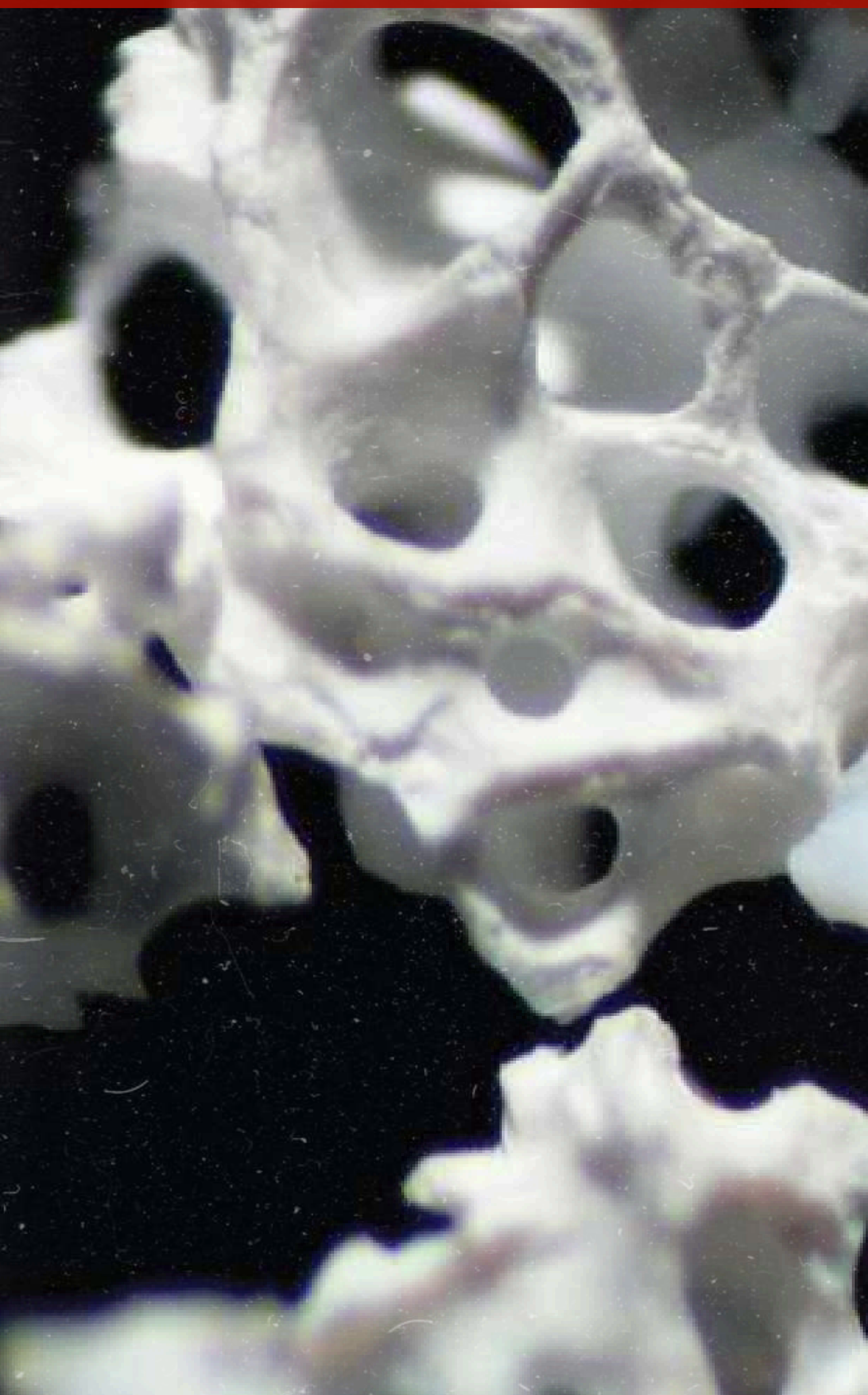
Ti-OSS®

CANCELLOUS SUBSTITUTE

The Gold Standard of Dental Bone Substitute

CE 1434

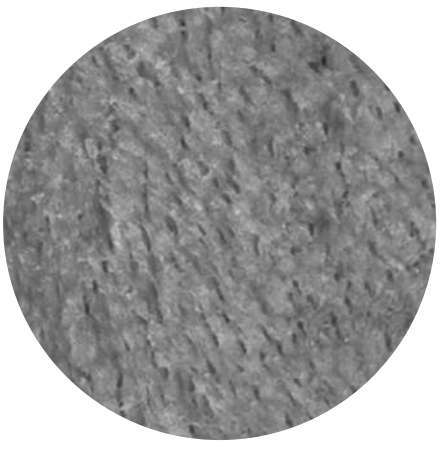


WHY IS TI-OSS® SPECIAL?

Ti-oss® made from 100% BSE-free approved Australian Bovine Origin, is a biocompatible, highly porous, OCP-based inorganic mineral matrix designed for dental regenerative applications.

The performance of **Ti-oss®** clearly stands out from other world-leading products in the market. That's because of the following **THREE ESSENTIAL PROPERTIES** that you can find only with **Ti-oss®**

