LEADING REGENERATION

Geistlich Biomaterials

Patient Information

Treatment of larger bone defects

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.[9]
- The safety has been assessed by international and national regulatory bodies.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- High biofunctionality[5–8]

Why is a treatment beneficial?

Smile again

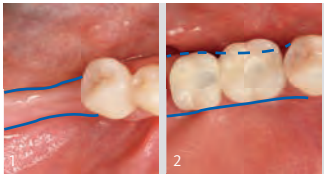
Aesthetically pleasing outcomes & maintenance of healthy teeth.

Restoring functionality

Predictable bone gain for long-term implant survival.[5,10,11]

Stable outcomes

Less bone resorption & stable clinical outcomes.[12–16]



[1] Implant placement is not possible due to insufficient bone width.

[2] 2 years post-operation: enough bone width maintained.

Prof. Dr. Istvan Urban (Budapest, Hungary)

[1] Implant placement is not possible due to insufficient bone height.

[2] 6 months post-operation: sufficient bone height maintained for stable implant placement.

Dr. Mauro Merli (Rimini, Italy)

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 degradation of bone.

If the treatment is delayed for too long...

› the height and/or thickness of the jaw bone diminishes.
› there is insufficient amount of bone for implant placement.

Sufficient bone is essential to ensure the long-term stability of your dental implants.

How can these bone defects be treated?

There are two clinical situations that can occur:

Insufficient width of the bone wall

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

...by using autologous bone blocks in combination with Geistlich Bio-Oss® and a Geistlich Bio-Gide® membrane.

In both cases, the optimal clinical outcome are restored bone walls where implants can be easily inserted.

Insufficient height of the bone wall

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

...by using a form-stable membrane, Geistlich Bio-Oss® and autologous bone chips to reshape the bone walls. A Geistlich Bio-Gide® membrane is used to support soft tissue healing.

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.

Geistlich Bio-Oss® promotes effective bone regeneration[17]

- 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.

Geistlich Bio-Gide® protects & supports wound healing[18,19]

- Supports wound healing and provides a barrier for optimum regeneration of bone.
- Made of collagen obtained from healthy pigs.
- Swiss quality, refined through 20 years of experience.

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

Back to a healthy smile

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

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.
- Avoid chewing of hard food.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world:[20]

More than 15 million
Geistlich Bio-Oss®

More than 6.5 million
Geistlich Bio-Gide®

More than 200,000
Geistlich Mucograft®

More than 15,000
Geistlich Fibro-Gide®

601549/1911/EN

Referenzen

1 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
2 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
3 ISO 13485 certificate, design & development.
4 ISO 9001 certificate, distribution.
5 Jung R et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73. (Clinical study)
6 Buser D et al., J Periodontol. 2013 Nov;84(11):1517-27. (Clinical study)
7 Jensen S.S. et al., J Periodontol. 2014 Nov;85(11):1549-56. (Clinical study)
8 Mordenfeld A et al., Clin Oral Implants Res. 2010 Sep;21(9): 961–70. (Clinical study)
9 NCBI Pubmed, October 2019, Search term: Bio-Oss OR Bio-Gide OR Mucograft OR Fibro-Gide, PubMed Filter "Species: Humans" (836 hits) or "Other animals" (667 hits). (Market research).
10 Urban IA et al., Int J Periodontics Restorative Dent. 2013 May-Jun;33(3):299–307. (Clinical study)
11 Chiapasco M et al., Clin Oral Implants Res. 2012 Sep;23(9):1012–21. (Clinical study)
12 von Arx T et al., Clin Oral Implants Res. 2006 Aug;17(4):359–66. (Clinical study)
13 Canullo L et al., Int J Periodontics Restorative Dent. 2006 Aug;26(4):355–61. (Clinical study)
14 Maiorana C et al., Int J Oral Maxillofac Implants. 2005 Mar-Apr;20(2):261–6. (Clinical study)
15 Maiorana C et al., Open Dent J. 2011 Apr 25;5:71–8. (Clinical study)
16 Cordaro L et al., Clin Oral Implants Res. 2011 Oct;22(10):1145–50. (Clinical study)
17 Degidi M et al., Clin Implant Dent Relat Res. 2009 Sep;11(3):178-82. (Clinical study)
18 Becker J et al. Clin Oral Implants Res. 2009; 20(7):742-749 (Clinical study)
19 Tal H et al. Clin Oral Implants Res. 2008; 19(3) : 295-302 (Clinical study)
20 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

swiss made

LEADING REGENERATION

Geistlich Biomaterials

Patient Information

When implants become visible

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- High biofunctionality[5–10]

- These natural biomaterials were evaluated in more than 1,400 studies from countries all over the world.[11]
- The safety has been assessed by international and national authorities.

Why is a treatment beneficial?

Smile again

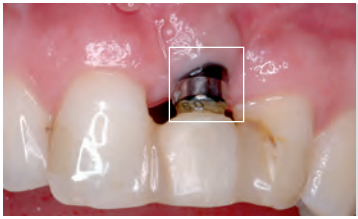
Aesthetically pleasing outcomes & maintenance of healthy teeth.[12]

Pioneering solution

You may avoid complicated procedures in the future.[5]

Stable outcomes

Preventive procedures following tooth loss save you time and possible complications in the long-term by preventing further grafting procedures.[5,13]



Implant exposure are obvious and jeopardize the aesthetic appearance.

Aesthetically pleasing outcome 1 year after surgery.

Prof. Sculean (Berne, Switzerland)

Why do I have visible implants?

Do you wish more information? Scan the code and watch the video:

Implants become visible when they are not surrounded by bone and your gums are in direct contact with the implant.

When implants become visible, you may experience...

- an unpleasant appearance to your smile.
- complications such as mechanical tissue trauma or inflammation.
- mechanically unstable implants ▸ trouble chewing.
- implants that might have a reduced implant durability.

