



# Inductigraft

*Osteoinductive Bone Graft Substitute*  
*Silicate Substituted Calcium Phosphate*

**Enhance**  
Bone Growth<sup>\*1</sup>



\*Preclinical data. Results may not correlate to performance in humans.

**Baxter**



## Versatility and Ease of Use

The precise handling characteristics of **INDUCTIGRAFT** allow the putty to be molded into multiple shapes to adapt to various surgical needs, designed to instill confidence while handling when using as standalone, with autograft, or BMA.



**INDUCTIGRAFT**  
as a standalone

Ratio up to 2:1

**INDUCTIGRAFT : BMA**

Ratio up to 1:3

**INDUCTIGRAFT : Autograft**

**INDUCTIGRAFT** is designed for use as a standalone bone graft substitute or as an autograft extender. While not necessary, it can be combined with autologous bone (autograft) or bone marrow aspirate (BMA).

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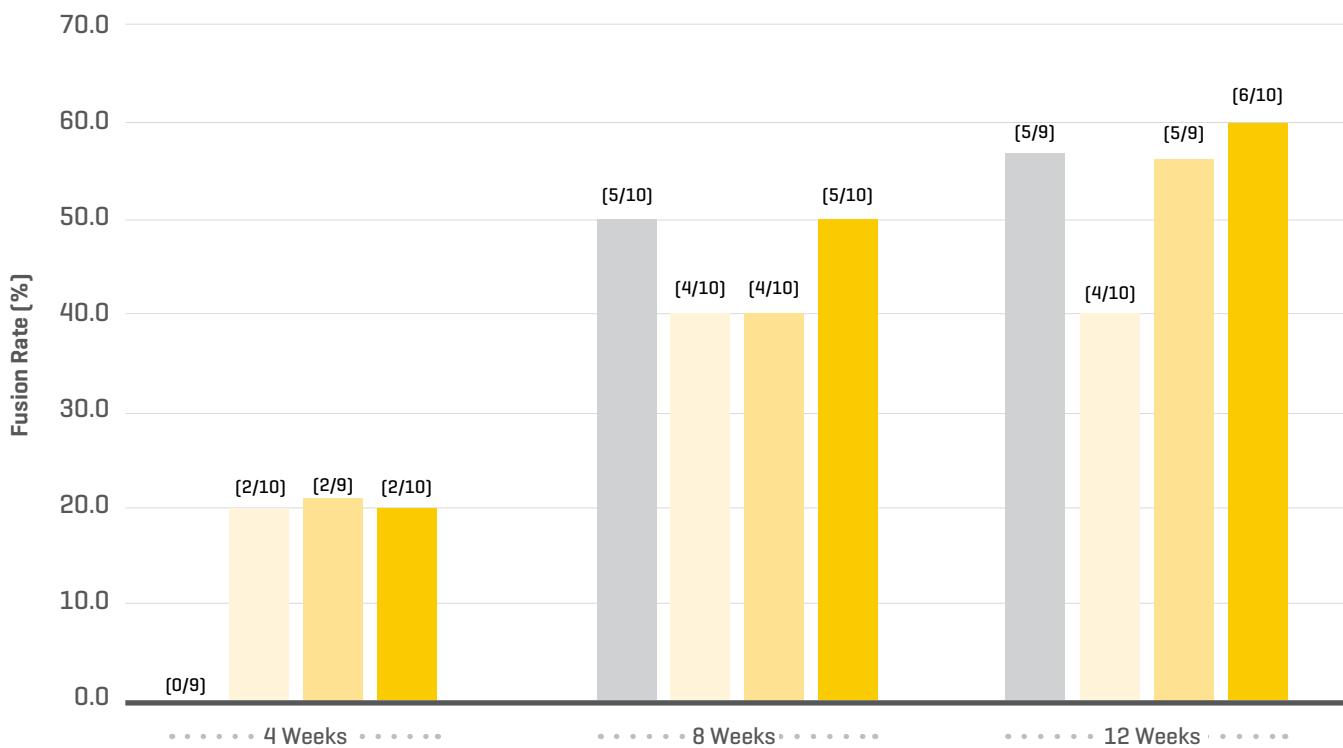


## Enhanced Performance

### Comparable Results to Autograft<sup>6,7,8</sup>

Iliac crest autograft is the commonly utilized “gold standard” graft material in spine surgical techniques. In a pre-clinical posterolateral fusion model, INDUCTIGRAFT exhibited similar fusion rates to autograft.<sup>5</sup>

ICBG Si-CaP EP/BMA Si-CaP EP/ICBG Si-CaP EP



### Fusion rates were established by manual palpation<sup>8</sup>

Fusion was assessed by manual palpation of the treated segment by three blinded, independent reviewers. “Fusion” was determined if no motion was detected in flexion or extension. At 8 and 12 weeks, SiCaP EP, ICBG+SiCaP EP, and SiCaP EP+BMA exhibited comparable fusion rates to ICBG.

<sup>\*</sup>Preclinical data. Results may not correlate to performance in humans.



