

# Geistlich Bio-Oss<sup>®</sup> Collagen and Geistlich Bio-Gide<sup>®</sup> in Extraction Sockets

**+35%**  
horizontal volume<sup>1</sup>



WINNER STUDY<sup>1</sup>  
AAP CLINICAL  
RESEARCH  
AWARD 2017



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**What was the main focus of this study?**

To compare two methods and four materials with an RCT treating severe buccal blow out lesions from perio- and endo- failures.

Using an acid test to provide a powerful comparison between two well-known treatment modalities in the USA and Europe.

**Which finding of the study impressed you most?**

If I had to limit my reply it would be the soft-tissue healing and histological outcomes, but the superior horizontal ridge augmentation gain was pretty impressive for the xenogeneic bone graft group.

**From your experience: Which aspect of the study is of most relevance for a clinician and his patients?**

So many: soft-tissue, patient outcomes, histological outcomes, gap wound healing outcomes. Really all we want to know about ridge augmentation in a severe defect model within a human clinical trial.

**What makes the study special for you?**

With 10 centers, 40 patients, 6 months follow up, cores retrieved and implants placed in 14 months. Then an award winning paper published in less than one year. This has been beyond my dreams when it comes to the big clinical research vision we have at iMc and PHP.

**For more information visit:**

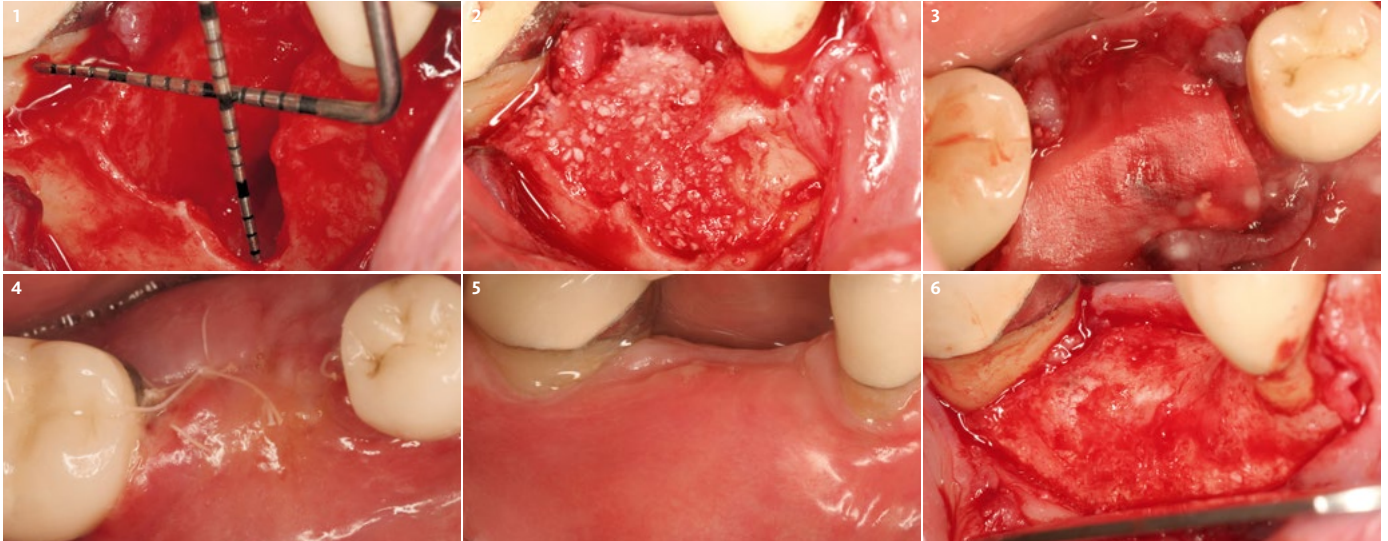
**[Mcguireinstitute.org](http://mcguireinstitute.org) or [periohealth.com](http://periohealth.com)**



