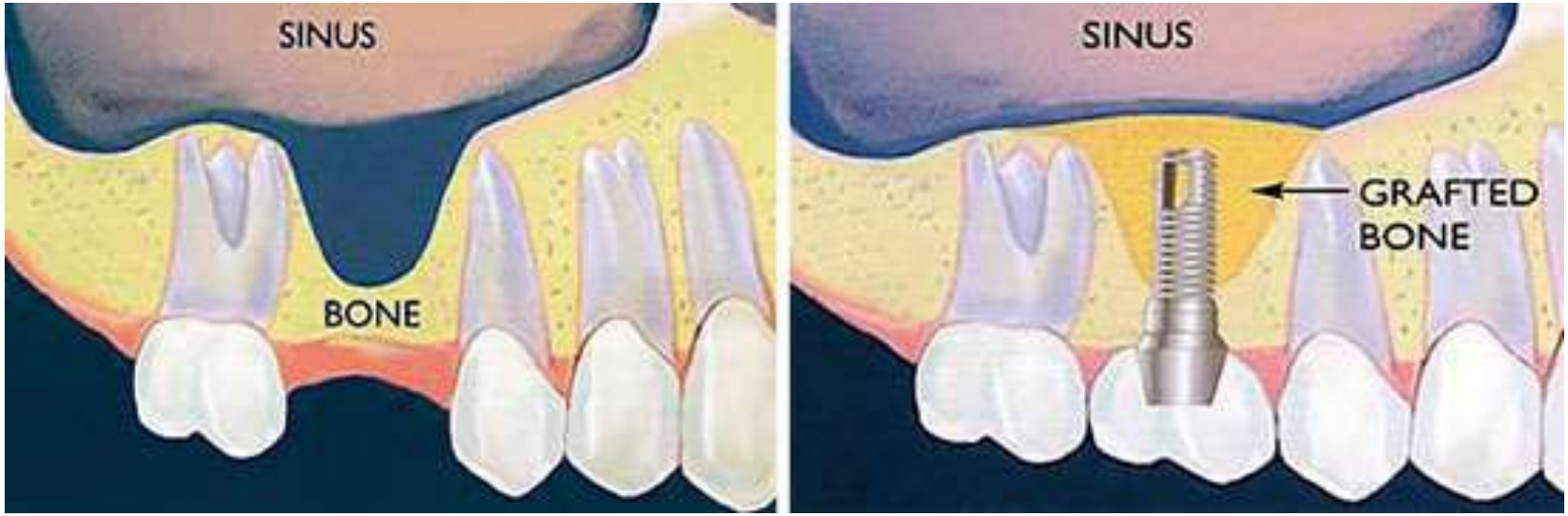
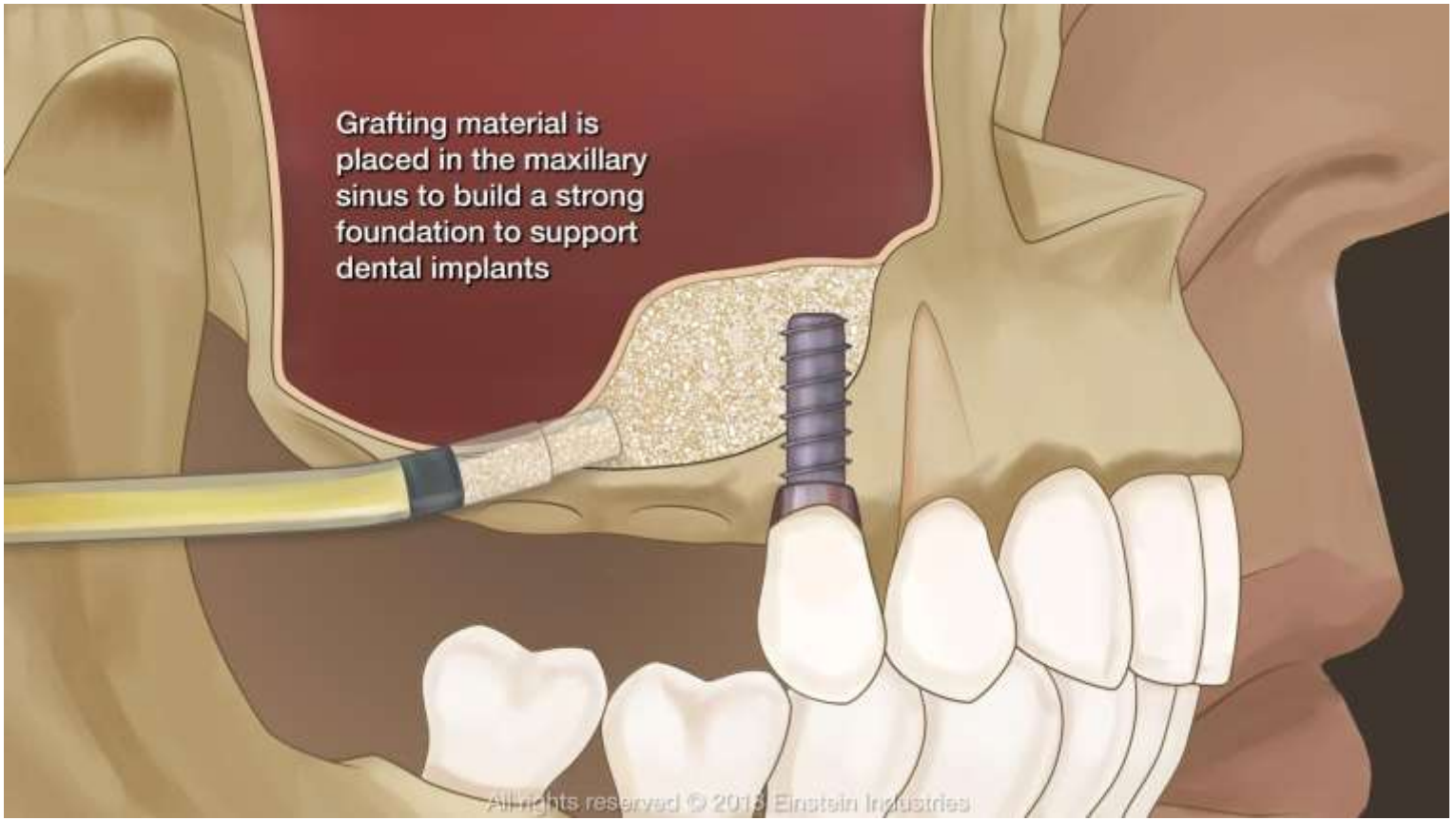
# Sinus lift