GENUINE MULTIPOROUS STRUCTURE



ROUGH HYDROPHILIC STRUCTURE

OSTEO PROMOTING FACTOR

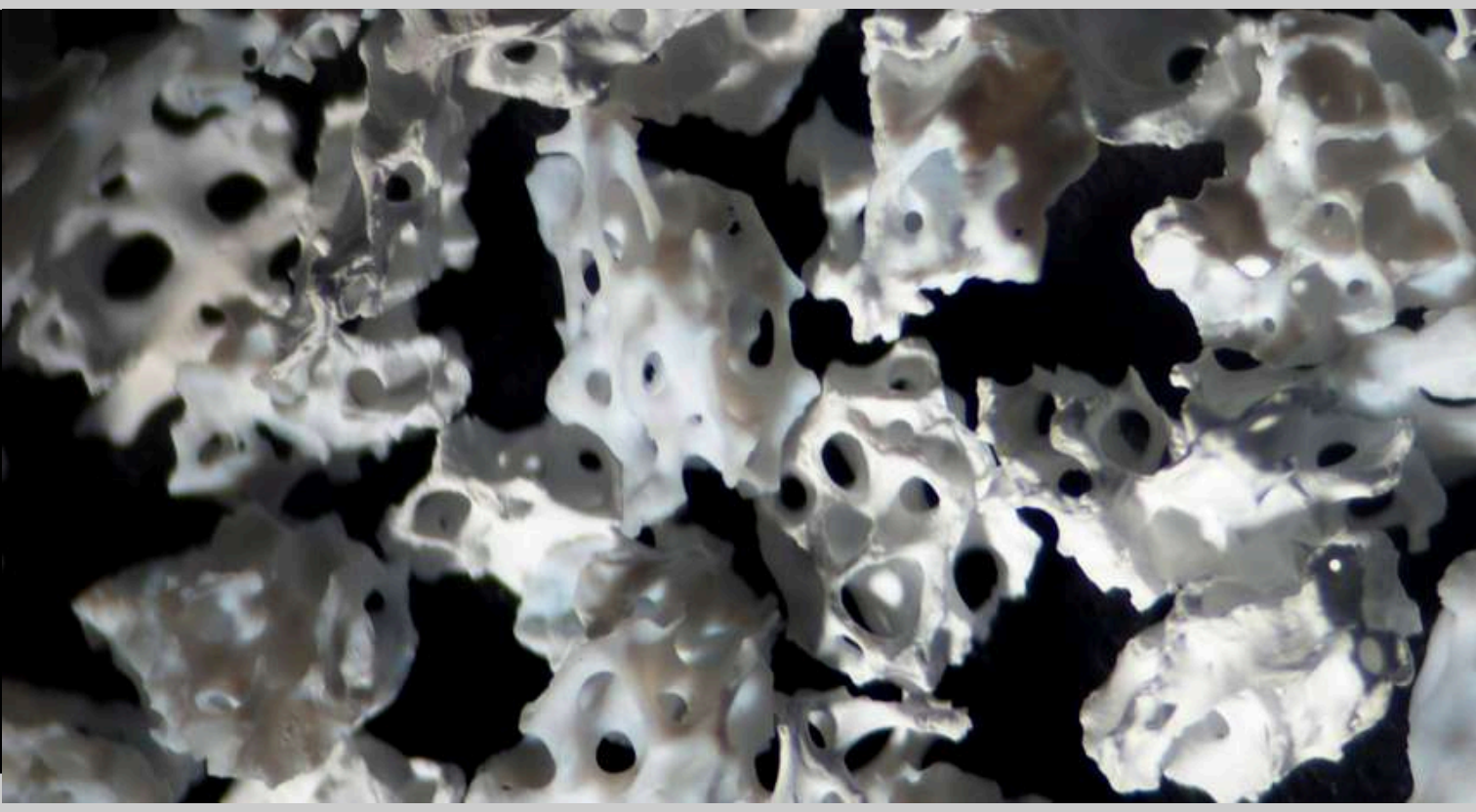
GENUINE MULTIPOROUS STRUCTURE

Ti-oss® shows an excellent multiporous structure.

The porosity of the bone graft substitute is one of the most crucial factors for angiogenic progress. Ti-oss® is made from 100% pure cancellous bone without the use of cortical portions. Our specialized & advanced pulverizing technique enables mass production of highly porous and uniformed graft particles.

Ti-oss® 1.2-1.7 X20

Uniformed Multiporous Structure

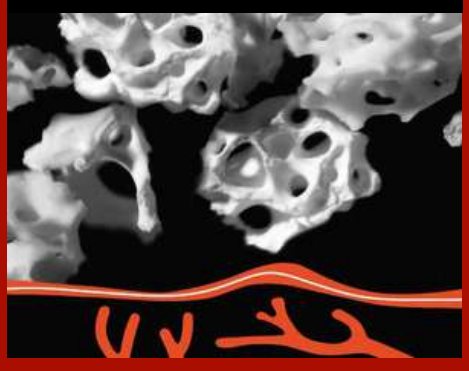


Competitors - Poor Porous Nature

A Co. X20	B Co. X20	C Co. X20
		

Post Graft Surgery Blood Vessel Progress of Ti-oss®

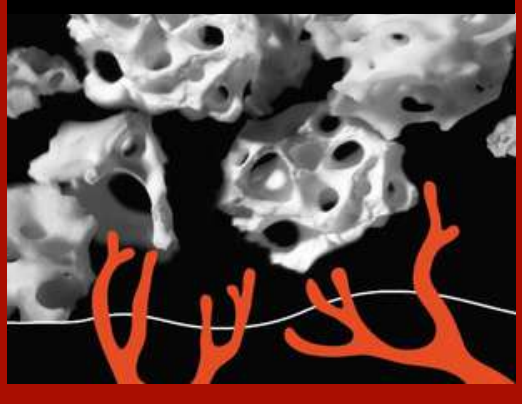
After 3 days



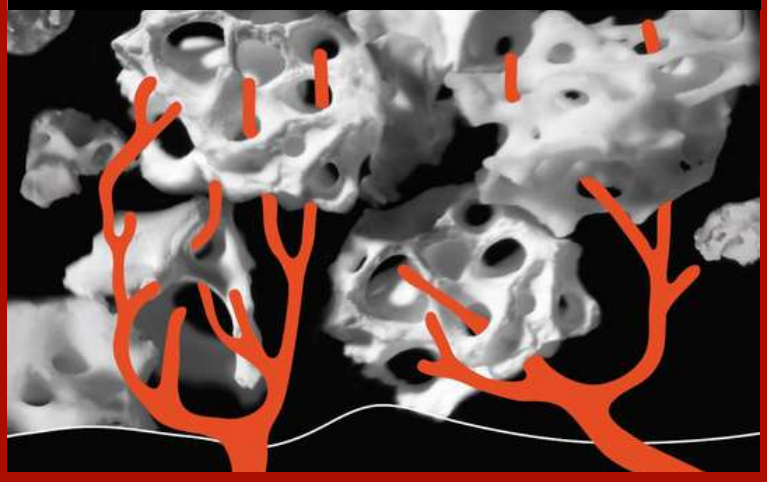
When the graft surgery is implemented, the new bone cell is conducted & delivered from the patient's existing bone to the graft site throughout the blood supply.

