

Dental Bone Graft Substitute

Introductions

Far Eastern Group has developed a fully synthetic dental bone graft substitute which is composed of 100% beta form of tricalcium phosphate (β -TCP). Our dental bone graft substitute is porous with many interconnected pores. The construction is similar with the human bone which leads the osteoconductive property and enhances the growth of bone tissue. The beta form of tricalcium phosphate (β -TCP) will gradually degrade during healing process, and it will be totally replaced by human bone tissue finally. We applied our patented sintering technology to manufacture the dental bone graft substitute with both high porosity and high strength. There are two kinds of granule diameters, 0.2mm-0.5mm and 0.5-1.0mm, to fit different sizes of bone defects.



Fig.1. The ingredient is 100% beta form of tricalcium phosphate (β -TCP).

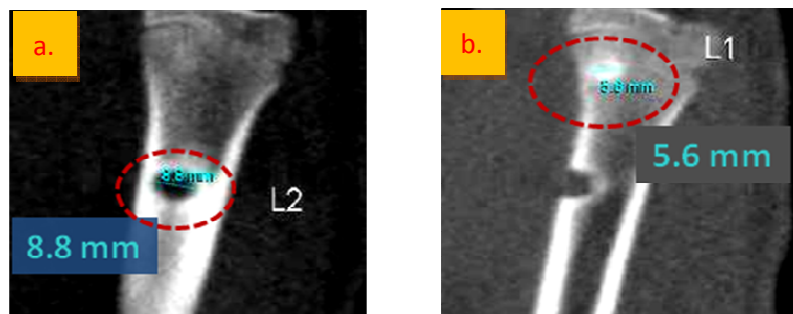


Fig.2. Preclinical animal test result

- (a) The defect is unhealed without any treatment.
- (b) The defect is almost healed by using the bone graft substitute.

Features

Functionality :

- ✓ **Excellent osteoconduction** - Effectively enhancing the growth of bone tissue
- ✓ **Biodegradable** – Totally degrading during healing process
- ✓ **Patented sintering technology** – Granules with both high porosity and high strength

Safety : Passing the biocompatible test by SGS

- ✓ Cytotoxicity
- ✓ Intracutaneous Irritation
- ✓ Skin Sensitization Test
- ✓ Acute Systemic Toxicity
- ✓ Subacute Intravenous toxicity
- ✓ Genotoxicity
- ✓ Bone Implant
- ✓ Heavy metals
- ✓ Pyrogenic test

Applications

- Peri-implant defects
- Ridge augmentation
- Horizontal augmentation
- Vertical augmentation
- Extraction sockets
- Sinus floor elevation