

Limb lengthening and correction of extremities with improved comfort and reduced intensity of treatment

# FITBONE® system Patient information



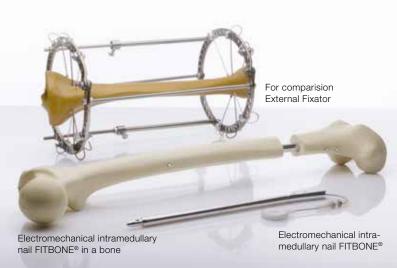
## **FITBONF®**

Fully Implantable electromechanical intramedullary nail for limb lengthening and correction of extremities

#### Patient information

FITBONE® is the world's only fully-implantable, electromechanical intramedullary nail for limb lengthening and the correction of extremities. The device is used for correcting leg length differences and other serious deformities of the femur and/or tibia. The intramedullary nail can replace conventional methods such as external fixators in selected cases (see image below).

The electromechanical intramedullary nail can be used to achieve an extension of 60 mm in the lower leg (tibia) and 80 mm in the upper leg (femur).



### Treatment with the FITBONE® system

The distraction treatment ("activation") takes approximately 90 seconds, repeated three times daily by the patient. These three activations result in an average distraction rate of about 1mm per day. The rate of distraction may be increased or decreased by the surgeon as necessary, by increasing or decreasing the number of activations per day. The distraction phase is followed by the consolidation phase, during which time bone consolidates with the gap created by the distraction process.

Partial weight-bearing is allowed during the distraction phase; the amount of weight-bearing will be increased at the direction of the surgeon as the bone solidifies during the consolidation phase. Full weight-bearing is allowed after full recovery has occurred.

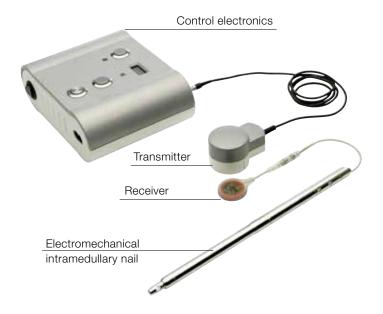
After complete consolidation of the new bone, around 1-1 ½ years after implantation a removal of the electromechanical intramedullary nail FITBONE® and receiver is imperative.



#### **Benefits**

- Improved comfort and reduced intensity of treatment (e.g., pin care) during treatment
- Reduced scar formation
- Short in-patient stay
- Reduced risk of infection
- Reduced pain compared to external fixators
- High product safety
- Restricted use of the device to highly specialized surgeons with years of experience with the FITBONE® surgery technique

## The FITBONE® system at a glance



#### Indications

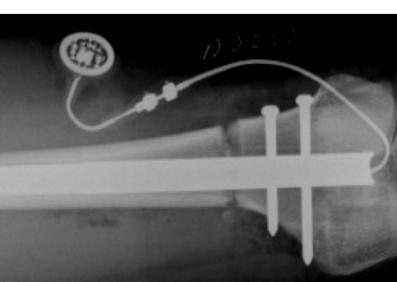
Compensation of leg length differences in femur and tibia

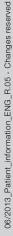
Custom-made products for following indications on request: Residual limb lengthening, segmental transport after tumor resection or bone defect and others.

## Externally-Controlled Intramedullary Limb lengthening

The FITBONE® system consists of the implantable electromechanical intramedullary nail connected to a receiver by a cable, and an external control set consisting of a control electronic and a transmitter.

The energy needed for the distraction process is transmitted from the outside by placing the external transmitter over the implanted receiver which is placed in the subcutaneous tissue during FITBONE® surgery. There is no contact between the implanted intramedullary nail and the outer surface of the patient's body.







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