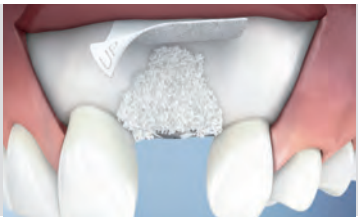
How can these bone defects be treated?

There are two clinical situations in which this happens[14]

The bone defect is similar to a "window" where a part of the implant is exposed and is in direct contact with the gums.

The implant is not surrounded by bone on the outer side and is clearly visible.

In both cases the surgery starts by uncovering the defect.



Geistlich Bio-Oss® and Geistlich Bio-Gide® are applied to the defect to support bone regeneration.[15]

Bone regeneration with Geistlich biomaterials stabilizes the implant and gives you a pleasant aesthetic outcome.[12]

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.

Geistlich Bio-Oss® promotes effective bone regeneration[15]

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

Geistlich Bio-Gide® protects & supports wound healing[16,17]

- Supports wound healing and provides a barrier for optimum regeneration of bone.
- Made of collagen obtained from healthy pigs.
- Swiss quality, refined through 20 years of experience.

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world:[18]

More than 15 million
Geistlich Bio-Oss®

More than 6.5 million
Geistlich Bio-Gide®

More than 200,000
Geistlich Mucograft®

More than 15,000
Geistlich Fibro-Gide®

601519/1909/EN

References

1 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
2 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
3 ISO 13485 certificate, design & development.
4 ISO 9001 certificate, distribution.
5 Jung R. et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73. (Clinical study)
6 Buser D et al., J Periodontol. 2013 Nov;84(11):1517-27. (Clinical study)
7 Jensen S.S. et al., J Periodontol. 2014 Nov;85(11):1549-56. (Clinical study)
8 Mordenfeld A. et al., Clin Oral Implants Res. 2010 Sep;21(9): 961–70. (Clinical study)
9 Sanz M, et al. J Clin Periodontol. 2009 Oct;36(10):868-76. (Clinical study)
10 McGuire MK & Scheyer ET. J Periodontol. 2010 Aug;81(8):1108-17. (Clinical study)
11 NCBI Pubmed, October 2019, Search term: Bio-Oss OR Bio-Gide OR Mucograft OR Fibro-Gide, PubMed Filter "Species: Humans" (836 hits) or "Other animals" (667 hits). (Market research).
12 Buser D et al., J Dent Res. 2013 Dec;92(12 Suppl):176S-82S. (Clinical study)
13 Cardaropoli D. et. al., Int J Periodontics Restorative Dent. 2015 Sep-Oct;35(5):677-85. (Clinical study)
14 Benic GI & Hämmerle C: Periodontol 2000. 2014 Oct;66(1):13-40. (Clinical study)
15 Degidi M et al., Clin Implant Dent Relat Res. 2009 Sep;11(3):178-82. (Clinical study)
16 Becker J et al. Clin Oral Implants Res. 2009; 20(7):742-749 (Clinical study)
17 Tal H et al. Clin Oral Implants Res. 2008; 19(3) : 295-302 (Clinical study)
18 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

swiss made

LEADING REGENERATION

Geistlich Biomaterials

Patient Information

When teeth become loose

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- High biofunctionality[5–10]

- These natural biomaterials were evaluated in more than 1,400 studies from countries all over the world.[11]
- The safety has been assessed by international and national authorities.

Why is a treatment beneficial?

Tooth retention with regenerative measures[12]

Retention of your natural tooth
Prevention of artificial solutions (implants, bridge restoration).

Stable outcomes
You regain your customary comfort and avoid tooth mobility.

In case of tooth loss

Bone regeneration for final dental prosthesis
Flexibility in the choice of artificial solutions (implants, bridge restoration etc.).

Stable outcomes
Preventive procedures following tooth loss save you time and money in the long-term by preventing further grafting procedures.[13]

Smile again

Aesthetically pleasing outcomes & maintenance of healthy teeth.

Dr. Bröseler (Aachen, Germany)

Why do I have periodontitis?

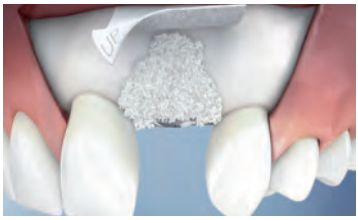
1 Our mouth is full of bacteria and our teeth are constantly covered with bacteria in a so called plaque, a sticky, colourless coating. Brushing and flossing helps to get rid of oral bacteria.

2 Unremoved plaque becomes harmful for your teeth. The gums surrounding your teeth and the spaces in-between become infected (periodontitis).

3 If you don't treat periodontitis, your teeth may become loose due to the degradation of the bone surrounding your teeth. Depending on the degree of the infection (periodontitis) teeth might have to be removed.

A tooth affected by periodontitis leads to bone degradation in the long-term.

Hopeless tooth ▸ tooth extraction



A tooth with an advanced degree of periodontitis may need to be extracted. In this case, bone regenerative measures with Geistlich Bio-Oss® and Geistlich Bio-Gide® can be a solution...

Tooth retention with regenerative measures

A tooth with a good prognosis can be retained by regenerating lost bone, with the support of biomaterials such as Geistlich Bio-Oss® and Geistlich Bio-Gide®.

...to ensure an adequate restoration with e.g. implant placement.
See Brochure "Tooth out – what's next?" [13]

Regenerative measures like this can lead to long-term tooth retention with stable outcomes, that retain the comfort and function of the tooth. [14,15]

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.

Geistlich Bio-Oss® promotes effective bone regeneration[16]

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

Geistlich Bio-Gide® Perio protects & supports wound healing[12,17,18]

- Supports wound healing and provides a barrier for optimum regeneration of bone.
- Made of collagen obtained from healthy pigs.
- Swiss quality, refined through 20 years of experience.

