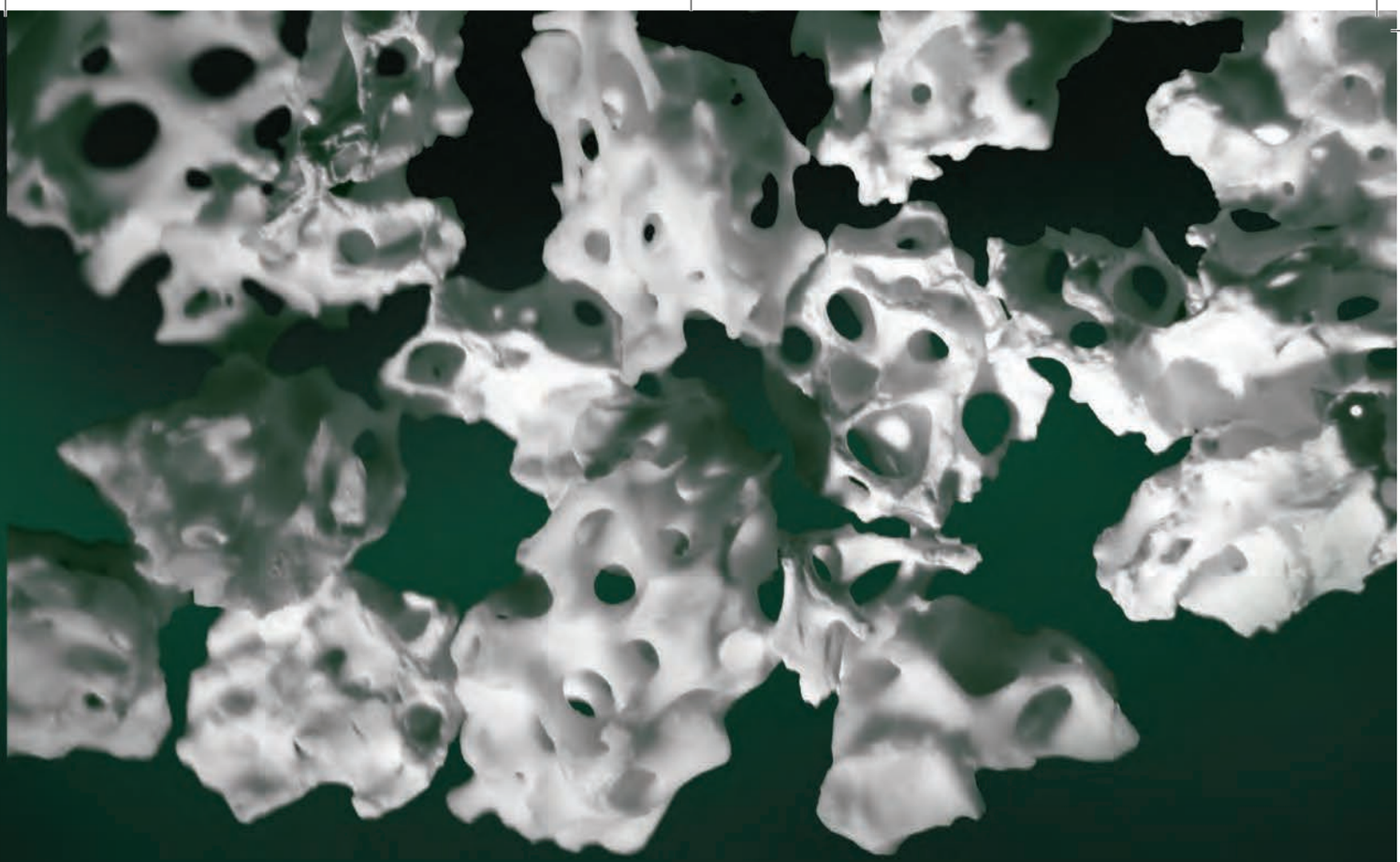


Ti-OSS®

CANCELLOUS SUBSTITUTE

Leading regeneration with quality, reliability, affordability

Manufactured with the highest quality standard moves your practice to high success rate and safety.