**Maxillary sinus floor augmentation** (also termed **sinus lift**, **sinus graft**, **sinus augmentation** or **sinus procedure**) is a surgical procedure which aims to increase the amount of bone in the posterior maxilla (upper jaw bone), in the area of the premolar and molar teeth, by lifting the lower Schneiderian membrane (sinus membrane) and placing a bone graft

# Sinus


SINUS
BONE
SINUS
GRAFTED
BONE


Grafting material is placed in the maxillary sinus to build a strong foundation to support dental implants
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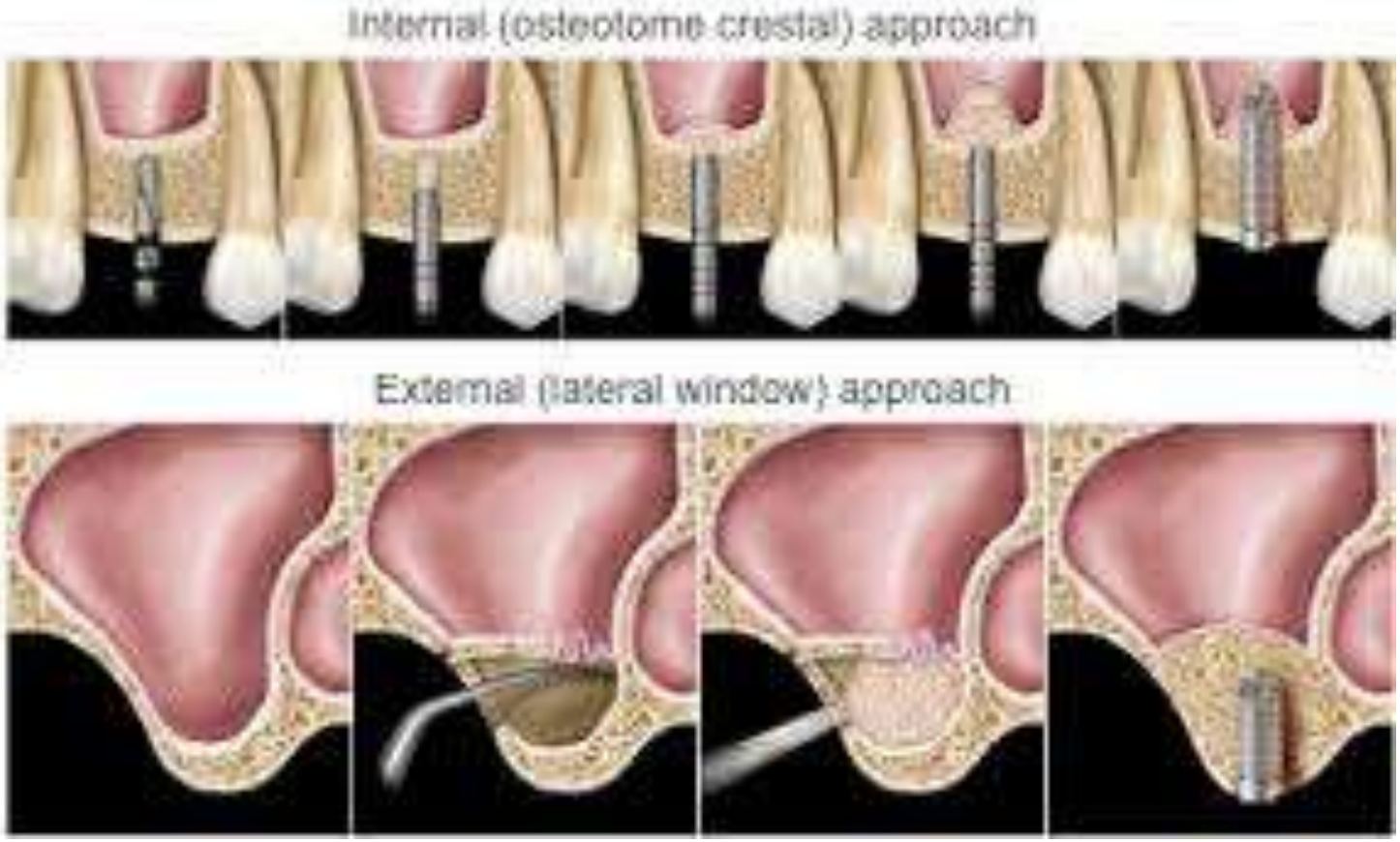
# Sinus kit

