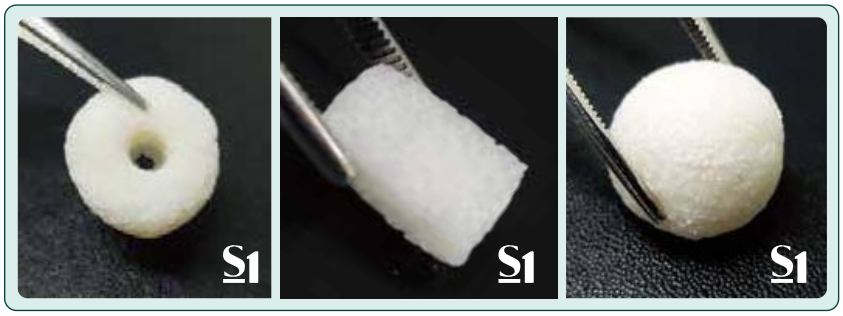
Keywords

MedPark Bone (Bovine Bone)

VS

Other product

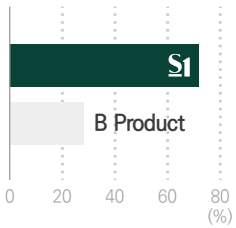
- Excellent adhesion and fixation
- Sufficient space maintenance
- Excellent osteoconduction



MedPark Bone (Bovine Bone)

- Easy to manipulate
- Moldable to shape

High porosity



Porosimeter Test

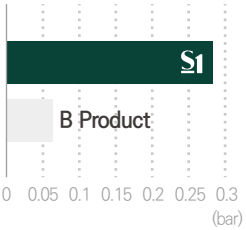
- With a porosity of over 70%, it enables rapid penetaration of growth factors

Improved hydrophilicity

Hydrophilicity Test

- Hydrophilic property allows for easy blood absorption

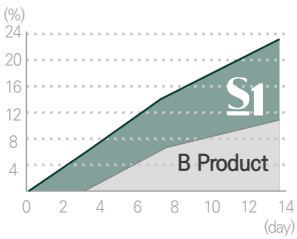
Excellent shape maintenance



Pressure Test

- Perfect shape maintenance against high pressure from outside compared to other bone

Bone formation rate



Mass Increase Test(SBF)

- In SBF, MedPark Bone shows 21% increase in mass after 14days, indicating high affinity

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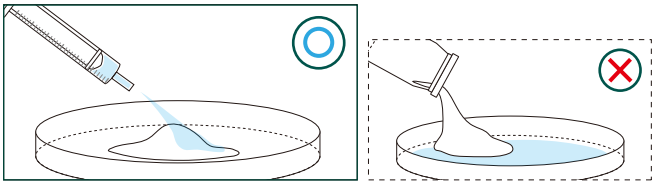
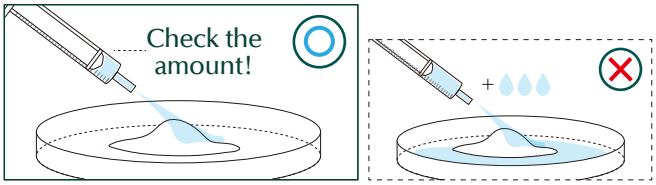
Quick Guide

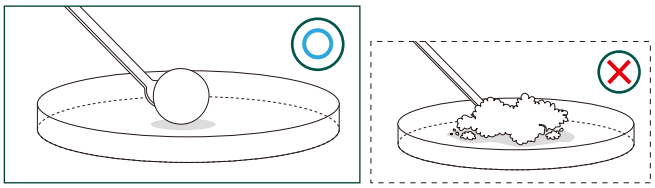
- ☑ Please use the recomended amount of solution
- ☑ Each package is for one-time use only
- ☑ Do not mix with other bone grafts
- ☑ Mix with solutions well enough (over 10 secs)



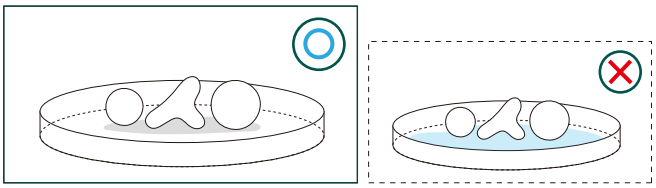
1 Place MedPark Bone in the tray and hydrate the materials with saline



1 Please use the recommended amount of saline only.



1 Knead the dough enough for at least 30 seconds by using hands or tools to form a lumpy shape before using MedPark Bone.