CE 1023

Ti-oss®, natural bovine cancellous substitute becomes

New GOLD STANDARD in Xenograft.

Bone Graft

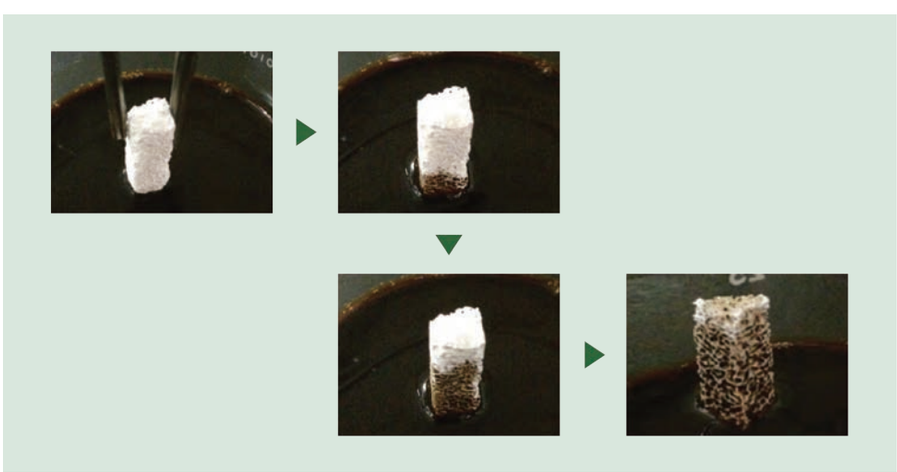
Ti-oss®

Ti-oss® Syringe

Ti-oss® particle is filled into the syringe form for easy handling onto the wound site. Several drops of Blood, saline, PRP at the entrance of syringe allows wetting whole Ti-oss® particles in the syringe. Unique Ti-oss® pore size makes this possible.

Ti-oss® Block

Whole block of Ti-oss® opens new horizon to Bone grafting technique with these special fact. Average Ti-oss® pore size is more than three times of other world leading product. This advanced manufacturing technique permits rapid absorption of blood or saline into the block, allowing ingrowth of blood vessel and osteoblasts.
Stabilization of Block is easily achieved by carving with surgical blade and adaptation in the patient mouth.
Horizontal mattrix suture or PRP fixation is possible.

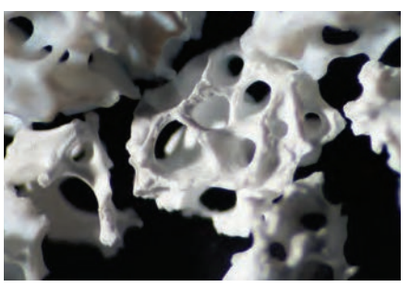


Our manufacturing technical level and Ti-oss® quality

Do not allow comparison to any products in the world.

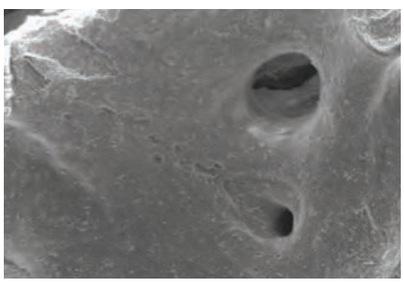
Multiporosity Structure

Ti-oss® is made from 100% cancellous bone without any cortical portion. Innovative pulverizing technique allows multiporous structure, maximizing blood vessel ingrowth.



