

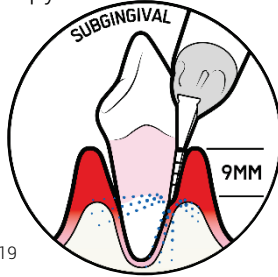
# PERIOFLOW®

## On Natural Teeth

### CLINICAL BENEFITS

Removes biofilm from periodontal pocket 4 to 9 mm deep<sup>1-9</sup>

- + Maintains health of residual periodontal pockets<sup>1-3,9</sup> during supportive periodontal therapy (SPT).<sup>2-14</sup>
- + Decreases bleeding on probing (BOP).<sup>3-8,11,14-17</sup>
- + Significantly reduces probing pocket depth (PPD).<sup>2,3,5-9,11-15,17,18</sup>
- + Promotes the re-attachment of periodontal ligament fibroblasts.<sup>19</sup>
- + Increases clinical attachment level (CAL).<sup>3,5,7,8,11,14,16,18</sup>
- + Preserves cementum in a minimally invasive way (94%),<sup>20</sup> dentine<sup>19</sup> and soft tissues.<sup>1,2</sup>
- + Can be used in patients with aggressive periodontitis with systemic antibiotics.<sup>16</sup>
- + Reduces full-mouth plaque scores.<sup>8,11,16</sup>
- + Decreases in Gingival Crevicular Fluid (GCF).<sup>7</sup>
- + Effectively improves clinical outcomes during active periodontal therapy.<sup>14</sup>



### MICROBIOLOGICAL BENEFITS

- + AA (Aggregatibacter Actinomycetemcomitans)<sup>2,7,19</sup> greater reduction than PIEZON®<sup>2</sup>
- + Red complex bacteria: P. gingivalis,<sup>1,4-7,11,12,19</sup> T. forsythia,<sup>1,2,4-7,12,19</sup> T. denticola,<sup>2,4,7,12,19</sup> Orange complex bacteria.<sup>7</sup>
- + Subgingival AIR-FLOWING® can reduce periopathogenic bacteria and support antimicrobial therapy.<sup>21</sup>

### IN ACCORDANCE WITH THE GUIDED BIOFILM THERAPY (GBT) PROTOCOL

- + PERIOFLOW® is efficient<sup>2,3,5,9,10,19</sup> and can be applied safely following EMS treatment recommendations.<sup>1-6,8,9,11,14-18,22</sup>
- + Time-efficient compared to traditional methods.<sup>2-4,13,14,16,17</sup>
- + More comfortable with high patient compliance than traditional methods<sup>1-10,13,14,16</sup> based on Visual Analog Scale (VAS).<sup>23</sup>
- + Local periodontal treatment with AIR-FLOWING® is a promising approach to reduce the bacterial penetration into the bloodstream during periodontal treatment.<sup>24</sup>



### CONSENSUS

Academics and clinicians alike reached a common consensus on safety, efficiency and comfort<sup>25,26</sup> using PERIOFLOW®.