# Your surgical expertise

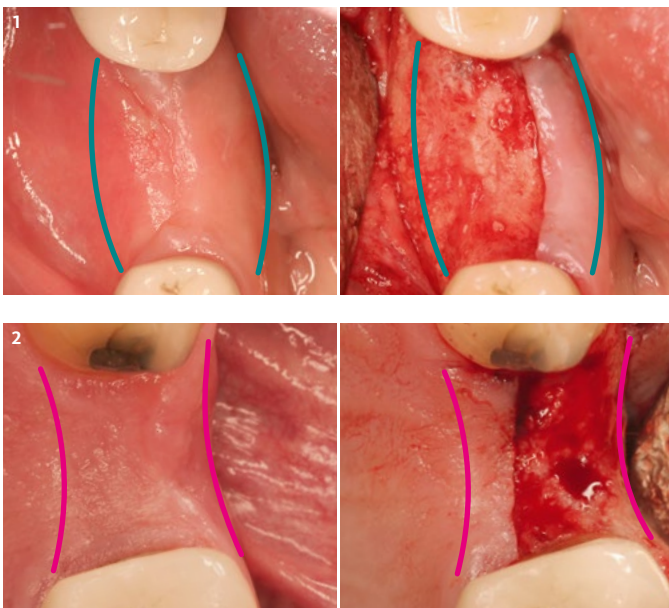


Clinical case by Dr. Diego Velasquez I Fenton (USA), Co-author



- 1 Buccal view of extended post-extraction defect with buccal dehiscence in Region 46.
- 2 Complete filling of the socket with Geistlich Bio-Oss® Collagen after debridement to preserve ridge volume.
- 3 Application of Geistlich Bio-Gide® for protection from soft-tissue ingrowth and mechanical dislocation.
- 4 Soft tissue flap is securely closed over the augmented area. Good soft tissue healing at 1 week post-op.
- 5 Buccal view of the preserved ridge at 6 months with good soft tissue status and stable ridge volume.
- 6 Buccal view after flap elevation shows good bony result with successful integration of the bone graft material.

## Key to success – Our expert products



- 1 Occlusal view of well-preserved ridge 6 months after treatment with Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® before and after flap elevation.
- 2 Occlusal view of a resorbed ridge 6 months after treatment with an allograft<sup>2</sup> and a cross-linked membrane<sup>3</sup> before and after flap elevation.

1 Treatment of extraction sockets with buccal bone defect with Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® resulted in 35% more horizontal ridge volume after 6 months of healing. (Picture 1)

Implants can be placed without re-grafting at time of implant placement.<sup>1</sup>

2 Treatment with a combination of a demineralized allograft<sup>2</sup> covered with a reconstituted artificially cross-linked collagen membrane<sup>3</sup> resulted in lower ridge dimensions (Picture 2) after 6 months. This is statistically significant linked to a higher soft-tissue inflammation on average at 1 week healing time.<sup>1</sup>

14% of implants could not be placed without a re-grafting at time of implant placement.<sup>1</sup>



# Handing over to nature

## Geistlich Bio-Gide® – protecting your success

No foreign body reaction including multinucleated giant cells<sup>4,5</sup>

Significantly more side effects occurred with an extended life collagen membrane such as wound dehiscences or inflammations<sup>6</sup>

Protects your bone graft from soft-tissue ingrowth<sup>6</sup> and mechanical dislocation<sup>7</sup>

Increased volume of regenerated bone by protection of Geistlich Bio-Gide®<sup>7,8</sup>

REGENERATIVE SURGERY

6 MONTH RESULT

**+35%**  
horizontal volume

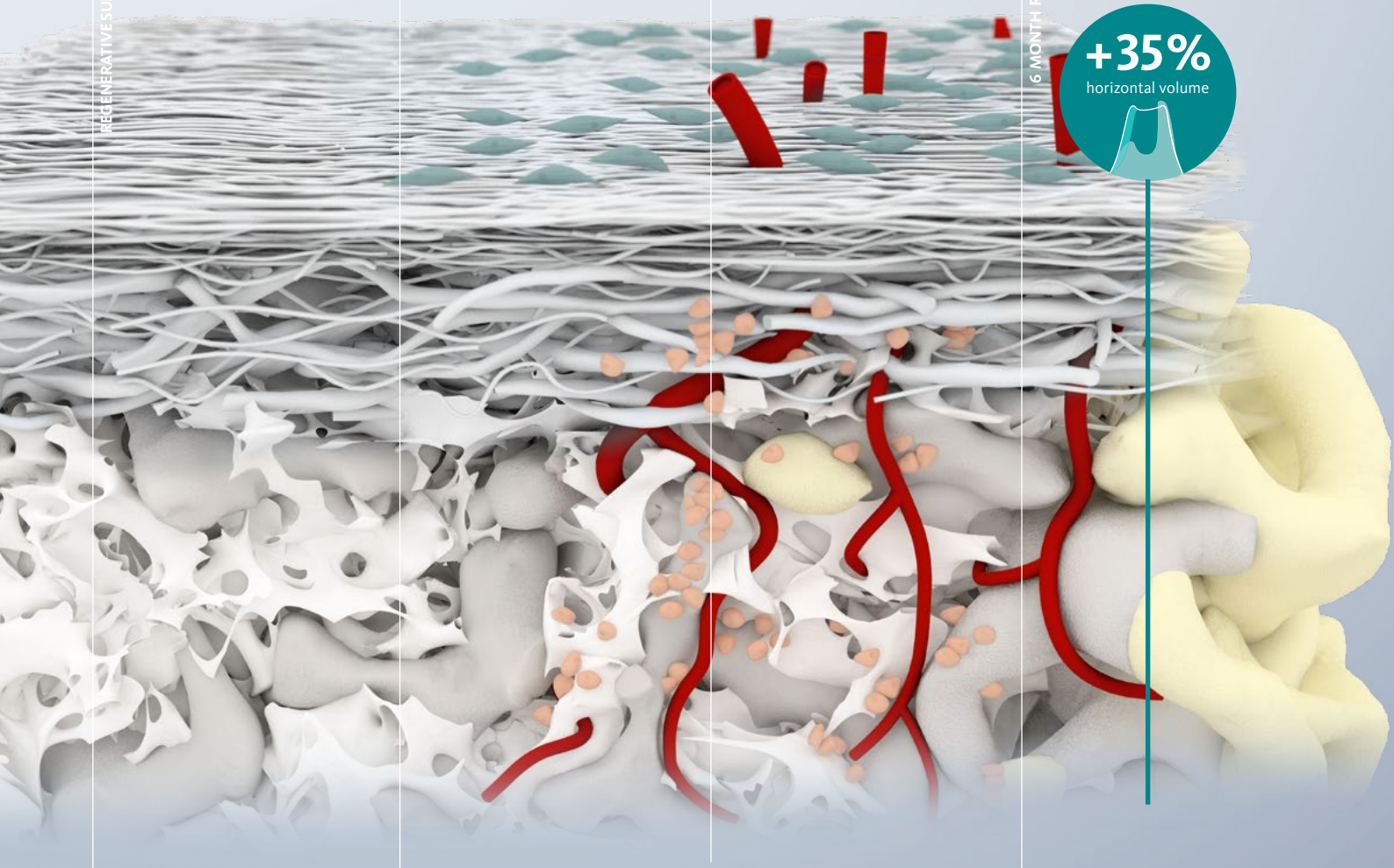
## Geistlich Bio-Oss® Collagen – grafting a solid foundation