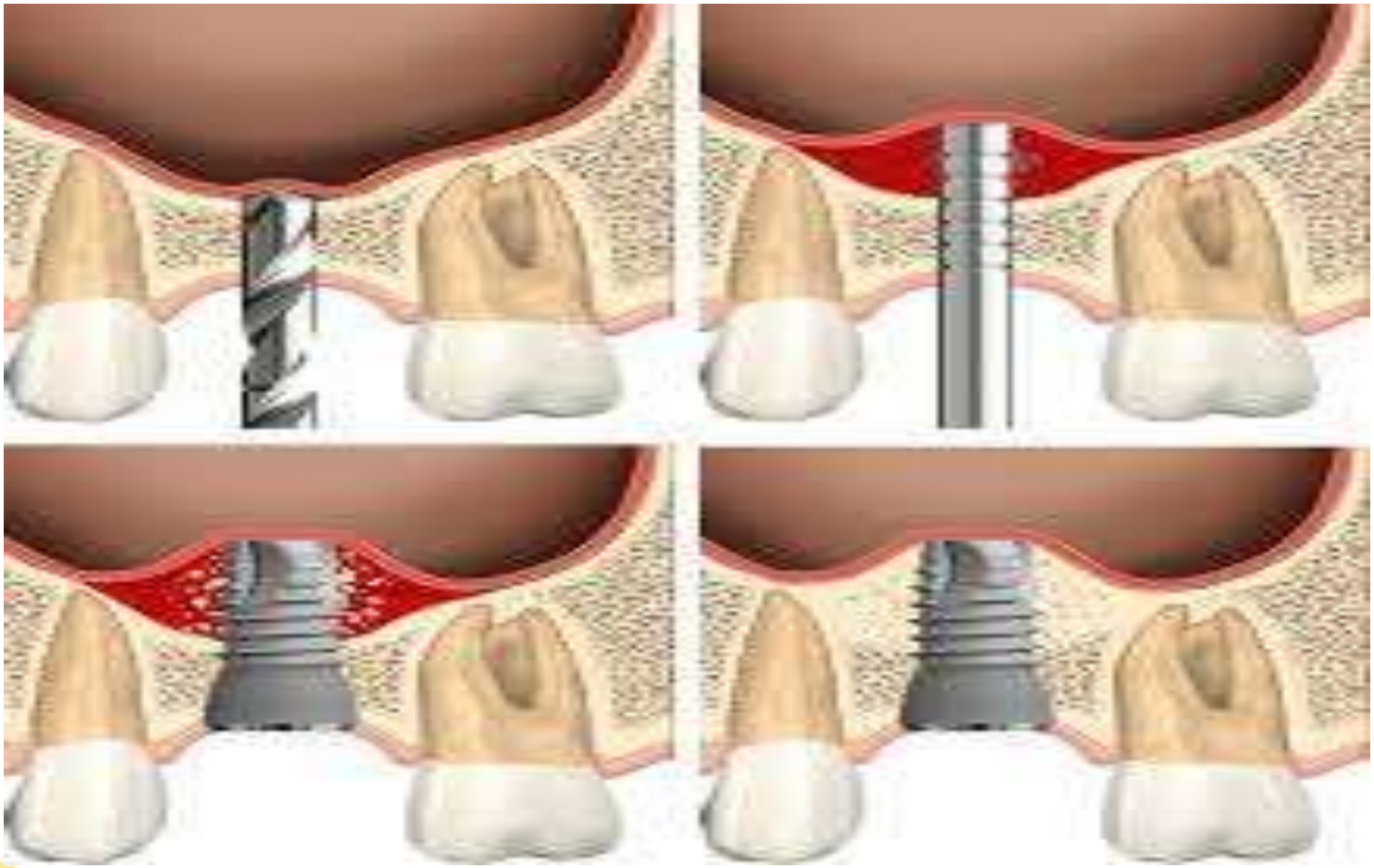
Two approaches

- Lateral
- Crestal

# Lateral vs Crestal

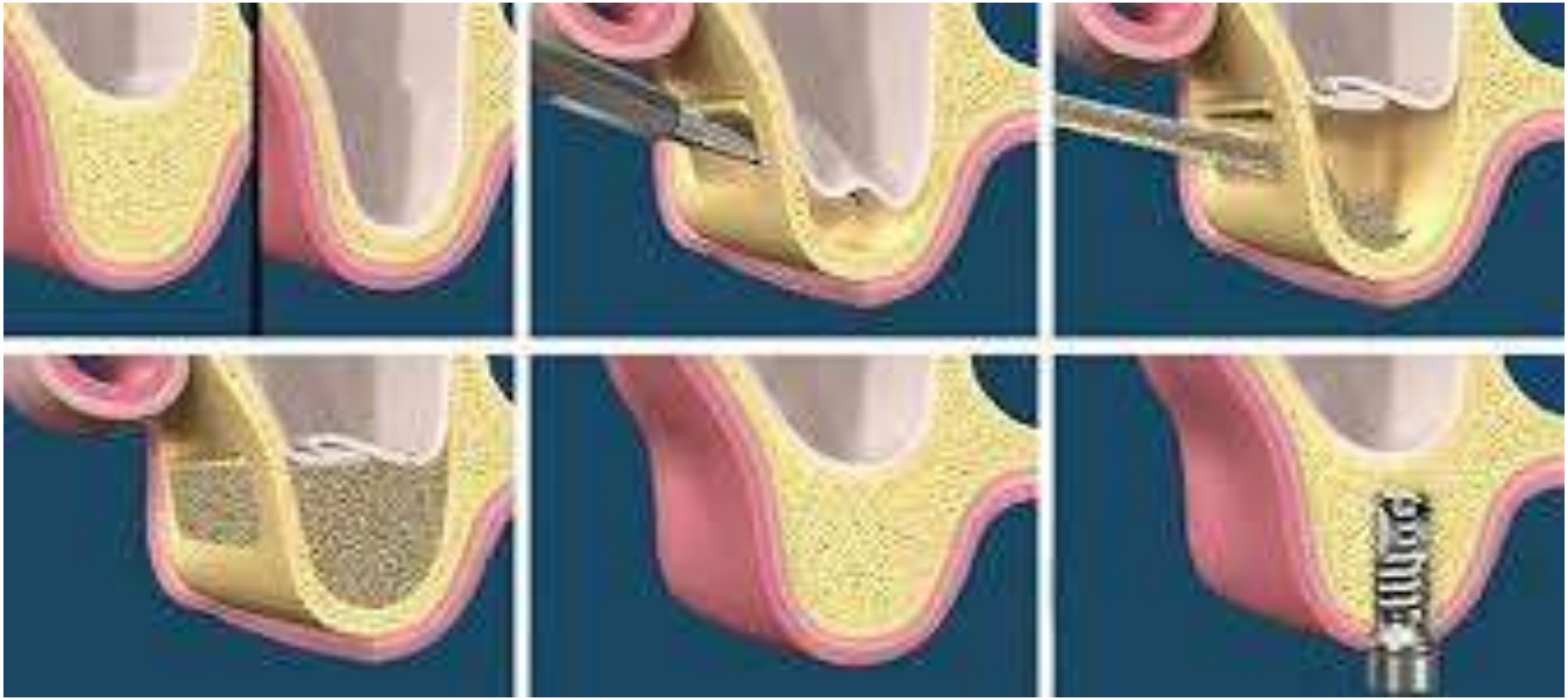


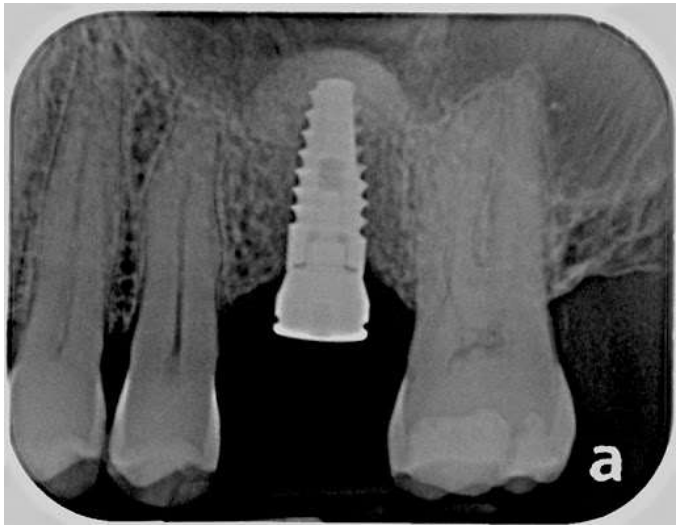
# Crestal Approach



# Membrane lift

# Lateral approach




a


STOPPER
2
3
4
5
6
7
8
9
10
11
INITIAL DRILL
ROUND DRILL
2.0
2.8
3.6
5.5
7.0
MEMBRANE LIFTER
CORE DRILL
5.5
7.0
0.5
1.0
1.5
2.0
2.5
3.0
STOPPER

# Ø 2.0 Initial drill

# Crestal Round drill  Ø 2.8 mm

# Crestal Round drill  Ø 3.6 mm

# Crestal stoppers

**Crestal Stoppers**

| Code | CST 11 | CST 10 | CST 09 | CST 08 | CST 07 | CST 06 | CST 05 | CST 04 | CST 03 | CST 02 |
|---|---|---|---|---|---|---|---|---|---|---|

Stoppers must be used to alter depth of the drill. They are color coded & laser marked.