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world:[19]

More than 15 million
Geistlich Bio-Oss®

More than 6.5 million
Geistlich Bio-Gide®

More than 200,000
Geistlich Mucograft®

More than 15,000
Geistlich Fibro-Gide®

601525/1909/EN

References

1 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
2 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
3 ISO 13485 certificate, design & development.
4 ISO 9001 certificate, distribution.
5 Jung R. et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73. (Clinical study)
6 Buser D et al., J Periodontol. 2013 Nov;84(11):1517-27. (Clinical study)
7 Jensen S.S. et al., J Periodontol. 2014 Nov;85(11):1549-56. (Clinical study)
8 Mordenfeld A. et al., Clin Oral Implants Res. 2010 Sep;21(9): 961–70. (Clinical study)
9 Sanz M, et al. J Clin Periodontol. 2009 Oct;36(10):868-76. (Clinical study)
10 McGuire MK & Scheyer ET. J Periodontol. 2010 Aug;81(8):1108-17. (Clinical study)
11 NCBI Pubmed, October 2019, Search term: Bio-Oss OR Bio-Gide OR Mucograft OR Fibro-Gide, PubMed Filter "Species: Humans" (836 hits) or "Other animals" (667 hits). (Market research).
12 Sculean A, et al.: J Clin Periodontol 2007; 34(1): 72-77. (Clinical study)
13 Cardaropoli D. et. al., Int J Periodontics Restorative Dent. 2015 Sep-Oct;35(5):677-85. (Clinical study)
14 Cortellini P, Tonetti MS. J Clin Periodontol. 2009: 36: 157–163. (Clinical study)
15 Cortellini P, Tonetti MS. J Clin Peridontol. 2011: 38: 365–373. (Clinical study)
16 Degidi M et al., Clin Implant Dent Relat Res. 2009 Sep;11(3):178-82. (Clinical study)
17 Becker J et al. Clin Oral Implants Res. 2009; 20(7):742-749 (Clinical study)
18 Tal H et al. Clin Oral Implants Res. 2008; 19(3) : 295-302 (Clinical study)
19 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

swiss made

LEADING REGENERATION

Geistlich Biomaterials

Patient Information

When your back teeth are missing

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- High biofunctionality[5–8]

- These natural biomaterials were evaluated in more than 1,400 studies from countries all over the world[9].
- The safety has been assessed by international and national authorities.

Why is a treatment beneficial?

Optimized bone height

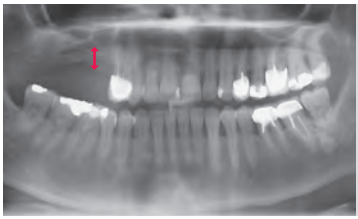
Basis for stable implants. [10,11]

Pioneering solution

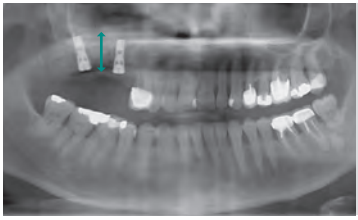
You may avoid complicated procedures in the future.[5]

Stable outcomes

Preventive procedures following tooth loss save you time and money in the long-term by preventing further grafting procedures.[12]



Lack of bone height for restorative measures.



Availability of sufficient bone height for implant placement.

Dr. Pascal Valentini (Corte, France)

What happens when your back teeth are missing?

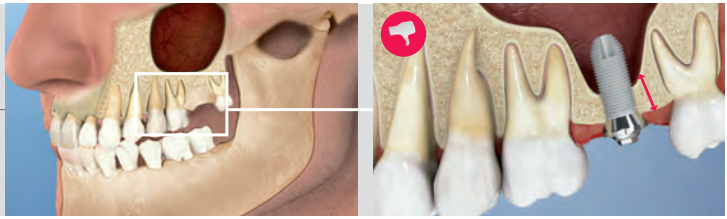
After dental extraction, the height and thickness of the jaw bone diminishes. Sufficient bone is essential to ensure the long-term stability of your dental implants.[10,11]

Gain in bone height

In the back teeth area, a procedure called sinus floor elevation leads to higher bone level for a secure insertion of implants. Your dentist will choose a suitable technique adapted for you and your clinical situation.[13]

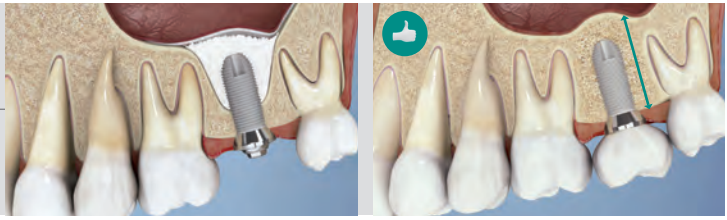
Do you wish more information?
Scan the code and watch the video:

How can back teeth be restored?



Lack of bone height

If there is insufficient bone available (↕), implants cannot be firmly anchored.



Sufficient bone height

Geistlich Bio-Oss® and Geistlich Bio-Gide® are the regenerative materials of choice when you need a sinus floor elevation.

Bone regeneration procedures are necessary to establish a sufficient bone height (↕) as a basis for secure implants.

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.

Geistlich Bio-Oss® promotes effective bone regeneration[14]

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

Geistlich Bio-Gide® protects & supports wound healing[15,16]

- Supports wound healing and provides a barrier for optimum regeneration of bone.
- Made of collagen obtained from healthy pigs.
- Swiss quality, refined through 20 years of experience.

