A revolution in bone grafting

“BonAlive® is bioactive and osteoconductive with proven bone growth promoting properties”

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Helsinki Central University Hospital, Finland
Bioactive BonAlive® granules

BonAlive® is a 100% synthetic bioactive bone graft substitute that promotes new bone formation. Surgeons trust BonAlive® with its over 15 years of proven safety and clinical performance in orthopedic and trauma surgery. The composition of BonAlive® by weight is: SiO₂ 53%, Na₂O 23%, CaO 20% and P₂O₅ 4%.

BonAlive® in Spine Surgery

Bone grafting in spinal surgery is often required in cases of vertebral body fractures or spinal fusions. BonAlive®’s capacity to promote bone growth offers an excellent option as a bone graft extender for spine surgery.

Patient case I: BonAlive® in posterolateral fusion

A 56 year old male patient with a L1 fracture of the vertebra was instrumented posteriorly to restore the original anatomical position. BonAlive® was used as a bone graft extender together with autologous bone in a 50/50 ratio. The instrumentation was removed at the patient’s own request at 12 months post-op and no complications or symptoms could be observed.

Proven Clinical Performance

Bioactive

- Bonds effectively to surrounding bone
- Promotes the growth of new bone

Osteoconductive

- Promotes the growth of new bone

Safe

- Fully synthetic with long term verified safety

Resorbs slowly

- Encourages long-term bone growth

Composite grafting

- BonAlive® can easily be combined with autograft or allograft to contribute to accelerated healing

Images © Turku University Hospital, Finland
BonAlive® in Traumatology

BonAlive® is well suited for use in both osteotomies and fracture repair and has an excellent record when used in combination with metal implants. BonAlive® provides both a bone void filler and a biomaterial that promotes new bone formation.\(^1\),\(^2\),\(^3\)

**Patient case II: BonAlive® in the treatment of a depressed tibial plateau fracture**

BonAlive® (15cc; 1.0-2.0mm granule size) was used to treat a depressed tibial plateau fracture in a 57 years old male in 1998. Joint alignment was performed and the fracture was fixated with a plate. During the follow-up the joint line had sustained its originally elevated level and no complications were observed.

**Patient case III: BonAlive® in the treatment of a depressed tibial plateau fracture**

BonAlive® (10cc; 1.0-2.0mm granule size) was used to treat a depressed tibial plateau fracture in a 57 years old female in 1998. The joint was aligned and the fracture was fixated with a plate. The plate was removed in 2003 at the patient’s own request. During the follow-up the joint line had sustained its originally elevated level and no complications were observed.
BonAlive® in Benign Bone Tumor Surgery

BonAlive® has been used successfully for almost two decades to fill bone cavities, and it has been clinically proven that the long-term performance is comparable to autogenic bone. BonAlive® induces a high but balanced local bone turnover by promoting new bone formation. The high level of bone remodeling can be seen remarkably well in pediatric patients. BonAlive® does not disturb the growth of bone in children.

BonAlive® was used to treat a recurrent aneurysmatic bone cyst (ABC) in the proximal phalanx of the finger, in a three-year-old child, with good results. During the two-year follow-up, the filled cavity appeared dense on X-ray and no sign of a recurrent cyst was observed. The phalanx had grown in length and remodeled to an almost normal shape.

### Product Table

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References: