

Patient Information

Customized 3D treatment of larger bone defects

Back to a healthy smile

Post-operative care is an area where you can contribute to the success of your procedure.*

C Do's*

- Maintain your oral hygiene and use antibacterial mouthwash as prescribed by your dentist.
- > Treat swelling with moistcold pads.
- Consult your dentist regarding pain.
- Make sure that you visit your dentist for a follow-up appointment.

Dont's

- > Do not neglect your oral hygiene.
- > Do not brush or floss at the site of surgery for 1 week after surgery.
 A toothbrush with especially soft bristles can usually be used for cleaning the teeth in the vicinity of the wound.
- Do not drink coffee or alcohol and do not smoke cigarettes for 2–3 days after surgery.
- \rightarrow Avoid chewing of hard food.

*Do's and Dont's of dental societies on postoperative care may include (but are not limited to) these recommendations and considerations. You dentist will provide more details.

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 15 million patients worldwide have been treated with Geistlich biomaterials.¹⁻⁷

- > Geistlich products are scientifically proven top quality Swiss biomaterials.
- Meticulous selection of raw materials, together with a strictly controlled manufacturing process, allows Geistlich biomaterials to conform to high safety requirements and ensures high tolerability.
- These natural biomaterials were evaluated in more than 1,400 studies from countries all over the world.
- > Their safety has been assessed by international and national regulatory bodies.

Regenerate your bone

- > Why Titanium? Titanium is a well-tolerated material, state of the art in dental implant care. The titanium scaffold provides stability, that is very important in larger bone defects.
- > Why Yxoss CBR®? Thanks to the 3D technology, the scaffold is printed very precise, avoiding manually adaptations by the dentist. Every patient has a unique jaw and a specific defect.
- > Why Geistlich Biomaterials? Your defect needs a bone substitute material as a filler under the titanium scaffold for new bone formation. These materials are additionally covered by a collagen membrane, that supports gum healing and the bone regeneration.

Why is a treatment beneficial?

Smile again

Aesthetically pleasing outcomes & maintenance of healthy teeth.

Restoring functionality

Predictable bone gain for long-term implant survival with Geistlich Biomaterials $^{\textcircled{B},10-12}$

Stable outcomes

Less bone resorption & stable clinical outcomes with Geistlich Biomaterials $^{(\![n]_{2-17}\!]}$



Implant placement is not possible due to insufficient bone width and height.



1 year post-operation: sufficient bone width and height maintained for stable implant placement.

Dr. Keyvan Sagheb & Dr. Eik Schiegnitz (Mainz, Germany)

What happens when there is not enough bone available?

Accidents, dental traumas or advanced periodontists are just some of many reasons for tooth loss followed by bone resorption.

Customized patient treatment by 3D printed technology

Sufficient bone is essential for long term implant stability. With the 3D printed titanium scaffold Yxoss CBR^{\otimes} an individual restoration of your original jaw bone in width and height can be established.

Therefore, your dentist sends the x-ray information to ReOss[®]. With this data, the 3D printed titanium scaffold will be exclusively produced to fit to your bone defect.

How can these bone defects be treated?

Most times, the following two clinical situations requires a special intervention. In some cases, the bone is diminished in width and height at the same time.



manufactured by ReOss[®]

Insufficient width of the bone wall



Large bone defects where one bone wall is maintained can be restored...

Insufficient height of the bone wall



Large bone defects where the bone walls are completely diminished can be restored...



...by using the 3D printed Yxoss CBR® in combination with autologous bone, a bone substitute and a membrane in order to restore your diminished bone 3-dimensional. This leads to a high stability during the healing phase.



The good result is achieved after reconstruction of the bone walls, removal of titanium (Yxoss CBR®) and implant placement after approximately 6–8 months after the augmentation.

Geistlich Biomaterials

Biomaterials are scaffolds that can be implanted to replace or repair missing tissue.

Biomaterials, such as bone substitutes, collagen membranes and matrices, are used regularly in regenerative dentistry to support the body's own tissue regeneration process effectively.

The bone substitute promotes effective bone regeneration¹⁸

- Providing a foundation for your body to regenerate bone.
- Made from the mineral part of the bones originating from cattle.
- Swiss quality, refined through 30 years of experience.

A membrane for uneventful wound healing^{19,20}

- Provides optimal wound healing properties for effective bone regeneration.²³
- Made of collagen obtained from healthy pigs.
- Swiss quality, refined through 20 years of experience.

Yxoss CBR[®] stabilizes 3-Dimensional bone regeneration

- Customized to your bone defect by using a modern 3D printed technology
- Made of pure titanium²
- > Easy removable after bone regeneration







Yxoss CBR[®] manufactured by ReOss[®]

Bone regeneration in larger bone defects requires some form of grafting in order to restore volume, stability and ultimately regenerate bone.



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Biomaterials from Geistlich Pharma AG are among the most frequently used products in regenerative dental medicine throughout the world^{1-9,22}



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