



Alpha-Bio Tec.

**xenobone**

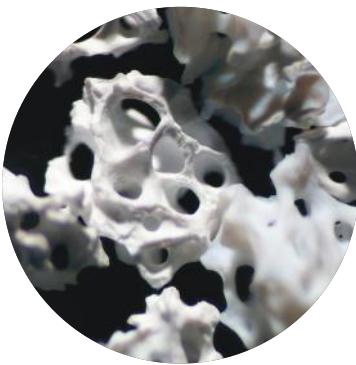
Stability and growth

**Bovine Bone Graft Material**

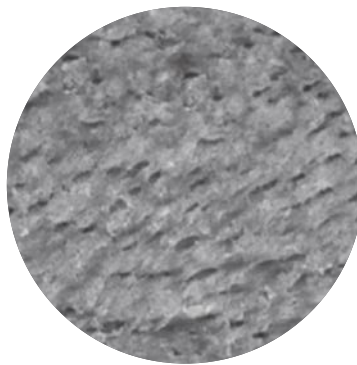




**Alpha-Bio Tec xenobone is an advanced xenograft product, skillfully designed to meet clinicians' challenges when performing Bone Regeneration procedures.**



**Multi-Porous 100% BSE-free Cancellous Bone**



**Rough Hydrophilic Structure**



**Unique OCP Coating**



With Alpha-Bio Tec xenobone, clinicians can provide patients with predictable, osseoregenerative, and highly reliable, long-term treatment outcomes.



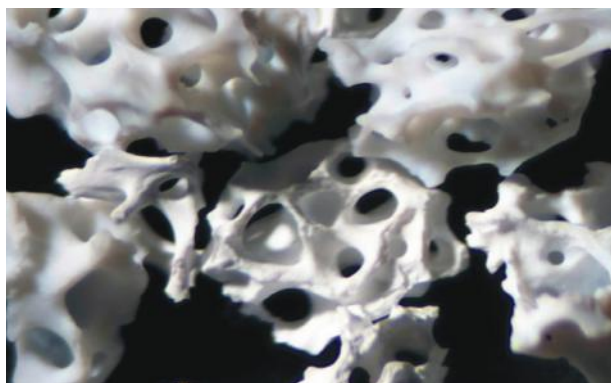
Made from 100% BSE-free, Australian origin cancellous bovine bone, Alpha-Bio Tec xenobone's multi-porous structure and unique Octacalcium Phosphate (OCP) coating, significantly enhances predictability, bone formation, and stability in any bone regeneration procedure.



The xenograft medium heating temperature processing technique enables ideal, natural surface topography. Surface roughness resembles human bone, stimulating osteoblasts, and average pore size of 300~400um enables capillaries growth to support osteogenesis.

## Why is graft material porosity essential?

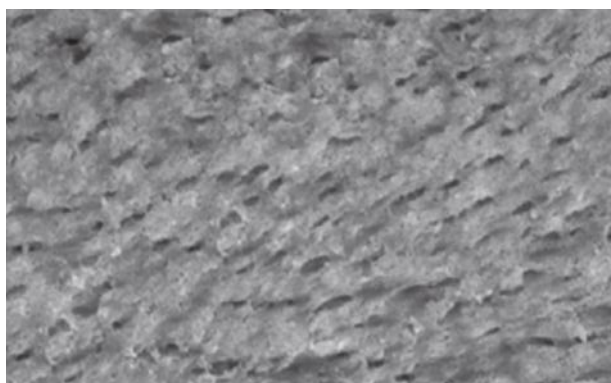
The porosity of the grafting material is a crucial factor allowing capillaries ingrowth, creating pathways for the osteoprogenitor cells to reach the regeneration site.



**Pic 1:** Light microscope photography demonstrating the porosity of the graft material

## Surface roughness

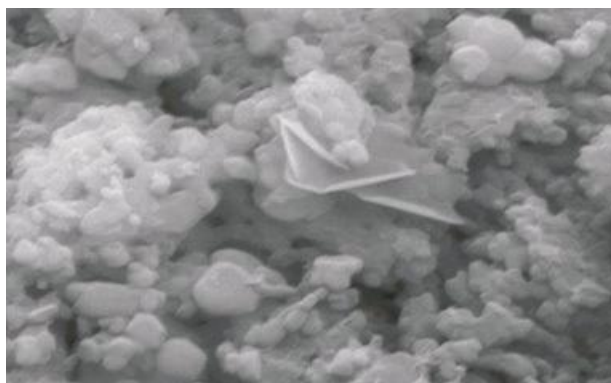
The graft surface roughness resembles human bone. The roughness and hydrophilicity of the graft enables the attraction of blood to the graft, an essential step for new bone formation. Medium heating process of Alpha-Bio Tec xenobone™ allows an optimal rough surface topography, resembling human bone.