The Blood vessels deliver blood, bone cells into the pores of the graft materials. If the graft particle shape has poor porosity, it prohibits blood vessel growth inside the graft

3~5 days



After 2 weeks



and consequently causes poor angiogenic progress. That's why the porosity of the graft material is essential.

Outstanding Volume Stability

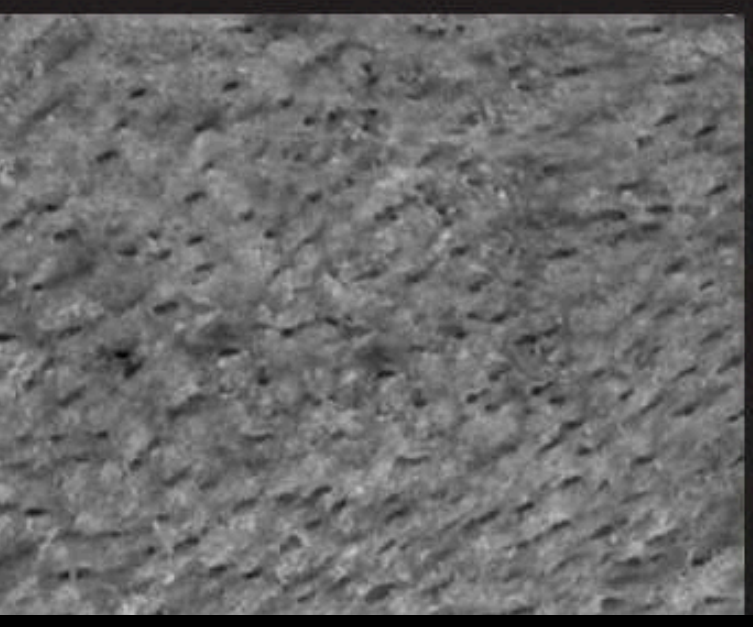
The unique 100% multiporous cancell-ous nature of Ti-oss® offers higher quantitative mass volume per gram unit, compared to other poor porous products. It results in less material cost which means that Ti-oss® is cost-efficient & effective.

ROUGH HYDROPHILIC STRUCTURE

Our 15 years of R&D and sophisticated low-temperature manufacturing expertise enable Ti-oss® to exhibit an optimal, natural surface topography, the same as human bone.