# Lateral Core drill Ø 5.5

# Lateral Core drill Ø 7.0

# Lateral round drill Ø 5.5 mm

# Lateral round drill Ø 7.0 mm

# Membrane lifter

# Saline tube

# Sinus kit cont.

# Sinus Depth gauge

# Bone Condensor

# Medbone

- Started 2008
- Present in more than 90 countries
- Available for Dental, Orthopedic & vetinary surgeries

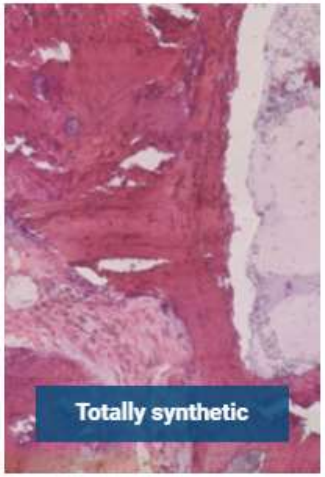
All our products are certified by the

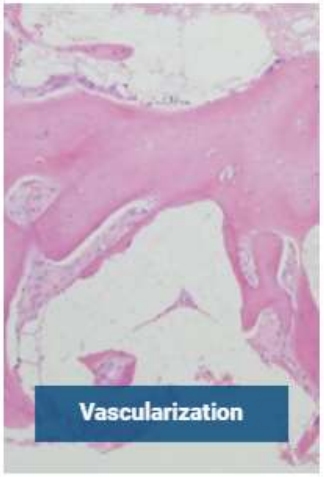
**European Directive 93/92/EEC.**

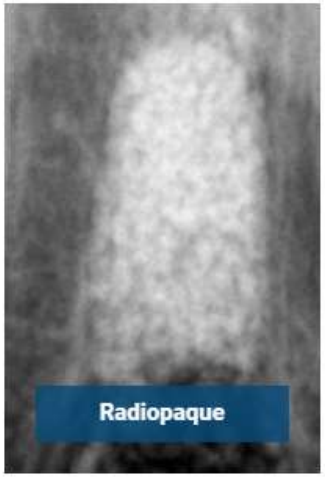
- Made form resorbable biomaterials based on Calcium phosphates
- 100% resorbable
- Prescence of interconnected pores/channels(~.05mm in dia)

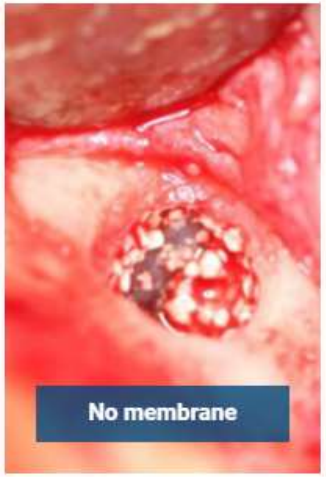
- Supporting neovascularization- enables material biodegradation & bone ingrowth within the bone substitute

**adbone**® is intendend to be used as a bone void filler or augmentation material for bone defects that are not intrinsic to the stability of the bony structure:


- Easy to Handle- Can be mixed with patients blood, autologous bone marrow, PRP & PRF
- Hydrophillic- excellent cohesivity
- Totally synthetic- No animal/human tissue derivatives

- Radiopaque- allows easy monitoring of osseointegration through X ray’s
- Membrane not mandatory unless risk of graft exposure
- High mechanical resistance-allows the conservation of the initial cavity volume
- High Porocity

# BCP

- 25% ß tricalcium phosphate + 75% Hydroxyapatite
- Porosity 60%
- Pore size 300-500µm
- Mechanical resistance- 3 Mpa
- Resorption- 20% in 1.5yrs

