LEADING REGENERATION



Reinforce, Revascularize, Regenerate



Facing challenges with vertical augmentations...



Stability

Vertical defects are difficult to treat and stabilise ¹
Space-making elements are required¹



Vascularization

> Larger bone volumes are challenging to re-vitalize²

> Complete vascularization of the graft is key for new bone formation¹

Bone Volume

 Insufficient bone volume may not allow proper implant placement and proximity to the mandibular nerve is challenging³

> Esthetic: additional bone augmentation is required in 90% of implant surgical sites⁴

... and the consequences if no appropriate measures are taken



- > Collapse of non-reinforced membranes alone will result in insufficient bone volume¹
- > Space making ability is key for vertical bone augmentation¹



- Conventional PTFE barriers membranes represent an established approach to rebuild vertical height¹, but:
- > Do not allow revascularization from the surrounding periosteum⁵

- Placing an implant in the available bone, but not in the correct prosthetic position, can compromise the long-term success⁶
- > Bone regeneration using fast resorbing biomaterials can compromise the extent of bone volume maintenance⁷ and long-term success⁸

Perforation

allow natural **revascularization** and infiltration of cells from periosteum into the bone graft

O PTFE Mesh

easily conforms to tissue contours

Titanium Frame

maintains space essential for vertical ridge augmentation

O Special non-perforated side for lingual

Designed to decrease soft tissue ingrowth facilitating easier removal

Geistlich Bio-Gide[®]

Revascularization

The natural collagen structure of Geistlich Bio-Gide[®] permits prompt and homogeneous vascularization and offers optimal tissue integration and wound stabilisation .⁹

Prevents soft tissue ingrowth

The smooth side of Geistlich Bio-Gide[®] prevents soft tissue from growing into the defect and serves as a scaffold for the attachment of fibroblasts.^{9, 10, 11, 12, 13}

Soft tissue assurance

Potential exposures can be anticipated by covering non-resorbable mesh with Geistlich Bio-Gide[®] to get better soft tissue healing.^{11,14}

Geistlich Bio-Oss

Bimodal pore structure¹⁵

This characteristic initiates high level bone formation on the surface of Geistlich Bio-Oss[®].¹⁶

The regenerative potential

The excellent results of Guided Bone Regeneration with Geistlich Bio-Oss[®] and Geistlich Bio-Gide[®] are largely due to their unsurpassed Biofunctionality.^{8, 17, 18, 19, 20}

100% commitment to tissue regeneration

Numerous trials confirm outstanding long-term results and stable esthetic results with Geistlich Bio-Oss[®] for your patients.^{8, 17, 22}

Vertical Ridge Augmentation treated with Geistlich Bio-Gide[®], Geistlich Bio-Oss[®] and RPM[™]



"With the new RPM™, I get as close as possible to the results of vital regenerated bone as with the Sausage Technique™, but for vertical bone augmentation."

Surgery by Dr. Istvan Urban (Hungary)



- Elgali I et al. Eur J Oral Sci. 2017 Oct;125(5):315-337 (clinical review)
- Fernandez de Grado G et al. | Tissue Eng. 2018 |un 4;9:2041731418776819 2 (clinical and pre-clinical review)
- Chiapasco M et al. Clin Oral Implants Res. 2018 Jul;29(7):725-740 (clincal study)
- Lang NP et al. Clin Oral Implants Res. 2007 Apr:18(2):188-96 (clinical study) Δ
- De Marco AC et al. Int J Oral Maxillofac Implants. 2005 Nov-Dec;20(6):867-74 (pre-clinical) 5
- 6 Chiapasco M & Casentini P. Periodontol 2000. 2018 Jun;77(1):213-240 (clinical review)
- Schneider D et al. J Clin Periodontol. 2014 Jun;41(6):612-7 (clinical study)
- Jung RE et al. Clin Oral Implants Res. 2013 Oct;24(10):1065-73 (clinical study)
- Rothamel D et al. Clin Oral Implants Res. 2005 Jun;16(3):369-78 (pre-clinical study)
- Schwarz F et al. Clin Oral Implants Res. 2006 Aug;17(4):403-9 (pre-clinical study) 10
- Tal H et al. Clin Oral Implants Res. 2008 Mar;19(3):295-302 (clinical study) 11
- 20 Degidi M et al. Oral Dis. 2006 Sep;12(5):469-75 (clinical study) 21 Degidi M et al. Clin Implant Dent Relat Res. 2009 Sep;11(3):178-82 (clinical study)

12

13

14

15

17

19

22 Buser D et al. | Periodontol, 2013 Nov:84(11):1517-27 (clinical study)

16 Traini T et al. J Periodontol. 2007 May;78(5):955-61 (clinical study)

Orsini G et al. Oral Dis. 2007 Nov;13(6):586-93 (clinical study)

Rothamel D et al. Clin Oral Implants Res. 2004 Aug;15(4):443-9 (pre-clinical study)

18 Galindo-Moreno P et al. Clin Oral Implants Res. 2010 Feb;21(2):221-7 (clinical study)

Becker J et al. Clin Oral Implants Res. 2009 Jul;20(7):742-9 (clinical study)

Jensen SS et al. J Periodontol. 2014 Nov;85(11):1549-56 (clinical study)

Data on file. Geistlich Pharma AG. Switzerland

Geistlich Biomaterials



More details about our distribution partners: www.geistlich-biomaterials.com

Manufacturer of regenerative biomaterials Geistlich Pharma AG

Business Unit Biomaterials Bahnhofstrasse 40 6110 Wolhusen, Switzerland Phone +41 41 492 55 55 Fax +41 41 492 56 39 www.geistlich-biomaterials.com

Affiliate Great Britain and Ireland Geistlich Sons Limited 1st Floor, Thorley House Bailey Lane Manchester Airport Manchester M90 4AB, Great Britain Phone +44 161 490 2038 Fax +44 161 498 6988 info@geistlich.co.uk www.geistlich.co.uk

Manufacturer of RPM™ Osteogenics Biomedical 4620 71st St #78 Lubbock, TX 79424 USA **RPM™ – Size Configuration**

Versatile Rectangular Shapes



RPM250PSE 20 x 25 mm

RPM250XLKME

30 x 40mm

RPM250PLTE

30 x 41mm



25 x 30 mm

RPM250K2E

40 x 50 mm

Interproximal Shapes



RPM250XLE 30 x 40mm

RPM250BLE

17 x 25 mm

RPM250XLKE 30 x 40mm

Shapes with Fixation Points





RPM250PSTE 25 x 36 mm



RPM250PTCE 38 x 38mm



RPM250PDMLE 38 x 38mm

38 x 38mm

RPM250PTCME

RPM250PDE 38 x 38 mm **RPM250PDMRE** 38 x 38 mm

RPM250ATCME

24 x 38mm

x 38mm

Geistlich Biomaterials

Bone Substitudes

Caller Bio-Oss Mandalar Mandal

Geistlich Bio-Oss®

0.25-1mm

1.00-2 mm



Membranes

Geistlich Bio-Gide[®] 13 x 25mm 25 x 25mm 30 x 40mm Matrices



Geistlich Fibro-Gide[®] 15 x 20 x 6 mm 20 x 40 x 6 mm 602075/2005/en © 2020 Geistlich Pharma AG – Subject to modifications







> Find more products here:





RPM250ATCE