creos™ xenoprotect: strong native collagen membrane

High mechanical strength[1]

– High suture retention
– High tear resistance

Easy handling

– Does not stick to instruments or itself
– Either side can face the defect
– Low surface expansion when hydrated

Facilitates new bone formation[2, 3]

– Significantly higher new bone formation in the central portion of the defect, in comparative *in vivo* study
– Associated with significantly increased expression of growth factor *BMP-2*

High success rate proven in randomized controlled trial[4]

In an RCT published by Dr. Istvan Urban *et al.*, creos xenoprotect and Geistlich Bio-Gide® similarly reduced defect height after simultaneous GBR and implant placement.

High tensile strength and suture retention[1]

Studied *in vitro* compared to other collagen membranes

– Showed the highest suture retention when hydrated (6.1 N)
– Demonstrated the highest force at break, wet (21.2 N)

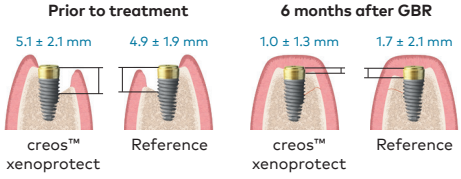
Stable during the period required for barrier function[5]

After 20 weeks in an animal model, the thickness of creos xenoprotect decreased only slightly, whereas Geistlich Bio-Gide® showed around a 50% thickness loss.

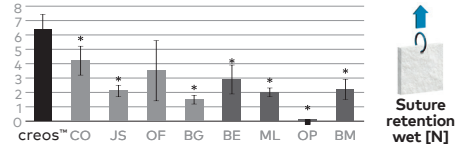
Proprietary production process

Nobel Biocare's German manufacturing site, Matricel, tested 30 processing techniques so that they could produce the product with the best cell compatibility and mechanical strength.

Schematic showing the defect height:



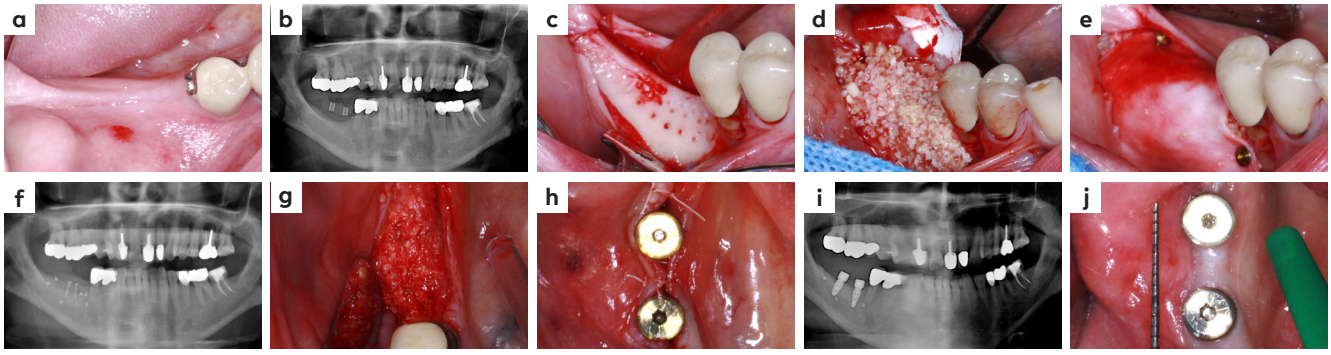
Comparison of commercial membranes in a hydrated state



Non-cross-linked collagen membranes (NXL) – 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

Manufacturing site of creos xenoprotect

Clinical case



Images courtesy of Dr. B. Wessing, Germany

A 54-year-old male patient reported with missing teeth 30, 31. Poor bone quantity with 2–3 mm thickness at the crest and 8 mm and 6 mm of residual bone, respectively, on top of the nervus alveolaris inferior region.

(a, b) Preoperative assessment
(c) Cortical perforations and tenting screws applied
(d) creos xenoprotect and bone graft applied
(e) Graft immobilized – spanning of creos xenoprotect
(f) Panoramic radiograph after GBR
(g) After 6 months: 3 mm vertical, 8 mm horizontal bone gain
(h, i) Immediately after implant placement
(j) Situation after four months' healing

Dr. Fabrizio Colombo
Oral surgeon, Italy

"Strength and elasticity of creos xenoprotect can protect and stabilize the grafted area even in the most challenging cases."

Dr. Andrew Peterson
Periodontist, USA

"Utilizing creos xenoprotect and creos allo.gain in your GBR cases results in a synergistic interaction for a predictable outcome."

Dr. Catherine Rivière
Periodontist, France

"I use creos xenoprotect combined with creos xenogain particularly in cases of GBR. The membrane, stabilized by pins, offers significant strength and stability."

More to explore

Scientific evidence

Clinical cases

Production & handling movie

Why creos xenoprotect?

1. Gasser A, et al. J Dent Res 2016,95(Spec Iss A): 1683 • 2. Wessing B, et al. Clin Oral Impl Res; 2017;28(11):e218-e226 • 3. Omar O, et al. Clin Oral Impl Res; 2018;29(1):7-19 • 4. Urban I, et al. Clin Oral Impl Res. 2019;30:487–497 • 5. Bozkurt A, et al. Clin Oral Impl Res; 2014;25(12):1403-1411.

Nobel Biocare™