LEADING REGENERATION

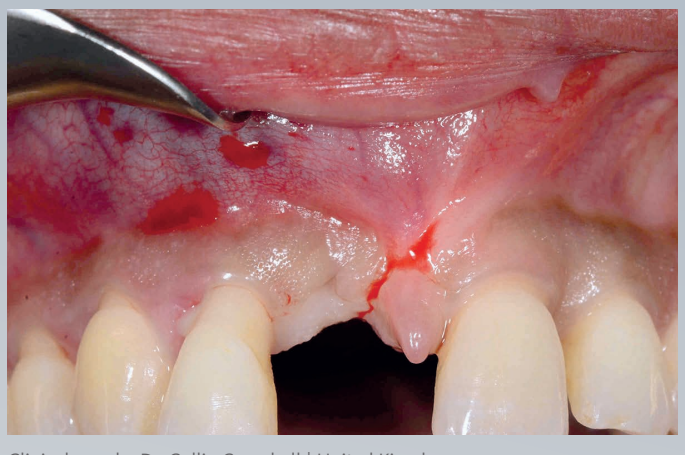
Geistlich
Biomaterials

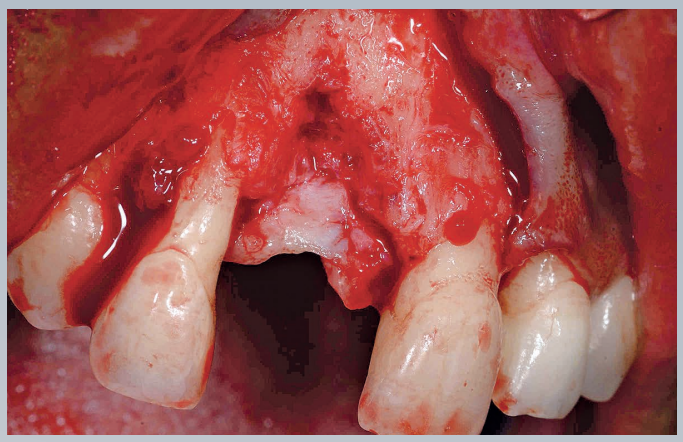
Intelligently Designed to Protect Augmented Bone

Geistlich Bio-Gide®

Architect the Future

Your options when faced with these situations





Clinical case by Dr. Collin Campbell | United Kingdom

No Membrane?

Not using a membrane can lead to soft-tissue cell ingrowth into the graft material and slow vascularization with the consequence of more soft tissue and less bone volume.[21–24]

Native Collagen Membrane!

Let's take a closer look on the role of a native collagen membrane

Cross-linked Collagen Membrane?

For certain defects, longer barrier functions are needed. Usually the collagen of these membranes are cross-linked.[1,14] Several problems can be associated with cross-linked collagen membranes:

- Causes foreign body reactions like recruitment of multinucleated giant cells[1,2]
- Causes inflammatory responses which leads to delayed healing, encapsulation[2], less tissue integration[1]
- Causes a high inflammation rate of soft-tissues within an early phase of healing (1 week) which is correlated with less bone volume after 6 months.[4]

A site treated with a cross-linked membrane shows a soft-tissue dehisence 7 days post-surgery. Clinical case by Dr. Zumstein, Lucerne | Switzerland

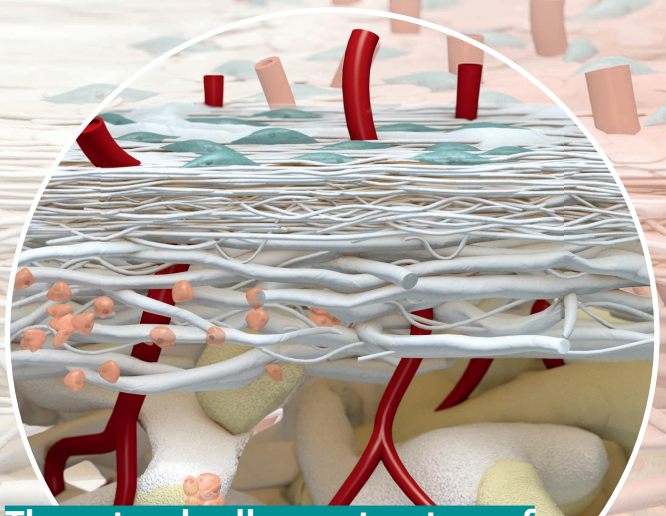
Higher inflammation rate is linked to less bone volume for proper implant placement[4]