# Inductigraft

Osteoinductive Bone Graft Substitute  
Silicate Substituted Calcium Phosphate

## Introducing the Next Generation Osteoinductive Silicated Substituted Bone Graft Substitute

**INDUCTIGRAFT** is an osteoinductive and osteoconductive silicate substituted calcium phosphate bone void filler. **INDUCTIGRAFT** contains microgranules, sized 1–2 mm, with 80–85% macro porosity and 31–47% micro porosity, suspended in an absorbable aqueous gel carrier. The interconnected and open porous structure is similar to human cancellous bone and is designed to promote osteogenesis.<sup>2</sup>

### Optimized Porosity to Enhance Bone Growth

#### Earlier Vascularization<sup>2</sup>

The enhanced porosity of **INDUCTIGRAFT** Bioactive Bone Graft promotes early vascularization, which plays a central role in the bone formation process by providing oxygen, nutrients, and growth factors indispensable for appropriate bone development.



#### Enhanced Cellular Activity<sup>2</sup>

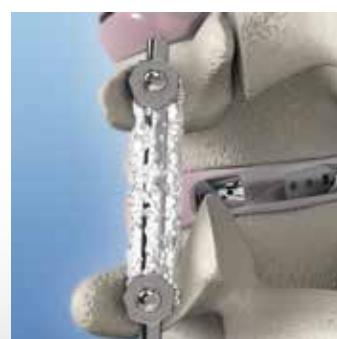
The enhanced macro and micro porosity of **INDUCTIGRAFT** Bioactive Bone Graft provides for an increased surface area and topography, which facilitate the increased proliferation and differentiation of osteoblasts along the surface of the graft and promote increased new bone formation.



#### Physiologically Balanced Bone Growth<sup>2</sup>

**INDUCTIGRAFT** promotes osteogenesis and accelerates the body's own regeneration response producing consistently high quality bone throughout the graft.

The osteoinductive properties of Inductigraft allow for bone formation throughout the bone graft and not by creeping substitution.<sup>1</sup>



**80-85%**

Macro  
Porosity<sup>1</sup>

**31-47%**

Micro  
Porosity<sup>4</sup>

**0.8 wt%**

Silicone  
Level<sup>5</sup>



### Micro-granule Characteristics:

**INDUCTIGRAFT** contains microgranules, sized 1–2 mm, with 80–85% macro porosity and 31–47% micro porosity, suspended in an absorbable aqueous gel carrier.

**INDUCTIGRAFT** contains 0.8% silicon by weight, which in preclinical studies was shown to be optimal for bone formation.<sup>4</sup>

## INDICATIONS FOR USE

INDUCTIGRAFT is an implant intended to be used in place of cortico-cancellous, or cancellous allograft or autograft bone to fill bony voids or gaps of the skeletal system (i.e., extremities, pelvis, spine, dental). INDUCTIGRAFT may be used in spinal fusion procedures, where pedicle screw fixation or an interbody cage relieve the graft site from physiological loads. INDUCTIGRAFT may be used with morselized autograft or allograft bone as a bone graft extender, autologous blood or bone marrow aspirate, or sterile saline/water. Inductigraft is not intended to be used in place of cortical-strut allograft bone where high-tensile, torsion and/or bending strength are required.

## Important Risk Information

INDUCTIGRAFT should not be used where it could be subject to torsion, compression, shear, or bending. A conventional implant (e.g. screw, rod) can protect the graft from such loading actions. INDUCTIGRAFT should not be used on volumetrically unconstrained sites and does not set in-situ following implantation.

Do not overfill or attempt to pressurize the bony defect site, as this may lead to extrusion of the product beyond the site of its intended application and damage to the surrounding tissues, or may lead to fat embolization or embolization of the product into the bloodstream.

**Rx Only.** For safe and proper use please refer to full device Instructions for Use for Contraindications, Warnings, and Precautions.

| Product Name   | Product Size | Order Code   |
|--|--------------|--------------|
|  <b>Inductigraft</b><br>Osteoinductive Bone Graft Substitute<br>Silicate Substituted Calcium Phosphate | 1.5 mL       | 506005078079 |
|  | 2.5 mL       | 506005078080 |
|  | 5 mL         | 506005078081 |
|  | 10 mL        | 506005078082 |
|  | 20 mL        | 506005078083 |

For information on directions for use, contra-indications and warnings please refer to the Instructions for Use which are available upon request.

**For more information, contact your local sales representative or call 1-888-229-0001**

### References:

1. INDUCTIGRAFT Bioactive Bone Graft Instructions for Use.
2. Campion CR, Chandler C, Buckland T, Hing K. Increasing strut porosity in silicate-substituted calcium-phosphate bone graft substitutes enhances osteogenesis. J Biomed Mater Res B Appl Biomater. 2011 May;97(2):245-54.
3. Hankenson KD, Dishowitz M, Gray C, Schenker M. Angiogenesis in Bone Regeneration. Injury. 2011 Jun;42(6):556-61.
4. Baxter Data on File.
5. Hing KA, Revell PA, Smith N, Buckland T. Effect of silicon level on rate, quality and progression of bone healing within silicate-substituted porous hydroxyapatite scaffolds. Biomaterials. 2006 Oct;27(29):5014-26.
6. Guth K, Campion C, Buckland T, Hing KA. Effect of silicate-substitution on attachment and early development of human osteoblast-like cells seeded on microporous hydroxyapatite discs. Adv Eng Mater. 2010;12(4):B77-B82.
7. Hing KA, Wilson LF, Buckland T. Comparative performance of three ceramic bone graft substitutes. Spine J. 2007; 7(4):475-490.
8. Fredericks DC, Petersen EB, Saihi N, Corley KGN, DeVries N, Grosland NM, Smucker JD. Evaluation of a novel silicate substituted hydroxyapatite bone graft substitute in a rabbit posterolateral fusion model. The Iowa Orthopaedic Journal. 2013;33:25-32.

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