

# TREATMENT RECOMMENDATIONS



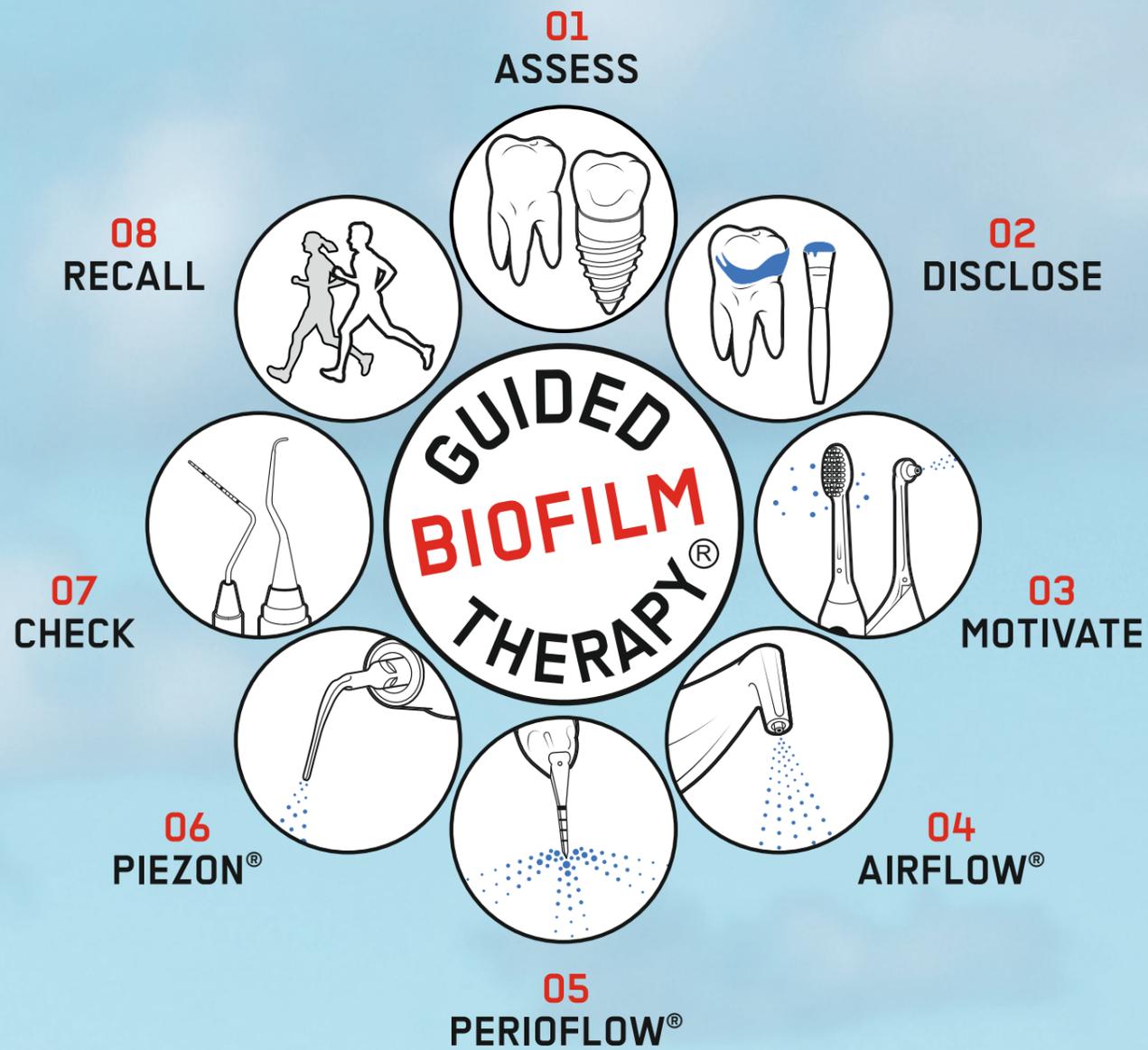
**"I FEEL  
GOOD"**

**GUIDED  
BIOFILM  
THERAPY®**

**EMS+**

# AIM OF THIS DOCUMENT

- ▶ This document aims to provide the users of AIRFLOW® Prophylaxis Master (REF FT-229HF) and AIRFLOW® One (REF FT-230HF) with the general precautions and treatment recommendations to remove biofilm, stains and calculus from natural teeth, restorations and implants.
- ▶ The correct sequence of AIRFLOW®, PERIOFLOW® and PIEZON® as part of the global protocol delivers optimum efficiency, comfort and safety. For this purpose, our Guided Biofilm Therapy (GBT) summarizes our recommendations. It follows the recommendations for Professional Mechanical Plaque Removal (PMPR) and Oral Hygiene Instructions (OHI) for Home Care of the European Federation of Periodontology (EFP).
- ▶ Three of the 8 steps detail the use of our technologies individually; the other steps detail how to prepare, diagnose, check and secure biofilm and calculus removal.



<b>01 ASSESS</b> .....	<b>10</b>
<b>02 DISCLOSE</b> .....	<b>16</b>
<b>03 MOTIVATE</b> .....	<b>18</b>
<b>04 AIRFLOW®</b> .....	<b>20</b>
<b>05 PERIOFLOW®</b> .....	<b>30</b>
<b>06 PIEZON®</b> .....	<b>34</b>
<b>07 CHECK</b> .....	<b>38</b>
<b>08 RECALL</b> .....	<b>40</b>

- ▶ The Treatment Recommendations, as well as the Instructions for Use of the devices, are provided in electronic format and are part of the product documentation. To receive a hard copy, available free of charge, please order via our website, by telephone or in writing. Allow 7 days for delivery.
- ▶ The Treatment Recommendations (document series FB-648), as well as the Instructions for Use of the device, are available for downloading in PDF format at [ems-instruction.com](http://ems-instruction.com) using Product/Key Code FT-229 for AIRFLOW® Prophylaxis Master and Code FT-230 for AIRFLOW® One. A PDF reader is required and is available for downloading from the same website.