# adbone® BCP


75% of hydroxyapatite and

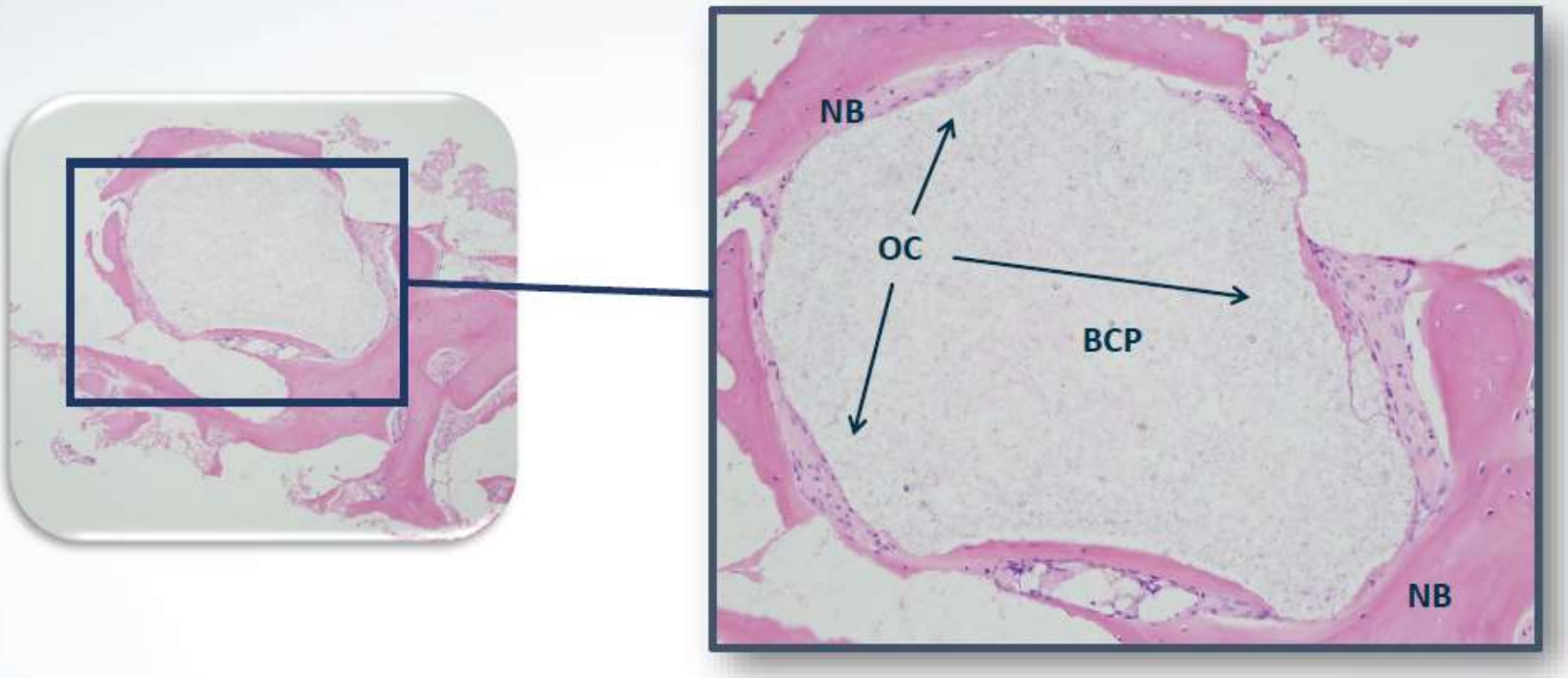
25% of beta-tricalcium phosphate

orthopedic

dental

## Available geometries

| Granules | Crunch | Cylinder | Wedges | Blocks |
|---|---|---|---|---|
|  |  |  |  |  |
| 0,1 – 0,5mm | 4 x 7mm | 8 x 20mm | 6 x 25 x 30mm | 4 x 4 x 20mm |
| 0,5 – 1mm | | | 8 x 25 x 30mm | 5 x 10 x 15mm |
| 1 – 2mm | | | 10 x 25 x 30 mm | 8 x 8 x 20mm |
| 3 – 4 mm | | | 12 x 25 x 30mm | 15 x 15 x 20mm |
| | | | 14 x 25 x 30mm | 15 x 20 x 30mm |




New vital bone surrounding the granule of adbone®BCP, observable after 12 weeks.
High osteoclastic activity, indicating bone remodeling

# TCP

- 100% ß tricalcium phosphate
- Porosity 60%
- Pore size 300-500µm
- Mechanical resistance- 3 Mpa
- Resorption- 20% in 5-6mth