1 Do not soak in saline after shaping for a surgery

Recommended Hydration Amount

Particle size	Volume (Weight)	Recommended Hydration Amount
0.2 ~ 1.0 mm (Powder Type)	0.5cc (≈0.25g)	0.3 cc ※
	1cc (≈0.5g)	0.6 cc ※
	2cc (≈1.0g)	1.2 cc

Particle size	Volume (Weight)	Recommended Hydration Amount
1.0 ~ 2.0 mm (Chip Type)	0.75cc (≈0.25g)	0.4 cc ※
	1.5cc (≈0.5g)	0.8 cc ※
	3cc (≈1.0g)	1.6 cc
	6cc (≈2.0g)	3.2 cc

※ If less than 1cc of solution is reguired, it is recomended to use a 1cc syringe.

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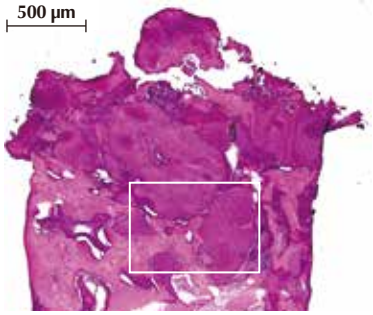
Innovative technology
Check it out for yourself !

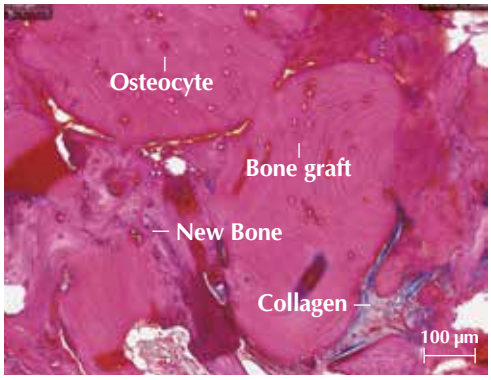
Biopsy

※ Hematoxylin & Eosin Stain

Case 1 | #14, Ridge augmentation

Patient Info : 65 years-old, Female



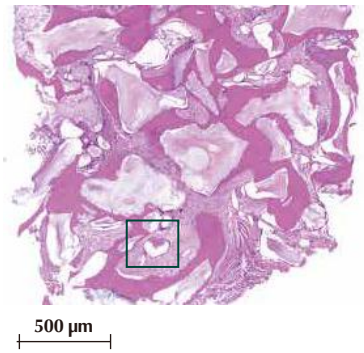


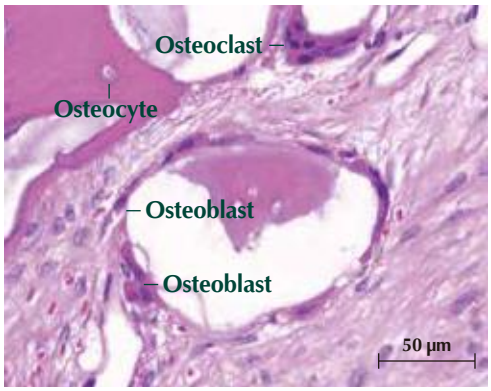
Clinical Opinion

- Excellent bone formation around bone graft material
- The graft materials appeared surrouded by newly formed bone
- No sign of inflammation or immune rejections

Case 2 | #26, Sinus graft

Patient Info : 73 years-old, Female





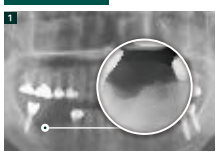
Clinical Opinion

- Excellent osteoconduction as it shows osteoclasts and new bone formation
- No evidence of inflammation or immune rejection

Clinical cases

Case 1

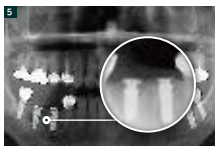
Patient Info : 59 years-old, Female


Before surgery


Placing Fixture


Grafting MedPark Bone

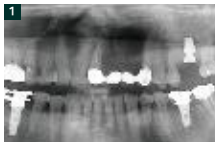

Suture


After 3m MedPark Bone


Final prosthesis

Case 2

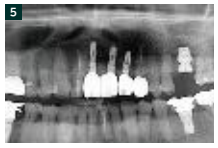
Patient Info : 66 years-old, Male


Before surgery


Placing Fixture (Implant placement at #11, #21, #22)


Grafting MedPark Bone


4 months after MedPark Bone graft


X-ray after final prosthetics


Final prosthesis

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INNOVATIVE

moldable Bone graft material

S1
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Sticky Bone without Blood Collection!

