



# **BUILDING A FOUNDATION FOR SUCCESS** WITH STRAUMANN BONE GRAFT SOLUTIONS



COMMITTED TO  
**SIMPLY DOING MORE**  
FOR DENTAL PROFESSIONALS<sup>SM</sup>

# REGENERATE THE PATIENT'S OWN VITAL BONE

Vital bone tissue is the key component needed to **build a foundation for success** – whether it's the osseointegration of a dental implant or the functional regrowth of periodontal structures.

Straumann® Bone Graft Solutions provide you with a choice of quality products designed to support the regeneration of the patient's own vital bone for hard and soft tissue augmentation procedures.



**Clinical situation  
after tooth extraction**



**Grafting with Straumann  
Ground Cortical AlloGraft**



**Clinical situation at re-entry  
after 5 months healing time**

Photos courtesy of Robert Miller, DMD, Fort Lauderdale, FL



## Your choice of bone graft substitute should not be a compromise

**Allograft is the bone graft most similar to a patient's own bone, providing a strong matrix to regenerate your patient's new bone.**






Straumann has allied with LifeNet Health®, the worldwide leading tissue bank and organ procurement organization, to introduce Straumann® AlloGraft, a broad range of high quality allograft products.

### **BoneCeramic™ - Bone vitality and volume in one product**

The specific formulation of Straumann BoneCeramic has been designed to support patients' vital bone regeneration, while restoring and preserving bone volume critical for esthetic results.

# A BROAD RANGE OF GRAFTING SOLUTIONS

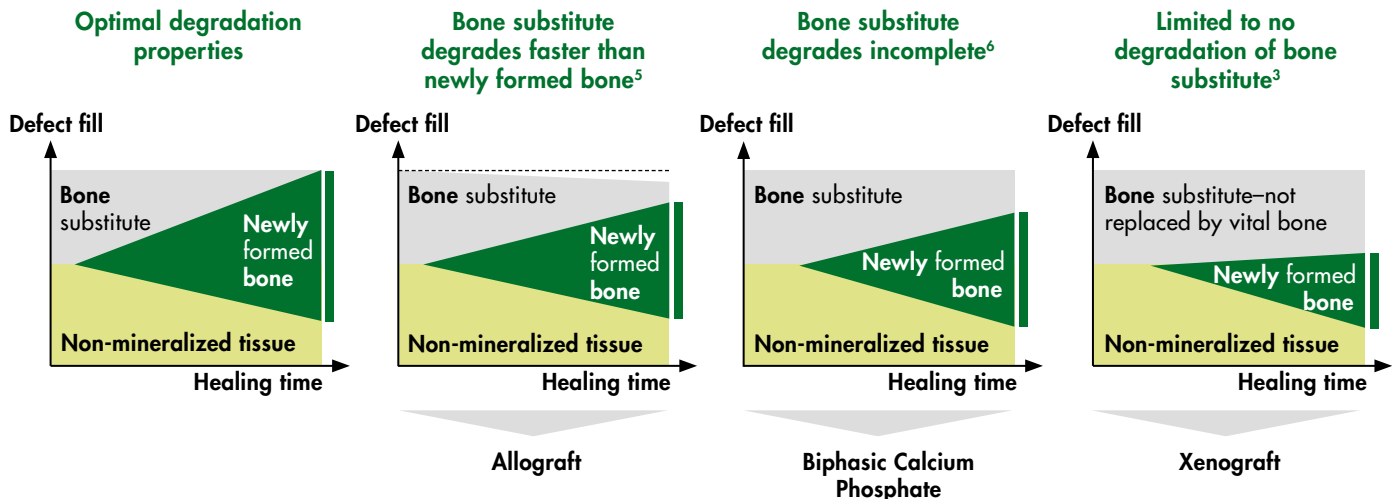
...WITH FLEXIBILITY

		Characteristics	
		Graft type	Product Properties
Straumann AlloGraft	Mineralized Cortical (GC)	Additional mechanical resistance Volume preservation <sup>11</sup>	
	Deminerlized Cortical (GC)	Rapid bone regeneration <sup>a, b</sup> Optimized osteoinductive potential <sup>11, 2</sup>	
	Mineralized Cancellous (OCAN)	Highly osteoconductive trabecular structure with interconnecting pores, to support vascular penetration and bone-in growth	
	Mineralized Mix Cortical/ Cancellous	Combines the structural characteristics of cortical and cancellous bone in one product	
Straumann BoneCeramic™	Biphasic Calcium-phosphate	Biphasic alternative designed for gradual replacement by your patients' own bone and volume maintenance	

a. when compared to mineralized allograft  
b. Pulsatile Acid Demineralization (PAD)

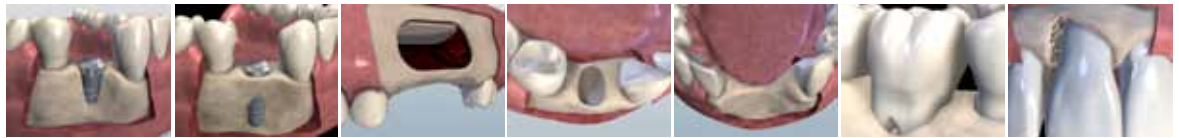
## Degradation properties of bone substitutes

Matching the choice of bone graft material with the type of defect and treatment goals can help foster your success. Together with osteoconductive and osteoinductive properties, the ability of the graft material to degrade over time is one of the most important characteristics to consider in material selection.



