Nobel Biocare™

creos™

nobelbiocare.com

YOU ARE WHAT
WE STAND FOR.

creos™ was launched in

2014

creos™ xenoprotect

2016

creos™ xenogain
creos™ xenogain collagen

2018

creos™ mucogain

2021

creos™ syntoprotect

2022

creos™ syntogain
creos™ xenoform

2023

creos™ syntostitch
creos™ xenofill
creos™ screw fixation
creos™ xenofirm

2024

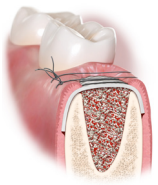
creos™ syntoprotect mesh
creos™ pin fixation

creos™

The trusted regenerative partner for you and your patients

Indication-based product overview

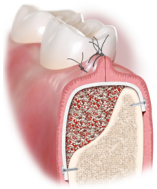
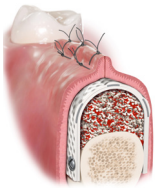
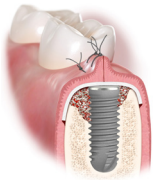
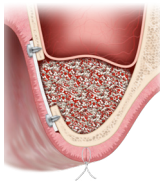
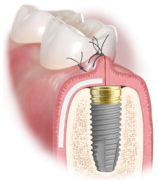
See article lists (p. 24–31) for most commonly used product codes



			Ridge preservation	
			With primary closure	Without primary closure
 Bone grafts	creos xenogain*	Xenogenic bone graft substitute	0.25–0.5 g	0.25–0.5 g
	creos xenogain collagen	creos xenogain + 10% porcine collagen type I	0.1–0.25 g	0.1–0.5 g
	creos xenoform*	Xenogenic bone graft substitute	0.25–0.5 g	0.25–0.5 g
	creos syntogain*	Synthetic bone graft	0.5–1 g	0.5–1 g
 Membranes	creos xenoprotect	Resorbable collagen membrane	15 x 20 mm	
	creos xenofirm	Resorbable, firm collagen membrane	15 x 20 mm	
	creos syntoprotect	Non-resorbable high-density PTFE membrane		12 x 24 mm 12 x 30 mm 25 x 30 mm
	creos syntoprotect Ti-reinforced	Non-resorbable titanium-reinforced high-density PTFE membrane		Shapes 1 and 2
 Mesh	creos syntoprotect mesh	Reinforced PTFE mesh		
 Matrices	creos mucogain	Absorbable collagen matrix		
 Wound dessings	creos xenofill	Absorbable wound dressing		Plug (fully intact sockets only)
 Sutures	creos syntostitch	Non-absorbable PTFE suture–monofilament	All sizes	All sizes
 Fixation system	creos screw fixation	Self-drilling titanium fixation screws		
	creos pin fixation	Absorbable or non-absorbable membrane fixation pins		

Note See Instructions For Use for full prescribing information, including indications, contraindications, warnings and precautions. Volumes and sizes listed are to be used as approximations and may vary depending on the defect/patient.

*Please consult article lists (p. 24–31) for conversion to volume (cc)

Horizontal ridge augmentation	Vertical ridge augmentation	Peri-implant defect	Sinus augmentation	Periodontal defects	Soft tissue augmentation (around teeth or implants)
					
0.25–0.5 g	0.5–2 g	0.25–0.5 g	1–2 g	0.25 g	
0.25–0.5 g		0.15–0.25 g	0.25–0.5 g	0.1–0.25 g	
0.25–0.5 g	0.5–2 g	0.25–0.5 g	1–2 g	0.25 g	
0.5-1 g	1 g	0.5 g	1 g	0.5 g	
15 x 20 mm 25 x 30 mm	25 x 30 mm 30 x 40 mm	15 x 20 mm	15 x 20 mm 25 x 30 mm	15 x 20 mm	
15 x 20 mm 20 x 30 mm	20 x 30 mm 30 x 40 mm	15 x 20 mm	15 x 20 mm 20 x 30 mm	15 x 20 mm	
		12 x 24 mm 12 x 30 mm 25 x 30 mm			
Shapes depending on defect	Shapes depending on defect	Shapes depending on defect			
Shapes depending on defect	Shapes depending on defect	Shapes depending on defect			
					15 x 20 mm 25 x 30 mm
					Foam, Tape (for donor site)
All sizes	All sizes	All sizes	All sizes	All sizes	4-0; 5-0
All types	All types	Membrane fixation screws; Tenting screws			
Magnesium & Titanium	Titanium	Magensium & Titanium	Magensium & Titanium		

creos™ xenogain

Xenogenic bone graft used for guided bone regeneration and guided tissue regeneration

Three different methods of application:

Vial

Bowl

Syringe

Similar to human bone

- Chemical composition: Ca/P ratio
- Interconnected macropores[1,2]

Easy handling

- Homogenous particle size[1]
- Hydrophilic for fast rehydration[3,4]

Solid foundation for dental implant treatment

- Osteoconductive properties[2]
- Long-term volume stability[6]
- Uneventful healing[7,8,4,6,9]

Made from cancellous bone

"I appreciate its handling properties and I see its high hydrophilicity as a biological advantage in sinus grafting and peri-implant defect regeneration"

Dr. Werner Zechner, Austria

Bovine

creos™ xenogain collagen

Block

Syringe

Purified cancellous bovine bone mineral granules and 10% porcine collagen in block form and syringe. The collagen helps to hold creos xenogain collagen in the desired place. Especially recommended for extraction socket management.

Bovine

Porcine

Scaffold for successful regeneration

Preserved natural features of bone through optimized manufacturing process.[2]

Chemical composition

With a calcium phosphate ratio that reflects the composition in human bone and a structure with low crystallinity, the body accepts creos xenogain as a suitable framework for bone formation.[1]

Particle size

- Homogenous particle size[1]
- Maintains space for bone regeneration[4]

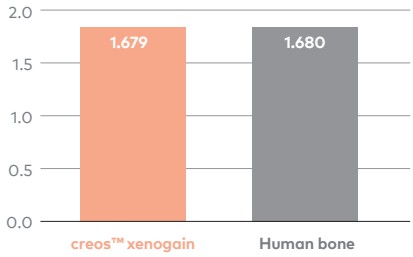
Preserved nanostructure

Nanostructure preserved thanks to treatment at comparatively low temperature (600°C) and no sintering.[2]

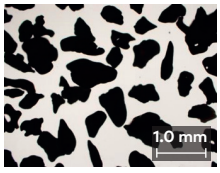
Macro and micro-structure

Interconnected macropores allow cells to invade bone grafts and micropores contribute to capillary liquid uptake (hydrophilicity).[10,11]

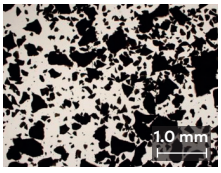
Calcium phosphate ratio



Photographic micrograph of creos xenogain and reference product showing the particle size distribution (magnification 20x)



creos™ xenogain
(0.2–1.0 mm)

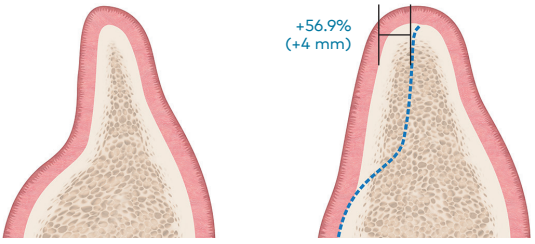


Reference product
(0.25–1.0 mm)

Solid foundation for implant placement

The graft integrates with the newly formed bone, building a basis for successful implant placement.[4]

Schematic showing the defect and bone size prior to and after GBR



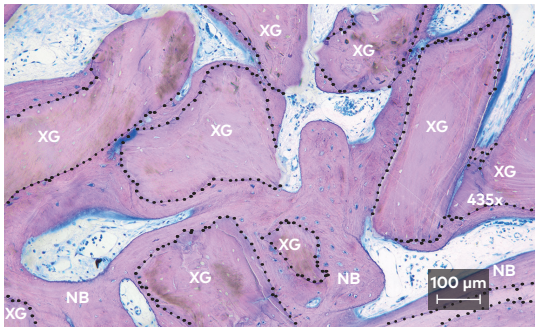
Initial situation before GBR

8 months post-surgery

In a multicenter clinical study involving 46 patients, bone increase after 8 months was 4.0 mm (+56.9 % gain) and 4.7 mm (51.0% gain) at 1 and 3 mm from the top of the crest, respectively.[6]

GBR led to robust bone regeneration during the 8 months of healing, enabling successful placement of 91 implants in 43 patients, with an average insertion torque of 37.8 ± 5.1 Ncm.[6]

Histological cross section of the cellular components: new bone (NB), bone graft (XG). Bone-to-graft-particle contact shown by dashed line.



