# **THE** Graft:::

#### **Porcine Particulate**

Designed to mimic the structure of human bone, offering osteoconductive properties to host cell growth and complete remodeling to host bone. The natural structure of the anorganic bone mineral demonstrates similar physical and chemical characteristics compared to the mineralized matrix of human bone. Gradually resorbs and is replaced with host bone during the healing process. Cancellous granules are sterilized using gamma irradiation.





SYRINGE		
Product Code	Volume	
TG-AS25	0.25cc	
TG-AS05	0.5cc	
TG-AS10	1.0cc	

VIAL	
Product Code	Volume
BG-A25	0.6cc
BG-A05	1.2cc
BG-A10	2.4cc
BG-A20	4.8cc

#### **Characteristics**

- Highly porous structure with high interconnectivity
   Supports absorption of liquids such as blood and leads to incorporation and remodeling
- Minimal residual protein without the use of high temperature sintering
  The natural Interconnectivity is maintained and is structurally similar to human bone
- High level of purity
   Predictable bone growth with little immunogenic reaction
- Demonstrated biocompatibility Encourages cell adhesion and supports vital cell growth
- Hydrophilic properties
   The high wettability positions this material to have advantages in host fluid absorption

#### Case Study THE Graft™ and OSSIX® Plus Horizontal and Vertical Defect

Implant placement and bone grafting treatment for horizontal and vertical bone defect. Implantation with decertification was performed followed by GBR using THE Graft™ and OSSIX® Plus. Re-entry surgery was done after 5 months of initial treatment and an adequate bone formation was seen radiographically.









Implantation and decortification

GBR with THE Graft™ and OSSIX® Plus







Re-entry surgery after 5 months





The proprietary manufacturing process effectively removes potential immunogenic organic elements, keeping the natural structure of the matrix. The manufacturing process is designed to eliminate organic components from THE Graft™ that might be potential causes of inflammation or immune reaction.

# Case Study using THE Graft™ and OSSIX® Plus **Dehiscence Defect**

A GBR using THE Graft™ and OSSIX® Plus was carried out on the one walled defect lesion. After 3 months, there was an increase in bone volume and well maintained overlying membrane could be seen. Marginal bone was also highly stable clinically and radiographically 1 year after surgery.















Pre-op clinical view

GBR with THE Graft™ and OSSIX® Plus

Re-entry surgery after 3 months, overlaying membrane was maintained

## THE Graft™ has a high purity.

The proprietary process results in minimal residual protein, soft tissue, and organic bone matrix. THE Graft™ is deproteinized enough for safe use. Achieves low organic residues without the use of high sintering temperatures. This is important as using high temperatures in preparation of bone graft material can cause deterioration of the natural bone structure which affects the body's ability to remodel the material.

# **Case Study** THE Graft™ and OSSIX® Plus for Extraction Socket Preservation

This case shows mangement of two and three walled defects using THE Graft™ and OSSIX® Plus for extraction socket preservation. Upon removal of suture, a partial exposure of extraction socket was seen, however, bone grafting was not carried out any further for implant placement. Favourable result was reported at 2 year follow-up with stable marginal bone structure.



Pre-op view



Bone resorption on the bucccal and ligual side



GBR and sutured with granulation tissue





Stitched out after 2 weeks



Re-entry surgery after 7 months

## **High Porosity**

The High porosity enables a quick absorption of liquids such as blood. This characteristic facilitates graft placement and leads to post-implantation incorporation and remodelling.

Porosity is an important factor in determining how the host integrates the graft material. High porosity leads to a quick absorption of liquids and cell proliferation provides supporting structure for cell adhesion and tissue regeneration.

# **Hydrophilicity**

In general, wettability of a graft material impacts protein absorption, cell attachment, growth, and proliferation. Hydrophilic properties allow this material to easily absorb host body fluids once implanted.

The high wettability positions this material to have advantages in host protein absorption resulting in cell adhesion and proliferation processes after implantation.

OpenTex® can be ordered online at HesiraMed.com