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world:[17]

More than 15 million
Geistlich Bio-Oss®

More than 6.5 million
Geistlich Bio-Gide®

More than 200,000
Geistlich Mucograft®

More than 15,000
Geistlich Fibro-Gide®

601531/1909/EN

References

1 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
2 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
3 ISO 13485 certificate, design & development.
4 ISO 9001 certificate, distribution.
5 Jung R. et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73. (Clinical study)
6 Buser D et al., J Periodontol. 2013 Nov;84(11):1517-27. (Clinical study)
7 Jensen S.S. et al., J Periodontol. 2014 Nov;85(11):1549-56. (Clinical study)
8 Mordenfeld A. et al., Clin Oral Implants Res. 2010 Sep;21(9): 961–70. (Clinical study)
9 NCBI Pubmed, October 2019, Search term: Bio-Oss OR Bio-Gide OR Mucograft OR Fibro-Gide, PubMed Filter "Species: Humans" (836 hits) or "Other animals" (667 hits). (Market research).
10 Chrcanovic BR et al., Journal of oral rehabilitation. 2014;41(6) :443-476. (Clinical study)
11 Glauser R et al., Clinical implant dentistry and related research. 2011;3(4):204-213. (Clinical study)
12 Cardaropoli D. et. al., Int J Periodontics Restorative Dent. 2015 Sep-Oct;35(5):677-85. (Clinical study)
13 ITI Treatment Guide Volume 5, Sinus Floor Elevation Procedures. (preclinical study)
14 Degidi M et al., Clin Implant Dent Relat Res. 2009 Sep;11(3):178-82. (Clinical study)
15 Becker J et al. Clin Oral Implants Res. 2009; 20(7):742-749 (Clinical study)
16 Tal H et al. Clin Oral Implants Res. 2008; 19(3) : 295-302 (Clinical study)
17 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

swiss made

LEADING REGENERATION

Geistlich
Biomaterials

Patient Information

Tooth out – what's next?

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- High biofunctionality[5–10]

- These natural biomaterials were evaluated in more than 1,400 studies from countries all over the world.[11]
- The safety has been assessed by international and national authorities.

Why are preventive measures beneficial?

Smile again

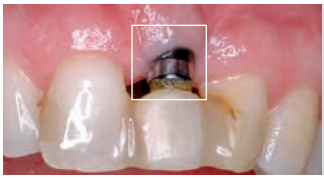
Aesthetically pleasing outcomes & maintenance of healthy teeth.[12,13]

Flexibility

In the choice of the final dental prosthesis (implants, bridge restoration).[14]

Stable outcomes

Preventive procedures following tooth loss save you time and possible complications in the long-term by preventing further grafting procedures.[15]



Without preventive measures

Prof. Sculean (Berne, Switzerland)

With preventive measures

Dr. Coutinho Alves (Porto, Portugal)

What happens after tooth removal?

Do you wish more information? Scan the code and watch the video:

Tooth removal

Following tooth removal

The bone retains its shape as before tooth extraction (lines).

Without preventive measures

Collapse of the socket over time due to natural resorption of the bone by the own body.

Implant restoration

Poor aesthetics with implant placement, due to significantly less bone volume.

Bridge restoration

Formation of an unattractive gap between the bridge and underlying gums.

With preventive measures

Filling the socket with Geistlich biomaterials regenerates bone and so retains the volume and shape of the bone over time.

Aesthetic outcome

Preventive measures with Geistlich biomaterials allow flexibility in choosing the final restoration (implants / bridge restoration).

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.

Geistlich Bio-Oss® promotes effective bone regeneration[16]

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

Geistlich Bio-Gide® protects & supports wound healing[17,18]

- Supports wound healing and provides a barrier for optimum regeneration of bone.
- Made of collagen obtained from healthy pigs.
- Swiss quality, refined through 20 years of experience.

Choice

Your dentist will choose the appropriate material in order to achieve an optimum outcome.

Geistlich Mucograft® Seal for gum regeneration[14,19,20]

- Seals the hole after tooth extraction and helps your body to regenerate your own gums.
- Made of collagen obtained from healthy pigs.
- Winner of the Swiss IHZ-Innovation Award 2014: first product developed specifically for gum regeneration.

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world:[21]

More than 15 million
Geistlich Bio-Oss®

More than 6.5 million
Geistlich Bio-Gide®

More than 200,000
Geistlich Mucograft®

More than 15,000
Geistlich Fibro-Gide®

601513/1909/EN

References

1 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
2 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
3 ISO 13485 certificate, research and development
4 ISO 9001 certificate, multi site quality management
5 Jung R. et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73. (Clinical study)
6 Buser D et al., J Periodontol. 2013 Nov;84(11):1517-27. (Clinical study)
7 Jensen S.S. et al., J Periodontol. 2014 Nov;85(11):1549-56. (Clinical study)
8 Mordenfeld A. et al., Clin Oral Implants Res. 2010 Sep;21(9): 961–70. (Clinical study)
9 Sanz M, et al. J Clin Periodontol. 2009 Oct;36(10):868-76. (Clinical study)
10 McGuire MK & Scheyer ET. J Periodontol. 2010 Aug;81(8):1108-17. (Clinical study)
11 NCBI Pubmed, July 2019, Search term: Bio-Oss OR Bio-Gide OR Mucograft OR Fibro-Gide, PubMed Filter "Species: Humans" (830 hits) or "Other animals" (665 hits) (Market research).
12 Chambrone, L., F. Sukekava, et al. (2009). Cochrane Database Syst Rev(2): CD007161 (Clinical study).
13 Cairo F, et al. J Clin Periodontol. 2008 Sep;35(8 Suppl):136-62 (Clinical study).
14 Fickl S, et al. Int J Periodontics Restorative Dent. 2018 Jan/Feb;38(1):e1-e7. (Clinical Study)
15 Cardaropoli D. et. al., Int J Periodontics Restorative Dent. 2015 Sep-Oct;35(5):677-85. (Clinical Study)
16 Degidi M et al., Clin Implant Dent Relat Res. 2009 Sep;11(3):178-82. (Clinical study)
17 Becker J et al. Clin Oral Implants Res. 2009; 20(7):742-749 (Clinical study)
18 Tal H et al. Clin Oral Implants Res. 2008; 19(3) : 295-302 (Clinical study)
19 Jung R, et al.: J. Clin Periodontol 2013; 40(1): 90-98. (Clinical study)
20 Thoma D, et al.: J. Clin Periodontol 2012; 39: 157-65. (Clinical study)
21 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

swiss made

LEADING REGENERATION

Geistlich Biomaterials

Patient Information

Exposed tooth roots – now what?