Histological assessment of the trephine cores showed 37.3 % of new bone, 39.1 % of graft material, and 23.6 % of soft tissue (n = 6 cores, 3 patients).[6]

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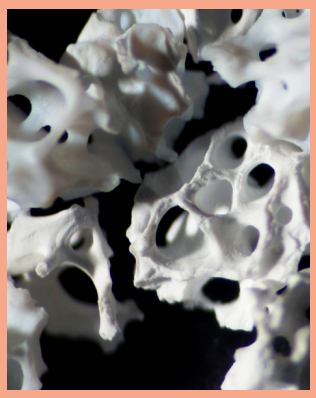
creos™ xenoform

Xenogenic bone graft used for guided bone regeneration and guided tissue regeneration

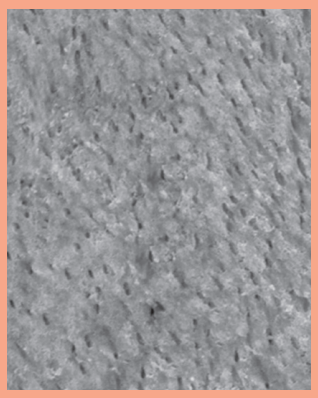
Cancellous bovine bone sourced from Australia with two application types and two granule sizes



Multiporosity structure

- Made from 100% cancellous bone
- Innovative pulverizing technique allowing multiporous structure

→ **Maximizing blood vessel ingrowth**



Natural surface topography

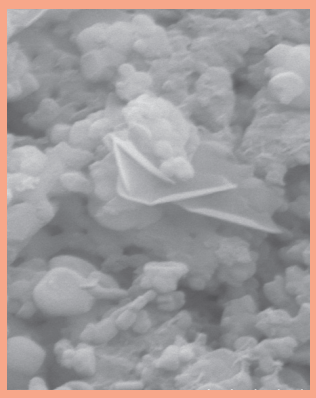
- Low-temperature processing technique

→ **Stimulating osteoblast activity**

Large pore size

- creos xenoform has a relatively large pore size (300–400 µm) compared to other world-leading products

→ **Favorable for blood vessel access and development**[1,2]



Octacalcium phosphate crystals

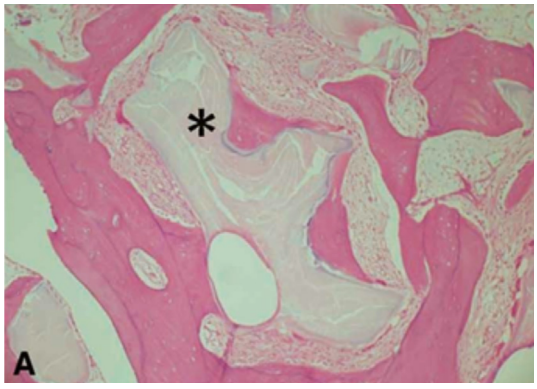
- Found on the surface

→ **Enhancing bone regeneration and formation**[1]

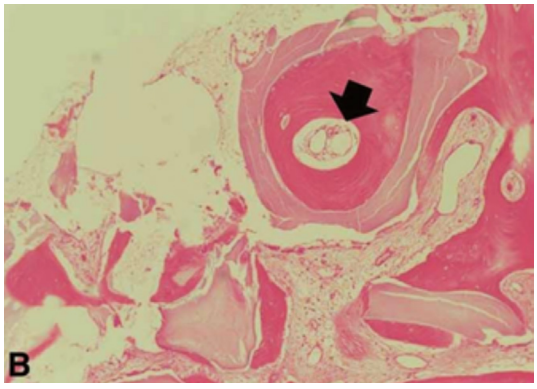
*as shown in an animal model

Histology: New bone formation of the grafted creos xenoform in the human maxillary sinus cavity [3]

- Sinus graft procedures were conducted in 10 patients
- 6 specimens used for histomorphometric analysis
  - → 23.5% new bone and 15.4% residual graft material 6 months after bone graft surgery
  - → More newly formed bone than residual graft material



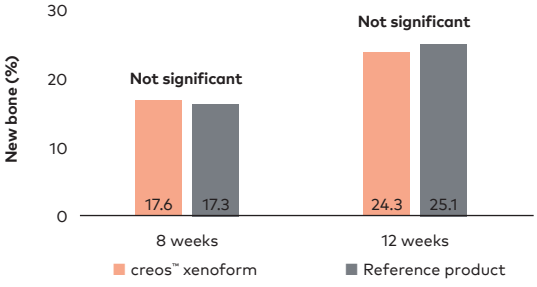
A. Residual graft material (*) circumscribed by newly formed bone.



B. Ingrowth of microvessels in the newly formed bone (arrow) with lacunae in the bone lamellae.

High percentage of newly regenerated bone

- Patient biopsies show 23.5±0.1% new bone vs 15.4±0.06 residual bone graft 6-8 months post sinus lift.[3]
- In an in-vivo model to evaluate the bone healing effect of biomaterials, the percentage of the newly formed bone with creos xenoform and the reference product were comparable (differences were statistically non-significant). No infections or complications observed after surgery.[1]



Long-term success in clinical setting

In the last 10+ years, creos xenoform has been used by dental surgeons around the world and in challenging clinical.

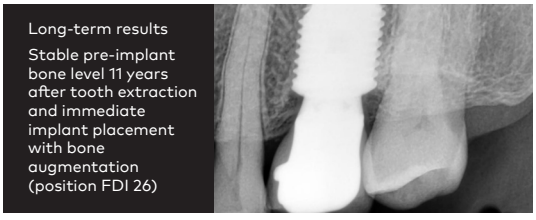


Image courtesy of Myung Ho Lee, DDS, Republic of Korea

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creos™ syntogain

Non-animal-based bone graft substitute for efficient regeneration

Unique composition of the material[1,2,3]

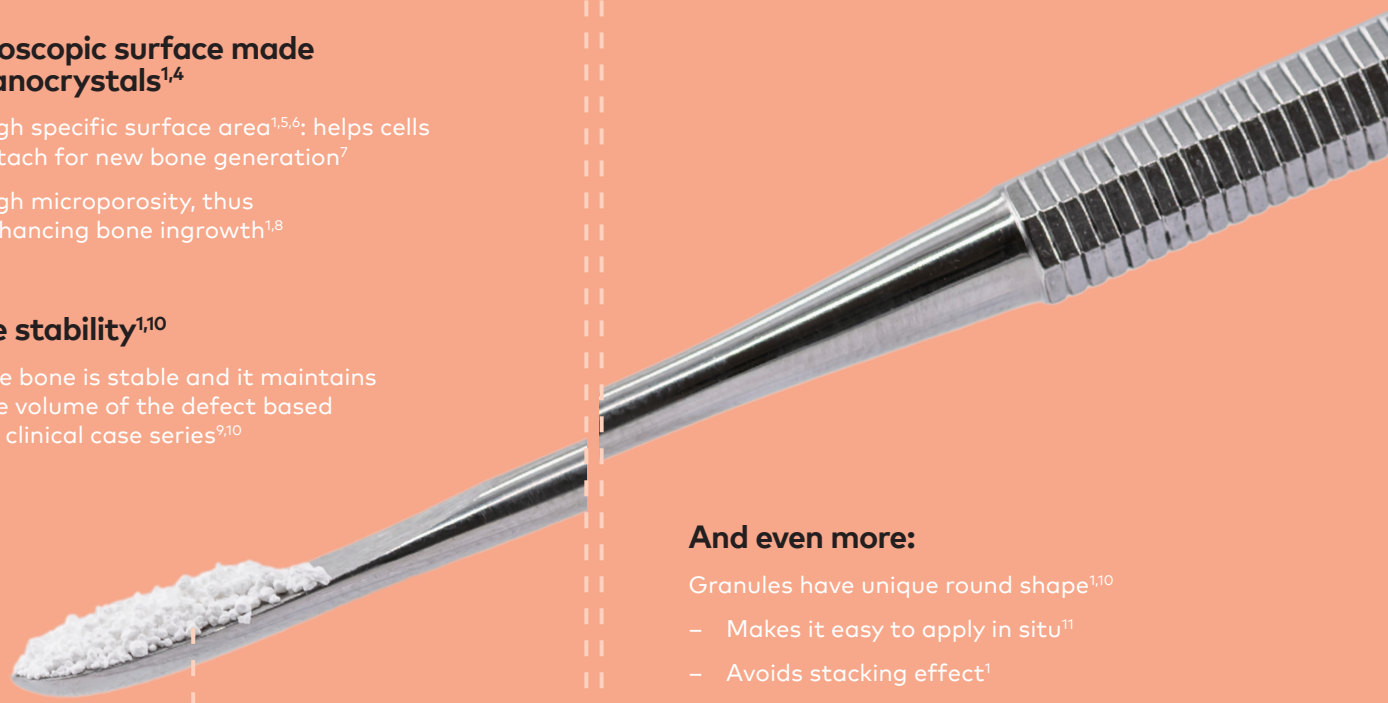
- 80% of calcium-deficient hydroxyapatite (CDHA) and 20% of BTCP (beta-tricalcium phosphate)
- It's biomimetic: it mimics human bone that is also made of CDHA[1,2,3]

Microscopic surface made of nanocrystals[1,4]

- High specific surface area[1,5,6]: helps cells attach for new bone generation[7]
- High microporosity, thus enhancing bone ingrowth[1,8]

Bone stability[1,10]

- The bone is stable and it maintains the volume of the defect based on clinical case series[9,10]



And even more:

Granules have unique round shape[1,10]

- Makes it easy to apply in situ[11]
- Avoids stacking effect[1]

High hydrophilicity[12]

- Allows for easy hydration and granule handling[12]

Non-sintered[1]

- Microporosity and osteoconductivity are not reduced[13,14]

Synthetic

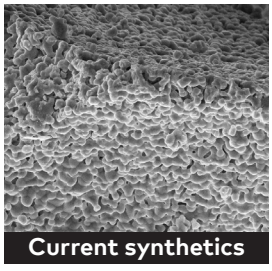
Advanced manufacturing process[1]

creos syntogain is the latest generation of synthetic bone graft. Its manufacturing process in an aqueous environment and at low temperature enables a bone graft with a unique composition, round granule shapes, a high surface area and a nano-/microporosity similar to natural bone.

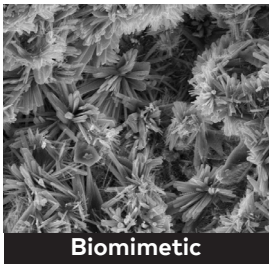
1. Unique composition[1,2,3]

- 80% CDHA (carbonated calcium deficient hydroxyapatite)
- 20% ß-tricalcium phosphate.

creos syntogain CDHA crystallinity resembles that of human bone.[1,2,3]
The closer a material resembles human bone, the better it is for bone formation.[15]



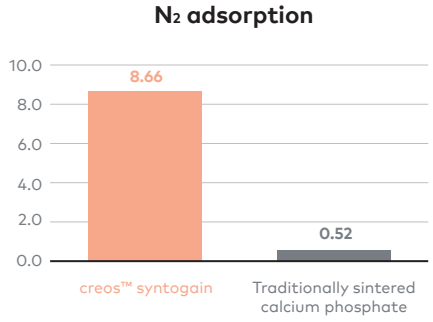
Traditional calcium phosphate (HA / B-TCP) synthetics
High-temperature manufacturing process: passivates materials and reduces the potential of the host to interact with it.



creos syntogain biomimetic calcium phosphate (CDHA / B-TCP)
Low-temperature manufacturing process: hydroxyapatite crystals grow slowly to mimic the structure and composition of human bone.