A Coordinated Interplay Between Vascularization and Barrier Time

Geistlich Bio-Gide® and Geistlich Bio-Oss® have demonstrated in numerous clinical studies sufficient gain of bone volume and quality.[17–19]

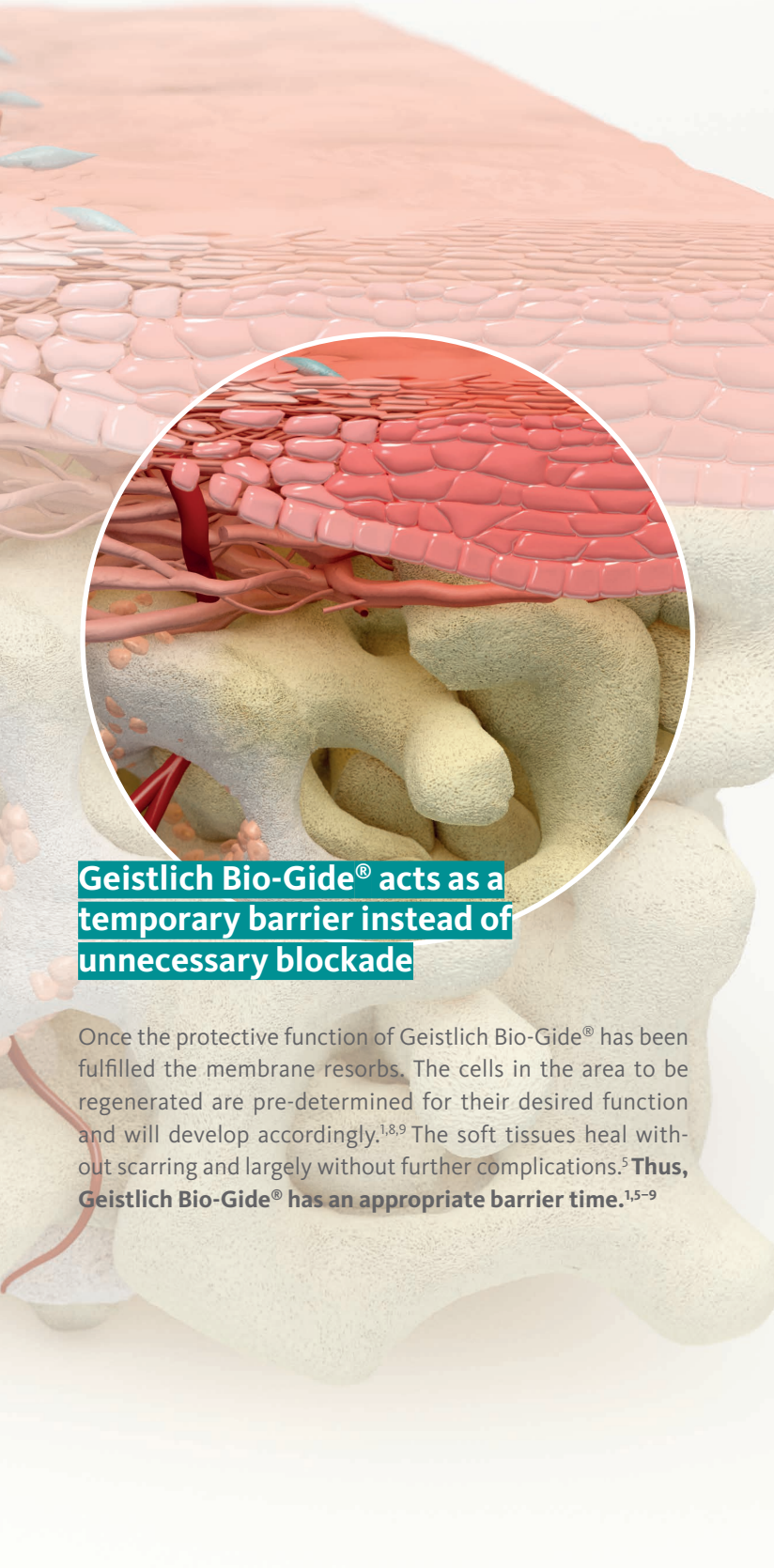
Setting the stage for optimal soft- and hard tissue regeneration[1,12,16]

The most important requirements when choosing a suitable membrane for bone regeneration are biocompatibility, tissue integration, cell occlusiveness, nutrient transfer and handling.[1,10,11] **Geistlich Bio-Gide® meets all these requirements.**