- ▶ It is essential to first read and understand all the Instructions for Use of the device before operating and using the related accessories. The Treatment Recommendations are an integral part of the device's Instruction for Use. Both documents complement one another.
- ▶ We recommend that you visit our website regularly to consult and/or download the latest version of the documentation for your device at [ems-instruction.com](http://ems-instruction.com)
- ▶ Please contact EMS technical support or your local EMS representative for further information and support.
- ▶ Always keep this documentation close at hand.
- Always read first the Instructions for Use of the specific device in use and refer to those for Intended Use, Intended User, Patient Population, Contraindications, General Precautions and Compatibility. Specific device limitations or deviations may apply.**

- |                                |  |
|--------------------------------|--|
| GENERAL WARNING                | ELECTRONIC INSTRUCTIONS FOR USE                                    |
| MANDATORY ACTION               | READ THE INSTRUCTIONS FOR USE                                      |
| WEAR PROTECTIVE MASK           | DO NOT DO / NOT COMPATIBLE   |
| WEAR PROTECTIVE GLASSES        | ALLOWED / COMPATIBLE   |
| WASH YOUR HANDS                | TIME-RELATED RECOMMENDATIONS                                       |
| WEAR PROTECTIVE GLOVES         | WATER FLOW LEVEL   |
| DO NOT DRINK COFFEE            | POWER LEVEL  |
| DO NOT SMOKE                   | MANUFACTURER   |
| DO NOT DRINK COLORED BEVERAGES | MEDICAL DEVICE CE MARKING AND NUMBER OF THE NOTIFIED BODY INVOLVED |

# GBT APPLICATIONS



PREVENTION, MAINTENANCE AND TREATMENT TO REMOVE BIOFILM, STAINS AND CALCULUS FROM NATURAL TEETH, RESTORATIONS AND IMPLANTS.