2. High specific surface area[1,5,6]

Thanks to the biomimetic manufacturing process, hydroxyapatite crystals grow on the surface of the granules. This increases the surface area and enables the cells to attach for bone generation.[16]

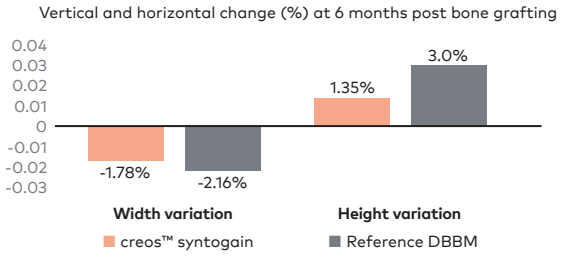


The specific surface area was measured by nitrogen adsorption

Clinical outcomes[17]

In one of the largest randomized clinical trials performed in dental bone regeneration with 102 patients in need of a bone augmentation, creos syntogain showed non-inferiority with the reference deproteinized bovine bone matrix (DBBM): no statistically significant difference in the vertical and buccolingual dimensional change was observed.

Six months post-grafting, the mean bone change in width and height was respectively -1.78% and 1.35% for creos syntogain (n=42) and -2.16% and 2.99% for the reference DBBM (n=41). The differences between the two materials were not statistically significant.



The mean implant insertion torque was 36.2 Ncm at sites regenerated with creos syntogain and 35.1 Ncm at sites regenerated with the reference DBBM. For creos syntogain, 71.1% of the implants were placed with an insertion torque above 35 Ncm and 62.8% for the reference DBBM.

	creos™ syntogain n=45	Reference DBBM	t-test
Insertion Torque (Ncm^{-1})	36.2	35.1	0.676
StDev	12.4	13.6	
ISQ	70.2	70.8	0.770
StDev	12.0	9.8	

Scan the code for more resources.

creos™ xenoprotect

Nobel Biocare's highest selling resorbable collagen membrane

Easy handling[1,2]

- Does not stick to instruments
- Repositioning in-situ possible
- Low surface expansion when hydrated
- Both sides can face the defect

High mechanical strength[2,3,4]

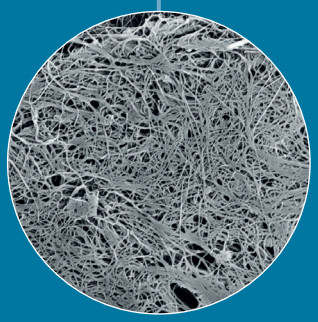
- High suture retention[1,4,9]
- Highly tear-resistant

Natural collagen membrane

- Non-chemically cross-linked[14]
- Made from porcine collagen

Facilitates bone gain[2,3,5,6,7,8]

- Tested and approved biocompatibility[7,10]
- Beneficial clinical results[7,10]



"What I like is that the handling is very easy. The mechanical stability is very high and when it is rehydrated it adapts very well to the underlying bone"

Dr. Bastian Wessing, Germany

* As shown in an animal model (rat, subcutaneous)

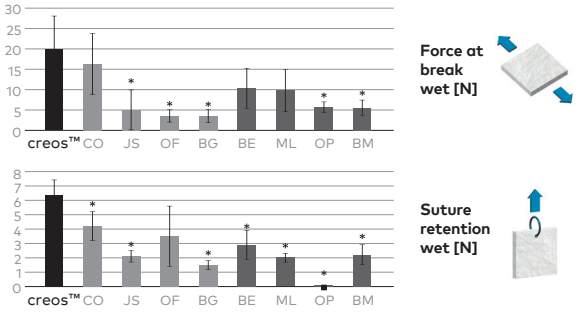
Porcine

High mechanical strength

In an in vitro study aiming to compare the mechanical strength of commonly used native non-chemically cross-linked and chemically cross-linked collagen membranes[4]

- creos xenoprotect demonstrated the highest force at break, wet (21.2 N).
- creos xenoprotect had the highest suture retention when hydrated (6.1 N).

Comparison of commercial membranes in a hydrated state



Non-cross-linked collagen membranes (NXL) – CX: creos™ xenoprotect [Nobel Biocare]; CO: Copios [Zimmer]; JS: Jason [botiss]; OF: Osseoguard Flex [3i]; BG: Bio-Gide [Geistlich]

Cross-linked collagen membranes (XL) – BE: BioMend Extend [Zimmer]; ML: Mem-Lok [BioHorizons]; OP: OssixPlus [Datum Dental]; BM: BioMend [Zimmer];

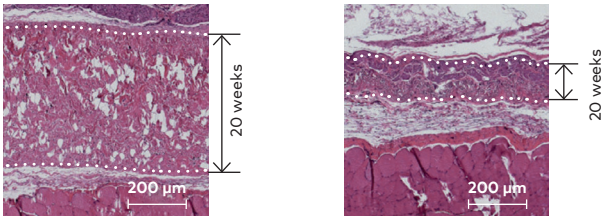
*Statistically significant

Provides a physical barrier to contain the bone graft material at the defect site[1,2,3,5,6,11,12,13]

Prevents ingrowth of surrounding tissue for a period of time that is long enough to allow bone regeneration to take place.

In an animal model, after 20 weeks, the thickness of xenoprotect decreased only slightly, whereas the reference membrane showed a thickness loss of around 50%, confirming the higher stability of xenoprotect against biodegradation in vivo.[3]

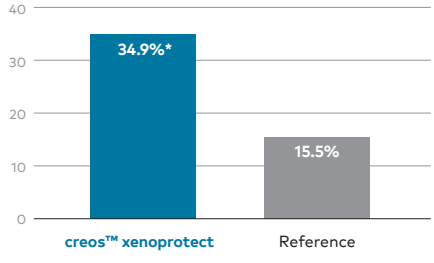
Representative histological images at 20 weeks implantation in a rat model.



creos™ xenoprotect | Reference membrane

Facilitates new bone formation[2,3,5,6,7,8]

New bone formation (%)



In a comparative in vivo study, creos xenoprotect demonstrated significantly higher new bone formation in the central portion of the defect.

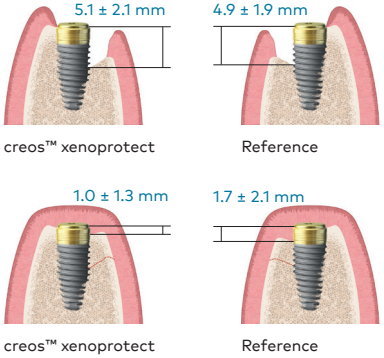
This increase in bone formation was associated with significantly increased expression of the growth factor *Bmp2*, which has a strong role in osteogenesis.[7]

*Statistically significant

In a randomized controlled clinical trial, 24 patients were treated with creos xenoprotect and 25 with a reference membrane. In the creos xenoprotect group, the defect height reduced at 6-month re-entry by 81%.

In the reference membrane group, the defect height reduced at 6-month re-entry by 62%.[5]

Schematic showing the defect height prior to treatment and 6 months after GBR



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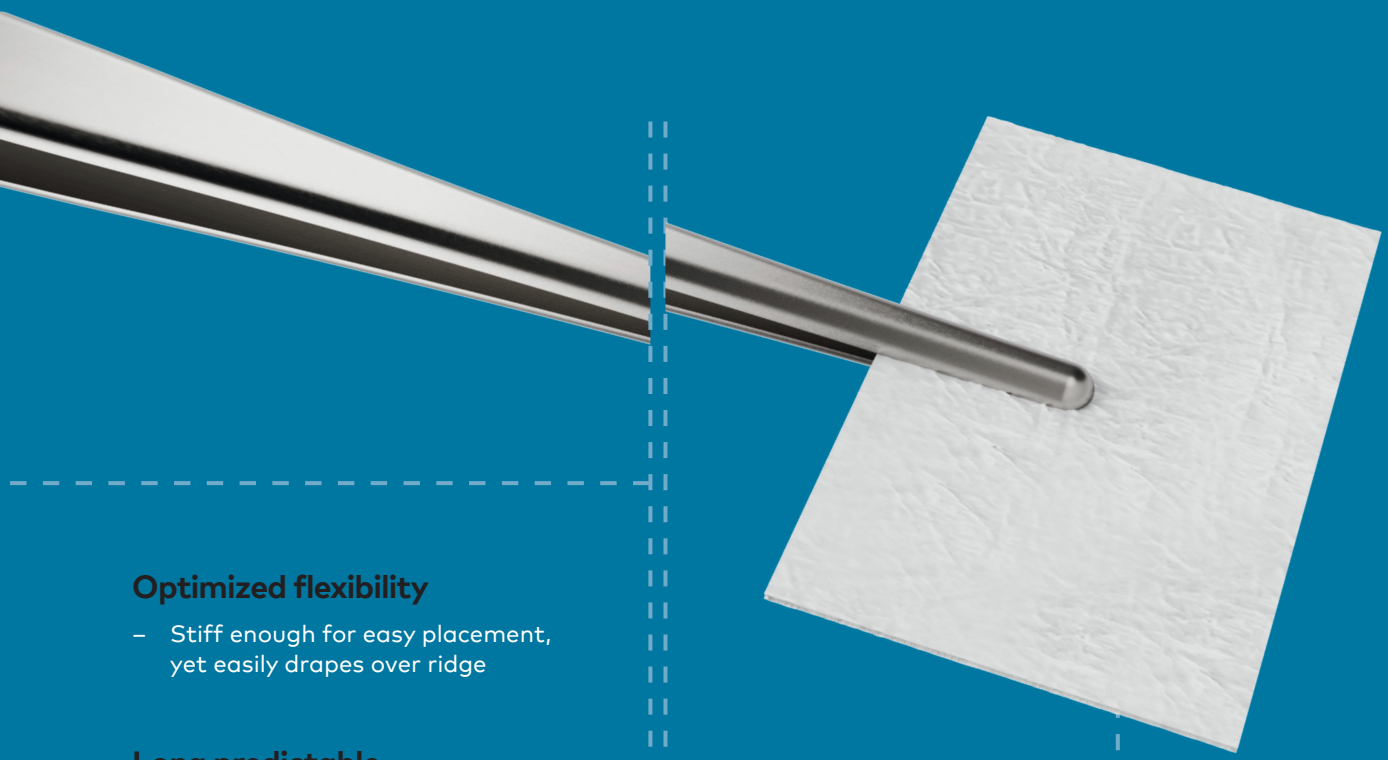
creos™ xenofirm

