

# STRAUMANN® EMDOGAIN

BEFORE IT'S TOO LATE



dental  
bone & tissue  
regeneration

botiss  
biomaterials

COMMITTED TO  
**SIMPLY DOING MORE**  
FOR DENTAL PROFESSIONALS

"THE EMDOGAIN® 015 SHOULD ENABLE THE CLINICIAN TO USE THE MATERIAL MORE OFTEN SINCE IT WILL BE MORE COST-EFFECTIVE WHEN ADDED TO BONE GRAFTING PROCEDURES."

DR. DAVID COCHRAN



## TOOTH PRESERVATION WITH STRAUMANN® EMDOGAIN

Emdogain® is now available in a new package size containing 5 syringes with 0.15 ml. This allows for a cost-effective treatment of smaller defects and soft tissue grafting procedures. The additional Emdogain® 015 in our regenerative portfolio enables the clinician to select the right amount of Emdogain® for the use with various\* bone grafting materials, thereby enhancing the patients regenerative periodontal outcome.

### 5-15% OF POPULATION SUFFERS FROM SEVERE PERIODONTITIS THAT MAY LEAD TO TOOTH LOSS<sup>1,2</sup>

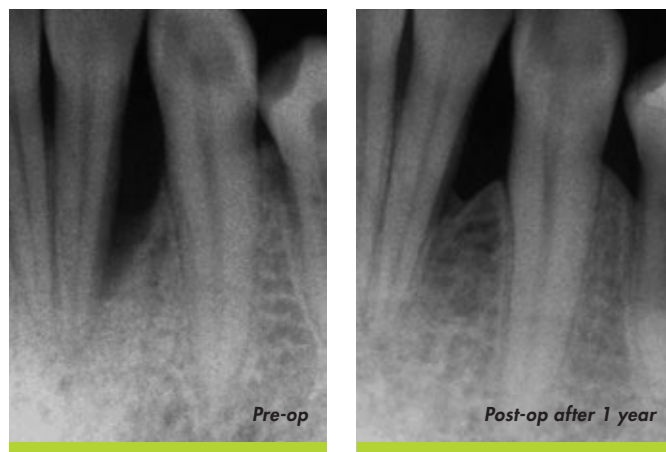
Periodontitis treatment involves controlling the causative bacteria and inflammation as well as subsequent regeneration of the lost periodontal hard and soft tissues in order to regain tooth attachment.

#### Biological guided regeneration

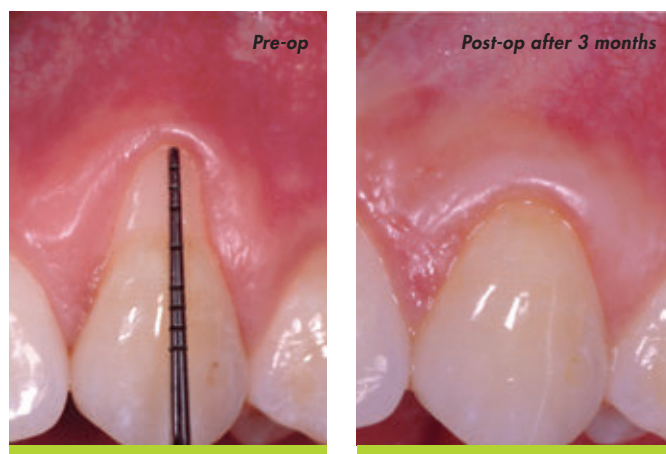
Straumann® Emdogain supports the predictable regeneration of the lost periodontal hard and soft tissue caused by periodontitis and in this way helps save and preserve the tooth<sup>3</sup>.

Applying Straumann® Emdogain to the cleaned root surface of the periodontally diseased tooth helps to regenerate the periodontium, which includes the cementum, periodontal ligament and alveolar bone<sup>4-8</sup>.