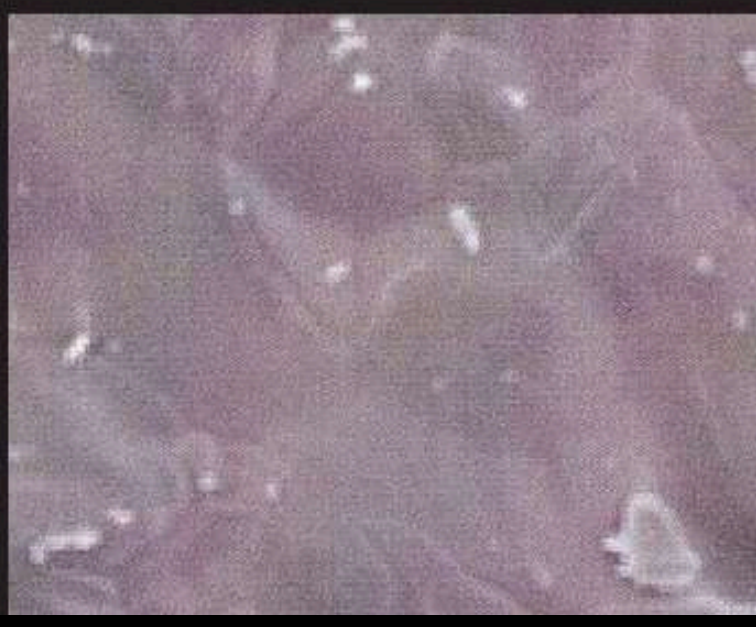
Ti-oss

Osteoblast Preferred Surface

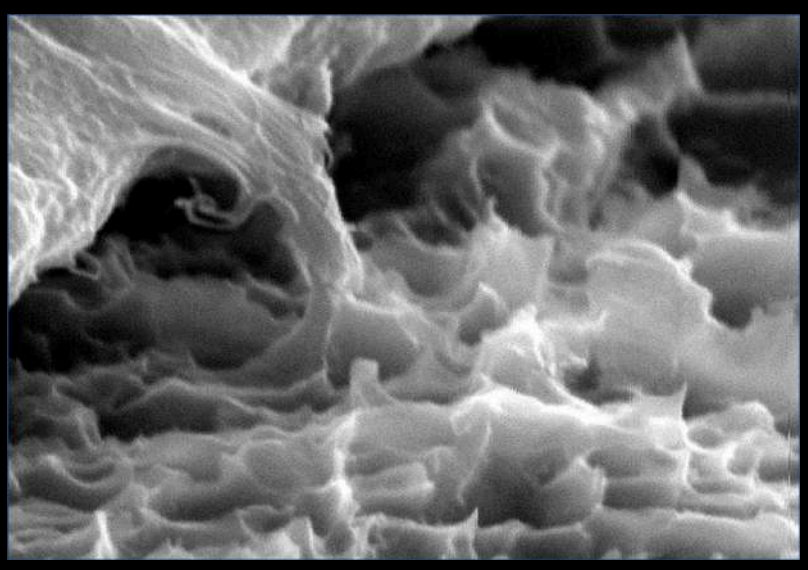


Competitor Bone Ceramic

All Classified Surface



Why is Rough Surface necessary?



New bone is formed by the attachment of blood clots(,which originates from