Resorbable, firm, and long-lasting collagen membrane



Optimized flexibility

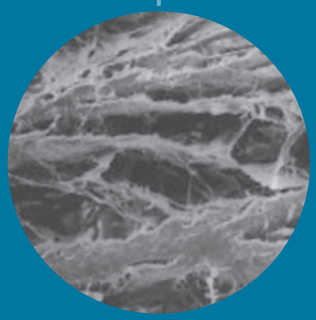
- Stiff enough for easy placement, yet easily drapes over ridge

Long predictable resorption time

- Resorption time 26–30 weeks

High tensile strength

- Suture or tack the membrane in place without tearing



Manufactured from highly purified Type 1 bovine Achilles tendon

Reconsituted fiber construction allows tissue integration while preventing direct passage of epithelial cells.

Bovine

creos™ syntoprotect mesh

Non-resorbable reinforced PTFE mesh for the stabilization and support of bone grafts in horizontal and vertical ridge augmentations

Adaptability of a membrane with porosity of a mesh

Maintains space essential for horizontal and vertical ridge augmentations, but with the benefits of easier trimming and adaptation.

Handling options

15 shapes adapted to treat different indications.

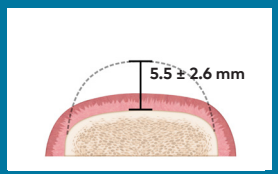
Unique macroporous design

Direct contact between bone graft and periosteum allows naturally occurring revas-cularization and infiltration of cells into the bone graft.

Synthetic

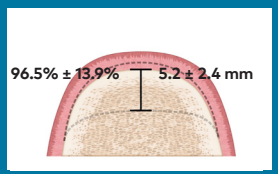
Vertical bone augmentation using a reinforced PTFE mesh[1]

A study published by Urban et al. that included 57 patients (65 defects) found that the mean absolute bone gain after vertical bone augmentation with a reinforced PTFE mesh was 5.2 ± 2.4 mm, with a relative gain of 96.5 ± 13.9%. Overall, 89.2% of cases showed complete regeneration.



Baseline vertical deficiency
5.5 ± 2.6 mm

Vertical bone augmentation using a reinforced PTFE mesh



Mean absolute bone gain
5.2 ± 2.4 mm

"The creos PTFE mesh allows the vascularization you get from a mesh, but with the softness of a membrane that remains kind to soft tissues. With the mesh, and the bone quality I see at seven months, I am able to shorten time to implants by about two months."

Istvan Urban DMD, MD, PhD

Scan the code for more resources.

creos™ syntoprotect

Non-resorbable dense PTFE membrane for extraction socket management, ridge augmentations, and grafting of large defects

syntoprotect PTFE membrane

Purposely leave the membrane exposed

Preserves soft tissue architecture and keratinized mucosa

Non-resorbable

Will not resorb prematurely – you dictate healing time

100% dense (non-expanded) PTFE

Impervious to bacteria – pore size less than 0.3 µm

Soft tissue attaches, but doesn't grow through the membrane

Exposed membrane allows for non-surgical removal; no anesthesia required

Synthetic

syntoprotect Ti-reinforced PTFE membrane

Delicate, lightweight framework

Easy to trim and compliant with the overlying soft tissues

Less is more

Less titanium bulk allows for greater versatility in shaping and placement, providing additional stability in large, non-spacemaking osseous defects

Handling options

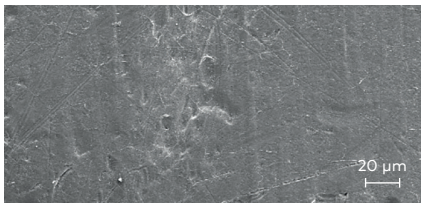
Broad portfolio with 15 shapes in two thicknesses

Traditional frame design

Incorporating delicate and strategically-placed titanium "struts" with more than 25 years of clinical history and successful use in GBR

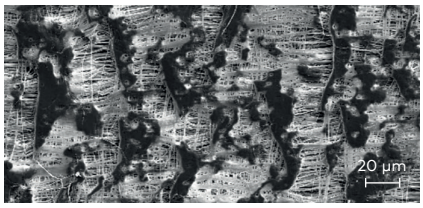
Unique properties of dense PTFE membranes

Dense PTFE



SEM image courtesy of Schüpbach Ltd, Switzerland.

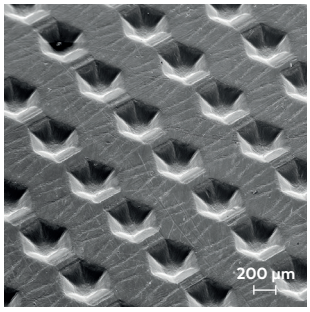
Expanded PTFE



SEM image courtesy of Schüpbach Ltd, Switzerland.

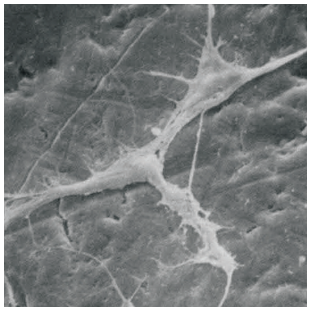
Dense PTFE was designed to withstand exposure in the oral environment, which represents an improvement to earlier versions of expanded PTFE in applications such as ridge preservation where deliberate membrane exposure offers several advantages.

Designed to aid in membrane stabilization



Hexagonal surface dimples provide a textured surface that increases the area available for cellular attachment without increasing porosity. The textured surface is designed to help stabilize the membrane and the soft tissue flap.

SEM image courtesy of Schüpbach Ltd, Switzerland.

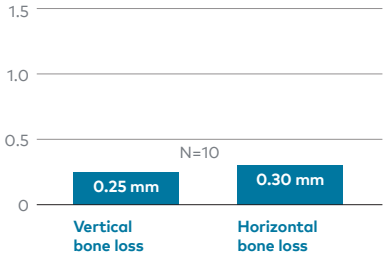


Although PTFE is inherently a non-stick material, cells attach to the outside of the dense PTFE membranes. Cellular adhesion is important to create a seal around the edges of exposed dense PTFE membranes or to support primary closure in larger graft applications.

Clinical evidence

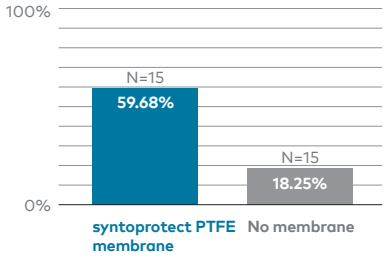
Efficacy

Bone loss 1-year post-extraction[1]



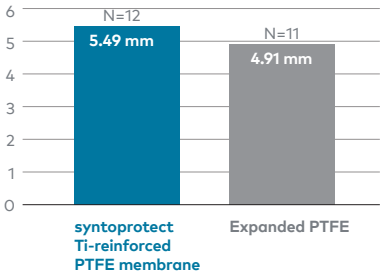
Vertical bone loss measured at crest. Horizontal measured from stent to buccal plate.

Soft tissue regeneration 90 days post-extraction[2]



Measured as reduction of the occlusal distance between buccal and lingual gingival margins.

Vertical ridge augmentation around implants[3]



Mean vertical bone regeneration.

