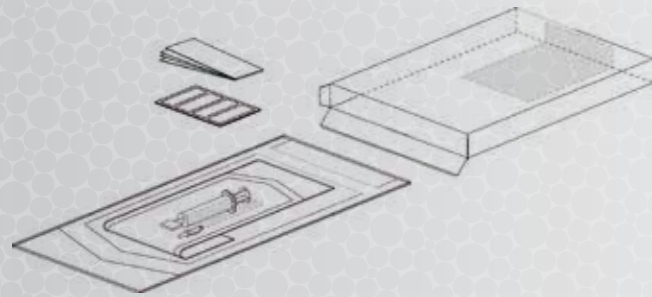


# NANO GEL®

## Storage

NANO GEL® is supplied sterile, ready to use in operating rooms. It must be kept in its original unopened packaging, in a dry clean place away from light, and at a temperature between + 2°C and + 25°C.



# NANO GEL®



## Products

Each dose of NANO GEL® is packaged in a pre-filled sterile syringe. NANO GEL® is sterilized by radiation at a minimum dose of 25 kGy. Single use. Do not re-sterilize. For any further information, please refer to the IFU.

Synthetic  
Bone Substitute

DESIGNATION	REFERENCE
NANO GEL® 0,5ml Syringe	T860005
NANO GEL® 1ml Syringe	T860010
NANO GEL® 2,5ml Syringe	T860025
NANO GEL® 5ml Syringe	T860050

Distributed by



**Head offices:**  
8, rue du Corps Franc-Pompiès  
65500 VIC en BIGORRE (France)  
Tél (33) 5 62 96 88 38  
Fax (33) 5 62 96 28 72

**Administration and supply-chain offices:**  
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**Sales and engineering departments:**  
Z.I. de Montredon - 11, rue Apollo  
31240 L'UNION (France)  
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Manufactured by



Crédits photos : © Teknimed - TF431861/Ind 3 - 05/2017



Thanks to its nano composition and structure, NANO GEL<sup>®</sup> is a synthetic bone substitute which is the most similar to bone tissue.

This innovative product is an absorbable bone void filler which gives a rapid bone ingrowth for a bone reconstruction.

NANO GEL<sup>®</sup> offers to surgeon wide possibilities of use; open or percutaneous surgery to fill closed bone defects.

BIOCOMPATIBLE

OSTEOCONDUCTIVE

SYNTHETIC

RESORBABLE

BONE VOID FILLER



PERCUTANEOUS USE

## Indications

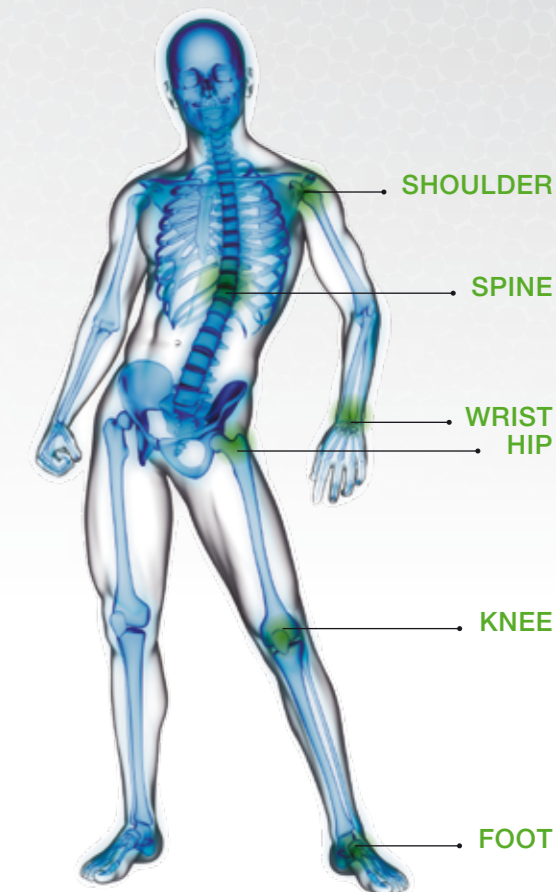
NANO GEL<sup>®</sup> is a bone void filler which can be applied by percutaneous way in closed defects, or directly implanted in the surgical site.

### Orthopaedic surgery:

- Treatment of bone defects like benign tumors or cysts
- Bone defects caused by traumatic lesions
- Arthrodesis (foot, ankle, spine, wrist, etc.)

### Spine surgery:

- Spine fusion
- Interbody cage filling



## In vivo study & clinical cases :

## Properties

### COMPOSITION

- Hydroxyapatite, H<sub>2</sub>O sterile
- Nanoparticles between 100 nm to 200 nm
- Specific surface around 80 m<sup>2</sup>/g

### SYNTHETIC

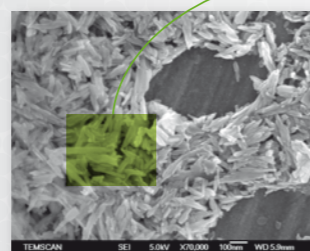
Free from organic phase

### INJECTABLE

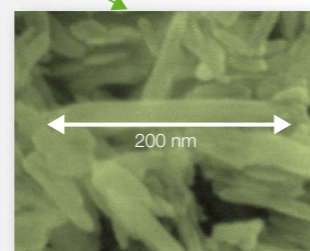
Syringe ready to use

### STABLE

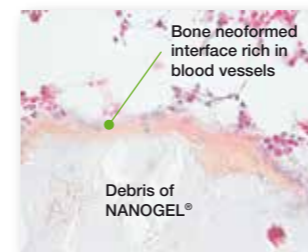
Pasty gel which keeps its stability *in situ*, even with blood cellular flow



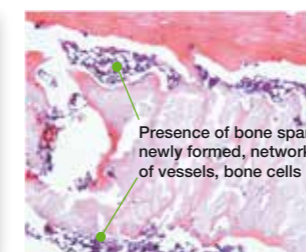
NANO GEL<sup>®</sup> STRUCTURE (x70 000 SEM)



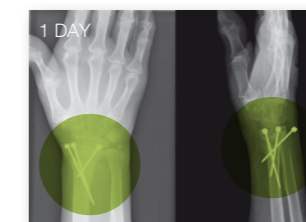
100 nm to 200 nm



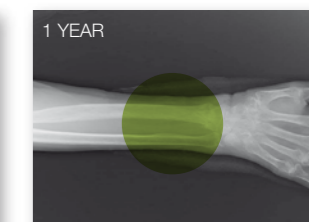
2 WEEKS (MAGNIFICATION x40)



4 WEEKS (MAGNIFICATION x40)



1 DAY AFTER STABILISATION



1 YEAR AFTER PIN ABLATION

### RESORBABLE

Nano crystals of HA easily resorb. *In vivo* studies have shown a quick cellular invasion and high bone ingrowth within a short time, after implantations

### BIOCOMPATIBLE

No adverse reaction observed

### OSTEOCONDUCTIVE

NANO GEL<sup>®</sup> promotes high bone ingrowth