the patient's existing bone) to the surface of the graft.

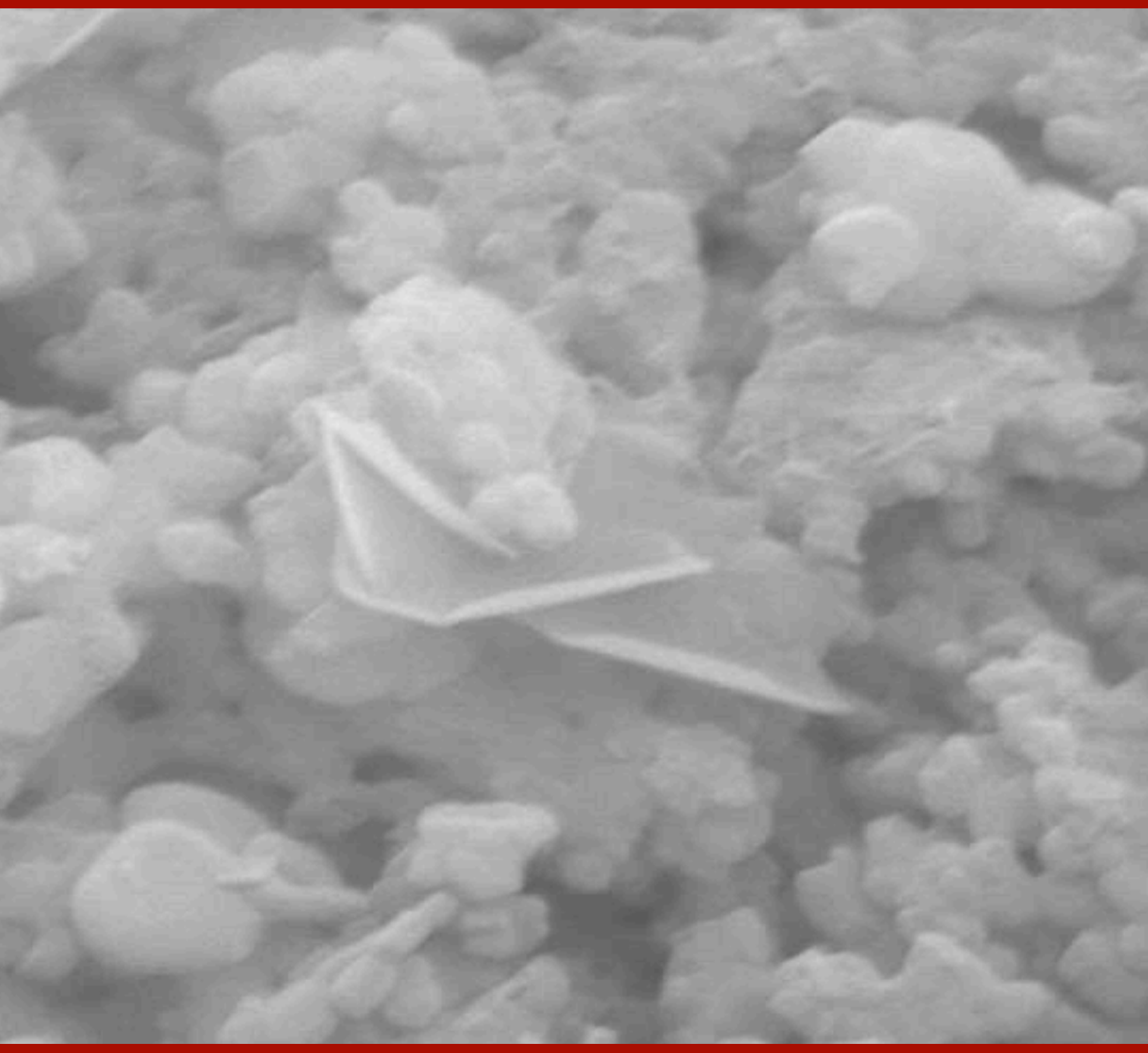
A rough and hydrophilic surface is necessary for bone formation, without it, we can't expect effective bone promotion, just like how friction is hard to create on a glassy surface.