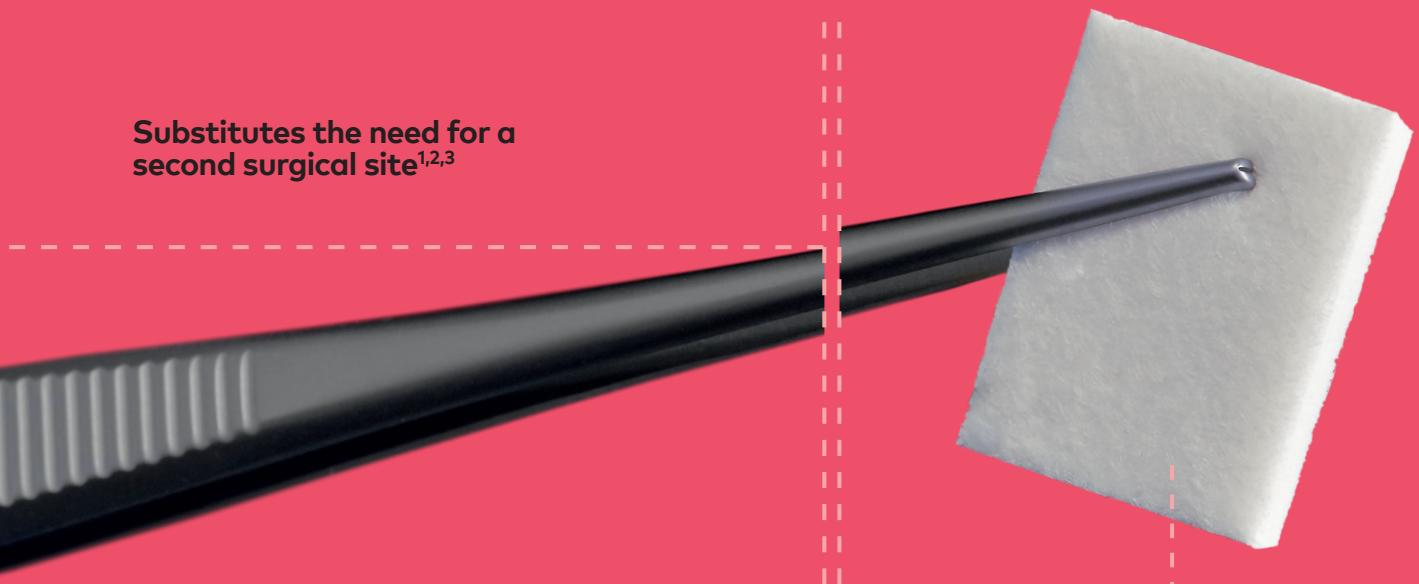
Predictability

In two separate studies treating a total of 696 extraction sites using dense PTFE membranes in an exposed technique, there were no reported infections.[4,5]

Scan the code for more resources.

creos™ mucogain

Collagen matrix designed to promote soft tissue regeneration



Substitutes the need for a second surgical site[1,2,3]

Patented manufacturing method

- Open interconnecting porous structure.
- Designed to promote soft tissue regeneration through the migration of cells and blood vessels into the matrix.[4,5,6]

Variety of choices

- A choice of different sizes and thicknesses.

Excellent handling

- Easy to use[7]
- High suture retention and stress resistance[7]
- Memory effect after hydration and cycling loading in vitro[4]
- Trim to precisely fit surgical site[7]

"It felt like an autogenous tissue graft and the mechanical stability is amazing"

Dr. Miguel González Menéndez, Spain

Clinically effective

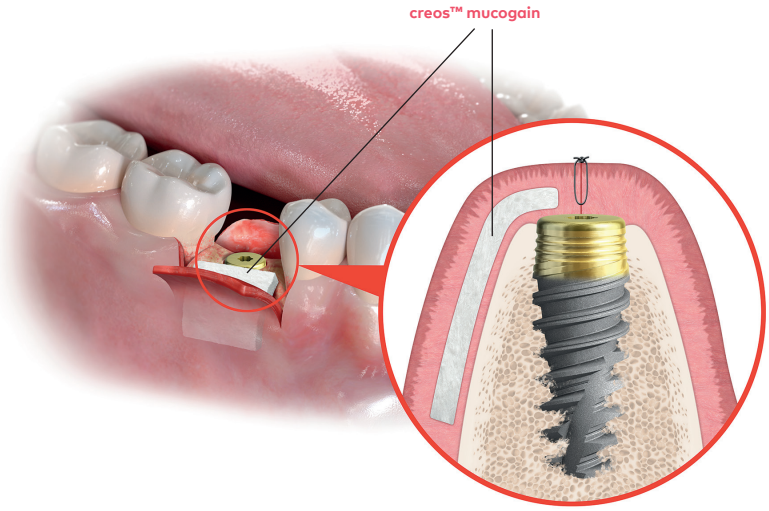
- Shown to promote soft tissue health and maintain adequate soft tissue thickness in a clinical study.[23,24,25,26]

Porcine

Use straight out of the box

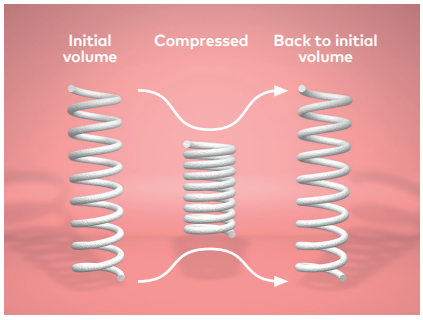
creos mucogain is intended to be used for soft tissue augmentation indications in the oral cavity around teeth or implants:

- Guided tissue regeneration (GTR) procedures in recession defects for root coverage.
- Localized gingival augmentation to increase keratinized tissue around teeth and implants.

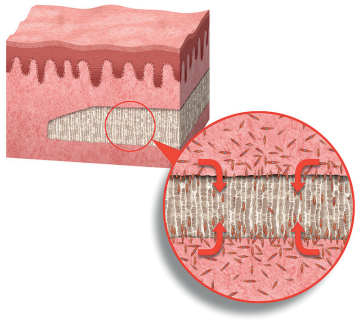


Unique oriented porous structure

1. Matrix structure
Interconnecting porous structure produced by a patented process.[4,5,6]



2. Mechanical properties
After hydration and compression in 49 cycles in vitro, the graft regains its initial volume.[4]



3. Biological outcome
Designed to promote soft tissue regeneration through the migration of cells and blood vessels into the matrix.[4,6]

Clinically effective[7,8,9,10]

Clinically effective for soft tissue regeneration in combination with immediate implant placement and bone grafting procedure.[7,8]

A retrospective analysis including 45 patients with a follow-up of up to 4.5 years (mean of 1.8 ± 1.3 years) demonstrated that creos mucogain promotes soft tissue health and maintains adequate soft tissue thickness when used simultaneously with implant placement.[9]

Clinical case

Buccal view prior to surgery (left) and 8 months after surgery (right) on #22, #24, #25, #26 after treatment with creos mucogain.

Cirillo F. (March 2020). Periodontal plastic surgery: gingival recession coverage with a xenogenic collagen matrix. The Foundation for Oral Rehabilitation (FOR.org): https://bit.ly/2TkLsgu (Images reprinted with permission of the author and FOR.)

Scan the code for more resources.

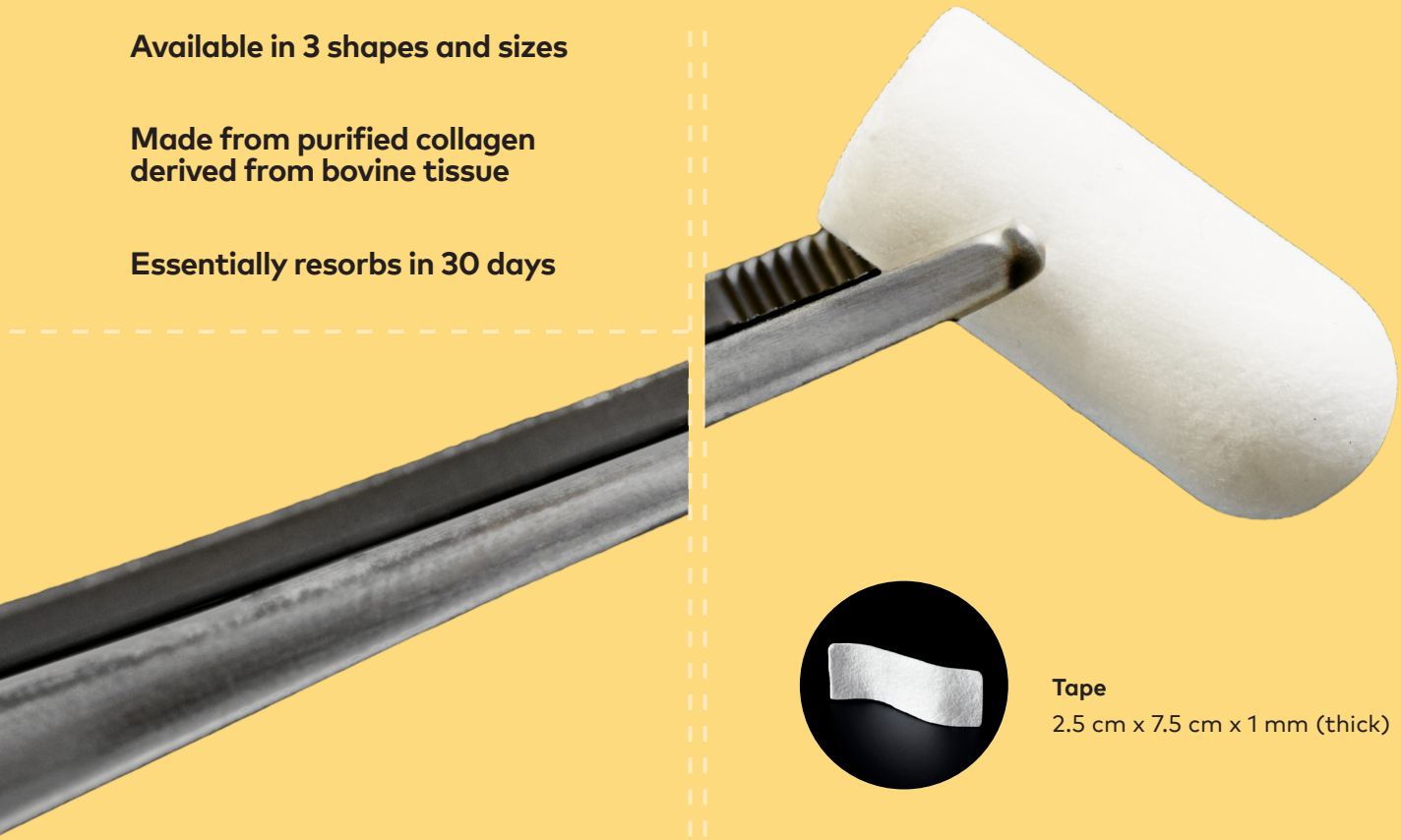
creos™ xenofill

Absorbable wound dressings to protect wound beds and aid in wound healing

Available in 3 shapes and sizes

Made from purified collagen derived from bovine tissue

Essentially resorbs in 30 days



Tape
2.5 cm x 7.5 cm x 1 mm (thick)