## References

1. Randomized controlled trial assessing efficacy and safety of glycine powder air polishing in moderate-to-deep periodontal pockets. Flemmig, T. F. et al. *Journal of periodontology* **83**, 444–52 (2012).
2. Subgingival air-polishing with erythritol during periodontal maintenance: randomized clinical trial of twelve months. Müller, N., Moëne, R., Cancela, J. A. & Mombelli, A. *Journal of clinical periodontology* **41**, 883–9 (2014).
3. Clinical outcomes following subgingival application of a novel erythritol powder by means of air polishing in supportive periodontal therapy: a randomized, controlled clinical study. Hägi, T. T., Hofmänner, P., Salvi, G. E., Ramseier, C. A. & Sculean, A. *Quintessence international (Berlin, Germany : 1985)* **44**, 753–61.
4. Subgingival plaque removal using a new air-polishing device. Moëne, R., Décaillet, F., Andersen, E. & Mombelli, A. *Journal of periodontology* **81**, 79–88 (2010).
5. The effects of erythritol air-polishing powder on microbiologic and clinical outcomes during supportive periodontal therapy: Six-month results of a randomized controlled clinical trial. Hägi, T. T. et al. *Quintessence international (Berlin, Germany : 1985)* **46**, 31–41 (2015).
6. Subgingival debridement of periodontal pockets by air polishing in comparison with ultrasonic instrumentation during maintenance therapy. Wennström, J. L., Dahlén, G. & Ramberg, P. *Journal of clinical periodontology* **38**, 820–7 (2011).
7. Clinical and Microbiological Study about Efficacy of Air-polishing and Scaling and Root-planing. Yang, K.-I., Park, D.-Y., Kim, B.-O. & Yu, S.-J. *International Journal of Oral Biology* **40**, 93–101 (2015).
8. Adjunctive air-polishing with erythritol in nonsurgical periodontal therapy: a randomized clinical trial. Jentsch, H. F. R., Flechsig, C., Kette, B. & Eick, S. *BMC oral health* **20**, 364 (2020).
9. Maintenance therapy for teeth and implants. Mombelli, A. *Periodontology 2000* **79**, 190–199 (2019).
10. Full Mouth-Erythritol Powder Air Polishing Therapy (FMLEPAPT): Paradigm Shift. Il nuovo modo di concepire la terapia. Mensi, M. *Quintessence International* **32**, 119–122 (2016).
11. Clinical and microbiological effects of the supplementary use of an erythritol powder air-polishing device in non-surgical periodontal therapy: A randomized clinical trial. Park, E. J. et al. *Journal of Periodontal and Implant Science* **48**, 295–304 (2018).
12. Clinical and microbiological effect of frequent subgingival air polishing on periodontal conditions: a split-mouth randomized controlled trial. Sekino, S., Ogawa, T., Murakashi, E., Ito, H. & Numabe, Y. *Odontology* **108**, 688–696 (2020).
13. Use of air polishing for supra- and subgingival biofilm removal for treatment of residual periodontal pockets and supportive periodontal care: a systematic review. Nascimento, G. G., Leite, F. R. M., Pennisi, P. R. C., López, R. & Paranhos, L. R. *Clinical oral investigations* **25**, 779–795 (2021).
14. Efficacy of erythritol powder air-polishing in active and supportive periodontal therapy: A systematic review and meta-analysis. Abdulbaqi, H. R. et al. *International journal of dental hygiene* **20**, 62–74 (2022).
15. One-Stage Full Mouth Instrumentation (OSFMI): Clinical Outcomes of an Innovative Protocol for the Treatment of Severe Periodontitis. Mensi, M. et al. *Journal of the International Academy of Periodontology* **22**, 129–136 (2020).
16. Efficacy of subgingival air polishing in patients with aggressive periodontitis. Trtić, N., Bošnjak, A., Arbutina, R., Kojić, Ž. & Veselinović, V. *Balkan Journal of Dental Medicine* **20**, 149–154 (2016).
17. Comparison of three full-mouth concepts for the non-surgical treatment of stage III and IV periodontitis: A randomized controlled trial. Stein, J. M. et al. *Journal of clinical periodontology* **48**, 1516–1527 (2021).
18. Infection Control in Adult Periodontal Patients Using Ultrasonic Debridement and Erythritol Powder: A Randomized, Controlled, Split-Mouth Clinical Study. Cardaropoli, D., Albano, M. & Tamagnone, L. *The International journal of periodontics & restorative dentistry* **41**, 675–681 (2021).
19. A Biofilm Pocket Model to Evaluate Different Non-Surgical Periodontal Treatment Modalities in Terms of Biofilm Removal and Reformation, Surface Alterations and Attachment of Periodontal Ligament Fibroblasts. Hägi, T. T. et al. *PloS one* **10**, e0131056 (2015).
20. Preservation of root cementum: a comparative evaluation of power-driven versus hand instruments. Bozbay, E. et al. *International journal of dental hygiene* **16**, 202–209 (2018).
21. Antimicrobial Impact of Different Air-Polishing Powders in a Subgingival Biofilm Model. Wenzler, J.-S. et al. *Antibiotics (Basel, Switzerland)* **10**, (2021).
22. Efficacy of the additional use of subgingival air polishing with erythritol powder in the treatment of periodontitis patients: a randomized controlled clinical trial. Mensi, M. et al. *Clinical oral investigations* **25**, 729–736 (2021).
23. A 12-month randomized controlled trial evaluating erythritol air-polishing versus curette/ultrasonic debridement of mandibular furcations in supportive periodontal therapy. Ulvik, I. M. et al. *BMC oral health* **21**, 38 (2021).
24. Influence of periodontal treatment on blood microbiotas: a clinical trial. Zhang, W., Meng, Y., Jing, J., Wu, Y. & Li, S. *PeerJ* **9**, e10846 (2021).
25. A paradigm shift in mechanical biofilm management? Subgingival air polishing: a new way to improve mechanical biofilm management in the dental practice. Sculean, A. et al. *Quintessence international (Berlin, Germany : 1985)* **44**, 475–7 (2013).
26. Consensus Conference Findings on Supragingival and Subgingival Air Polishing. Cobb, C. M. et al. *Compendium of continuing education in dentistry (Jamesburg, N.J. : 1995)* **38**, e1–e4 (2017).