## ► GBT WORKS FOR ALL DENTAL PRACTITIONERS

**AIRFLOW®**

**PERIOFLOW®**

**PIEZON®**

**GBT IS THE GAME CHANGER**

- HIGHLY PREVENTIVE,
- MINIMALLY INVASIVE,
- GENTLE AND SAFE

\* Approved for 5 mm in the U.S. - 9 mm in Canada

GENERAL DENTISTRY

ORTHODONTOLOGY

IMPLANT DENTISTRY

PEDIATRIC DENTISTRY

AESTHETIC DENTISTRY

PERIODONTOLOGY

GERODONTOLOGY

ENDODONTOLOGY

ORAL SURGERY

Clinical evidences are listed on page 8.

## 08 RECALL<sup>20,21</sup>

HEALTHY PATIENT = HAPPY PATIENT

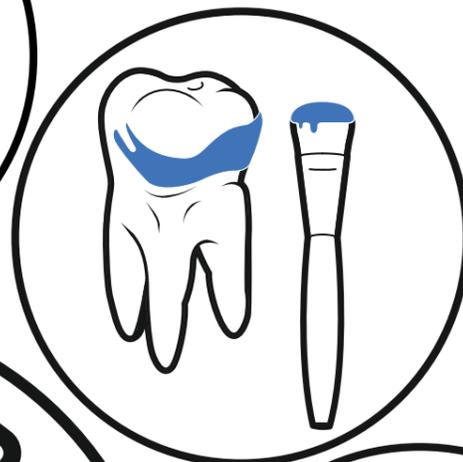
- ▶ Schedule recall frequency according to risk assessment
- ▶ Ask your patient if he or she liked the treatment



## 07 CHECK<sup>5,19</sup>

MAKE YOUR PATIENT SMILE

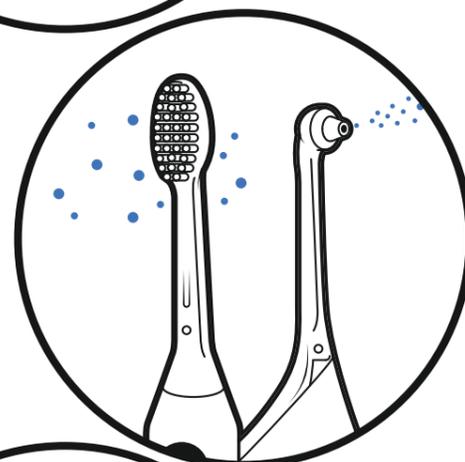
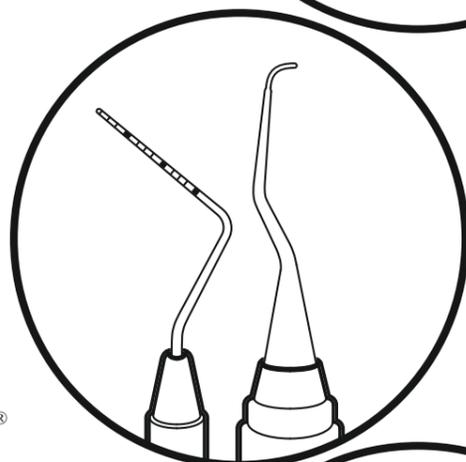
- ▶ Do a final check for remaining biofilm
- ▶ Ensure calculus is fully removed
- ▶ Accurately diagnose caries
- ▶ Protect with fluoride