Plug
1 cm x 2 cm

Foam
2 cm x 4 cm x 3 mm (thick)

Applications:

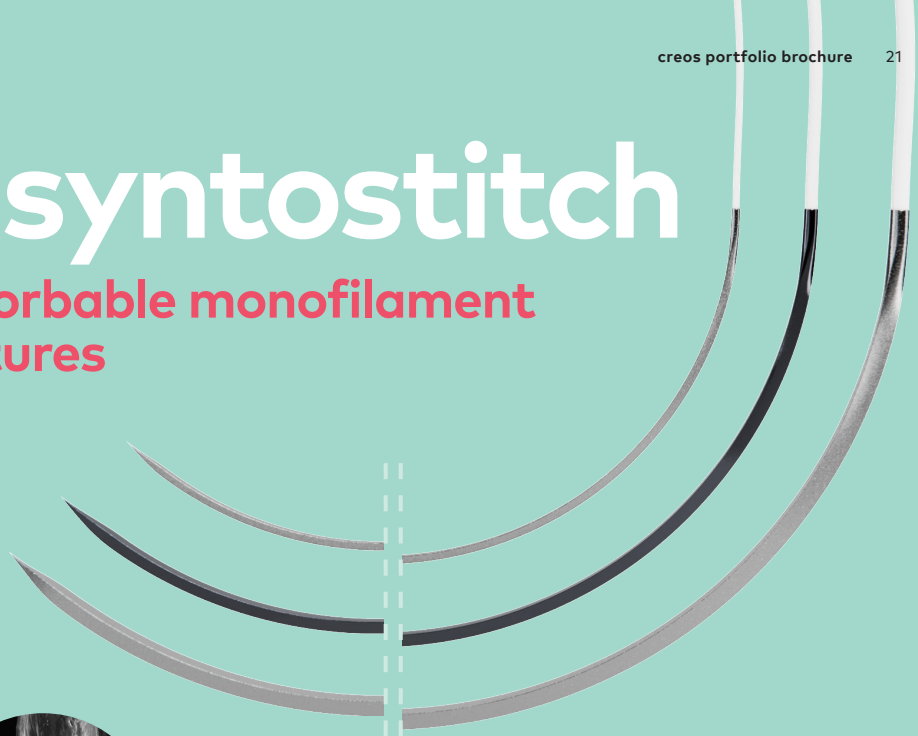
- Surgical wounds
- Periodontal surgical wounds
- Extraction sites
- Dental sores
- Oral ulcers (non-infected or viral)
- Suture sites
- Burns
- Traumatic wounds

Scan the code for more resources.

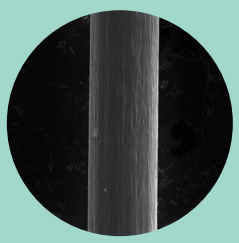
Bovine

creos™ syntostitch

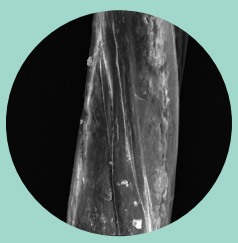
Non-absorbable monofilament PTFE sutures



Smooth monofilament rod



creos™ syntostitch
350x magnification



PTFE competitor
350x magnification

100% medical-grade PTFE Biologically inert

Monofilament Does not wick bacteria

Soft (not stiff) Comfortable for patients

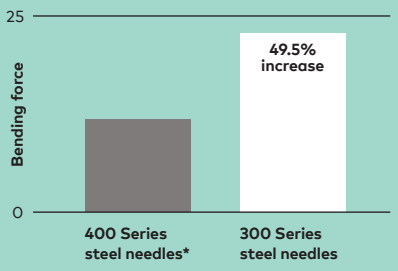
Little to no package memory Excellent handling, knots securely

Non-resorbable Keeps the surgical site reliably closed

Advantages of the 300 series stainless steel needles:

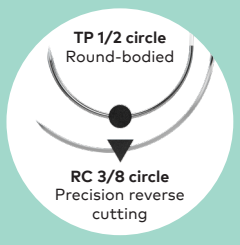
- Gold standard material for suture needles
- Increased needle strength and needle sharpness
- Less force to penetrate

Resistance to bending



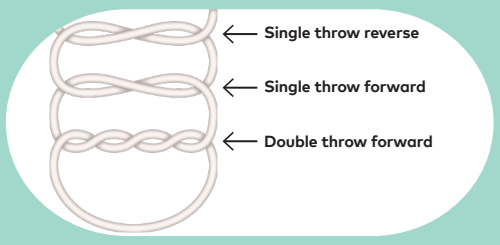
*common in dentistry

Needle shapes



Thread diameters

Recommended knot[1]



creos™ pin fixation

Absorbable and non-absorbable pins for secure and stable membrane fixation in guided bone regeneration (GBR) procedures

Securely fix resorbable, non-resorbable, and titanium-reinforced membranes to avoid micromovements of the graft.

One kit, two types of pins.

Designed for easy pick-up and release of the pins from the holder and stable transfer to the surgical site.

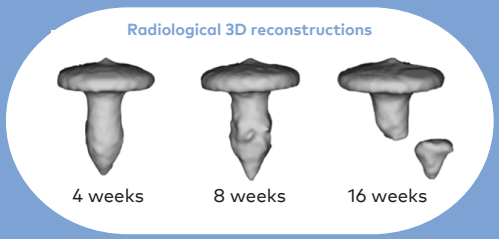
Absorbable magnesium pins:

- **Peace of mind:** Bioabsorbable, no second surgery needed; less complications or shine through from pins left in situ.
- **Remarkable strength:** Stronger than other absorbable pins, comparable to titanium pins, holds membrane stable during the crucial healing phase.
- **Biocompatible:** Titanium free, safe for patients, and completely absorbed and replaced by bone within 18 months.

Titanium pins:

- **Extremely strong:** No bending or breakage, strong build and sharp tip allow for precise and reliable placement of pins in dense, cortical bone (even at an angle).
- **Easy to remove:** Designed to make pin removal easy.
- **Secure and Stable:** No shifting or loosening, ensuring the pin stays firmly in place, even during challenging surgical procedures.

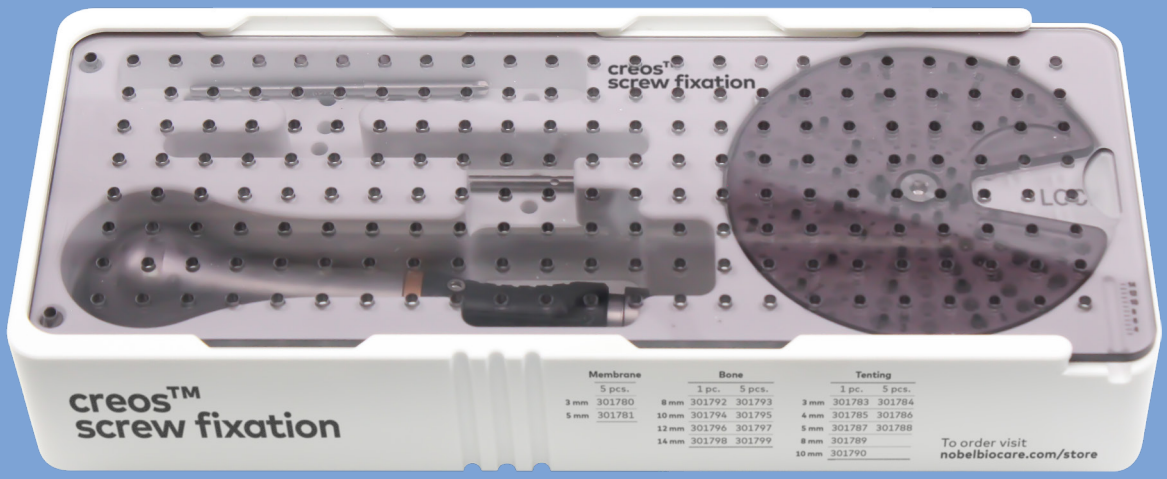
Absorption process of magnesium pins[1]:



Scan the code for more resources.

creos™ screw fixation

Instruments and screws for fast and easy placement of membrane, bone block, and tenting screws



One kit for three types of screws

- Variety of membrane fixation, bone fixation, and tenting screws
- Instruments designed to work universally with all creos screw fixation screw types

Self-drilling screws

- The self-drilling design of the membrane fixation and tenting screws allows penetration through cortical bone without the use of a mallet or the need for drilling pilot holes

Stable and secure fixation

- Easy pick-up, solid stability of the screw during transfer to the surgical site, and easy placement make membrane fixation fast and easy

Membrane fixation screws

Secure membranes and mesh

Tenting screws

Maintain space under membranes in horizontal and vertical augmentation procedures

Bone fixation screws

Stabilize, fixate, and support bone block grafts

Contra-angle blade (optional)

Designed for posterior and lingual screw placement, it attaches to latch type motorized hand pieces and works universally with all creos screws

Products

creos™ xenogain

Xenogenic bone graft substitute

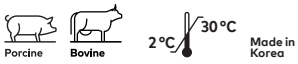
Weight	Granule size	Volume	Vial	Bowl	Syringe
0.25 g	Small (0.2–1.0 mm)	0.36 cc	N1110	**N1110-B**	N1210
0.5 g		0.82 cc	N1120	N1120-B	N1220
1.0 g		1.71 cc	N1130	**N1130-B**	
2.0 g		3.64 cc	N1140	N1140-B	
0.25 g	Large (1.0–2.0 mm)	0.54 cc	N1111	N1111-B	N1211
0.5 g		1.27 cc	N1121	N1121-B	N1221
1.0 g		2.69 cc	N1131	N1131-B	
2.0 g		5.74 cc	N1141	N1141-B	

creos™ xenogain collagen

creos™ xenogain + 10% porcine collagen type I

Weight	Block size	Article no.
0.1 g	6 × 6 × 6 mm	**N1320**
0.25 g	7 × 8 × 9 mm	N1330
0.5 g	9 × 10 × 11 mm	N1340

