

Structural grafts provide strength to an augmented area. Unlike particulate grafts, the mechanics of remodeling differ and fixation is needed for success. LifeNet Health provides a variety of structural allograft bio-implants for maxillofacial applications.

► **NOMENCLATURE**

Structural grafts are always a combination of cancellous or cortical bone, or a combination of both. These grafts are mineralized and possess anatomy specific to the donor from whom they were derived. Grafts containing only cancellous bone are known as cancellous blocks or cubes. Bicortical strips are derived from ilia inferior to the iliac crest and possess two opposing cortical plates separated by a layer of cancellous bone. These grafts are commonly known as “strips.” Tricortical wedges are produced from the superior part of the ilia and are commonly known as iliac crest wedges (ICW). All have a long history of use in both dentistry and medicine^{1,2}.

► **CANCELLOUS BLOCKS (CUBES)**

These blocks and cubes consist of pure cancellous (trabecular) bone and can be easily trimmed either before or after rehydration. Care should be taken when trimming grafts that have not been rehydrated to avoid fracture. While these grafts can be easily secured with fixation screws, care must be taken to avoid driving a screw head through the cancellous material.



► **BICORTICAL STRIPS**

Bicortical grafts provide surgeons with the option of applying cancellous bone to a surgical site and also providing the strength of cortical bone. As with cancellous grafts, trimming preference is up to the implanting surgeon. Care should be taken when handling these grafts. Because of the density of these grafts, be careful to allow ample time for re-hydration. Fixation screws can be easily used with bicortical grafts in that the screw head will rest securely within the cortical face. Note that the actual graft size may exceed the specifications in the product listing. Graft shape is based on donor anatomy and, therefore, somewhat variable. Be sure to examine any graft used before implantation to assess suitability for your surgical procedure.



► **RIBS**

Ribs are a unique graft with a long history of use in dentistry for massive oral reconstruction. LifeNet Health supplies these adaptable grafts in lengths from 60 mm to 115 mm.



Contact LifeNet Client Services Department or the OraGraft Product Manager to discuss your clinical needs.

► TRICORTICAL WEDGES (ICW)

While not listed on the dental order form or product offering, these unique orthopedic grafts (commonly used for spinal fusion procedures) are available on a case-by-case basis. Contact LifeNet Health's OraGraft Product Manager to discuss your patient's needs.



STRUCTURAL GRAFT FEATURES

OSTEOCONDUCTIVE

An excellent structural material providing a scaffold for vascular in-growth, proliferation and differentiation of cells to allow for the natural regeneration and remodeling of a surgical site.

READILY AVAILABLE

Alleviates the need for a second surgery to secure limited amounts of autograft material. This allows shortened rehabilitation times for the patient while reducing pain and morbidity.

ROOM TEMPERATURE STORAGE

Easily kept at your surgical facility without need for special storage. Ready for use at any time.

LONG SHELF LIFE

Most configurations have a five years expiration date thus providing buying convenience.

IMPLANTABLE DEVICE LEVEL STERILITY

LifeNet Health ensures safety and quality through its proprietary Allowash XG® that provides a Sterility Assurance Level of 10⁻⁶ without the use of harsh chemicals, ethylene oxide or high levels of irradiation.

► PERIODONTAL FASCIA LATA MEMBRANE (PFL)

Periodontal Fascia Lata is a unique cell occlusive, resorbable membrane that can be used in areas where primary closure can not be achieved. Periodontal Fascia Lata has a long history of use in medicine and dentistry³.

¹ Leonetti JA, Koup R. Localized axillary ridge augmentation with a block allograft for dental implant placement: Case reports. *Implant Dentistry* 2003; 12(3):217-224.

² Lyford RH, Mills MP, Knapp CI, Scheyer ET, Mellonig JT. Clinical evaluation of freeze-dried block allografts for alveolar ridge augmentation: A case series. *The International Journal of Periodontics & Restorative Dentistry* 2003; 23(5):417-425.

³ Callan DP. Guided tissue regeneration without a stage 2 surgical procedure. *The International Journal of Periodontics & Restorative Dentistry* 1993; 13(2):173-179.