# STRAUMANN BONE GRAFT SOLUTIONS

## FOR YOUR REGENERATIVE NEEDS



	Peri-implant- /dehiscence Defect	Fenestration Defect	Sinus Lift	Extraction Socket	Horizontal Augmentation	Furcation Defects	Intraosseus Defects
AlloGraft Ground Cortical	✓✓	✓✓	✓ <sup>4</sup>		✓		
AlloGraft Demineralized Ground Cortical						✓	✓ <sup>8</sup>
AlloGraft Ground Cancellous	✓	✓		✓		✓	✓✓
AlloGraft Cortical/ Cancellous Mix	✓		✓✓	✓	✓✓		
BoneCeramic (Synthetic HA 60% /β-TCP 40%)	✓ <sup>9</sup>	✓	✓✓ <sup>6</sup>	✓ <sup>10</sup>	✓✓ <sup>7</sup>		

All above bone graft types can be used to treat all above described indications. Recommendations in the table are based on material characteristics and scientific data (where available).



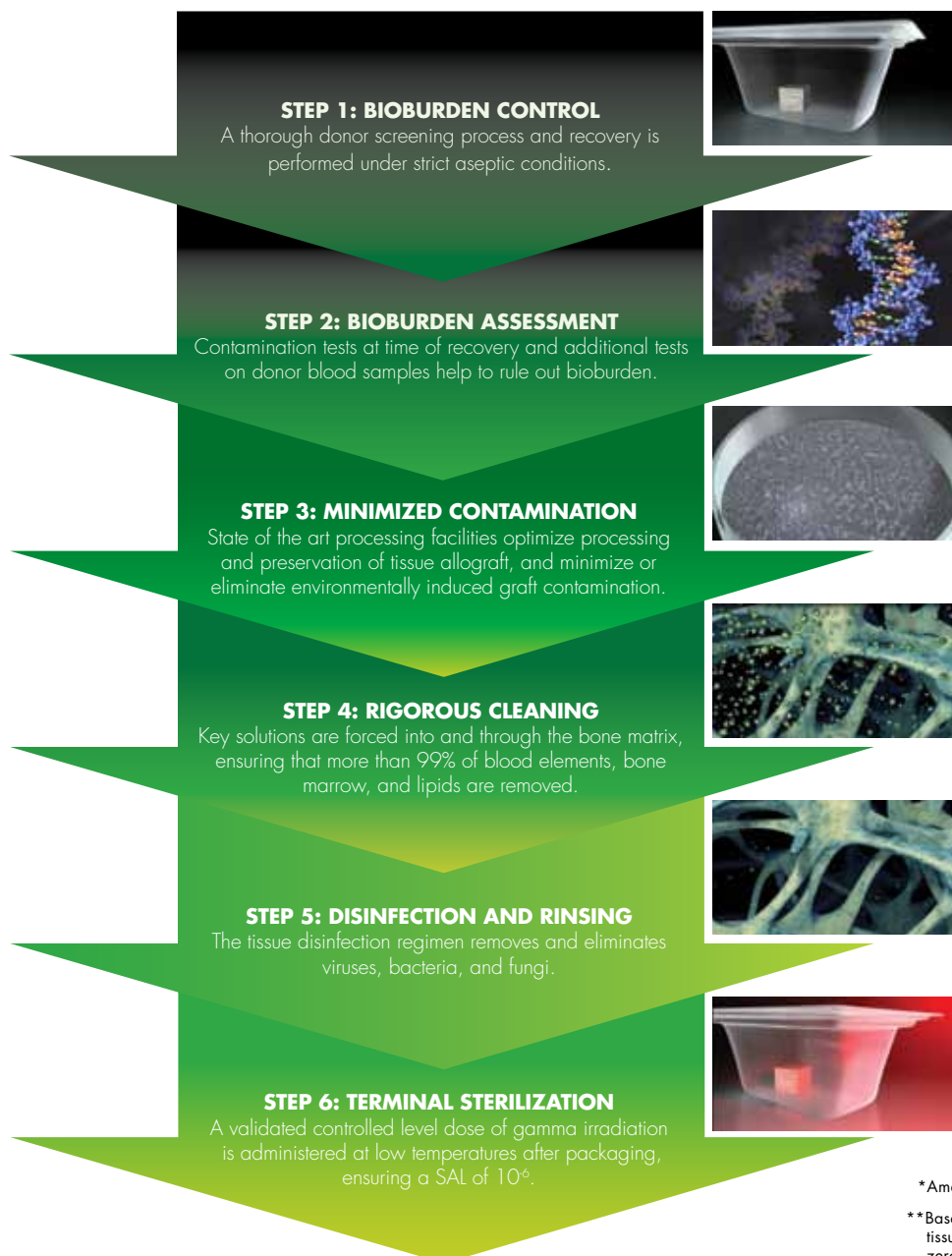
# CONFIDENCE FOR YOU AND YOUR PATIENTS

...WITH SAFETY\*

- **Straumann AlloGraft** is processed with LifeNet Health®'s proprietary and patented Allowash XG® technology, designed to:
  - remove and inactivate viruses and bacteria with a Sterility Assurance Level (SAL) of  $10^{-6}$  and
  - maintain the biomechanical or biochemical properties of the tissue
- LifeNet Health, the worldwide leading tissue bank, has the longest continuous AATB\*\* accreditation and adheres to quality standards beyond those of AATB
- Straumann BoneCeramic™ synthetic biphasic calcium phosphate eliminates any risk for disease transmission from the material itself

## The patented LifeNet Health Allowash XG® Process – Predictable, reliable and sterile allograft

Since the development of the Allowash® process, LifeNet Health has distributed over 2.7 million allograft tissue grafts with zero disease transmission reported to date.



\*American Association of Tissue Banks

\*\*Based on over 2.7 million allograft tissue grafts documented to date with zero record of disease transmission

## REFERENCES

1. Zhang M et al. Effect(s) of the demineralization process on the osteoinductivity of demineralized bone matrix. *J Periodontol.* 1997;68: 1085-1092.
2. Herold RW et al. Effects of varying degrees of allograft decalcification on cultured porcine osteoclast cells. *J Periodontol.* 2002; 73(2):213-219.
3. Traini, et al. A Histologic and Histomorphometric Evaluation of Anorganic Bovine Bone Retrieved 9 Years After a Sinus Augmentation Procedure." *J Periodontol.* 2007;78:955-961.