Weight	Syringe size	Article no.
0.25 g	4.6 × 40 mm	N1410
0.5 g	5.6 × 45 mm	N1420



Symbol glossary

Temperature limit

Upper limit of temperature

Most commonly sold articles

creos™ xenoform

Xenogenic bone graft substitute

Weight	Granule size	Volume	Vial (Granules)	Syringe
0.25 g	0.2–1.0 mm	0.5 cc	CHY25-0210	**CHYS25-0210**
0.5 g		1.1 cc	**CHY05-0210**	CHYS05-0210
1.0 g		2.1 cc	CHY10-0210	
2.0 g		4.1 cc	CHY20-0210	
0.25 g	0.5–1.2 mm	0.6 cc	CHY25-0512	CHYS25-0512
0.5 g		1.2 cc	CHY05-0512	CHYS05-0512
1.0 g		2.3 cc	CHY10-0512	
2.0 g		4.5 cc	CHY20-0512	

creos™ syntogain

Synthetic bone graft

Weight	Granule size	Volume	Vial
0.5 g	Small (0.2–1.0 mm)	0.50 cc	S1110
1.0 g	Small (0.2–1.0 mm)	1.00 cc	**S1120**
0.5 g	Large (1.0–2.0 mm)	0.50 cc	S1111
1.0 g	Large (1.0–2.0 mm)	1.00 cc	S1121

creos™ xenoprotect

Nobel Biocare's highest selling resorbable collagen membrane

Size	Article no.
15 × 20 mm	E1520
25 × 30 mm	E2530
30 × 40 mm	E3040

Porcine | 25 °C | Made in Germany

creos™ xenofirm

Resorbable, firm, collagen membrane

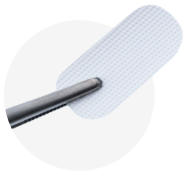
Size	Units/box	Article no.
15 × 20 mm	2	CLMCM1520
20 × 30 mm	2	CLMCM2030
30 × 40 mm	2	CLMCM3040

Bovine | 15 °C | 30 °C | Made in USA

creos™ syntoprotect PTFE membrane

Non-resorbable, high-density PTFE membrane

Shape	Picture	Size	Thickness	Article no.	Units/box	Description
Small		12 × 24 mm	200 µm	N161224-1	1	Designed specifically for extraction site grafting and augmentation procedures where exposure to the oral cavity is common
			200 µm	N161224-10	10	
Medium		12 × 30 mm	200 µm	N161230-10	10	
Large		25 × 30 mm	200 µm	N162530-1	1	
			200 µm	N162530-4	4	



Synthetic | 15 °C | 30 °C | Made in USA

creos™ syntoprotect Ti-reinforced PTFE membrane

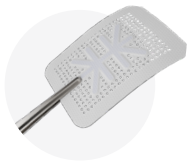
Non-resorbable, titanium reinforced, high-density PTFE membrane

Shape	Picture	Size	Thickness	1 unit per box	2 units per box	Description
No. 1		12 × 24 mm	150 µm	N1615TI-01-1	N1615TI-01-2	Designed for narrow single-tooth extraction sites, especially where one bony wall is missing
			250 µm	N1625TI-01-1	N1625TI-01-2	
No. 1, 30 mm		12 × 30 mm	150 µm	n/a	n/a	
			250 µm	N1625TI-01-30-1	N1625TI-01-30-2	
No. 2		14 × 24 mm	150 µm	**N1615TI-02-1**	**N1615TI-02-2**	Designed for single-tooth extraction sites, especially where one or more bony walls are missing
			250 µm	N1625TI-02-1	N1625TI-02-2	
No. 3		17 × 25 mm	150 µm	N1615TI-03-1	N1615TI-03-2	Designed for large buccal defects
			250 µm	N1625TI-03-1	N1625TI-03-2	
No. 3, 30 mm		17 × 30 mm	150 µm	N1615TI-03L-1	N1615TI-03L-2	
			250 µm	N1625TI-03L-1	N1625TI-03L-2	
No. 4		20 × 25 mm	150 µm	N1615TI-04-1	N1615TI-04-2	Designed for large extraction sites and limited ridge augmentation
			250 µm	N1625TI-04-1	N1625TI-04-2	
No. 5		36 × 25 mm	150 µm	N1615TI-05-1	N1615TI-05-2	Designed for large extraction sites and limited ridge augmentation in the anterior maxilla
			250 µm	N1625TI-05-1	N1625TI-05-2	
No. 6		25 × 30 mm	150 µm	**N1615TI-06-1**	**N1615TI-06-2**	Designed for large bony defects, including ridge augmentation
			250 µm	N1625TI-06-1	N1625TI-06-2	
No. 7		30 × 41 mm	150 µm	N1615TI-07-1	N1615TI-07-2	Designed for large bony defects, including ridge augmentation in the anterior maxilla
			250 µm	N1625TI-07-1	N1625TI-07-2	
No. 8		30 × 40 mm	150 µm	N1615TI-08-1	N1615TI-08-2	Designed for very large bony defects, including ridge augmentation
			250 µm	N1625TI-08-1	N1625TI-08-2	
No. 9		30 × 40 mm	150 µm	N1615TI-09-1	N1615TI-09-2	Designed for very large bony defects, including ridge augmentation
			250 µm	N1625TI-09-1	N1625TI-09-2	
No. 10		24 × 38 mm	150 µm	N1615TI-10-1	N1615TI-10-2	Designed for large extraction sites, including ridge augmentation
			250 µm	N1625TI-10-1	N1625TI-10-2	
No. 11		38 × 38 mm	150 µm	N1615TI-11-1	N1615TI-11-2	Designed for large bony defects, including ridge augmentation
			250 µm	N1625TI-11-1	N1625TI-11-2	
No. 12		38 × 38 mm	150 µm	N1615TI-12-1	N1615TI-12-2	Designed for large bony defects, including distal extension of the posterior ridge
			250 µm	N1625TI-12-1	N1625TI-12-2	
No. 13		40 × 50 mm	150 µm	N1615TI-13-1	N1615TI-13-2	Designed for the largest bony defects, including ridge augmentation
			250 µm	N1625TI-13-1	N1625TI-13-2	

creos™ syntoprotect mesh

Non-resorbable mesh

Shape	Picture	Size	Thickness	1 unit per box	Description
No. 3		17 × 25 mm	200 µm	301871	Designed for large buccal defects
No. 3, 30 mm		17 × 30 mm	200 µm	301892	
No. 4		20 × 25 mm	200 µm	301872	Designed for large extraction sites and limited ridge augmentation
No. 5		36 × 25 mm	200 µm	301873	Designed for large extraction sites and limited ridge augmentation in the anterior maxilla
No. 6		25 × 30 mm	200 µm	301874	Designed for large bony defects, including ridge augmentation
No. 7		30 × 41 mm	200 µm	301875	Designed for large bony defects, including ridge augmentation in the anterior maxilla
No. 8		30 × 40 mm	200 µm	301876	Designed for very large bony defects, including ridge augmentation
No. 9		30 × 40 mm	200 µm	301877	Designed for very large bony defects, including ridge augmentation
No. 9M		30 × 40 mm	200 µm	301878	
No. 10		24 × 38 mm	200 µm	301879	Designed for large extraction sites, including ridge augmentation
No. 10M		24 × 38 mm	200 µm	301880	
No. 11		38 × 38 mm	200 µm	301881	Designed for large bony defects, including ridge augmentation
No. 11M		38 × 38 mm	200 µm	301882	
No. 12		38 × 38 mm	200 µm	301883	Designed for large bony defects, including distal extension of the posterior ridge
No. 13		40 × 50 mm	200 µm	301886	Designed for the largest bony defects, including ridge augmentation

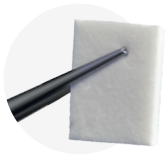


Synthetic 15 °C 30 °C Made in USA

creos™ mucogain

Absorbable collagen matrix

Size	Block size	Article no.
15 × 20 mm	3 mm	MU15203
25 × 30 mm	3 mm	MU25303
15 × 20 mm	5 mm	MU15205
25 × 30 mm	5 mm	MU25305



Porcine 25 °C Made in Germany

creos™ xenofill

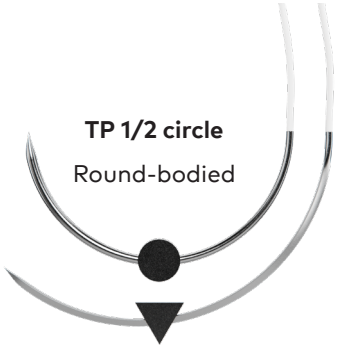
Absorbable wound dressing

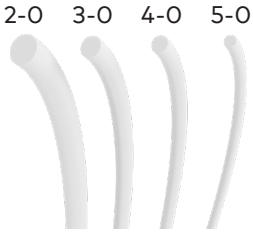
Size	Size	Units/box	Article no.
Plug	1 × 2 cm	10	CLMBDDWDP1020
Foam	2 × 4 cm	10	CLMBDDWDF2040
Tape	2.5 × 7.5 cm	10	CLMBDDWDT2575

creos™ syntostitch

Non-absorbable PTFE suture – monofilament

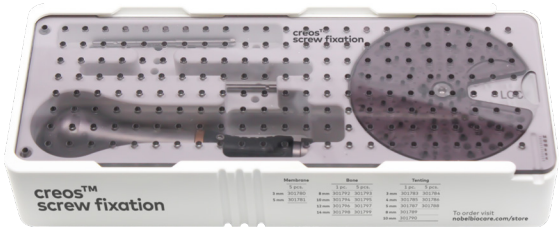
Needle shape	USP	Needle size	Needle color	Suture length 45 cm 12 units per box	Suture length 70 cm 12 units per box
TP 1/2 circle Round-bodied	4-0	13 mm		301815	301816
RC 3/8 circle Precision reverse cutting	2-0	19 mm		301805	301806
	3-0	16 mm		301807	301808
		19 mm		301809	301810
		16 mm	black	301811	301812
		19 mm	black	301813	301814
	4-0	13 mm		301817	301818
		16 mm		301819	301820
	5-0	13 mm		301821	301822
		16 mm		301823	301824





creos™ screw fixation

Titanium screws for membrane/bone fixation and tenting



Made in USA

Stabilization kit includes

- Storage tray with screw organizer dial
- Stainless steel driver handle
- 76 mm cruciform driver blade
- 56 mm cruciform driver blade