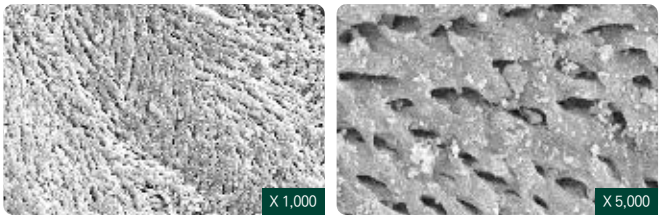
Bovine Bone Mineral

- Unable to mold
  Lack of retentivity
- Scattered & Flowing
- Blood collection to make sticky bone

S1

- **Moldable & Customizing**
- **Stable adherence**
- **Sticky bone made easily with saline or blood**

BOVINE BONE GRAFT



MedPark Bone has similar structural characteristics with human bones

Due to its high porosity, MedPark Bone provides the most optimal environment for promoting osteoblast adhesion, blood vessel formation, and bone regeneration.

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BOVINE BONEGRAFT

NATURAL BONE SUBSTITUTE

FDA

CE 1434

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Bovine bonegraft manufactured by Sintering Technology of MedPark

Biocompatibility

- High blood permeability, similar pH to body fluids, rapid new bone formation without inflammatory reactions
- Sticky bone formation through PRF and CGF with independent process technology

Excellent Pore Structure

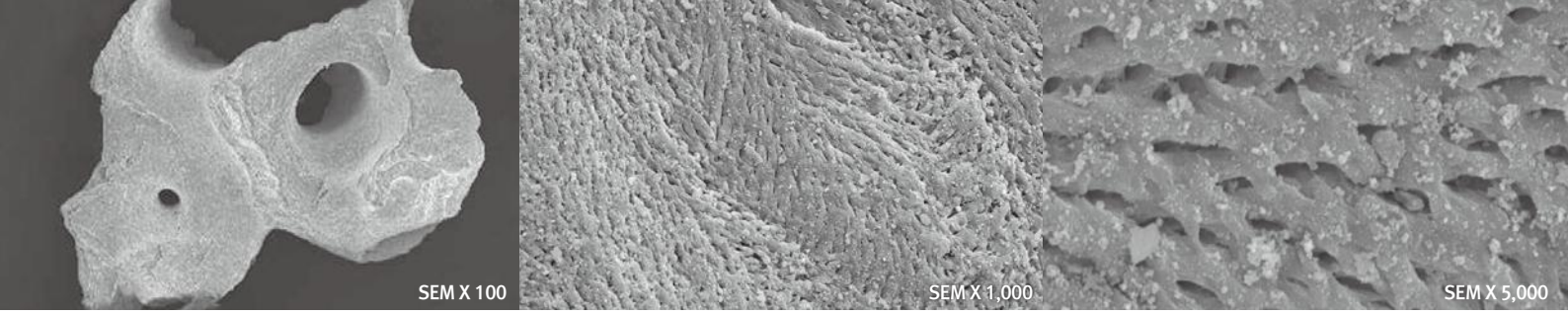
- Selection of proper size of graft materials for suitable environment for bone regeneration
- Increased micropores allows the migration of osteoblasts for increasing new bone formation

Easy Manipulation

- Enhanced hydrophilicity allows user to manipulate easily
- Applicable to various indication such as Socket Preservation, Sinus lift, Periodontal Defects and Ridge Augmentation

Specifications

Source	Particle size	Weight	Volume
Bovine	0.2 ~ 1.0 mm (Powder Type)	0.25 g	0.5 cc
		0.5 g	1.0 cc
		1.0 g	2.0 cc
	1.0 ~ 2.0 mm (Chip Type)	0.25 g	0.75 cc
		0.5 g	1.5 cc
		1.0 g	3.0 cc
		2.0 g	6.0 cc



Perforations similar to human bones

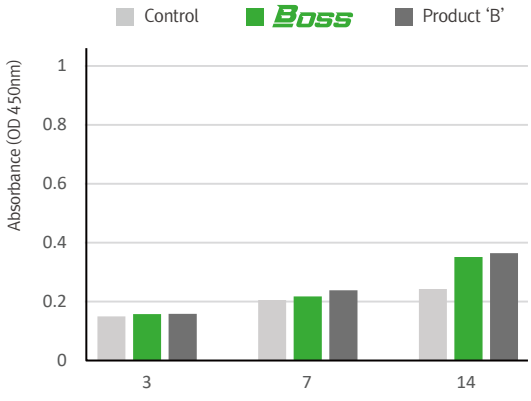
High pore rate confirmed by the Porosimeter Test

