# MatrixOss<sup>™</sup> Granules

MatrixOss<sup>™</sup> Granules is an osteoconductive, porous, anorganic bone mineral with carbonate apatite structure derived from porcine cancellous bone

# **Product Features:**

- Carbonate apatite structure similar to natural bone
- Highly porous
- Rough surface/faciliates cell adhesion
- High volume fill

CATALOG NO.	VOLUME	PARTICLE SIZE RANGE
PMC0510	0.5 cc	0.25 - 1.0 mm
PMC1010	1.0 cc	0.25 - 1.0 mm
PMC2010	2.0 cc	0.25 - 1.0 mm
PMC4010	4.0 cc	0.25 - 1.0 mm
PMC1020	1.0 cc	1.0 - 2.0 mm
PMC2020	2.0 cc	1.0 - 2.0 mm

#### Syringe

CATALOG NO.	VOLUME	PARTICLE SIZE RANGE
PMCS025	0.25 cc	0.25 - 1.0 mm
PMCS05	0.5 cc	0.25 - 1.0 mm

# Why **MatrixOss**<sup>™</sup>?

# Safe

- Porcine animals are considered a non-TSE relevant species
- Bone tissue is subjected to several processing steps known to eliminate or inactivate viruses
- A rigorous process designed to effectively mitigate any risk of disease transmission and ensure safety for human implantation
- The bone graft is provided sterile and for single use only

# Carbonate apatite anorganic bone mineral

- Carbonate apatite structures are better osteoconductive materials than hydroxyapatite <sup>1,2,3</sup>
- Resorption and remodeling profiles are more similar to natural bone than those of synthetic materials, such as hydroxyapatite or tricalcium phosphate <sup>2</sup>



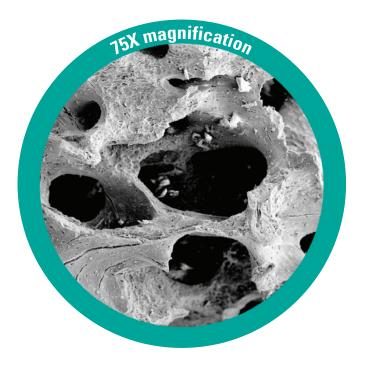
#### Porous

- Porosity permits vascularization of the defect site and enhances osteogenesis <sup>14,15</sup>
- High porosity and large pores enhance bone ingrowth and osseointegration of the implant after surgery <sup>15</sup>
- MatrixOss<sup>™</sup> macropores range between 0.1mm
   1.0mm<sup>16</sup>



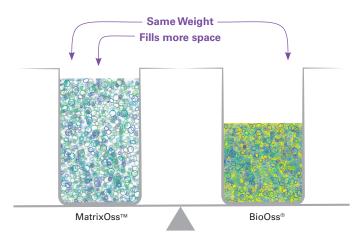
## Surface Roughness 17

 Surface roughness affects cellular response, enhancing cell adhesion and proliferation and possibly other markers of expression of cell phenotype, like production of collagen type I, osteocalcin, extracellular matrix and mineralized material



#### Volume Fill<sup>16</sup>

- 1gram of small size particles fills approximately 34% more volume then Bio-Oss<sup>®</sup>
- 1 gram of large size particles fills approximately
  49% more volume then Bio-Oss<sup>®</sup>



## Void Space<sup>16</sup>

- 88% void space for porcine mineral vs 78% void space of Bio-Oss<sup>®</sup> for small particles
- ✤ 95% void space for porcine mineral vs 88% void space of Bio-Oss<sup>®</sup> for large particles