Pore size

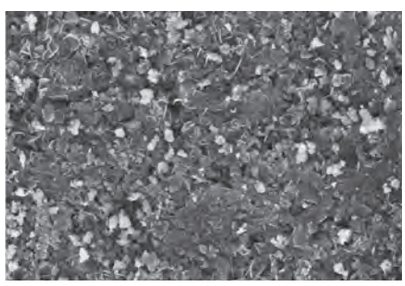
(Ti-oss® SEM image x 100)



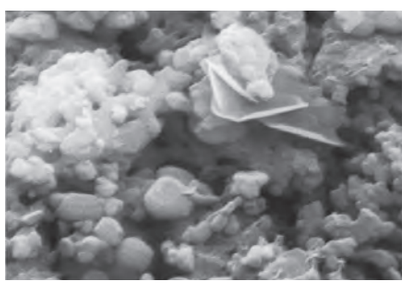
(A Co. SEM image x 100)

Octacalcium Phosphate Crystal

Pre HA structure, octacalcium phosphate crystal is found on the surface of Ti-oss®, resulting in fast bone formation.



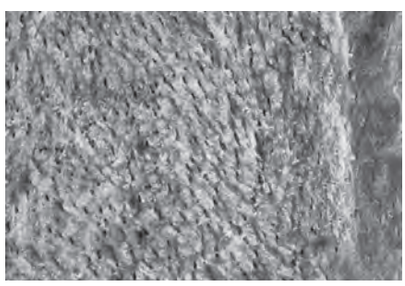
(SEM image x 10,000)



(SEM image x 50,000)

Osteoconductive Surface

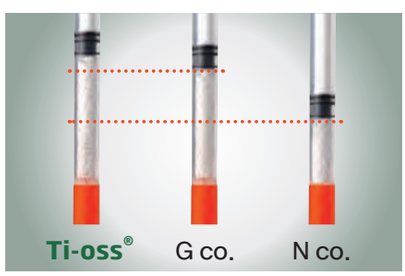
Low temperature processing technique allows ideal, natural surface topograph, the same as human bone, stimulating osteoblast activity. Vitrification phenomenon caused by high temperature process has been completely controlled.



(SEM image x 3,000)

Large Volume

Unique 100% multiporous cancellous nature offers higher quantitative mass volume per gram unit, compared to other nonporous product. This leads to less material cost.

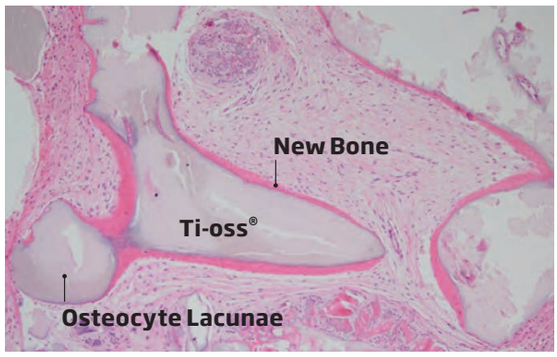


(Comparison of CC per gram)

Human Biopsy Result

Osteoconductive nature of Ti-oss® surface was evaluated by biopsy specimens. Consistent new bone formations were noted in several different clinical cases. Reliability of Graft success, Early bone formation, Observation of Osteocyte Lacunae