The natural collagen structure of Geistlich Bio-Gide® supports early vascularization resulting in good tissue integration and wound stabilization.[1,12]

The smooth layer orientated towards the soft-tissue serves as a scaffold for the attachment of fibroblasts, while the barrier function prevents the ingrowth of soft-tissue into the newly forming bone underneath.[1,7,12–14] The rough, open-pored bottom side serves as a framework for bone forming cells like osteoblasts[14,15], nutrients and growth factors and allows ingrowth of blood vessels.[1,12,15] **These characteristics even make the handling of Geistlich Bio-Gide® easy and convenient. You have the choice between different product types and shapes – matching *your* specific needs.**



Geistlich Bio-Gide® acts as a temporary barrier instead of unnecessary blockade

Once the protective function of Geistlich Bio-Gide® has been fulfilled the membrane resorbs. The cells in the area to be regenerated are pre-determined for their desired function and will develop accordingly.[1,8,9] The soft tissues heal without scarring and largely without further complications.[5] **Thus, Geistlich Bio-Gide® has an appropriate barrier time.**[1,5–9]

Geistlich
THE COLLAGEN EXPERT

Be the architect of your patient's bone regeneration:

With Geistlich Bio-Gide® there is an ideally suited collagen membrane available to guide your daily regenerative needs[1,24,10]

High long-term implant survival rate[20]

After 12–14 years implants that were placed in bones augmented with Geistlich Bio-Gide® and Geistlich Bio-Oss® show the similar survival rate as implants in pristine bone[20]

Reliable esthetic results: with using Geistlich Bio-Gide® and Geistlich Bio-Oss® for contour augmentation the facial bone wall was preserved in 95% of patients over a period of 5–9 years[20]

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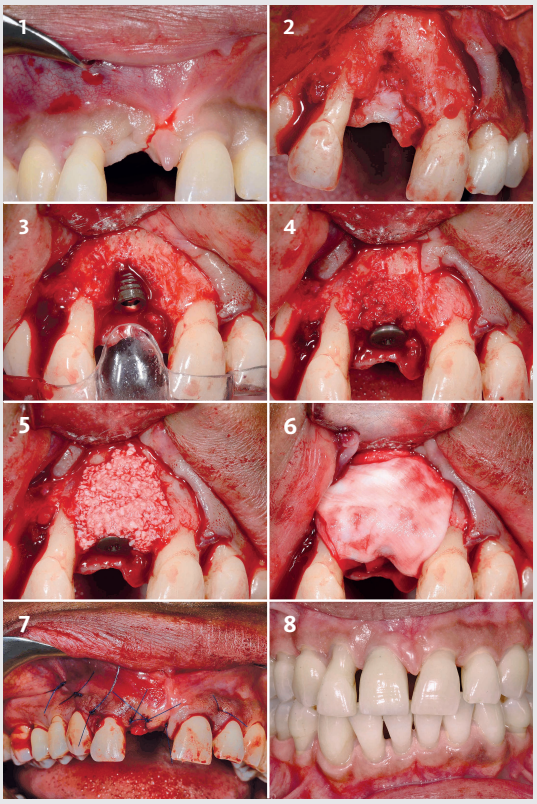
swiss made

Even in such a difficult esthetic case including horizontal and vertical bone and tissue loss associated with recession on teeth 12 and 21, the combination of Geistlich Geistlich Bio-Oss® plus autologous bone and Geistlich Bio-Gide® provided a stable mucosal result around implant restoration for the long-term success.

Clinical case by Dr. Collin Campbell | United Kingdom



1 Initial situation: recession of tooth 12 and 21 are present
2 Retraction of flap shows considerable bone loss associated with tooth 12 and early bone loss associated with tooth 21. Vertical and horizontal defects associated with 11 implant site also clearly visible.
3 Additional picture with surgical guide in position demonstrating correct vertical position of implant.
4 Implant placed with cover screw. Autologous bone chips have been applied which were harvested locally.
5 Geistlich Bio-Oss® granules were applied over autologous bone to provide stability to the whole bone graft.
6 A double-layer of Geistlich Bio-Gide® was applied to protect the bone graft during healing period.
7 Immediate post-operative view following application of sutures.
8 2-year follow-up with a stable gingival position.

Geistlich Bio-Oss® plus autologous bone chips

Geistlich Bio-Gide®

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