

# **ActivaNail™**

Absorbable self-reinforced biopolymer (poly L-lactide-co-glycolide copolymer, PLGA 85/15)

Advanced absorbable nail for upper and lower extremity fixation of bone fractures, osteotomies, arthrodeses, and osteochondral fractures in the presence of appropriate immobilisation with patented Self-Locking SL™ technology and grooved surface design with a conical head.

ActivaNail™ implants gradually lose their strength, however maintaining their function for at least 8 weeks. Complete absorption takes place within approximately two years, thus eliminating the need for implant removal surgery.

Bioretec ActivaNail™

#### **PATIENT BENEFITS**

- No need for removal surgery due to gradual absorption over the course of 2 years.
- During absorption, the implant slowly transfers stress to the healing bone, assisting in the healing process.
- Due to absorption, the risks of implantrelated long-term complications are eliminated.

## **PROFESSIONAL BENEFITS**

- Patented Self-Locking SL<sup>™</sup> technology and a grooved surface design provide excellent fixation and rotational stability, keeping the product securely in place after implantation.
- The self-reinforced structure offers enhanced support, with the diameter increasing by 1-2% from its initial dimensions, ensuring a tight and reliable fit to the bone.
- The use of ActivaNail™ is straightforward with Bioretec's reusable pin applicator, designed to pick up and attach the implant—eliminating the risk of losing the pin during insertion.
- The insertion process can be performed using either a reusable arthroscopic or regular applicator.
- ActivaNail<sup>™</sup> is sterile packaged to ensure ease of use and maintain aseptic conditions during surgical procedures.

#### **MATERIAL PROPERTIES & KEY POINTS**

- High strength and stiffness achieved through tailored material and proprietary manufacturing techniques.
- Bending modulus close to cortical bone, reducing stress shielding.
- Facilitates bone healing and fully absorbs in approximately two years.
- Made of PLGA 85/15.
- Patented Self-Locking SL™ technology minimizes unstable fixation risks.
- Implant diameter expands 1-2% in the physiological environment for firm bone fixation.
- Single sterile packed and excellent for pediatric orthopaedics.
- Also applicable in cartilage repair and osteochondral fragment/loose body repair.

#### **APPLICATIONS & INDICATIONS**

#### **Upper Extremities**

- Humeral condyle fractures
- · Olecranon fractures
- Radial head fractures
- Distal radius fractures
- Metacarpal fractures
- Phalanx fractures

#### **Lower Extremities**

- Cartilage Repair
- · Osteochondral fragment/loose body repair
- Ankle fractures (e.g., malleolar fractures)
- Talar fractures
- Patella fractures
- Fixation of metatarsal and phalangeal fractures and osteotomies (Akin, Scarf, Chevron, Weil) — e.g., Hallux Valgus
- · Arthrodesis procedures, including:
  - Talocrural arthrodesis
  - Subtalar arthrodesis
  - 1st MTP arthrodesis
  - Interphalangeal (IP) arthrodesis

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# **ActivaNail™ Product Codes**

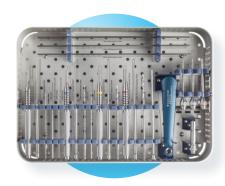
Product Code	Product Description
B-ANCO-1510	ActivaNail™ Conical 1.5 x 10 mm
B-ANCO-1515	ActivaNail™ Conical 1.5 x 15 mm
B-ANCO-1520	ActivaNail™ Conical 1.5 x 20 mm
B-ANCO-1525	ActivaNail™ Conical 1.5 x 25 mm
B-ANCO-1530	ActivaNail™ Conical 1.5 x 30 mm
B-ANCO-2015	ActivaNail™ Conical 2.0 x 15 mm
B-ANCO-2020	ActivaNail™ Conical 2.0 x 20 mm
B-ANCO-2025	ActivaNail™ Conical 2.0 x 25 mm
B-ANCO-2030	ActivaNail™ Conical 2.0 x 30 mm



Product Code	Product Description
B-IP-3200	Applicator Ø3.2 mm, reusable, for 3.2 mm pins and for 1.5/2.0/2.7/3.2 mm nails
B-IP-1502	K-Wire Ø1.5 mm, length 130 mm, for 1.5 mm pins/nails, 10 pcs.
B-IP-1501	K-Wire Ø1.6 mm, length 130 mm, for 1.5 mm pins/nails, 10 pcs
B-IP-2001	K-Wire Ø2.0 mm, length 130 mm, for 2.0 mm pins/nails, 10 pcs.
B-IP-1503	Drill bit Ø1.5 mm, for 1.5 mm pins/nails, quick coupling
B-IP-2003	Drill bit Ø2.0 mm, for 2.0 mm pins/nails, quick coupling
B-IP-4000	Applicator handle, arthroscopic, for pins and nails
B-IP-3212	Applicator tip, arthroscopic, for 1.5/2.0 mm nails
B-IP-4001	Applicator drill guide, arthroscopic, for 1.5/2.0 mm nails
B-IP-4004	Applicator housing, arthroscopic, for pins and nails
B-IP-1506	K-Wire Ø1.5 mm, length 260 mm, for 1.5 mm pins/nails
B-IP-1504	K-Wire Ø1.6 mm, length 260 mm, arthroscopic, for 1.5 mm pins/nails
B-IP-2004	K-Wire Ø2.0 mm, length 260 mm, arthroscopic, for 2.0 mm pins/nails
B-IP-4003	Sterilization tray for ActivaPin instruments



ActivaNail™



Instrument Set for ActivaPin™ B-IPS-1000



**Applicator** 

### **PRODUCT PROPERTIES**

- Material: ActivaNail™ is made of PLGA 85/15, which safely absorbs in the body in approximately two years. The material has a long history in medical use and is proven to be safe in various scientific clinical studies and by real-world evidence.
- **Certificates:** ActivaNail™ is FDA cleared and CE approved.
- Product measures: ActivaNail™ is available in diameter 1.5 and lengths 10-30 mm and diameter 2.0 and lengths 15-30 mm.