**Pic 2:** Rough hydrophilic surface (x3000, SEM)

## OCP-Octacalcium Phosphate-Coating (OCP factor)

- ✓ OCP is found on the surface of Alpha-Bio Tec xenobone™ as shown in pic 3.
- ✓ OCP consists of a precursor of biological apatite crystals and supports excellent bone regenerative properties.
- ✓ OCP promotes osteoblast differentiation and induces new bone formation.



**Pic 3:** OCP-Octacalcium Phosphate Coating (x50000, SEM)

## Clinical Use Indications

- ✓ Sinus floor augmentation
- ✓ Socket and ridge preservation
- ✓ Vertical and horizontal bone augmentation
- ✓ Bone defect following cystectomies
- ✓ Periodontal defects
- ✓ Peri-implant defects
- ✓ Apicoectomies

Alpha-Bio Tec.

**xenobone™**

## Your choice of 3 forms of convenient packaging



### Vial containing graft particles

🕒 Shelf-life: **3 years**



### Syringe

🕒 Shelf-life: **2 years**



### Block

🕒 Shelf-life: **3 years**

3

Choice of 3 granule sizes:  
0.2-1 mm, 0.5-1.2mm &  
1.2-1.7mm of a cancellous  
xenogenics bone.



The product should be stored  
in dry conditions at ambient  
temp 15°-25°, indicated for  
single use only.



Product safety is tested  
for: virus inactivation,  
toxicity, biocompatibility,  
animal comparison & gamma  
sterilization.

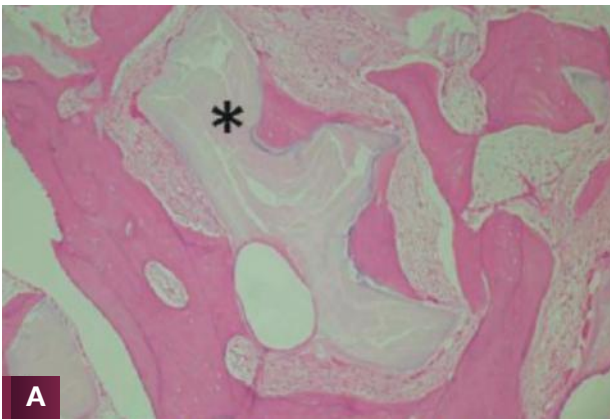
Alpha-Bio Tec xenobone™

## Clinical data

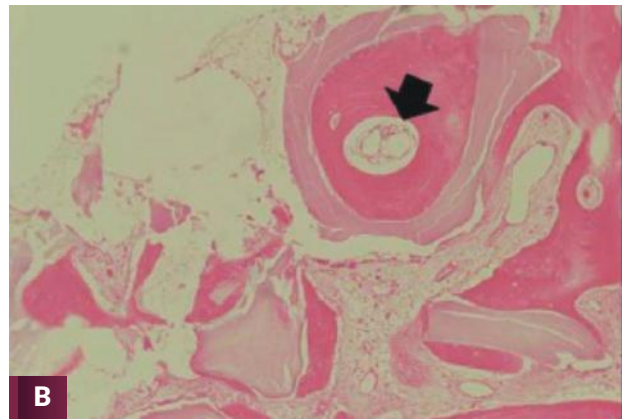
### Bone regeneration of macropore octacalcium phosphate-coated deproteinized bovine bone materials in sinus augmentation: a prospective pilot study.

Published in: *Implant Dent.* 2015 Jun;24(3):275-80.

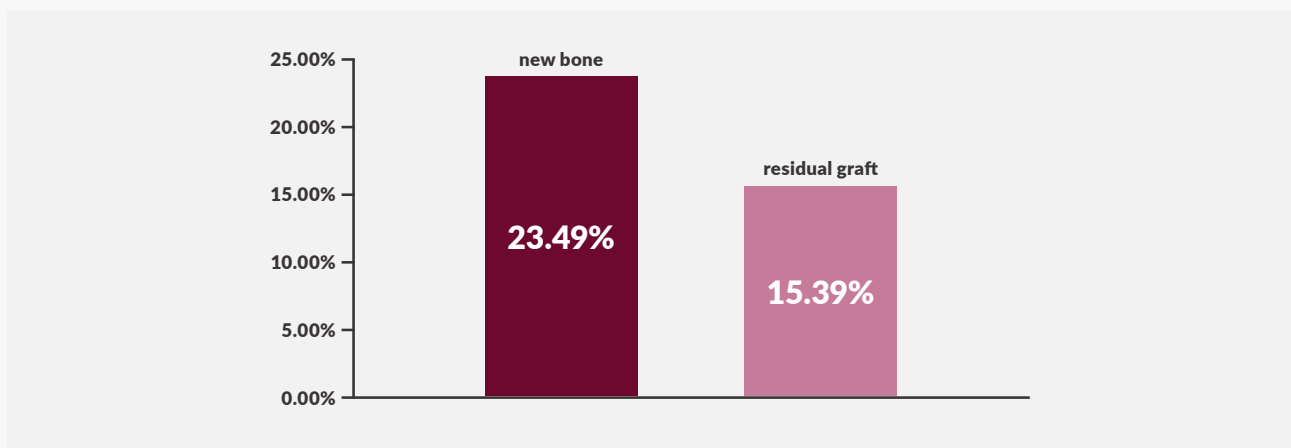
**Aim:** To investigate the osteogenic potential of Alpha-Bio Tec xenobone™ in sinus floor augmentation. **Methods:** OCP-coated DBBM material with macro-sized pores was tested. Xenogenic graft material was used via a lateral window approach (2 stage technique) for delayed implant placement. Graft cores were obtained six months following surgery for osteogenic outcome evaluation and clinical reliability.



**A** New bone formation engulfing grafted particle (\*) of Alpha-Bio Tec xenobone™ in human maxillary sinus cavity (hematoxylin and eosin staining).



**B** Ingrowth of micro-vessel in newly formed bone (arrow) with lacunae in the lamellar bone (hematoxylin and eosin staining).



Mean values of new bone formation and residual bone graft

# Ordering Information

PART NUMBER	DESCRIPTION	
25-0512	Alpha-Bio Tec xenobone™ 0.25g/0.6cc 0.5 - 1.2mm	Vial
05-0512	Alpha-Bio Tec xenobone™ 0.5g/1.2cc 0.5 - 1.2mm	Vial
10-0512	Alpha-Bio Tec xenobone™ 1g/2.3cc 0.5 - 1.2mm	Vial
20-0512	Alpha-Bio Tec xenobone™ 2.0g/4.5cc 0.5 - 1.2mm	Vial
25-1217	Alpha-Bio Tec xenobone™ 0.25g/0.75cc 1.2 - 1.7mm	Vial
05-1217	Alpha-Bio Tec xenobone™ 0.5g/1.5cc 1.2 - 1.7mm	Vial
10-1217	Alpha-Bio Tec xenobone™ 1.0g/3.0cc 1.2 - 1.7mm	Vial
20-1217	Alpha-Bio Tec xenobone™ 2.0g/6.0cc 1.2 - 1.7mm	Vial
25-0210	Alpha-Bio Tec xenobone™ 0.25g/0.45cc 0.2 - 1.0mm	Vial
05-0210	Alpha-Bio Tec xenobone™ 0.5g/0.8cc 0.2 - 1.0mm	Vial
10-0210	Alpha-Bio Tec xenobone™ 1.0g/1.5cc 0.2 - 1.0mm	Vial
20-0210	Alpha-Bio Tec xenobone™ 2.0g/3.0cc 0.2 - 1.0mm	Vial
BLK8812	Alpha-Bio Tec xenobone™ Block 8 x 8 x 12mm	Block
BLK8825	Alpha-Bio Tec xenobone™ Block 8 x 8 x 25mm	Block
S25-0512	Alpha-Bio Tec xenobone™ Syringe 0.25g/0.6cc 0.5-1.2mm	Syringe
S05-0512	Alpha-Bio Tec xenobone™ Syringe 0.5g/1.2cc 0.5-1.2mm	Syringe
S25-1217	Alpha-Bio Tec xenobone™ Syringe 0.25g/0.75cc 1.2 - 1.7mm	Syringe
S05-1217	Alpha-Bio Tec xenobone™ Syringe 0.5g/1.5cc 1.2 - 1.7mm	Syringe
S25-0210	Alpha-Bio Tec xenobone™ Syringe 0.25g/0.55cc 0.2 - 1.0mm	Syringe
S05-0210	Alpha-Bio Tec xenobone™ Syringe 0.5g/1.1cc 0.2 - 1.0mm	Syringe