Rough surface of microstructure makes osteoblast stick to the surface easily

(* Measure the size and pore rate of pores present on the sample surface by adsorbing mercury on the specimen)

Type	Product	Porosity (%)
Powder	Boss	70.20
	Company 'A'	48.74
	Company 'B'	36.36

Excellent bone formation & biocompatibility



[Osteoblasts Differentiation Test]

[Cytotoxicity Test]

- **Safe and stable bonegrafts without toxicity**
- Cell survival rate was equivalent to that of the Product 'B'
- Complete safety and stability verification as bonegraft
- **Excellent biocompatibility,** good differentiation of osteoblasts

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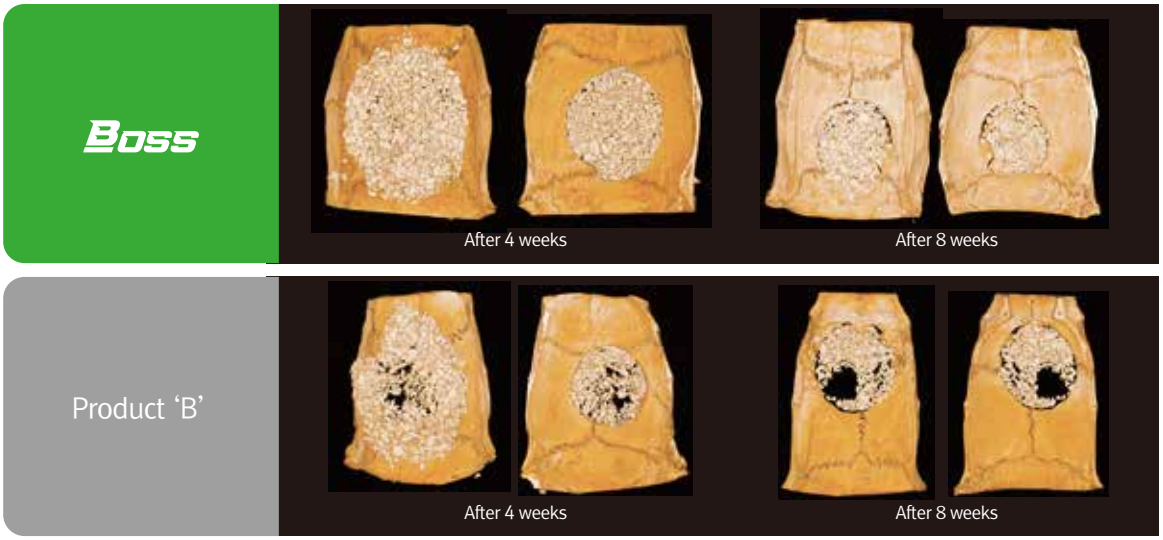
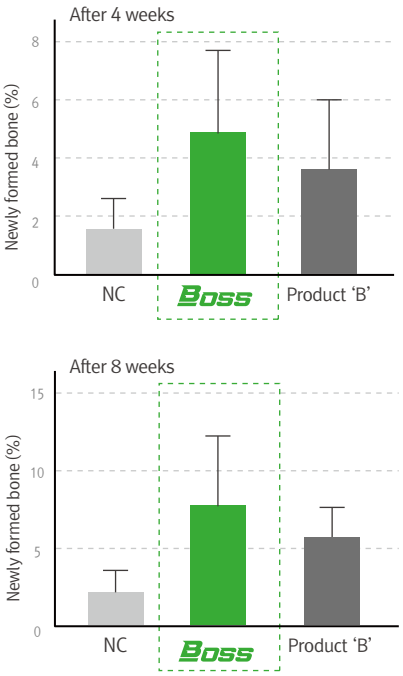
Pre-clinical case