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- High biofunctionality[5–10]

- These natural biomaterials were evaluated in more than 1,400 studies from countries all over the world[11].
- The safety has been assessed by international and national authorities.

Why is a treatment beneficial?

Smile again

Aesthetically pleasing outcomes & maintenance of healthy teeth. [10, 12-14]

Less pain & fewer complications

No harvesting of own tissue from the palate. [10, 15-18]

Less surgical chair time

With Geistlich Mucograft® the surgical chair time is clearly reduced.[12,15]

Exposed tooth root before treatment.

Completely covered tooth root with Geistlich Mucograft® 3 months after surgery.

Dr. McGuire & Dr. Scheyer (Houston, USA)

What happens with exposed tooth roots?

If exposed tooth roots and their causes are left untreated, several oral health problems like root hypersensitivity, aesthetic or functional deficiencies, gum inflammation, tooth root caries and impaired oral hygiene can occur.[19,20]

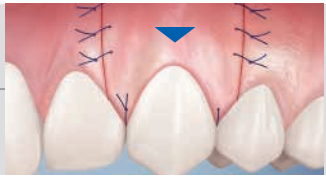
Moderately exposed tooth root.

Progression without treatment.

How can exposed tooth roots be treated?

Initial situation showing a moderately exposed tooth root.

Preparation of the surgical site: creation of a flap to uncover the affected area and a Geistlich Mucograft® is used to cover the exposed tooth root.



Covering the surgical site by mobilizing the flap downwards and suturing.

Outcome of a completely covered tooth root (result may vary).

Solution

Exposed tooth roots can often be treated with a suitable surgical approach. Your dentist will advise you on treatment individually adapted for you.

It is important to address existing infections before surgical treatment. Your dentist will advise you on appropriate measures individually adapted for you.

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.

Geistlich Mucograft® for gum regeneration [9,10,15]

- A scaffold upon which your body can regenerate your own gums.
- Made of collagen obtained from healthy pigs.
- Winner of the Swiss IHZ-Innovation Award 2014: first product developed specifically for gum regeneration.

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world: [21]

More than 15 million
Geistlich Bio-Oss®

More than 6.5 million
Geistlich Bio-Gide®

More than 200,000
Geistlich Mucograft®

More than 15,000
Geistlich Fibro-Gide®

601543/1909/EN

References

1 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
2 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
3 ISO 13485 certificate, research and development
4 ISO 9001 certificate, multi site quality management
5 Jung R. et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73. (Clinical study)
6 Buser D et al., J Periodontol. 2013 Nov;84(11):1517-27. (Clinical study)
7 Jensen S.S. et al., J Periodontol. 2014 Nov;85(11):1549-56. (Clinical study)
8 Mordenfeld A. et al., Clin Oral Implants Res. 2010 Sep;21(9): 961–70. (Clinical study)
9 Sanz M, et al. J Clin Periodontol. 2009 Oct;36(10):868-76. (Clinical study)
10 McGuire MK & Scheyer ET. J Periodontol. 2010 Aug;81(8):1108-17. (Clinical study)
11 NCBI Pubmed, July 2019, Search term: Bio-Oss OR Bio-Gide OR Mucograft OR Fibro-Gide, PubMed Filter "Species: Humans" (830 hits) or "Other animals" (665 hits) (Market research).
12 Schmitt CM.et al. Clin Oral Implants Res. 2016 Nov;27(11):e125-e133. (Clinical study)
13 Lorenz J, et al. Clin Oral Investig. 2017 May;21(4):1103-1111. (Clinical study)
14 Urban IA, et al. Int J Periodontics Restorative Dent. 2015 May-Jun;35(3):345-53. (Clinical study)
15 Cardaropoli D, et al. J Periodontol. 2012 Mar;83(3):321–8. (Clinical study)
16 Del Pizzo M, et al. J Clin Periodontol. 2002 Sep;29(9):848-54. (Clinical study)
17 Soileau KM & Brannon RB. J Periodontol. 2006 Jul;77(7):1267-73. (Clinical study)
18 Griffin TJ, et al. J Periodontol. 2006 Dec;77(12):2070-9. (Clinical study)
19 Chambrone L, et al.: Cochrane Database Syst Rev (2): CD007161. (Systematic review)
20 Bignozzi I, et al.: J Periodontal Res. 2014; 49(2): 143-63. (Review)
21 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

swiss made

LEADING REGENERATION

Geistlich
Biomaterials

Patient Information

Inflamed gums – now what?

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- High biofunctionality[10]

- These natural biomaterials were evaluated in more than 1,400 studies from countries all over the world.[11]
- The safety has been assessed by international and national authorities.

Why is a treatment beneficial?

Smile again

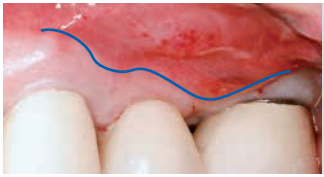
Aesthetically pleasing outcomes & maintenance of healthy teeth.[10, 12–14]

Less pain & fewer complications

No harvesting of own tissue from the palate.[10, 15–18]

Less surgical chair time

With Geistlich Mucograft® the surgical chair time is clearly reduced.[12, 15]



Initial situation before treatment

Due to inflammation and bleeding the oral hygiene is impaired.

6 month after surgery

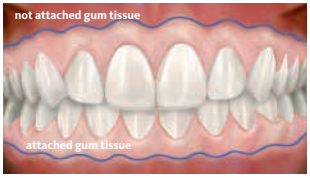
Restored healthy attached gum tissue with Geistlich Mucograft®.

Dr. Panaite & Dr. Charles (Pasadena, USA)

What happens when gum tissue is not healthy?