# Instructions for Use

## Vial

- 1 Carefully remove any soft tissue from the bony defect
- 2 Immerse Alpha-Bio Tec xenobone™ with patient's blood, normal saline or PRP (Platelet-Rich Plasma).
- 3 Avoid the use of distilled water
- 4 Fill the defect site with the graft mixture using a sterile spatula or surgical spoon
- 5 Cover the graft mass with membrane
- 6 Suture the soft tissue in a tension-free mode, to achieve complete coverage of the grafted area

## Block

- 1 Shape Alpha-Bio Tec xenobone™ Block to the defect according to the anatomical dimensions. To gain the desired shape and dimensions of the block, use scalpels or sterile rotating burrs
- 2 Following the shaping stage, it is recommended to fixate the block to the defect using appropriate fixating screws
- 3 Some clinicians will cover the block with a membrane prior to closure of the soft tissue
- 4 Use tension-free sutures to completely cover the operated site

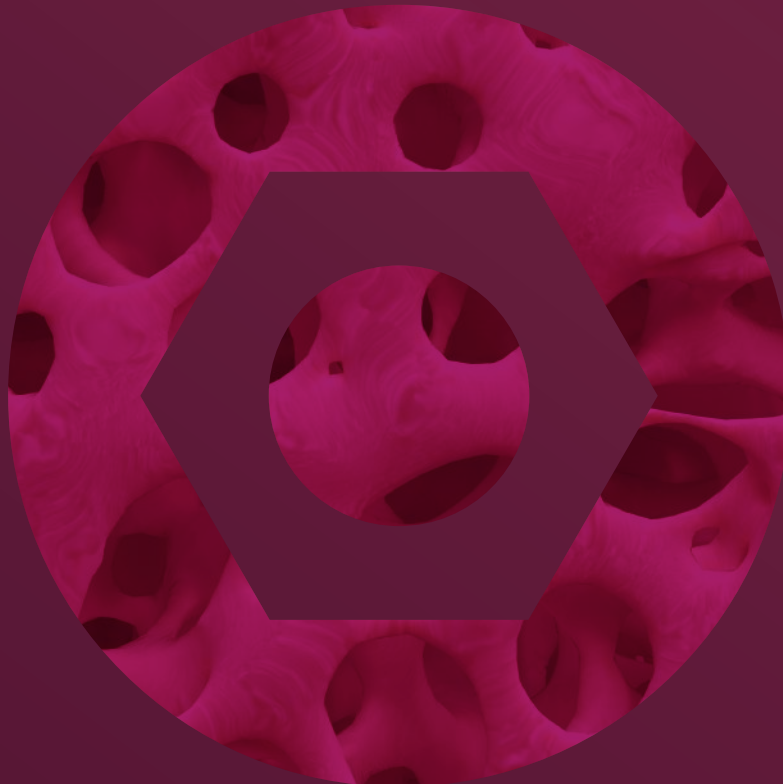
## Syringe

- 1 Open the box containing the blister with a sterilization sticker on the Tyvek package and 2 stickers with the lot number
- 2 Remove the Alpha-Bio Tec xenobone™ syringe from the package
- 3 Loosen the syringe plunger
- 4 Make sure to hold the syringe vertical, when removing the cap. Unscrew the cap from the syringe. The graft must be hydrated prior to its application into the defect
- 5 Fill a second sterile syringe and needle with sterile saline. Hydrate the graft material by injecting the sterile saline into the graft syringe until the graft is completely moistened
- 6 Press the plunger and apply the hydrated granules directly to the defect site
- 7 Cover the graft mass with a membrane
- 8 Suture the soft tissue in a tension-free mode, to achieve complete coverage of the grafted area



**Alpha-Bio™**  
xenobone<sup>TEC</sup>

**Stability and growth**



## Stability and growth



[www.alpha-bio.net](http://www.alpha-bio.net)