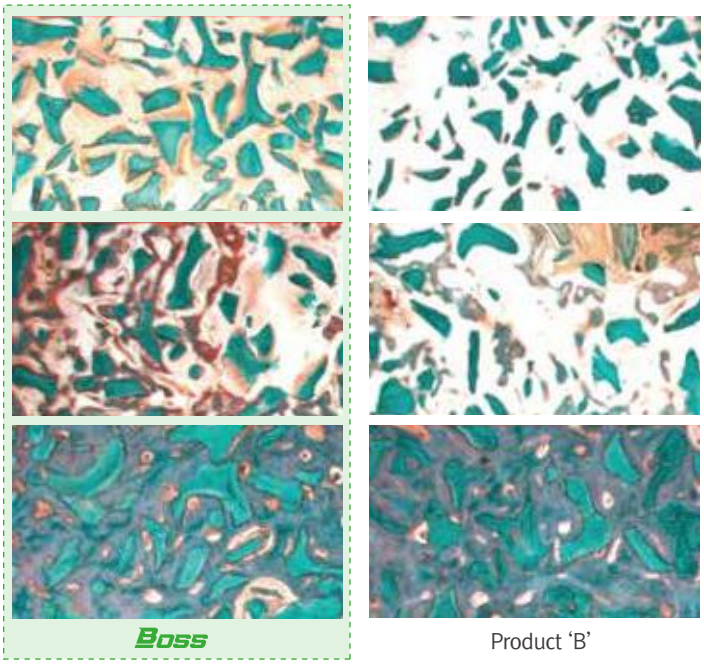
Space maintenance test (Micro CT) : Small Animal (Rat)



· **Superior space provision** after 4 and 8 weeks in defect when compared to product 'B'

New bone formation test (H&E Stain) : Large Animal (15 Dogs, Beagle)





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Clinical case

Case 1

Preoperative X-ray

Incision of the affected part

Fixture placement

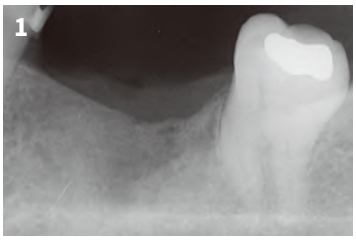
Application of **BOSS**

Application of CGF Membrane

Temporary Prosthesis

Postoperative X-ray

Case 2

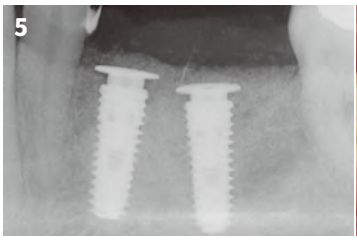


Preoperative X-ray

Fixture placement

Application of **BOSS**

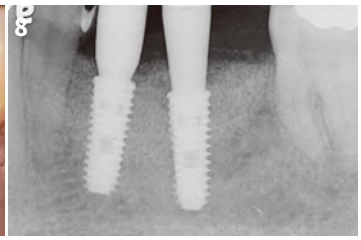
Application of **COLLA**



Postoperative X-ray

After 3 months
(Detection of keratinized tissues)

2nd Surgery
(Successful Bone formation)



X-ray After 2nd Surgery

· M. Figueiredo et al., 2010, Effect of the calcination temperature on the composition and microstructure of hydroxyapatite derived from human and animal bone, Ceramics International 36 (2010) 2383-2393
· AntoR Murugan et al., 2002, Heat-deproteinated xenogeneic bone from slaughterhouse waste : Physico-chemical properties, Indian Academy of Sciences. Vol. 26,523-528
Al Pearce et al., 2007, Animal models for Implant biomaterial research in Bone: A review, European Cells and Material Vol. 13. 2007
· Jungheon Lee ea al, 2017, Physicochemical characterization of porcine bone-derived grafting material and comparison with bovine xenografts for dental applications, J Periodontal Implant Sci. 2017 Dec:46(6):388-401

UNICORN DenMart UE®
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RESORBABLE
COLLAGEN MEMBRANE

CE 1434

FDA

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Resorbable collagen membrane with Medpark's crosslinking technology

Biocompatibility

- Using type I bovine collagen through standardized refining process
- Biocompatibility improvement of crosslinking technology ensures safety without inflammatory reactions

Stable Decomposition Period

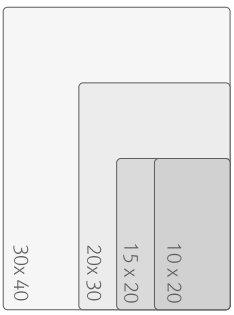
- Ensured biodegradation period through application of CE certified quality management standard
- Colla can stand in the body for at least 4 months

