



Biomaterials@Straumann®
Because one option is not enough.

Straumann® BoneCeramic™

ALLOPLASTIC BIPHASIC CALCIUM PHOSPHATE



Straumann® BoneCeramic™

One of the best documented alloplastics in the market offers a state-of-the-art scaffold with controlled resorption for vital bone regeneration without compromising on volume preservation.

« We have used BoneCeramic™ over 2 500 times and it has become an extremely valuable aid when augmentation measures are called for. Because of its fully synthetic components, constant volume and very high success rate of up to 99.6 %, it has become a standard here. »



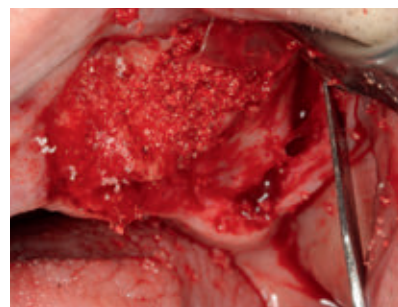
Dr. Dr. Andres Stricker, oral surgeon, Konstanz/Germany

FEATURES AND BENEFITS

Safety and biocompatibility	The chemical process technology used in the production of Straumann® BoneCeramic™ ensures <ul style="list-style-type: none">• reproducibility• batch to batch consistency• biocompatibility Because of its 100% synthetic composition any risk of infection or disease transmission can be excluded.
Optimized morphology	Optimized 90% porosity encourages vascularization, osteoblast migration and subsequent bone deposition. High porosity and minimum amount of material leave maximum space for new bone growth.
Homogenous composition	Biphasic calcium phosphate in homogenous composition: 60% hydroxyapatite (HA) as a strong matrix for long-term bone volume preservation: <ul style="list-style-type: none">• 60% HA prevents excessive resorption and preserves the bone volume.• 40% β-tricalcium phosphate (β-TCP) for rapid initial bone forming cell response: β-TCP resorbs faster and is replaced by natural bone.
Biofunctionality	The morphology of Straumann® BoneCeramic™ facilitates osteoconductivity, vascularization and osteoblast migration. Straumann® BoneCeramic™ serves as a scaffold for bone deposition during the bone formation process. The slow resorption rate of HA prevents excessive resorption and maintains the stability of the augmentate volume. Fast resorbing β -tricalcium phosphate (β -TCP) allows for regeneration of vital bone during healing time.

PROPERTIES

Attribute	Description
Origin	Synthetic
Composition	Biphasic calcium phosphate (60% hydroxyapatite (HA), 40% β -tricalcium phosphate (β -TCP))
Porosity	90%
Pore size	100-500 μ m
Degradation kinetics	Natural (cell-mediated) resorption process; fast resorption of β -TCP (3-6 months), slow resorption of HA (> 2 years)
Healing/integration time	6 months
Storage temperature	Room temperature
Shelf life	5 years



Courtesy of Dr. A. Stricker, Konstanz/Germany

APPLICATION AND HANDLING

Opening

Straumann® BoneCeramic™ is delivered sterile and must be used immediately after opening in an aseptic environment.

Rehydration

Rehydration in blood from the defect site or saline solution is recommended and facilitates handling and application.

Application

- Avoid compressing the particles during application; non compacted particles leave space for blood vessel ingrowth and formation of new bone matrix.
- Fill the defect as completely as possible.
- Ensure maximum contact between the graft material and viable bone in a well vascularized area.

Covering

When working with particulate bone regeneration materials, the augmentation site should always be covered with a barrier membrane to ensure undisturbed osseous regeneration and to prevent migration of the particles into the oral cavity.

Wound closure

Ensure that soft tissue coverage of the grafted site is complete and free of tension.

Healing time and re-entry

The appropriate healing time is patient- and site-dependent and has to be decided by the clinician based on the assessment of the patient's individual situation. A healing period of six months is recommended before re-entry to ensure stable integration of particles.

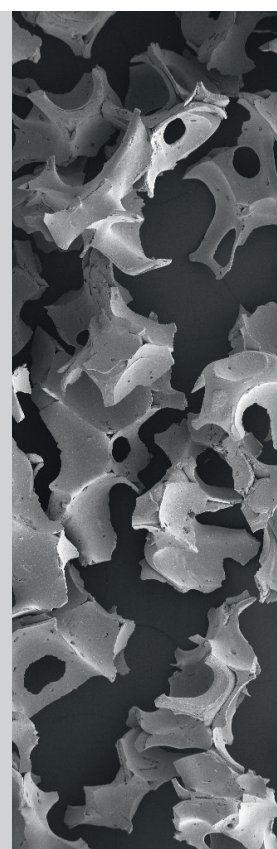
Particle size

The small granules are preferably used in the esthetic region to give a better surface contouring. It is also beneficial to use smaller granules in smaller defect sites like periodontal defects.

The large granules enable enhanced revascularization of larger defects.

Mixing with autologous bone

Mixing of Straumann® BoneCeramic™ with autologous bone adds a biological activity (osteoinductive and osteogenetic properties of autologous bone) and supports faster regeneration and improved formation of new bone.



Recommended for

Straumann® BoneCeramic™ is recommended for implantology, periodontology, oral and craniomaxillofacial (CMF) surgery:

- Socket and ridge preservation
- Horizontal ridge augmentation
- Fenestration and dehiscence defects
- Intraosseous and furcation defects
- Sinus lift

Available in the following sizes

Code	Size, amount	Product
070.203	0.4-0.7 mm, 0.25 g, 0.3 cc (ml)	Straumann® BoneCeramic™ granules
070.204	0.5-1.0 mm, 0.5 g, 0.95 cc (ml)	
070.205	0.8-1.5 mm, 1.0 g, 1.9 cc (ml)	



For further informations please visit
www.straumann.com

International Headquarters

Institut Straumann AG

Peter Merian-Weg 12

CH-4002 Basel, Switzerland

Phone +41 (0)61 965 11 11

Fax +41 (0)61 965 11 01

www.straumann.com

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