cerabone®
The natural bovine bone graft

Origin: bovine, natural cancellous bone
Composition: pure bone mineral
Sizes: small granules / large granules
Biology: osseous cellular integration, long term volume stability
CE mark approval: since 2002
Nonetheless, the natural porosity and surface structure of the bone components including potential bacteria, viruses and prions. Heating creates high temperature treatments. This treatment reliably removes all organic components. The unique patented production process of cerabone includes different characteristics.

**Bio-physical characteristics**

- Interconnected pores and hydrophilicity
- Surface roughness and osteoconductivity
- Cell adhesion and migration
- What is crystallinity?
- What is heating?

**Surface roughness & osteoconductivity**

The inherent natural rough surface is preserved following the patented production process. By this means, cerabone provides an appropriate scaffold for adherence and migration of osteogenic and blood vessel-forming cells. The bone defect is filled with keratin and bone-forming cells while micro pores promote quick space for new bone matrix.

**Interconnected pores & hydrophilicity**

Cerabone is a highly porous bone graft of ~65-80% porosity with a mean pore size distribution of ~600-900 µm. Macro pores allow fast ingrowth of blood vessels and bone-forming cells while micro pores promote quick space for new bone matrix.

**Purity & safety**

The unique patented production process of cerabone includes different characteristics.

**Clinical indications**

- High temperature treatment of bone grafts increases its crystallinity, which makes cerabone® resistant to heat treatment allowing for long-term volume stability.
- Micro-computed tomography (µCT) measurements 3 months post-surgery demonstrate the osteoconductive properties of cerabone® granules and the ingrowth of bone matrix.

**Further clinical indications**

- Periodontology
  - Furcation defects (class I - II)
  - Bone defect augmentation
  - Socket preservation
  - Peri-implant defects
  - Ridge preservation
  - Vertical augmentation
- CMF Surgery
  - Ridge augmentation
  - Bone augmentation
  - Two-stage sinus lift
  - Regeneration of a vestibular bone
  - Reconstruction of residual spaces in periodontal intrabony defects
- GBR procedures
  - Horizontal and vertical bone defects
  - Furcation defects
  - Soft tissue augmentation
  - Membranes for GBR procedures
  - Fixation of allogeneic bone chips

**Clinical reports & worldwide use**

- More than 400,000 patients worldwide (2015)
- Clinical users worldwide (2015)

**References**

1. Brown et al. 1999
2. Tadic et al. 2004
3. Gauthier et al. 1998
4. Fathi et al. 2008
5. Panagiotou et al. 2015

**Find the webinar of Dr. Steigmann about cerabone**

Find additional pictures, clinical cases and videos of cerabone® on www.indication-matrix.com