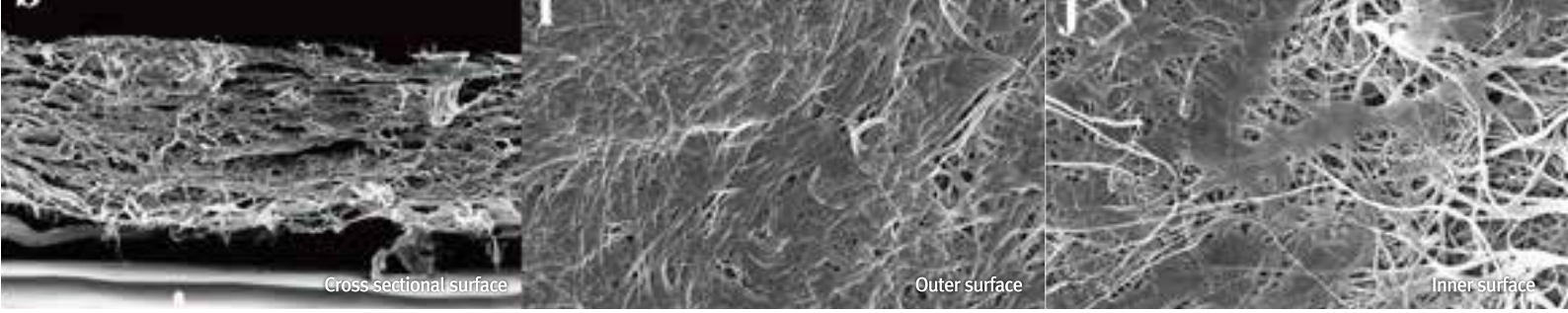
Space Maintenance

- Excellent space maintenance in bone defect
- Reliable bone regeneration effect with perfect prevention of soft tissue penetration

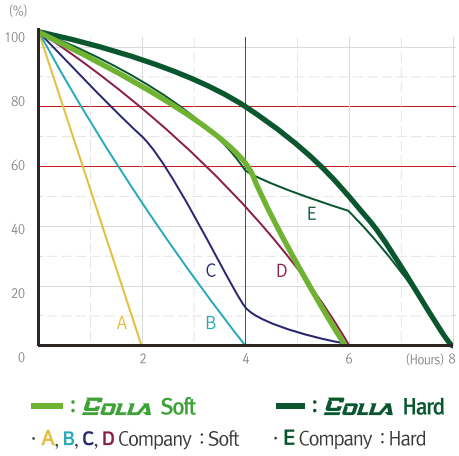
Sepcifications

Source	Type	Feature	Size
Bovine	Soft	· Excellent adhesion · Handling facilitated	10 X 20 mm
			15 X 20 mm
			20 X 30 mm
			30 X 40 mm
	Hard	· Multilayer Structure · Excellent Tension	10 X 20 mm
			15 X 20 mm
			20 X 30 mm
			30 X 40 mm





Excellent initial shape retention



Collagenase Degradation Test

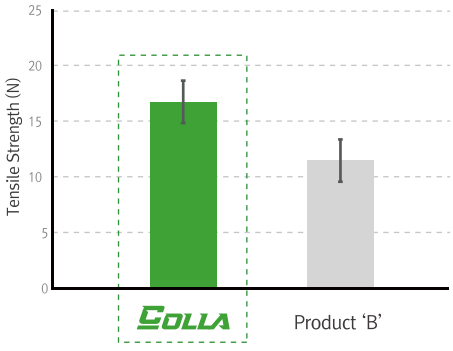
COLLA	Soft Type	Hard Type
Degradation time	6 hours	8 hours
Shape	Maintaining 60% of its shape up to 4 hours	Maintaining 80% of its shape up to 4 hours

Collagenase?

Enzymes that break down the peptide bonds in collagen

· Better initial shape maintenance than other membranes

In Vitro Test



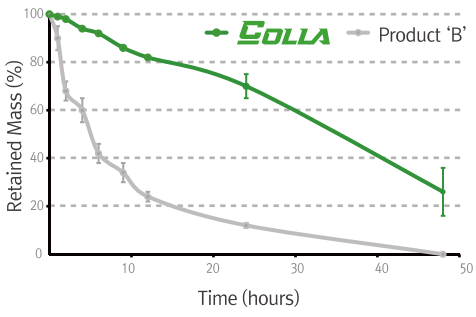
Tensile strength of membranes in wet state (unit:N) (n=5)

Mechanical test (Tensile strength)

Improving a manipulability and ensuring a stability for external stress

· Tensile strength (tearing resistance) in hydration is higher than other products

· Securing the initial osteoblast proliferation by its stability



Tensile strength of membranes in wet state (unit:N) (n=5)