Our expertise in mid-temperature manufacturing and research with top scientific institutions allows us to create a graft material with a surface that closely resembles human bone.

Ti-oss® has completely controlled the phenomenon of vitrification and the resulting cracks caused by high temperatures (1200°C and above).

OSTEO PROMOTING FACTOR

Pre-HA structure, Octacalcium Phosphate (OCP) crystals that exhibit excellent bone regenerative properties are found on the surface of Ti-oss®.



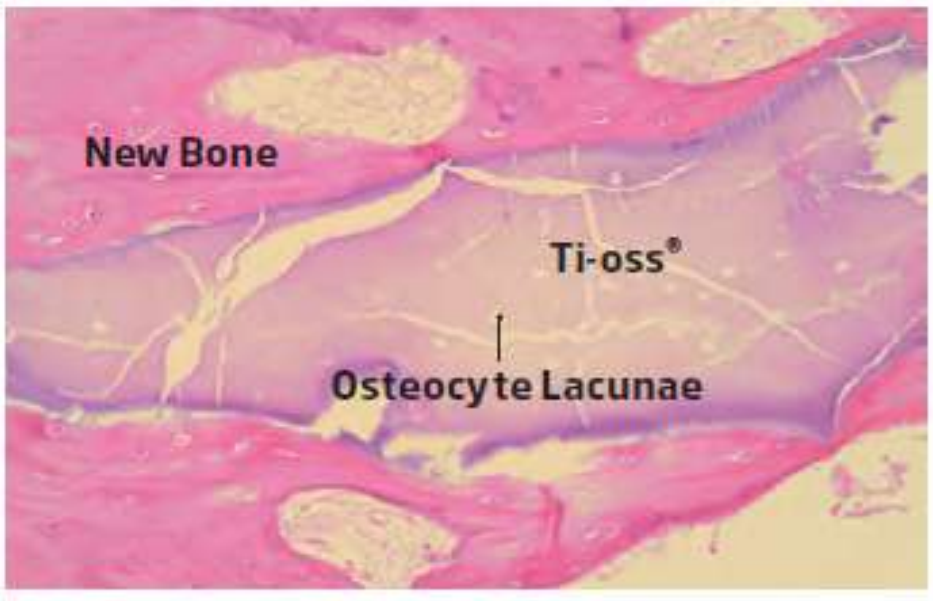
The osteopromoting factor of the bone graft materials is one of the foremost points that you must consider when choosing the right product. it is an advanced technology that only a few companies in the world are able to produce. Ti-oss® exhibits unique fish-fin-like structures on its surface and it is the secret of the osteopromoting factor of Ti-oss®.