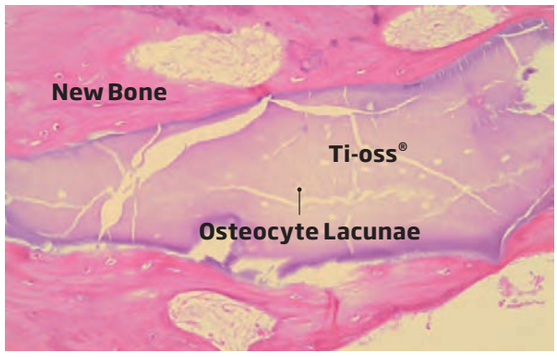
3 Months Biopsy Findings



Hospital : Myungin Dental
Lee, Myung Ho, D.D.S
Surgical No. : b-12-238488

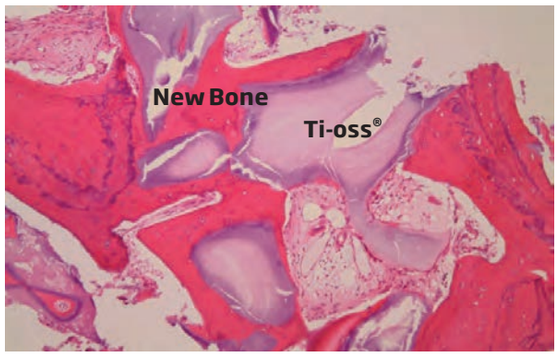
Date : 2012.11.12
Pictured by : S.A.LEE MD

4 Months Biopsy Result



- Research Report date; May, 2012
- Kim, Sun Young, D.D.S. Prosthodontist
- Suplant Dental Clinic Seoul, Korea

4 Months Biopsy



Mandibular left second molar

Ham, Byungdo, DDS, Periodontist
Seoul Korea

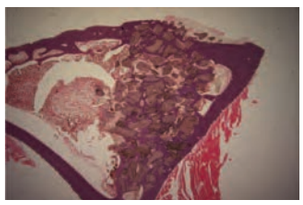
Animal Comparison ; Multiporosity, Pore Size, Natural Topograph, Octacalcium Phosphate

Make Significant Clinical Difference due to following factors.

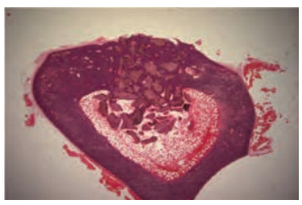
1. Angiogenesis by Porosity design.
2. Osteoblast movement by Natural Topograph
3. Fast Bone Formation by Octacalcium Phosphate

   Please look at the animal data.

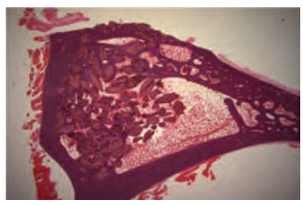
Ti-oss®



Rabbit Tibia 12 weeks
- Ti -oss® New Bone well formed

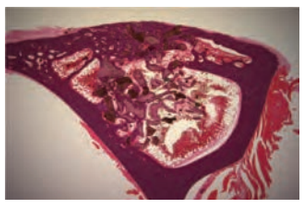


Rabbit Tibia 12 weeks
- Ti -oss® Densely formed

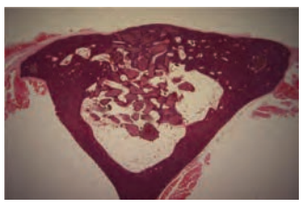


Rabbit Tibia 12 weeks
- Ti -oss® Excellent Osteoconductivity

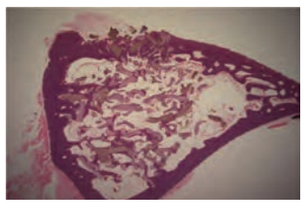
Competitor



Rabbit Tibia 12 weeks
- "A" Co Loosely formed Bone



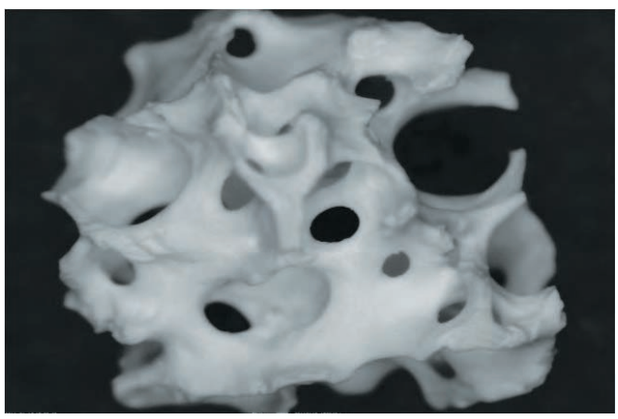
Rabbit Tibia 12 weeks
- "A" Co Loosely formed Bone