Degradation test (Collagenase)

Improved resistance to decomposition as structural stability is achieved by enhanced interaction between collagen molecules

· High resistance to the enzyme action of macrophage

· Helping effective new bone formation by its shape maintenance and high resistance to enzyme decomposition

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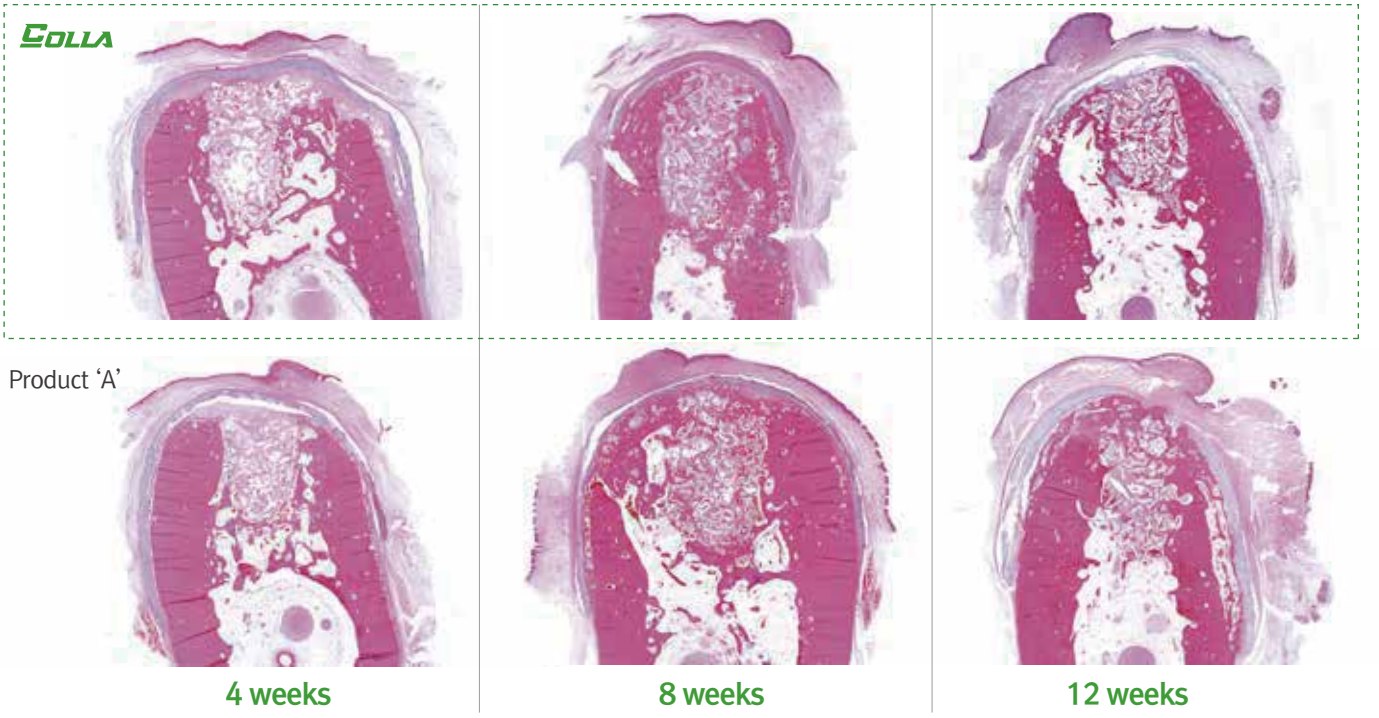
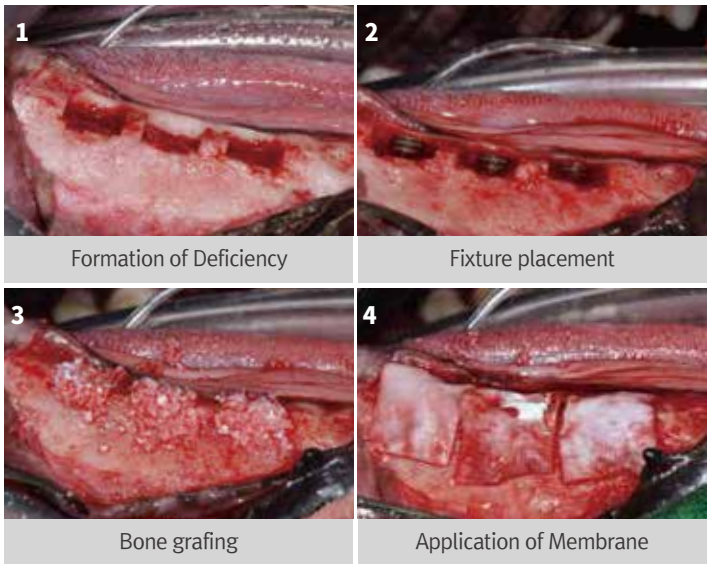
Pre-clinical case