### Regenerative surgery with Straumann® Emdogain



Courtesy of Prof. Carlos E. Nemcovsky, Tel-Aviv University



Courtesy of Prof. Zucchelli, Bologna University

\* BoneCeramic™, autograft, allograft, bone-derived xenograft,  $\beta$ -Tricalcium phosphate, or bioactive glass



# BIOLOGICAL GUIDED REGENERATION FOR VARIOUS INDICATIONS

Straumann® Emdogain is indicated for:

## 1 Intrabony defects



## 2 Wide intrabony defects

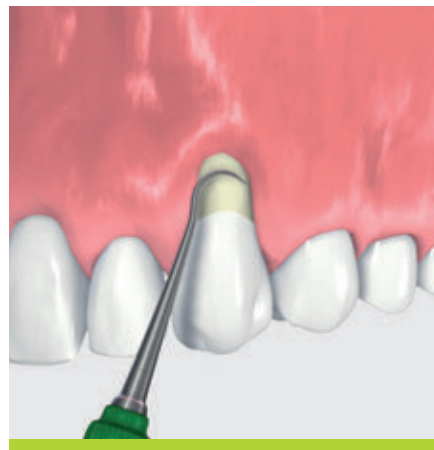


*In combination with various\* bone graft materials in wide defects where bone structure needs to be rebuilt or where additional soft tissue support is needed.*

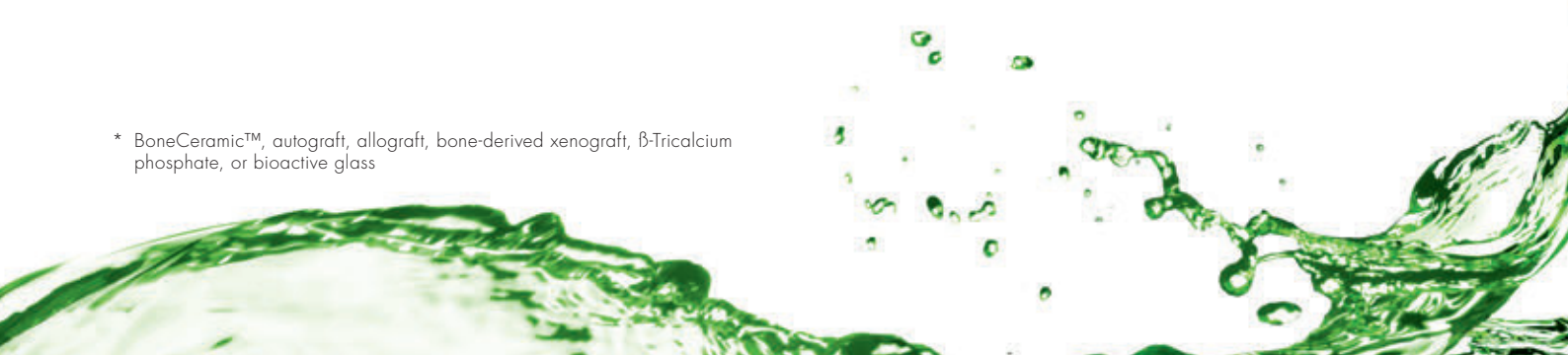
## 3 Furcation defects (Class II furcation)



## 4 Recession defects



\* BoneCeramic™, autograft, allograft, bone-derived xenograft,  $\beta$ -Tricalcium phosphate, or bioactive glass





The following steps describe how Straumann® Emdogain helps to regenerate the periodontium over time:



**1** When Straumann® Emdogain is applied the enamel matrix derived proteins precipitate on the root surface to form a matrix layer.



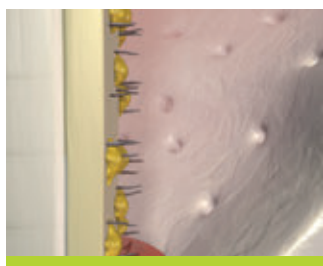
**2** The matrix stimulates the attraction and proliferation of mesenchymal cells from the healthy part of the periodontium.



**3** The cells secrete natural and specific cytokines and autocrine substances promoting the necessary proliferation.



**4** Supporting cells are attracted and differentiate into cementoblasts which start with the formation of the cement matrix in which the periodontal fibers will be fixed.



**5** The newly formed cement layer increases in thickness, extending the periodontal ligament.



**6** Within months, the defect fills with newly formed periodontal ligament.



**7** As the periodontal ligament is formed, new bone continues to develop.



**8** Straumann® Emdogain facilitates the regeneration of the complex dental structure of the periodontium, building a new functional attachment.

“STRAUMANN® EMDOGAIN STIMULATES THE REGENERATION OF BOTH THE HARD AND SOFT TISSUES OF THE PERIODONTIUM AT THE SAME TIME.”