# adbone® TCP


100% of beta-tricalcium phosphate

orthopedic

dental

## Available geometries

| Granules | Crunch | Cylinder | Wedges | Blocks |
|---|---|---|---|---|
|  |  |  |  |  |
| 0,1 – 0,5mm | 4 x 7mm | 8 x 20mm | 6 x 25 x 30mm | 4 x 4 x 20mm |
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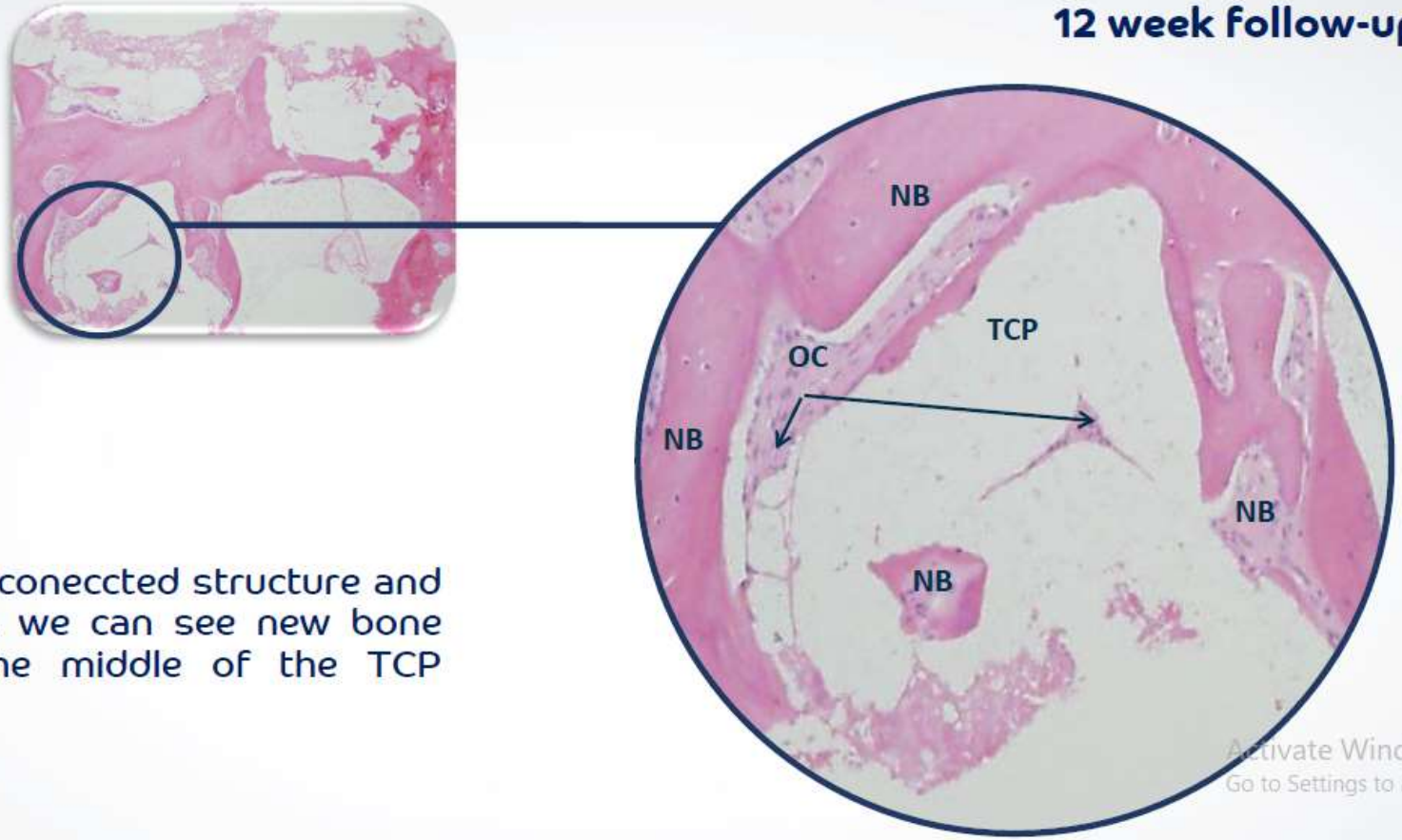
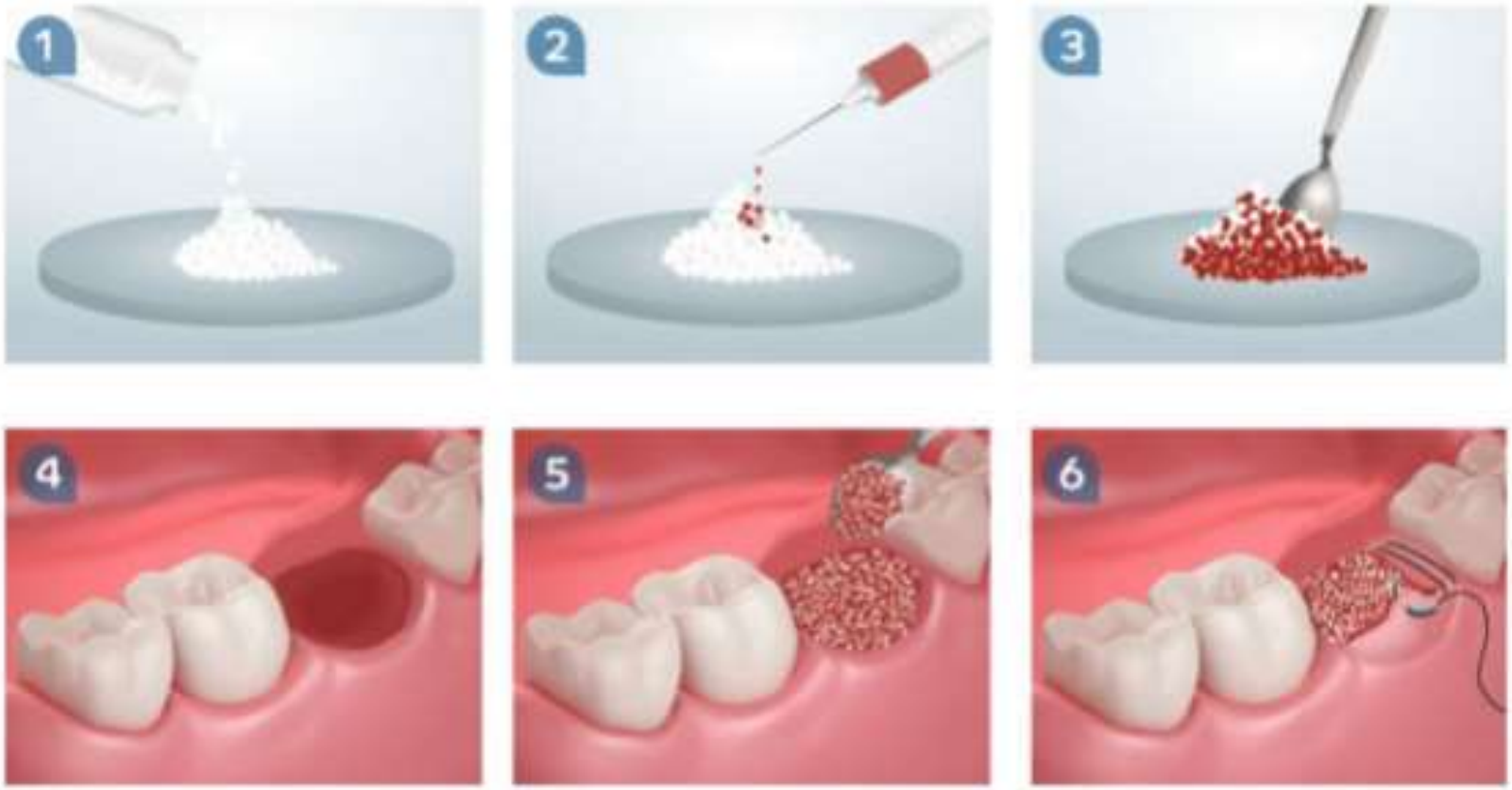
| | | | 14 x 25 x 30mm | 15 x 20 x 30mm |