High bone volume stability is crucial for long-term implant survival rate<sup>9-11</sup>

Considerably reduced horizontal and vertical bone resorption after grafting with Geistlich Bio-Oss® Collagen<sup>12</sup>

Use of Geistlich Bio-Oss® Collagen results in good bone-to-implant contact in the regenerated socket<sup>13</sup>

Geistlich Bio-Oss® granules remain volume stable in the regenerated defect<sup>10</sup>

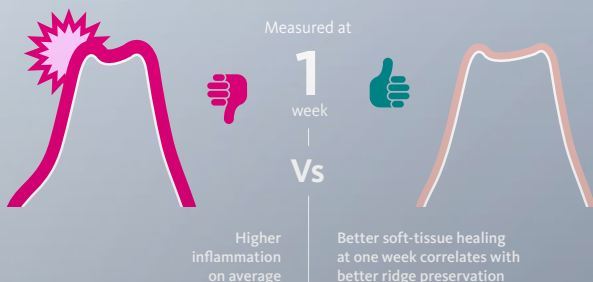




## ALTERNATIVE PRODUCTS

## GEISTLICH BIOMATERIALS

### SOFT-TISSUE HEALING<sup>1</sup>



### IMPLANT PLACEMENT<sup>1</sup>

18/21  
implants



Vs



19/19  
implants



**14%**  
of the implants could NOT be placed without 2nd re-grafting at implant placement

All implants could be placed without re-grafting at implant placement

The combination of the beneficial properties of Geistlich biomaterials results in the same amount of newly formed bone compared to a demineralized allograft<sup>2</sup> covered with an reconstituted artificially cross-linked collagen membrane<sup>3,1</sup>

There is no need for a second grafting at re-entry<sup>1</sup>

Predictable long-term results after 10 years using Geistlich Bio-Oss<sup>®</sup> Collagen<sup>14</sup>

### BONE FORMATION<sup>1</sup>

Socket dimensions recorded at

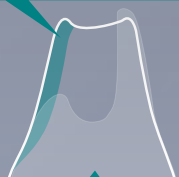
6 months



Vs



**35%** MORE horizontal volume



SAME new bone formation



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### Geistlich Bio-Oss® Collagen

Geistlich Bio-Oss® (small granules) + 10 % collagen (porcine) Sizes: 50 mg (2.5 × 5.0 × 7.5 mm), 100 mg (5.0 × 5.0 × 7.0 mm), 250 mg (7.0 × 7.0 × 7.0 mm), 500 mg (10.0 × 10.0 × 7.0 mm)



### Geistlich Bio-Gide®

Sizes: 25 × 25 mm, 30 × 40 mm



### Geistlich Bio-Gide® Compressed

Sizes: 13 × 25 mm, 20 × 30 mm



### Geistlich Bio-Gide® Shape

Size: 14 × 24 mm



### References

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