## 06 PIEZON<sup>®16,17,18</sup>

REMOVE REMAINING CALCULUS

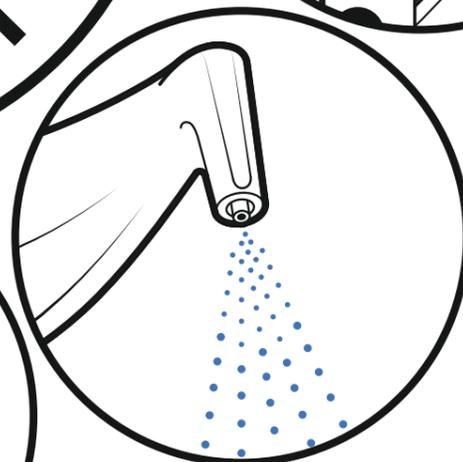
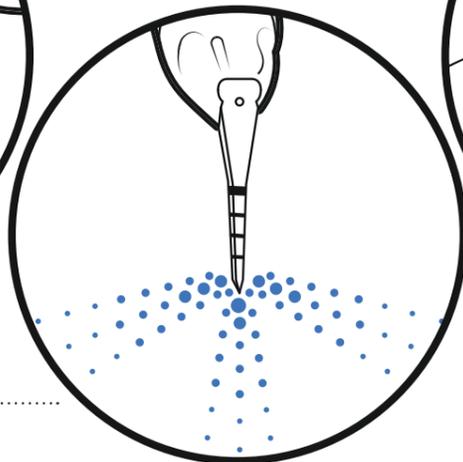
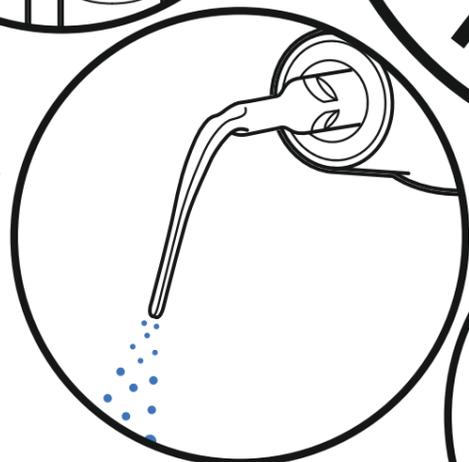
- ▶ Use the minimally invasive PIEZON<sup>®</sup> PS Instrument supra- and subgingivally
- ▶ Clean > 10 mm pockets with mini curette
- ▶ Use PIEZON<sup>®</sup> PI Instrument around implants and restorations



## 05 PERIOFLOW<sup>®13,15</sup>

REMOVE BIOFILM IN >4 TO 9 MM POCKETS\*

- ▶ Use AIRFLOW<sup>®</sup> PLUS Powder on natural teeth in deep pockets and root furcations and on implants
- ▶ Use depth-marked PERIOFLOW<sup>®</sup> Nozzle



## 01 ASSESS<sup>4,5,6</sup>

PROBE AND SCREEN EVERY CLINICAL CASE

- ▶ Healthy teeth, caries, gingivitis, periodontitis
- ▶ Healthy implants, mucositis, peri-implantitis
- ▶ Start by rinsing with a mouthwash available in the US market.

## 02 DISCLOSE<sup>7</sup>

MAKE BIOFILM VISIBLE\*

- ▶ Show patient disclosed biofilm and problem zones
- ▶ The color will guide the biofilm removal
- ▶ Once biofilm is removed, calculus is easier to detect

## 03 MOTIVATE<sup>8,9</sup>

RAISE AWARENESS AND TEACH

- ▶ Emphasize on prevention
- ▶ Instruct your patients on oral hygiene
- ▶ EMS recommends Sonicare toothbrushes and interdental brushes or Airfloss Ultra

## 04 AIRFLOW<sup>®10,11,12,13,14</sup>

REMOVE BIOFILM, STAINS AND EARLY CALCULUS

- ▶ Use AIRFLOW<sup>®</sup> for natural teeth, restorations and implants
- ▶ Remove biofilm supra- and subgingivally up to 4 mm using AIRFLOW<sup>®</sup> PLUS 14µm Powder
- ▶ Remove remaining stains on enamel using AIRFLOW<sup>®</sup> CLASSIC Comfort Powder
- ▶ Also remove biofilm from gingiva, tongue and palate

\* Approved for 5 mm in the U.S. - 9 mm in Canada

\* Use a disclosing product commercially available in the US market.

# GBT CLINICAL EVIDENCES

1 A new method for biofilm removal with erythritol powder guided by disclosing agent - Una nuova metodica di rimozione del biofilm con polvere di eritritolo guidata da rilevatore di placca; Dental Cadmos 2/2017 / M. Mensi, M. Dalè, A. Sordillo

2 Guided Biofilm Therapy; Die Zahnarzt Woche / Dr Strafela-Bastendorf, Dr Bastendorf

3 Guided biofilm therapy: innovative prophylaxy; Volume 6, Issue 1: Summer 2018 | Inspyred: The alternative EAO voice / M. Deudon

4 ADHA – Standards for clinical dental hygiene practice (pages 6 and 7) American Dental Hygienists' Association, adopted March 2008, revised 2016 / Stainbach P, Smith M, Burch S.