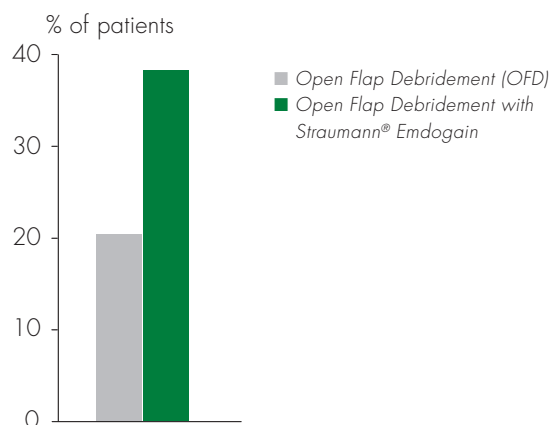
DR. DAVID COCHRAN

## PREDICTABLE CLINICAL RESULTS



### Confidence thanks to predictable clinical results

- Improved clinical results when treating patients with intrabony defects compared to OFD alone<sup>9</sup>
- Increased probability of complete root coverage achieved with a Coronally Advanced Flap (CAF) compared to CAF alone<sup>10</sup>
- More than 400 clinical publications demonstrate Straumann® Emdogain to have predictable clinical results



Percentage of patients with highly significant outcome (CAL gain of >4 mm) 1 year post-operative<sup>9</sup> in the treatment of intrabony defects

"BOTH THE SCIENTIFIC EVIDENCE AND MY PERSONAL EXPERIENCE INDICATE THAT IN APPROPRIATE CASES, STRAUMANN® EMDOGAIN SIGNIFICANTLY IMPROVES ROOT COVERAGE COMPARED TO THE CORONALLY ADVANCED FLAP ALONE."

DR. MICHAEL K. MCGUIRE, DDS



# MORE THAN 1 MILLION PATIENTS TREATED WORLDWIDE

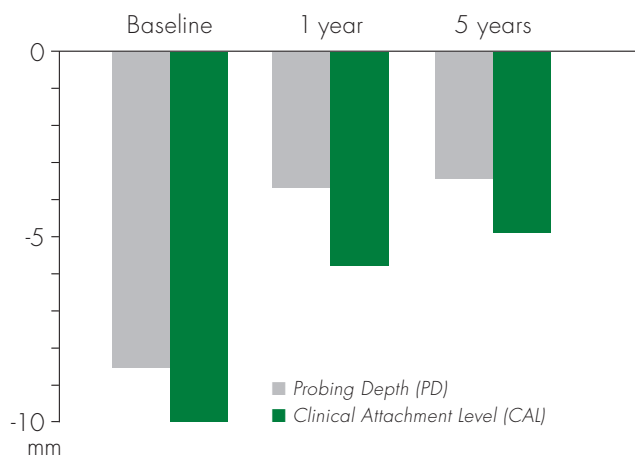
## Rely on long-term clinical experience

- Documented treatment success up to 10 years<sup>11</sup>
- Improved attachment level maintained up to 5 years compared to baseline<sup>12</sup>
- Improved probing depth level maintained up to 5 years compared to baseline<sup>12</sup>

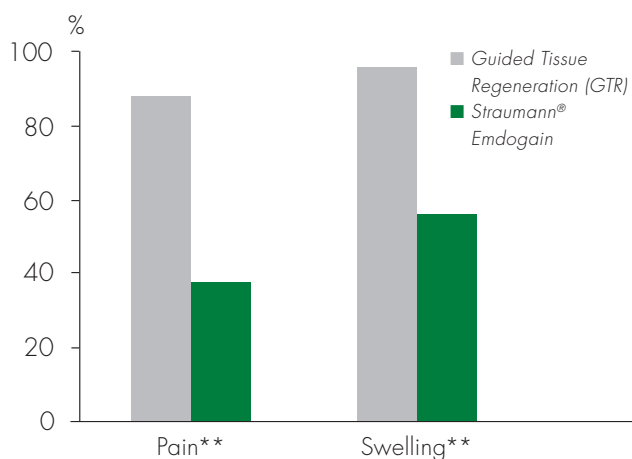
## Added value for your practice due to patient satisfaction

- Clinicians reported on enhanced wound healing when using Straumann® Emdogain compared to control<sup>\*13</sup>
- Less patients with pain and swelling compared to traditional GTR<sup>14</sup>
- Designed solution to improve patient comfort compared to traditional GTR<sup>13,14</sup> or Connective Tissue Graft (CTG)<sup>15</sup>

\*PGA carrier alone



Significantly improved CAL and PD following OFD with Straumann® Emdogain, measured up to 5 years<sup>12</sup>



Percentage of patients with pain\*\* and swelling\*\* 1 week post-operative in furcation treatment with GTR or Straumann® Emdogain<sup>14</sup>

\*\*little, moderated and strong



# STRAUMANN® EMDOGAIN

NOW AVAILABLE IN 3 SYRINGE SIZES FOR YOUR CONVENIENCE.