## 12 week follow-up




Due to our interconeccted structure and large pore size, we can see new bone formation in the middle of the TCP particule


1
2
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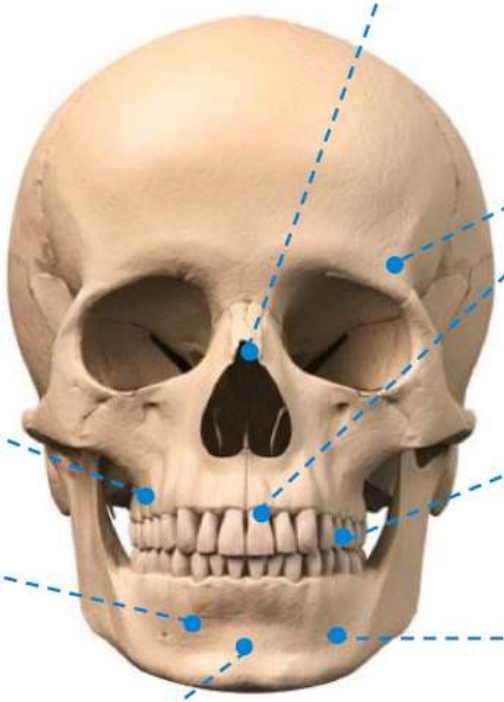
# Dental indications



Sinus lift augmentation:
Crestal acess
Lateral acess

Maxillofacial Osteotomy

Alveolar regeneration

Implantology

Peri-implant defects:
Dehiscence
Fenestration

Horizontal augmentation

Vertical augmentation

# Advantages

**HIGH MECHANICAL RESISTANCE**

Allows the conservation of the initial cavity volume

**HIGH POROSITY**

Allows osteoblasts to proliferate through the open cannels

**RESORBABLE**

Totally synthetic origin allows a perfect reasorption

**RADIOPAQUE**

Permits the perfect monotorization of osteointegration trough X-Ray

# Advantages

**NO MEMBRANE**

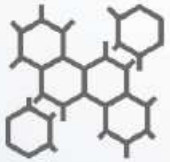
Due to its physical and mechanical properties

**VASCULARIZATION**

Interconnected pourous structure allows an excellent vascularization

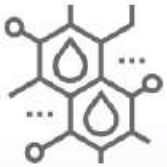
**EASY TO HANDLE**

The high cohesiveness allows the particles to stick to each other



**HYDROPHILIC**

Enhances bone growth



**VOLUME STABILITY**

Very hidrophilic which confers an excellent cohesivity of particles

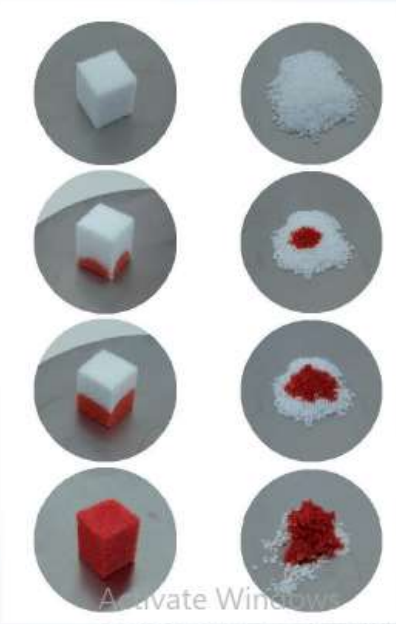
# Advantages

- No immunological risk
- Reduces surgery time
- No risk of infection
- Avoids painful removal of autograft
- High availability of synthetic bone

# Easy Handling

It can be mixed with PRP, PRF, patient´s blood or bone marrow, creating a cohesive and easy to use mixture.


Click in the image to watch an instructional video



# The Pitch: steps to follow

1. Texture and Mechanical Resistance
2. Structure and Porosity of the material
3. Absortion time and Hydrophilic Behaviour of the material
4. High Cohesiveness and Easy Handling
5. Advantages of Medbone's Products

Thank you