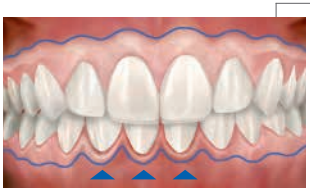
If you have insufficient healthy attached gum tissue, several oral health problems like inflammation, pain, bleeding and loss of bone and gums can occur.[19–22]

Healthy situation

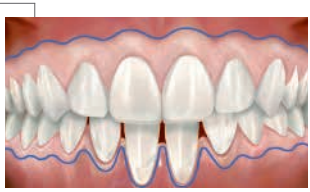


Healthy gums allow optimal oral hygiene for maintenance of bone and gums.

Problematic situation



Shifted boundaries between attached and unattached gum tissue can lead to problems.

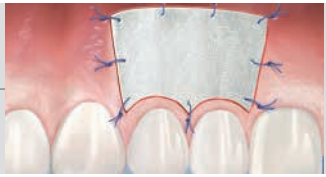


Exposed tooth necks are one of the consequences of unhealthy gum tissue.

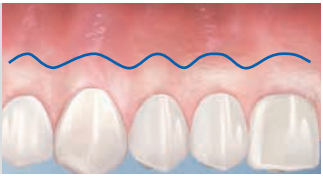
How can gum tissue be regenerated?

Initial situation showing an inflamed area in the gum.

Preparation of the surgical site: unhealthy gum tissue is removed.



Following the preparation, Geistlich Mucograft® is used to help regenerate attached gum tissue.



Restored, healthy attached gum tissue 6 months after surgery (results may vary).

Solution

An increase in gum tissue can be achieved by a suitable surgical approach.
Your dentist will advise you on treatment individually adapted for you.

It is important to address existing infections before surgical treatment. Your dentist will advise you on appropriate measures individually adapted for you.

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.

Geistlich Mucograft® for gum regeneration [9,10,15]

- A scaffold upon which your body can regenerate your own gums.
- Made of collagen obtained from healthy pigs.
- Winner of the Swiss IHZ-Innovation Award 2014: first product developed specifically for gum regeneration.

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world: [23]

More than 15 million
Geistlich Bio-Oss®

More than 6.5 million
Geistlich Bio-Gide®

More than 200,000
Geistlich Mucograft®

More than 15,000
Geistlich Fibro-Gide®

601537/1909/EN

References

1 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
2 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
3 ISO 13485 certificate, research and development
4 ISO 9001 certificate, multi site quality management
5 Jung R. et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73. (Clinical study)
6 Buser D et al., J Periodontol. 2013 Nov;84(11):1517-27. (Clinical study)
7 Jensen S.S. et al., J Periodontol. 2014 Nov;85(11):1549-56. (Clinical study)
8 Mordenfeld A. et al., Clin Oral Implants Res. 2010 Sep;21(9): 961–70. (Clinical study)
9 Sanz M, et al. J Clin Periodontol. 2009 Oct;36(10):868-76. (Clinical study)
10 McGuire MK & Scheyer ET. J Periodontol. 2010 Aug;81(8):1108-17. (Clinical study)
11 NCBI Pubmed, July 2019, Search term: Bio-Oss OR Bio-Gide OR Mucograft OR Fibro-Gide, PubMed Filter "Species: Humans" (830 hits) or "Other animals" (665 hits) (Market research).
12 Schmitt CM.et al. Clin Oral Implants Res. 2016 Nov;27(11):e125-e133. (Clinical study)
13 Lorenz J, et al. Clin Oral Investig. 2017 May;21(4):1103-1111. (Clinical study)
14 Urban IA, et al. Int J Periodontics Restorative Dent. 2015 May-Jun;35(3):345-53. (Clinical study)
15 Cardaropoli D, et al. J Periodontol. 2012 Mar;83(3):321–8. (Clinical study)
16 Del Pizzo M, et al. J Clin Periodontol. 2002 Sep;29(9):848-54. (Clinical study)
17 Soileau KM & Brannon RB. J Periodontol. 2006 Jul;77(7):1267-73. (Clinical study)
18 Griffin TJ, et al. J Periodontol. 2006 Dec;77(12):2070-9. (Clinical study)
19 Schrott AR, et al.: Clin Oral Implants Res 2009; 20(10): 1170-77. (Clinical study)
20 Chung DMT, et al.: J Periodontol 2006; 77(8): 1410-20. (Clinical study)
21 Schwarz F, et al.: J Periodontol 2018; 89 Suppl 1: S267-S290. (Review)
22 Greenstein G, Cavallaro J: Compend Contin Educ Dent 2011; 32(8): 24-31. (Review)
23 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

swiss made

LEADING REGENERATION

Geistlich Biomaterials

Lost gum around teeth?

How to solve esthetical and sensitivity demands

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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. 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.
- Do not interfere with the surgical wound, or with sutures.

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- Unique biofunctionality[5–8]

- These natural biomaterials were evaluated in more than 1,000 studies from countries all over the world.
- The safety has been assessed by international and national authorities.

Why is a treatment beneficial?

Smile again

Esthetically pleasing outcomes & maintenance of healthy teeth.

Less pain perception and analgetics intake

No harvesting of own tissue from the palate.[9]

Less surgical chair time

With Geistlich Fibro-Gide® the surgical chair time is reduced.[9]

Initial situation before treatment
Exposed tooth root that causes several oral health problems e.g. root hypersensitivity and esthetic or functional deficiencies.

6 month after surgery
Restored function and esthetics by a completely covered tooth root with Geistlich Fibro-Gide®.

Prof. Zucchelli (Bologna, Italy)

What happens with exposed tooth roots?

If exposed tooth roots and their causes are left untreated, several oral health problems like root hypersensitivity, esthetic or functional deficiencies, gum inflammation, tooth root caries and impaired oral hygiene can occur.

Exposed tooth root.

How can exposed tooth roots be treated?

Initial situation showing moderately exposed tooth root.

Preparation of the surgical site to uncover the affected area and...

...insertion of Geistlich Fibro-Gide® to cover the exposed tooth root.

Covering the surgical site by mobilizing the flap upwards and suturing.