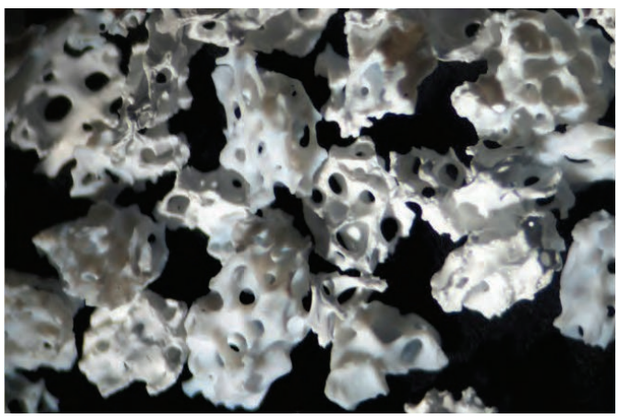
Rabbit Tibia 12 weeks
- "A" Co Loosely formed Bone

Microscopic Comparison

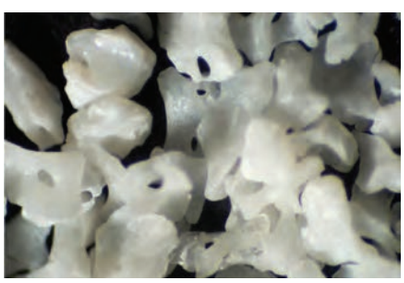
Ti-oss® multiporosity allows maximum angiogenic process, which is critical in first 2 weeks of initial bone healing stage. Osteoblast, oxygen, nutrients can not be supplied into the graft without blood vessel. Ti-oss® guarantees maximum revascularization into the graft, leading to high bone formation.



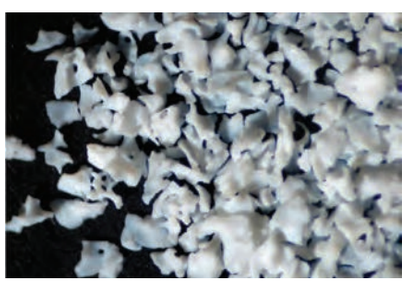
Gold Standard - Multiporosity



Uniformity of Ti -oss®



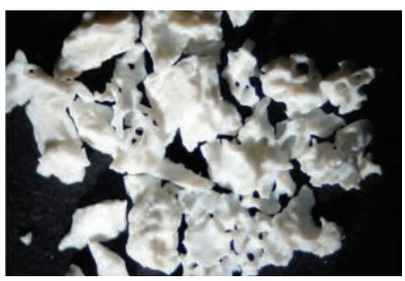
"A" Co. Nonporous Glassified Surface



"A" Co. Damaged Porosity

"A" Co. All Cortical Particles

"B" Co. Nonporous Glassified



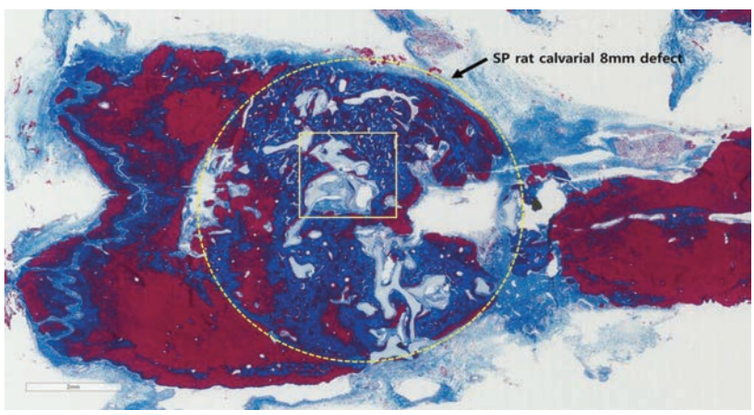
"C" Co. Cortical Particle Included

Ti-oss® resorption by Osteoclast found on 8 weeks rat model.

