

Straumann® XenoFlex

Natural bovine bone grafting material with 10% porcine Type I collagen

Straumann® XenoFlex is a biomimetic composite material that resembles the native bone in its basic biphasic composition of collagen and xenogenic hydroxyapatite. It has beneficial handling characteristics and the ability to be shaped to match the individual defect situation. Straumann® XenoFlex – an efficient, easy to handle, volume stable solution for the treatment of bone defects.



FEATURES AND BENEFITS

Osteoconductivity	The natural structure of Straumann® XenoFlex with interconnected porous granules and purified collagen facilitates the adhesion and invasion of bone forming cells and results in complete integration of the implant due to the ingrowth of cells and blood vessels.
Healing environment and volume stability	The collagen portion of Straumann® XenoFlex supports the initial healing environment and binding of the granules to the defect. The collagen creates the environment favorable for bone generation and is decomposed after a certain time (weeks). The granules undergo superficial resorption only. The granules provide excellent space maintenance and predictably integrate into newly formed bone ensuring volume maintenance and a strong long lasting matrix for successful placement of dental implants.
Safety	The final sterility of Straumann® XenoFlex is ensured by gamma irradiation.
Spongy consistency after hydration	After hydration Straumann® XenoFlex changes to a slightly spongy consistency enabling excellent handling and defect application. The collagen fibers have intrinsic hemostatic properties facilitating the adhesion of proteins and signaling molecules from the blood to the embedded granules to further improve the fast bony integration of Straumann® XenoFlex.
Easy handling and application	Straumann® XenoFlex can be easily cut to the needed size and shape in dry and wet condition. The product can be placed into defect in one piece using tweezers shortening operation time.

PROPERTIES

Attribute	Description
Origin	Bovine cancellous bone particles Porcine collagen type I
Composition	90% Calcium phosphate (100% pure hydroxyapatite, mineral phase) 10% Type I Collagen
Degradation kinetics	Fast binding at defect site due to 10% of porcine collagen, very slow superficial degradation of bovine particles. Long term osseous integration of particles into newly formed bone matrix
Healing-/integration time	6-9 months
Storage temperature	2-30°C
Shelf life	3 years

APPLICATION AND HANDLING

Opening

Straumann® XenoFlex is delivered sterile and must be used immediately after opening in an aseptic environment

Rehydration

Rehydration in blood from the defect site or saline solution is recommended and facilitates handling and application.

Application

- Straumann® XenoFlex may be cut to the needed size in dry form or after hydration in blood or saline solution (using tweezers and scissors).
- The material is delivered to the surgical site with tweezers
- Ensure maximum contact between the graft material and well vascularized, bleeding bone surface to facilitate ingrowth of new blood vessels and bone forming cells.
- A bioabsorbable membrane should be placed over the graft.

Wound closure

Ensure that soft tissue coverage of the grafted site is complete and free of tension

Healing time and Re-entry

The appropriate healing time is patient- and site-dependent and has to be decided by the clinician based on his diagnosis of the patient's individual situation.

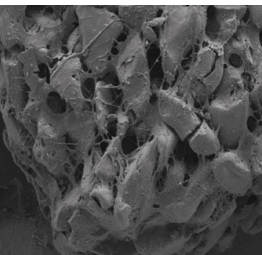
A minimum healing period of six months is recommended before re-entry to ensure stable integration of particles.

Combining with Allograft

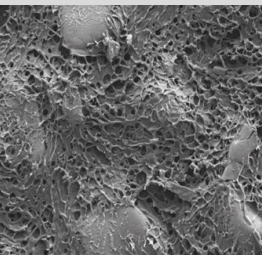
Combining of Straumann® XenoFlex with allogeneic bone combines the advantages of both materials; the biological potential of allograft and the long-term stability of Straumann® XenoFlex lead to fast regeneration of vital, strong bone.

Combining with autologous bone

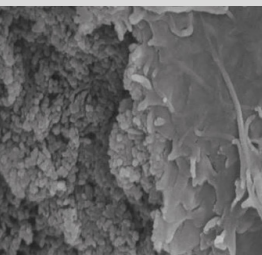
Combined use of Straumann® XenoFlex with autologous bone bring about a biological activity (osteo-inductive and osteo-genetic properties of autologous bone) and may support faster regeneration and improved formation of new bone.



Magnification 50x



Magnification 100x



Magnification 50,000x

Recommended for

Implantology, oral surgery and periodontology and craniomaxillofacial surgery (CMS)

- Sinus floor elevation
- Extraction sockets
- Horizontal augmentation
- Ridge preservation
- Peri-implant defects
- Intraosseous defects

Available in the following sizes

Code	Dimension LxWxH (mm)	Product
NI-0110-005	6x6x3, 50 mg	Straumann® XenoFlex Block
NI-0110-010	6x6x6, 100 mg	
NI-0110-025	7x8x9, 250 mg	