Final outcome of a completely covered tooth root (result may vary).

Solution

Exposed tooth roots can often be treated with a surgical approach.
Your dentist will advise you on treatment individually adapted for you.

It is important to address existing infections before surgical treatment. Your dentist will advise you on appropriate measures individually adapted for you.

Geistlich Biomaterials

Human body possesses the ability to regenerate, in other words, to rebuild missing tissue. In most cases it still needs assistance through a scaffold which serves as a template. The natural Geistlich products support the body's own tissue regeneration processes effectively.

Geistlich Fibro-Gide® for gum thickness

- A scaffold upon which your body can regenerate your own gums and its thickness.
- Made of collagen from healthy pigs.
- Winner of the KTI Swiss MedTech Award 2008: first collagen matrix designed for gaining gum thickness.[10,11]

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world[12]:

More than 10 million
Geistlich Bio-Oss®

More than 4.5 million
Geistlich Bio-Gide®

More than 80,000
Geistlich Mucograft®

More than 24,000
Geistlich Mucograft® Seal

New
Geistlich Fibro-Gide®

601851/1805/EN

References

1 iData Research Inc., US Dental Bone Graft Substitutes and other Biomaterials Market, 2013.
2 iData Research Inc., European Dental Bone Graft Substitutes and other Biomaterials Market, 2015.
3 ISO 13485 certificate, research and development.
4 ISO 9001 certificate, multi site quality management.
5 Jung R. et al. Clin Oral Implants Res. 2013 Oct;24(10):1065–73 (clinical).
6 Buser D et al. J Periodontol. 2013 Nov;84(11):1517-27 (clinical).
7 Jensen S.S. et al. J Periodontol. 2014 Nov;85(11):1549-56 (clinical).
8 Mordenfeld A. et al. Clin Oral Implants Res. 2010 Sep;21(9): 961–70 (clinical).
9 Thoma DS. et al. J Clin Periodontol. 2016 Oct; 43(10): 874 -85 (clinical).
10 European Patent Specification - EP 3 055 000 B1.
11 Data on file. Geistlich Pharma AG, Wolhusen, Switzerland.
12 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

LEADING REGENERATION

Geistlich Biomaterials

Missing gum at dental prosthesis?

How to solve esthetical and hygienic demands

Back to a healthy smile

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

Do's

- Maintain your oral hygiene and use antibacterial mouth wash as prescribed by your dentist.
- Treat swelling with moist-cold 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. 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.
- Do not interfere with the surgical wound or with sutures.

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials. Let us share some facts with you about these products:

- 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.

Geistlich Biomaterials

- Your worldwide no. 1 reference[1,2]
- Outstanding quality[3,4]
- Unique biofunctionality[5–8]

- These natural biomaterials were evaluated in more than 1,000 studies from countries all over the world.
- The safety has been assessed by international and national authorities.

Why is a treatment beneficial?

Smile again

Esthetically pleasing outcomes & maintenance of healthy teeth.

Less pain perception and analgetics intake

No harvesting of own tissue from the palate.[9]

Less surgical chair time

With Geistlich Fibro-Gide® the surgical chair time is reduced.[9]

Initial situation before treatment

Beside the unpleasent esthetics, the gum concavity complicates oral hygiene.

2 years after surgery

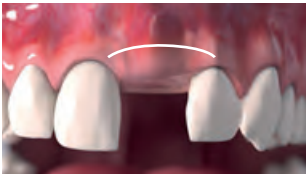
Restored function and esthetics by gaining gum thickness with Geistlich Fibro-Gide®.

Dr. Otto Zuhr (Munich, Germany)

What happens when gum tissue is not healthy?

If you have insufficient gum thickness, several problems like difficulties while cleaning or unpleasant esthetic appearance can occur.

Healthy situation



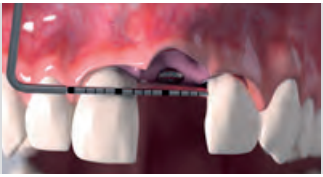
Healthy gums allow optimal oral hygiene and contribute to a pleasant esthetic appearance.

Problematic situation

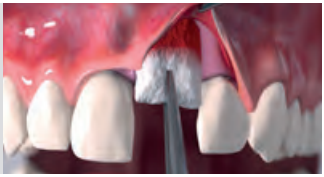
A concavity of the gum leads to unpleasant esthetics and difficulties with proper oral hygiene.

How can gum tissue be regenerated?

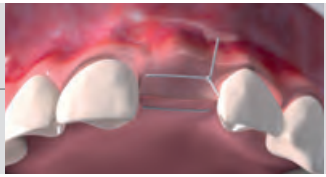
Initial situation showing a concavity of the gum due to missing gum tissue.



Preparation of the surgical site and...



... insertion of Geistlich Fibro-Gide®.



Closing the wound with sutures in order to allow wound healing.

Final outcome of a restored gum with sufficient thickness (results may vary).

Solution

An increase in gum thickness can be achieved by a surgical approach.
Your dentist will advise you on treatment individually adapted for you.

Geistlich Biomaterials

Human body possesses the ability to regenerate, in other words, to rebuild missing tissue. In most cases it still needs assistance through a scaffold which serves as a template. The natural Geistlich products support the body's own tissue regeneration processes effectively.