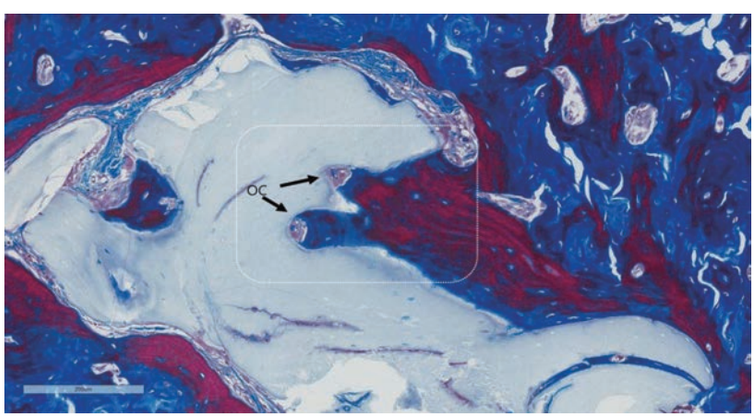
Jun, Sangho, DDS, MS, Ph.D
Korea University Hospital, Dental Division, Oral and maxillofacial department

Ryu, Jaejun, DDS, MS, Ph.D
Korea University Hospital, Dental Division, Prosthodontic department

In 8 weeks after the placement of Ti -oss® bone graft,
rat calvarial defect has been filled into the defect center.



Ti -oss® resorption by Osteoclast started 8 weeks after the
placement of Ti -oss® graft onto the surgical defect.
(yellow square)



Ti-oss®
CANCELLOUS SUBSTITUTE

Hyundai Marine & Fire Insurance
Product Liability Insurance

Introduction of Ti-oss® to the world dental society is an honor. We have been researched over 2 years to reach the highest quality, developing new innovative processing techniques. Our goal is to serve dental profession with reliability, safety. Ti-oss® will strive for the future of tissue engineering and research.

Ti-oss®

No.	Product / Weight	Size
25-0512	Ti -oss® 0.25g/0.6cc	0.5 - 1.2mm
05-0512	Ti -oss® 0.5g/1.2cc	0.5 - 1.2mm
10-0512	Ti -oss® 1.0g/2.3cc	0.5 - 1.2mm
20-0512	Ti -oss® 2.0g/4.5cc	0.5 - 1.2mm
25-1217	Ti -oss® 0.25g/0.75cc	1.2 - 1.7mm
05-1217	Ti -oss® 0.5g/1.5cc	1.2 - 1.7mm
10-1217	Ti -oss® 1.0g/3.0cc	1.2 - 1.7mm
20-1217	Ti -oss® 2.0g/6.0cc	1.2 - 1.7mm

No.	Product / Weight	Size
25-0210	Ti -oss® 0.25g/0.45cc	0.2 - 1.0mm
05-0210	Ti -oss® 0.5g/0.8cc	0.2 - 1.0mm
10-0210	Ti -oss® 1.0g/1.5cc	0.2 - 1.0mm
20-0210	Ti -oss® 2.0g/3.0cc	0.2 - 1.0mm

Ti-oss® Syringe

No.	Product / Weight	Size
S25-0512	Ti-oss® Syringe 0.25g/0.6cc	0.5 - 1.2mm
S05-0512	Ti-oss® Syringe 0.5g/1.2cc	0.5 - 1.2mm
S25-1217	Ti-oss® Syringe 0.25g/0.75cc	1.2 - 1.7mm
S05-1217	Ti-oss® Syringe 0.5g/1.5cc	1.2 - 1.7mm

Ti-oss® Block

No.	Product	Size
BLK8812	Ti oss® Block	8 x 8 x 12mm
BLK8825	Ti oss® Block	8 x 8 x 25mm

Ti-oss®
CANCELLOUS SUBSTITUTE

6F., 192, Gyeongchun-ro, Guri-si, Gyeonggi-do, Republic of Korea
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