Evaluation of histologic bone formation stability (H&E) : Large Animal (Beagle)



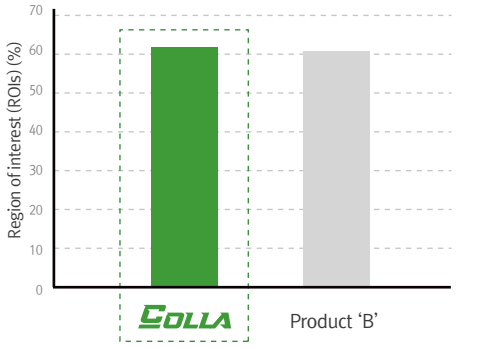
· **COLLA prevents loss of the bone graft materials,** and that the shape and thickness remain constant over time, thus **ensuring stable new bone formation**

New bone formation test (Micro CT) : Large Animal (Beagle)



Formation of Deficiency | Fixture placement

Bone grafing | Application of Membrane



Bone volume analysis within regions of interest (ROIs)(%)

[Bone volume analysis result using Micro CT]

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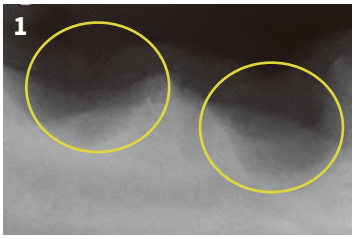
Clinical case

Case 1



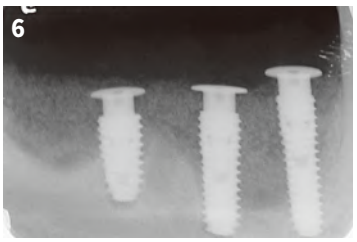
Preoperative X-ray

Flap incision

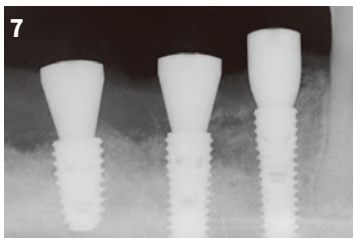
Implant installation

S1 Dental bone graft

Application of **COLLA**

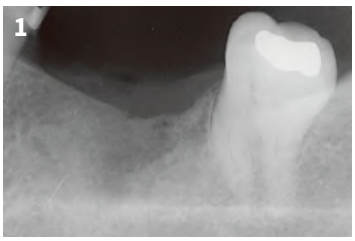


After the surgery



4 months after Implant placement,
X-ray After 2nd stage surgery

Case 2

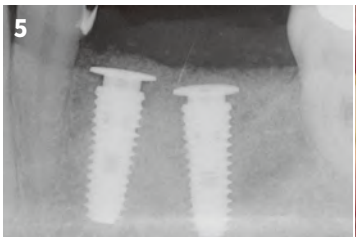


Preoperative X-ray

Incision of the affected part

Application of **BOSS**

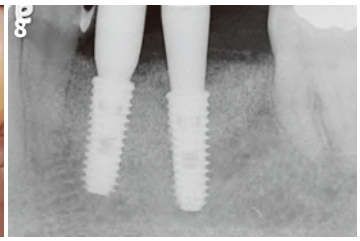
Application of **COLLA**



Postoperative X-ray

Healing period, after 3 months of surgery
(Detection of keratinized tissues)

2nd surgery after 3 months



Postoperative X-ray, after 2nd surgery

Indication

- Periodontal/Infra bony defects
- Ridge augmentation
- Extraction sites
- Guided bone regeneration (GBR) procedures
- Sinus lifts

31 Years of LEADERSHIP

WHERE **TRUST** COMES **FIRST**

Warranty Ke Saath Bhi

Warranty Ke Baad Bhi

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Connect With

Unicorn DenMart

Corporate Office: 3 Local Shopping Centre, MOR Land, Near J Block DDA Market, New Rajender Nagar, New Delhi – 110060

* Accessories shown may not be a part of standard equipment. Specifications are subject to change without notice.

Ver 7/2025