4. Kolerman R, et al. Histomorphometric analysis of newly formed bone after maxillary sinus floor augmentation using ground cortical bone allograft and internal collagen membrane. *J Periodontol.* 2008;79(11):2104-2111.
5. Wang HL, et al. Histologic evaluation of socket augmentation with mineralized human allograft. *Int J Periodontics Restorative Dent.* 2008;28(3):231-237.
6. Cordaro L et al. Maxillary sinus grafting with Bio-Oss or Straumann Bone Ceramic: histomorphometric results from a randomized controlled multicenter clinical trial. *Clin Oral Implants Res.* 2008;19(8):796-803.
7. Mardas N et al. Radiographic alveolar bone changes following ridge preservation with two different biomaterials. *Clin Oral Implants Res.* 2011;22(4):416-423.
8. Hoidal MJ, et al. Clinical evaluation of demineralised freeze-dried bone allograft with and without enamel matrix derivative for the treatment of periodontal osseous defects in humans. *J Periodontol.* 2008;79:2273.
9. Schwarz F et al. Guided bone regeneration at dehiscence-type defects using biphasic hydroxyapatite + beta tricalcium phosphate (Bone Ceramic) or a collagen-coated natural bone mineral (BioOss Collagen): an immunohistochemical study in dogs. *Int J Oral Maxillofac Surg.* 2007;36(12):1198-1206.
10. Mardas N et al. Alveolar ridge preservation with guided bone regeneration and a synthetic bone substitute or a bovine-derived xenograft: a randomized, controlled clinical trial. *Clin Oral Impl Res.* 2010;21(688-698).
11. Rummelhart JM et al. *J Periodontol.* A comparison of Freeze-dried bone allograft and demineralized Freeze-dried bone allograft in human periodontal osseous defects. *J Periodontol.* 1989;60(12):655-663.

[www.straumann.com](http://www.straumann.com)

---

#### International Headquarters

Institut Straumann AG  
Peter Merian-Weg 12  
CH-4002 Basel, Switzerland  
Phone +41 (0)61 965 11 11  
Fax +41 (0)61 965 11 01

#### Straumann USA

Straumann USA, LLC  
60 Minuteman Road  
Andover, MA 01810  
Phone 800/448 8168  
978/747 2500  
Fax 978/747 2490  
[www.straumannusa.com](http://www.straumannusa.com)

#### Straumann Canada

Straumann Canada Limited  
3115 Harvester Road, 1st Floor  
Burlington, ON L7N 3N8  
Phone 800/363 4024  
905/319 2900  
Fax 905/319 2911  
[www.straumann.ca](http://www.straumann.ca)

---