Geistlich Fibro-Gide®
for gum thickness

- A scaffold upon which your body can regenerate your own gums and its thickness.
- Made from collagen from healthy pigs.
- Winner of the KTI Swiss MedTech Award 2008: first collagen matrix designed for gaining gum thickness.[10,11]

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are the most frequently used materials in regenerative dental medicine throughout the world:[12]

More than 10 million
Geistlich Bio-Oss®

More than 4.5 million
Geistlich Bio-Gide®

More than 80,000
Geistlich Mucograft®

More than 24,000
Geistlich Mucograft® Seal

New
Geistlich Fibro-Gide®

601845/1805/EN

References

1 iData Research Inc., US Dental Bone Graft Substitutes and other Biomaterials Market, 2013.
2 iData Research Inc., European Dental Bone Graft Substitutes and other Biomaterials Market, 2015.
3 ISO 13485 certificate, research and development.
4 ISO 9001 certificate, multi site quality management.
5 Jung R. et al. Clin Oral Implants Res. 2013 Oct;24(10):1065–73 (clinical).
6 Buser D et al. J Periodontol. 2013 Nov;84(11):1517-27 (clinical).
7 Jensen S.S. et al. J Periodontol. 2014 Nov;85(11):1549-56 (clinical).
8 Mordenfeld A. et al. Clin Oral Implants Res. 2010 Sep;21(9): 961–70 (clinical).
9 Thoma DS. et al. J Clin Periodontol. 2016 Oct; 43(10): 874 -85 (clinical).
10 European Patent Specification – EP 3 055 000 B1.
11 Data on file. Geistlich Pharma AG, Wolhusen, Switzerland.
12 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)

Manufacturer
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

For more information about our distribution partners:

LEADING REGENERATION

Geistlich Biomaterials

Patient Information

Customized 3D treatment of larger bone defects

Dental treatments are a matter of trust

Our experience and expertise is something you can rely on

Over 10 million patients worldwide have been treated with Geistlich biomaterials.

- 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 1,000 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 additional covered by a collagen membrane, that supports gum healing and the bone regeneration.

Why is a treatment beneficial?

Smile again

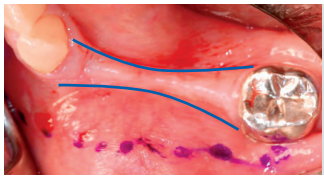
Aesthetically pleasing outcomes & maintenance of healthy teeth.

Restoring functionality

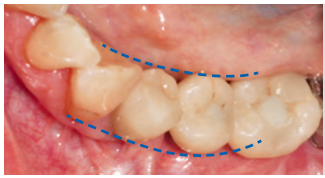
Predictable bone gain for long-term implant survival with Geistlich Biomaterials®.[1-3]

Stable outcomes

Less bone resorption & stable clinical outcomes with Geistlich Biomaterials®.[4-8]



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

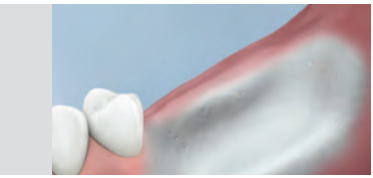
Sufficient bone is essential for long term implant stability. With the 3D printed titanium scaffold Yxoss CBR® an individual restoration of your original jaw bone in width and height can be established.

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.

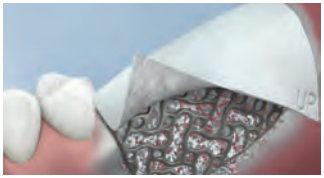
Insufficient width of the bone wall



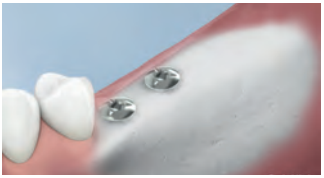
Large bone defects where one bone wall is maintained can be restored...

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.

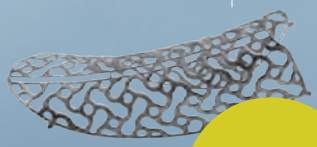
Biomaterials, such as bone substitutes, collagen membranes and matrices, are used regularly in regenerative dentistry to support the body's own tissue regeneration process effectively.

The bone substitute promotes effective bone regeneration[9]

- 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.

The membrane protects & supports wound healing[10,11]

- Supports wound healing and provides a barrier for optimum regeneration of bone.
- 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 titanium[12]
- 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.

Back to a healthy smile

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

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.
- 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.

Geistlich
Biomaterials

Biomaterials from Geistlich Pharma AG are among the most frequently used products in regenerative dental medicine throughout the world[13-15]

Manufacturer of regenerative biomaterials
© **Geistlich Pharma AG**
Business Unit Biomaterials
Bahnhofstrasse 40
CH-6110 Wolhusen
Phone +41 41 492 56 30
Fax +41 41 492 56 39
www.geistlich-biomaterials.com

601758/1909/en

New Technology
Manufactured by ReOss®
Yxoss CBR®

Manufacturer of Yxoss CBR®
ReOss® GmbH
Talstrasse 23
D-70794 Filderstadt
www.reoss.eu

For more information:

References
1 Urban IA et al., Int J Periodontics Restorative Dent. 2013 May-Jun;33(3):299–307 (Clinical study)
2 Chiapasco M et al., Clin Oral Implants Res. 2012 Sep;23(9):1012–21 (Clinical study)
3 Jung RE et al., Clin Oral Implants Res. 2013 Oct;24(10):1065–73 (Clinical study)
4 von Arx T et al., Clin Oral Implants Res. 2006 Aug;17(4):359–66 (Clinical study)
5 Canullo L et al., Int J Periodontics Restorative Dent. 2006 Aug;26(4):355–61 (Clinical study)
6 Maiorana C et al., Int J Oral Maxillofac Implants. 2005 Mar-Apr;20(2):261–6 (Clinical study)
7 Maiorana C et al., Open Dent J. 2011 Apr 25;5:71–8 (Clinical study)
8 Cordaro L et al., Clin Oral Implants Res. 2011 Oct;22(10):1145–50 (Clinical study)
9 Degidi M et al., Clin Implant Dent Relat Res. 2009 Sep;11(3):178-82. (Clinical study)
10 Becker J et al. Clin Oral Implants Res. 2009; 20(7):742-749 (Clinical study)
11 Tal H et al. Clin Oral Implants Res. 2008; 19(3) : 295-302 (Clinical study)
12 ISO 5832/8 and ISO 5832/34 certificate
13 Millennium Research Group, Dental Biomaterials North America, 2018 (Market research).
14 Millennium Research Group, Dental Biomaterials Europe, 2016 (Market research).
15 Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)