0.15 ml



0.3 ml



0.7 ml

## **Straumann® Emdogain 0.15 ml**

5 x Straumann® Emdogain 0.15 ml  
Art. No. 075.098

## **Straumann® PrefGel 0.6 ml**

5 x Straumann® PrefGel 0.6 ml  
Art. No. 075.203

## **Straumann® Emdogain 0.3 ml**

1 x Straumann® Emdogain 0.3 ml  
Art. No. 075.101

## **Straumann® Emdogain 0.3 ml Multipack**

3 x Straumann® Emdogain 0.3 ml and  
3 x Straumann® PrefGel 0.6 ml  
Art. No. 075.114

## **Straumann® Emdogain 0.7 ml**

1 x Straumann® Emdogain 0.7 ml  
Art. No. 075.102

## **Straumann® Emdogain 0.7 ml Multipack**

3 x Straumann® Emdogain 0.7 ml and  
3 x Straumann® PrefGel 0.6 ml  
Art. No. 075.116

## **Straumann® Emdogain Plus**

1 x Straumann® Emdogain 0.7 ml and  
1 x Straumann® BoneCeramic 0.25 g  
1 x Straumann® PrefGel 0.6 ml  
Art. No. 075.117

## References

<sup>1</sup> AAP: Position Paper: Epidemiology of Periodontal diseases. *J Periodontol* 76, 2005;1406–1419. <sup>2</sup> Holtfreter B, et al. Prevalence of periodontal disease and treatment demands based on a German dental survey (DMS IV). *J Clin Periodontol.* 2010 Mar;37(3):211–9. <sup>3</sup> Dieter D. Bosshardt, Biological mediators and periodontal regeneration: a review of enamel matrix proteins at the cellular and molecular levels *J Clin Periodontol* 2008;35(Suppl. 8):87–105. <sup>4</sup> Pimentel SP, et al. Enamel matrix derivative versus guided tissue regeneration in the presence of nicotine: a histomorphometric study in dogs. *J Clin Periodontol.* 2006;33:900–907. <sup>5</sup> Dieter D. Bosshardt et al. Effects of enamel matrix proteins on tissue formation along the roots of human teeth. *J Periodontol Res.* 2005;40:158–167. <sup>6</sup> Sallum EA et al. Enamel Matrix Derivative and Guided Tissue Regeneration in the Treatment of Dehiscence-Type Defects: A Histomorphometric Study in Dogs *J Periodontol.* 2004;75:1357–1363. <sup>7</sup> Sakalliglu U et al. Healing of periodontal defects treated with enamel matrix proteins and root surface conditioning - an experimental study in dogs *Biomaterials.* 2004;25:1831–1840. <sup>8</sup> Cochran DL et al. The effect of enamel matrix proteins on periodontal regeneration as determined by histological analyses. *J Periodontol.* 2003;74:1043–1055. <sup>9</sup> Tonetti et al. Enamel matrix proteins in the regenerative therapy of deep intrabony defects - A multicentre randomized controlled clinical trial *J Clin Periodontology* 2002;29:317–325 <sup>10</sup> Cairo F, Pagliaro U, Nieri M. Treatment of gingival recession with coronally advanced flap procedures: a systematic review. *J Clin Periodontol* 2008;35(Suppl 8):136–162. <sup>11</sup> Sculean et al. Ten-year results following treatment of intra-bony defects with enamel matrix proteins and guided tissue regeneration. *J Clin Periodontol* 2008;35:817–824. <sup>12</sup> Heden and Wennström. Five-Year Follow-Up of Regenerative Periodontal Therapy With Enamel Matrix Derivative at Sites With Angular Bone Defects *J Periodontol* 2006;77:295–301. <sup>13</sup> Wennstrom JL and Lindhe J. Some effects of enamel matrix proteins on wound healing in the dento-gingival region. *J Clin Periodontol* 2002;29:9–14. <sup>14</sup> Jepsen et al. A randomized clinical trial comparing enamel matrix derivative and membrane treatment of buccal class II furcation involvement in mandibular molars. Part I: Study design and results for primary outcomes. *J Periodontol.* 2004 Aug;75(8):1150–6. <sup>15</sup> McGuire MK, Nunn M. Evaluation of human recession defects treated with coronally advanced flaps and either enamel matrix derivative or connective tissue. Part I: Comparison of clinical parameters. *J Periodontol* 2003;74:1110–1125.

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