## Osteoallograft™ Periomix™

Real Bone Allograft. Naturally Osteoinductive.™



Veterinary Transplant Services, Inc. (VTS) is the world's first veterinary tissue bank. We provide you with animal bone and soft tissue allografts for animal use. Restoring bone after a tooth extraction or after bone loss caused by periodontal disease contributes to patient well-being and can be critical to avoiding tooth loss or fractures of the mandible. With Osteoallograft™ Periomix™, even extractions have been prevented. Real bone allograft is both osteoinductive and osteoconductive and therefore using it results in higher periodontal bone height fill and faster healing times than using bone substitutes which are osteoconductive only.¹-⁵

Oral surgeons in human medicine have been confidentially taking advantage of bone allografts for decades. As a veterinary version of a human tissue bank, we bring this significant medical advancement to veterinarians and are proud of having been providing veterinary bone allografts successfully since 1996.

# Why use bone allograft in periodontics?

#### Restores periodontium after extractions.

Reconstructing the periodontium after tooth extractions prevents fractures of the mandible and contributes to patient well-being.

#### Saves teeth.

Applying bone allograft after bone loss caused by periodontal disease results in reversal of the disease process, probing depth reduction, clinical attachment gain, clinical repair of lost bone, and histologic reconstruction of the attachment apparatus consisting of new bone, cementum, and periodontal ligament.<sup>1-2</sup> With Osteoallograft™ Periomix™, you can save teeth instead of pulling them.

#### Osteoinductive.

Real bone allograft is *both* osteoinductive and osteoconductive. Both properties are needed for optimal bone healing.<sup>3-5</sup> Bone substitutes that do not contain bone morphogenic proteins are only osteoconductive.

#### Faster healing and higher bone height fill.

Real, osteoinductive bone achieves faster and higher bone restoration than bone substitutes and bone growth naturally promotes periodontal ligament growth.<sup>1-5</sup>

#### Enhances the success of Guided Tissue Regeneration (GTR).

While using bone allograft leads to great results after extractions, it is also an optimal grafting material for use with GTR.<sup>1,6</sup>



## Easy to Use:

Osteoprogenitors come from blood or bone marrow. We recommend mixing rehydrated graft with patient blood or you can apply graft directly to a very vascular site.



Create surgical flap.

Rehydrate Osteoallograft $^{\mathsf{TM}}$  Periomix $^{\mathsf{TM}}$  with saline or patient blood.

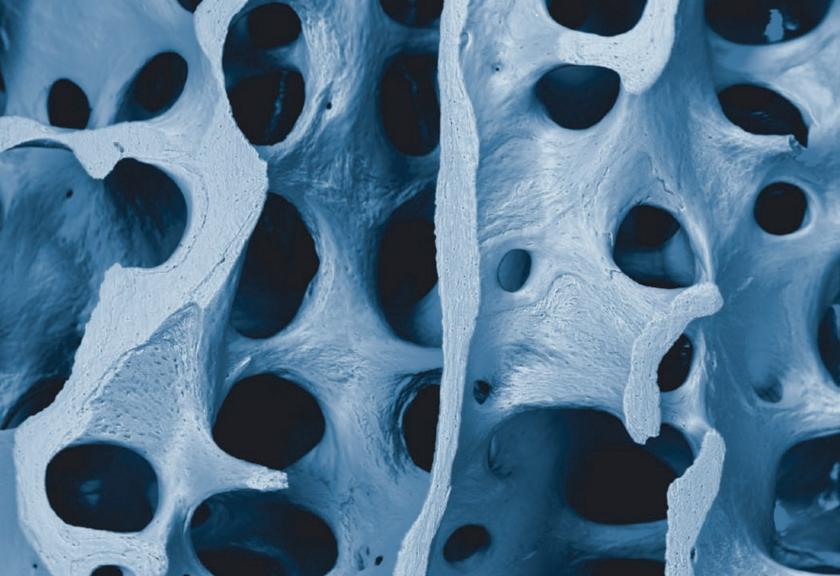


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Pack Osteoallograft™ Periomix™ into extraction site, around roots, or into other bone loss sites. GTR barriers may be added.



Suture close surgical flap.



## Osteoallograft™ Periomix™ from VTS

#### Easy to use.

Simply mix with patient blood or bone marrow and apply to surgical site. Osteoinductive growth factors in demineralized bone powder signal progenitor cells immediately after surgery, accelerating the healing process.<sup>1-2</sup>

#### High quality.

All VTS products are processed aseptically and meet USP guidelines for sterility. Immune reactions are not a significant concern, since VTS products are acellular, and processed by methods that have been shown to reduce immunogenicity; there is no need for any type of patient matching. Our stringent Quality Assurance Program provides confidence and consistency in our products.

#### Readily available.

A shelf-life of 5 years for freeze-dried grafts and 6 months for frozen grafts allows you to conveniently keep your own inventory on-site. We ship the same day and also offer overnight shipping for immediate needs.

#### Specifically for veterinary use.

While human tissues are intended for human use only, VTS is a veterinary tissue bank exclusively providing animal tissue specifically intended and designed for use in veterinary patients. Serving veterinarians since 1996, we are your trusted partner for your animal bone and soft tissue graft needs.

# Achieve fast and strong bone restoration with Osteoallograft™ Periomix™

Restoring bone after tooth extraction or bone loss maintains the height and width of the alveolar ridge. This contributes to patient well-being and significantly reduces the risk of fractures of the mandible or tooth loss. With its natural osteoinductive and osteoconductive properties, Osteoallograft™ Periomix™ achieves fast and strong bone restoration.

### Use Osteoallograft™ Periomix™ for:

- Tooth extractions
- Furcation defects
- Horizontal and vertical bone loss
- Fracture of the mandible
- Any other void filling or bone augmentation procedure that requires grafting

The Osteoallograft™ Periomix™ consists of osteoinductive bone powder and osteoconductive cancellous chips conveniently packaged for ease of use.



## Natural bone allograft vs. bioactive glass

	Natural Bone Allograft	Bioactive Glass	
Easy to use	*	*	
Conforms well to defect site	*	*	
Osteoinductive	*		
Highest Bone Height Fill <sup>3</sup>	*		
Begins to repair bony defects through new bone formation	Immediately after surgery	within 4 weeks	
Visible reconstruction of periodontium and restoration of lost bone	in 8 <b>weeks</b>	in 6 <b>months</b>	

Allograft saves teeth:

Use of allograft bone can prevent tooth loss by promoting new bone formation and facilitating reconstruction of the attachment apparatus. (See VTS case study.)

## Donor animals improve the lives of others.

Donor animals are provided to us through our Donor Program. Owners do not receive any compensation for their donation. All donor animals were euthanized for unrelated reasons such as irreparable trauma or intractable aggression. The option of donation is provided to pet owners only after their pet had to be euthanized.

Just like in human tissue banking, donor animals are donated to us for the noble cause of improving and prolonging the lives of others.



#### References:

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- 4. Griffon DJ, Dunlop DG, Howie CR, Gilchrist T, Salter DM, Healy DM. Early dissolution of a morsellised impacted silicate-free bioactive glass in metaphyseal defects. J Biomed Mater Res (Applied Biomater). 58(6):638-644, 2001.
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- 6. Mellonig, JT. Bone allografts in periodontal therapy. Clin Orthop Relat Res. Mar (324):116-125, 1996.