Contra angle driver blade

Description	Article no.
24 mm	301802

Individual components

Description	1 unit per box
Cruciform driver blade, 76 mm	301800
Cruciform driver blade, 56 mm	301801
Stainless steel driver handle	301803
Autoclavable storage tray	301804
Latch Type Pilot Drill, 1.2 mm	HGMBI1001

Membrane fixation kit Article 301779

Products included	Size	QTY
Stabilization kit		1
Self-drilling membrane fixation screw	1.5 × 3 mm	20

Tenting kit Article 301782

Products included	Size	QTY
Stabilization kit		1
Self-drilling tenting screw	1.5 × 3 mm	4
	1.5 × 4 mm	4
	1.5 × 5 mm	4

Bone fixation kit Article 301791

Products included	Size	QTY
Stabilization kit		1
Self-tapping bone fixation screw	1.5 × 8 mm	2
	1.5 × 10 mm	4
	1.5 × 12 mm	4
	1.5 × 14 mm	2

Membrane fixation screws

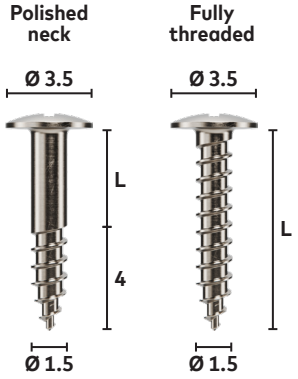
Size	5 units per box
1.5 × 3 mm	301780
1.5 × 5 mm	301781

Titanium Made in USA

Tenting screws

Size	Special	1 unit per box	5 units per box
1.5 × 3 mm polished neck	+4 mm threaded portion	301783	301784
1.5 × 4 mm polished neck		301785	301786
1.5 × 5 mm polished neck		301787	301788
1.5 × 8 mm	fully threaded	301789	n/a
1.5 × 10 mm	fully threaded	301790	n/a

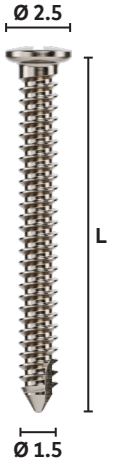
Titanium Made in USA



Bone fixation screws

Size	1 unit per box	5 units per box
1.5 × 8 mm	301792	301793
1.5 × 10 mm	301794	301795
1.5 × 12 mm	301796	301797
1.5 × 14 mm	301798	301799

Titanium Made in USA

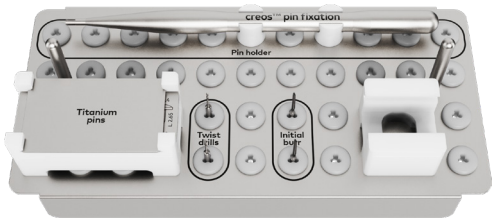


All measurements in millimeters.

Connect to Nobel Biocare Online store

creos™ pin fixation

Titanium and magnesium pins for membrane fixation



Made in Germany

creos pin fixation

- Fully autoclavable kit
- Pin holder
- 2 initial burs
- 2 twist drills
- **NO PINS**

Pin fixation kit Article CP200

Products included	Size	QTY
Kit with no pins included		1

Bioabsorbable magnesium pins

Size	QTY	Article
Ø2.4 x 3.5 mm	5	MTC638973
Ø2.4 x 3.5 mm	3	MTC638974

Mg Magnesium Made in Germany

Non-absorbable titanium pins

Size	QTY	Article
Ø2.4 x 3.3 mm	10	CP110
Ø2.4 x 3.3 mm	50	CP150

Ti Titanium Made in Germany

Individual components

Description	Usage	Article
Pin holder	To insert absorbable and non-absorbable pins	CP300
Initial bur	For pre—drilling prior to insertion of the pins (recommended in cases of very hard bone)	HGM186RF
Twist drill	For decortication to place bleeding points in the bone	HGM203RF
Master Pin Decortication Bur 2x Not included in the kit	Twist drill with depth stop to place bleeding points in bone	HGM203S-012-RA
Hammer with a plastic and a metal side Not included in the kit	Used to insert pin into surgical area	HGMMI154

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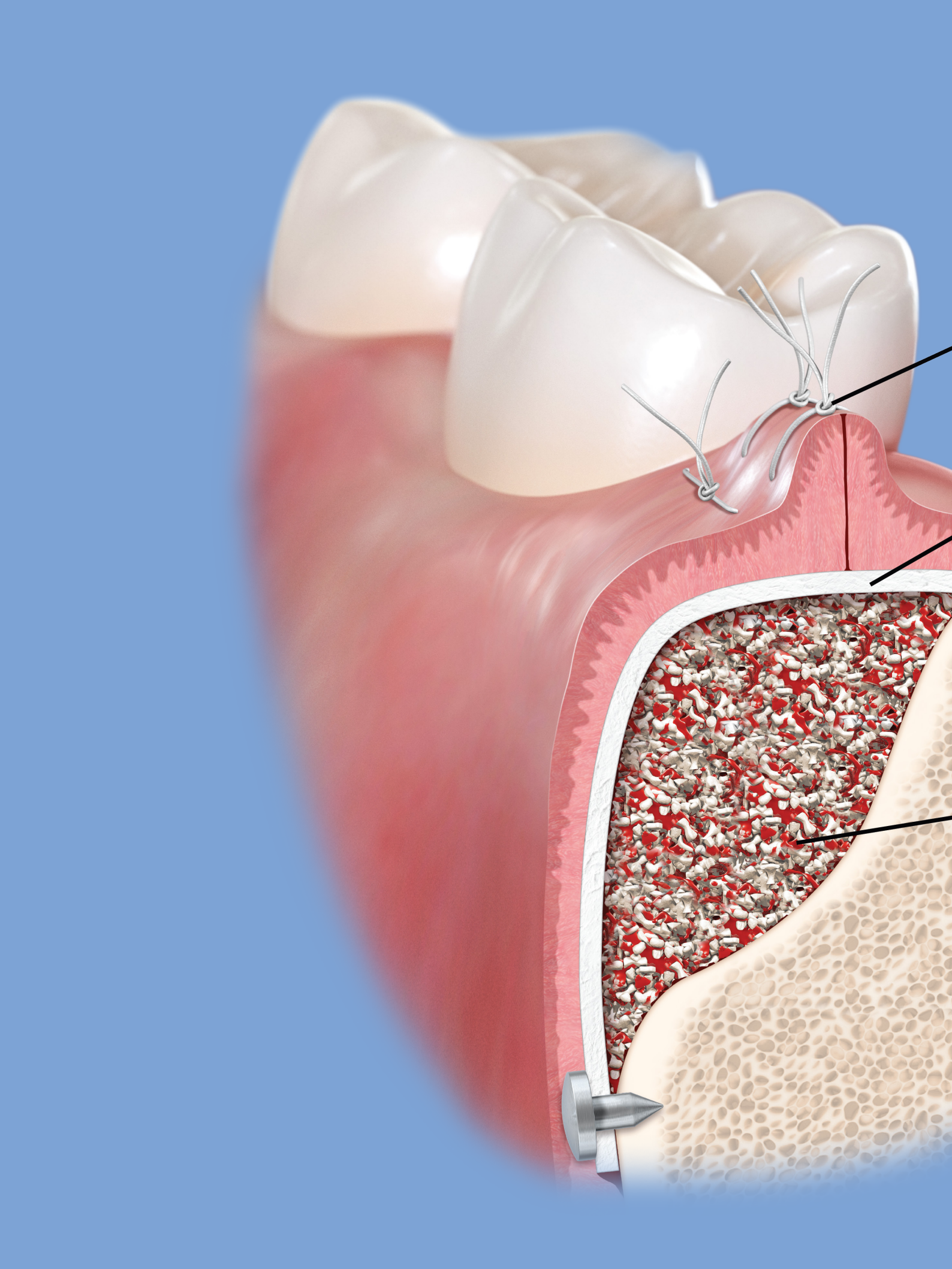

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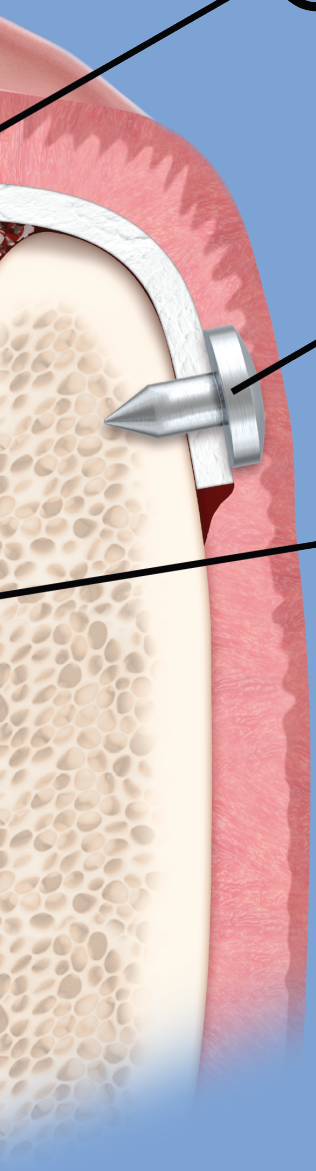

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