

OSTEOSPINE® controlling pain
improves patients quality of life

Effective

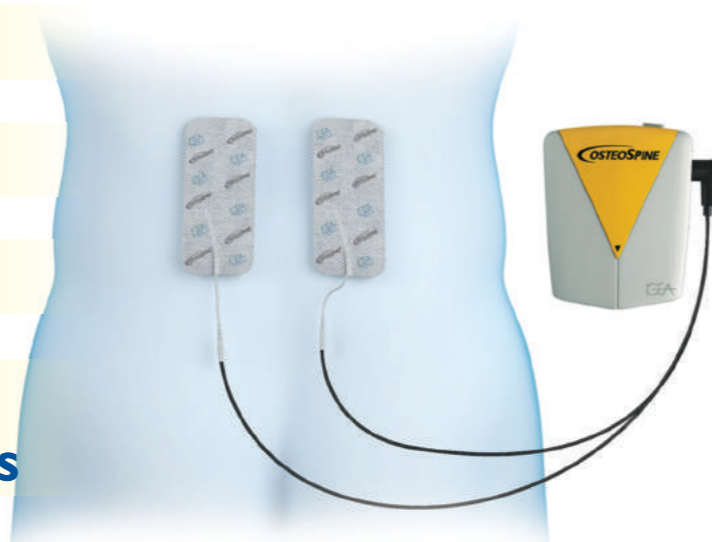
Safe

Portable

Easy to use

Usable also in presence
of internal fixation devices

Compatible with daily
activities



References

Brighton CT, Luessenhop CP, Pollack SR, Steinberg DR, Petrik ME, Kaplan FS. Treatment of castration-induced osteoporosis by a capacitively coupled electrical signal in rat vertebrae. JBJS 1989;71:228-236.

Sollazzo V, Massari L, Caruso A, De Mattei M, Pezzetti F. Effects of low-frequency pulsed electromagnetic fields on human osteoblast-like cells in vitro. Electro- and Magnetobiology 1996;15(1):75-83.

Chang K, Chang WHS, Yu YH, Shih C. Pulsed Electromagnetic Field Stimulation of Bone Marrow Cells Derived From Ovariectomized Rats Affects Osteoclast Formation and Local Factor Production. Bioelectromagnetics 2004;25:134-141.

Muijs SPJ, Nieuwenhuijse MJ, Van Erkel AR, Dijkstra PDS. Percutaneous vertebroplasty for the treatment of osteoporotic vertebral compression fractures. Evaluation after 36 months. JBJS 2009 Mar; 91-B:379-84.

Massari L, Brayda Bruno M, Boriani S, Caruso G, Grava G, Barbanti Brodano G, Cadossi R, Setti S.: Effetto della stimolazione biofisica con sistemi capacitivi nel trattamento delle atrosi vertebrali: studio multicentrico, prospettico, randomizzato e in doppio cieco. XXXI Congresso Nazionale di Chirurgia Vertebrale G.I.S, Milano 22-24 Maggio 2008.

Rossini M, Viapiana O, Gatti D, De Terlizzi F, Adami S. Capacitively Coupled Electric Field for Pain Relief in Patients with Vertebral Fractures and Chronic Pain. Clin Orthop Relat Res 2010;468:735-740.

Piazzolla A, Solarino G, Bizzoca D, Garofalo N, Dicuonzo F, Setti S, Moretti B. Capacitive coupling electric fields in the treatment of vertebral compression fractures. J Biol Regul Homeost Agents. 2015 Jul-Sep;29(3):637-46.

IGEA®
CLINICAL BIOPHYSICS

IGEA S.p.A. Via Parmenide, 10/A 41012 Carpi (MO) Italy
info@igeamedical.com | www.igeamedical.com

OSTEOSPINE®



Effective pain control and
improved Quality of life
in patients with vertebral
osteoporotic fractures

IGEA®
CLINICAL BIOPHYSICS

Innovative therapy for pain control in patients with vertebral osteoporotic fractures

Vertebral osteoporotic fractures lead to pain compromising daily activities and significantly worsening the quality of life

OSTEOSPINE®

Solves pain in patients with vertebral osteoporotic fractures

Favors the reabsorption of edema

Produces durable benefits even after the end of the treatment

Improves quality of life



Signal specific features

The efficacy of the **OsteoSpine®** signal* has been validated by preclinical studies. **OsteoSpine®** has a self calibration system that ensures, on the fracture site, the exact level of electric current density to promote osteogenesis and control the inflammatory process. (15-30 uA/cm²)

* Pulse train signal with frequency 12,5 Hz and duty cycle of 50%. Every single pulse train is made up of a sinusoidal signal of 60 kHz.

Patented

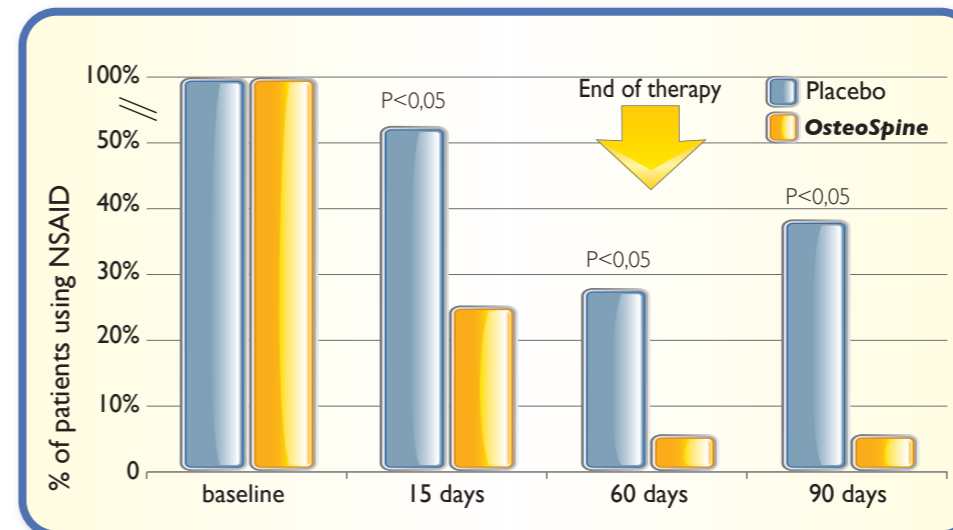
Imaging evidence



Resorption of bone edema after **OsteoSpine** therapy

Courtesy of Dr Alessio Lovi and Dr Marco Brayda Bruno (Vertebral Surgery III, IRCCS Orthopedic Institute, Galeazzi, Milano)

Effective pain control



OsteoSpine resolves pain, reduces NSAID consumption and favours functional recovery. Efficacy continues after therapy cessation.

Clinical indications

Acute and chronic pain, Vertebral osteoporotic fractures, Bone edema, Post surgery

Dosage

8 hours/day for 30-60 days. The therapy is repeatable.