HUMAN BIOPSY RESULT

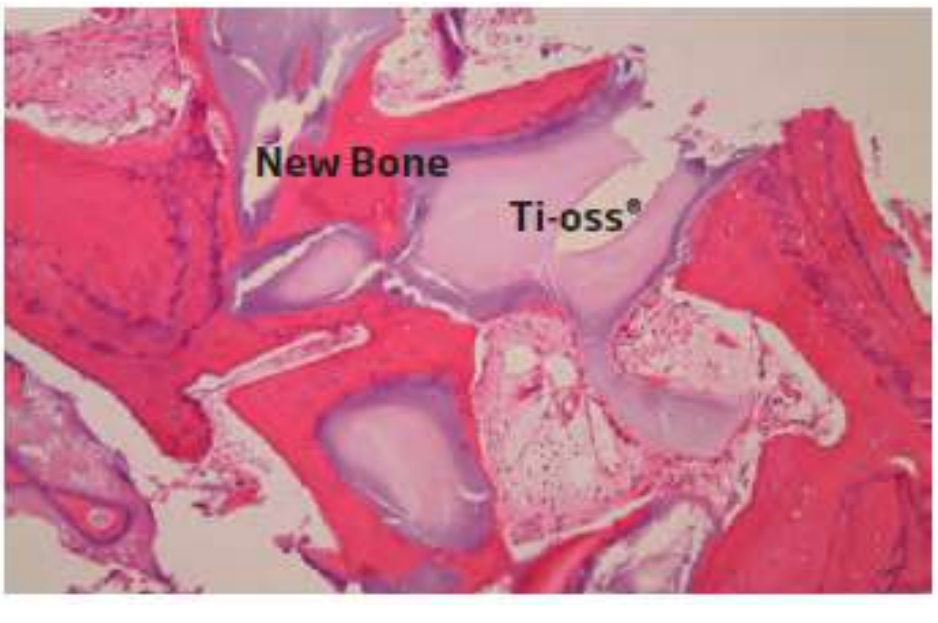
The study shows that Ti-oss®, with its exceptional osteoconductive surface nature, promotes highly reliable Graft Success and Early Bone Formation in various clinical cases: Evaluation results from Biopsy Specimens.

THREE MONTHS BIOPSY FINDINGS

FOUR MONTHS BIOPSY RESULTS



FOUR MONTHS BIOPSY



Chiyewon

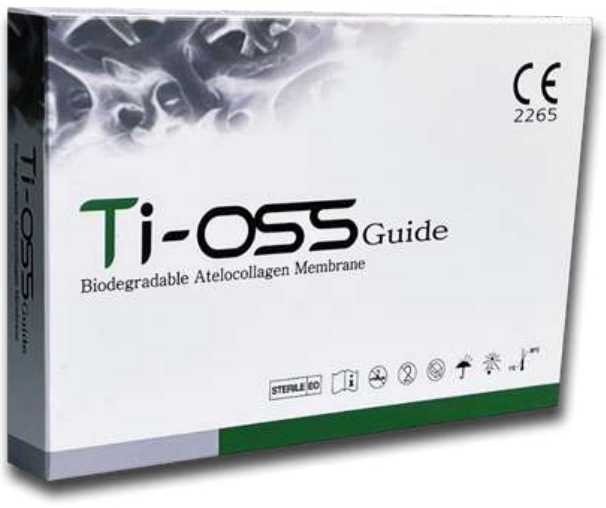
Chiyewon Co., Ltd
8F, Gyeongchun-ro 192, Guri-si
Gyeonggi-do, Korea. 11927
TEL: +82-31-856-1809
www.chiyewon.com

CE 1434

Ti-oss® Granule

Ti-oss® Syringe

Ti-oss® Block



Ti-oss® Guide