5 White paper on dental caries prevention and management: A summary of the current evidence and the key issues in controlling this preventable disease (pages 23-25) FDI World Dental Federation 2016 / Pitts N, Zero D.

6 Mouthrinse combining chlorhexidine digluconate and cetylpyridinium chloride: demonstration of the in vitro benefit considering antimicrobial and plaque control properties. Revue d'Odonto-Stomatologie;2012; 41:174-189 / C. Roques S. Pecastaings C. Michel

7 Effectiveness of plaque indicators and air polishing for the sealing of pits and fissures: European Journal of Paediatric Dentistry Vol. 11/1-2010 / Botti RH, Bossu M, Zallocco A, Polimeni A:

8 Guided Biofilm Therapy follows the recommendations of Professional Mechanical Plaque Removal (PMPR) from the European Federation of Periodontology (EFP) where in accordance with Tonetti MS, Chapple ILC, Jepsen S, Sanz M 2015; there is very little value of providing professional mechanical plaque removal without Oral Hygiene instructions

9 Effect of visual method vs plaque disclosure in enhancing oral hygiene in adolescents and young adults: a single-blind randomized controlled trial American Journal of Orthodontics and Dentofacial Orthopedics 2014, 145(3) / Peng Y, Wu R, Qu W, Wu W, Chen J, Fang J, Chen Y, Farella M, Mei L.

10 Subgingival plaque removal at interdental sites using a low abrasive air polishing powder. Journal of Periodontology 2003 74:307-311 / Petersilka GJ, Tunkel J, Barakos K, Heinecke A, Häberlin I, Flemmig TF

11 A systematic review on the effects of airpolishing devices on oral tissues; Int J Dent Hygiene 17 Feb 2015 / Bühler J., Amato M., Weiger R., Walter C.

12 A systematic review on the patient perception of periodontal treatment using air polishing devices; Int J of Dent Hygiene 2015 / Bühler J., Amato M., Weiger R., Walter C.

13 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 Ligaments Fibroblasts, PLOS, ONE/ June29,2015 / Hägi T, Klemensberger S, Bereiter R, Nietzsche S, Cosgarea R, Flury S, Lussi A, Sculean A and Eick S

14 A paradigm shift in mechanical biofilm management? Subgingival air polishing: a new way to improve mechanical biofilm management in the dental practice, Quintessenz International, Volume 44, Number 7, July/August 2013 / Sculean A., Bastendorf K-D., Becker C., Bush B., Einwag J., Lanoway C., Platzer U., Schmage P., Schoenrich B., Walter C., Wennström JL., Flemmig TF.

15 Subgingival debridement of periodontal pockets by air polishing in comparison with ultrasonic instrumentation during maintenance therapy Journal of Clinical Periodontology 2011; 38(9):820-7 JL. Wennström G. Dahlén P. Ramberg

16 Penetration depths with an ultrasonic mini insert compared with a conventional curette in patients with periodontitis and in periodontal maintenance Journal of Clinical Periodontology 2008; 35(1):31-6 / DS. Barendregt U. van der Velden MF. Timmerman F. van der Weijden

17 Effects of two different methods of non-surgical periodontal therapy on patient perception of pain and quality of life: a randomized controlled clinical trial Journal of Periodontology 2008; 79(6):1031-40 M. Aslund J. Suvan DR. Moles F. D'Aiuto MS. Tonetti

18 Full-mouth ultrasonic debridement versus quadrant scaling and root planing as an initial approach in the treatment of chronic periodontitis Journal of Clinical Periodontology 2005; 32(8):851-9 / JL. Wennström C. Tomasi A. Bertelle E. Dellasega

19 Roughness and loss of substance of tooth surfaces after biofilm removal with different processing methods; Die assistentin;03/18, pages 22-25 / M. Haas, M. Koller, B. Arefnia

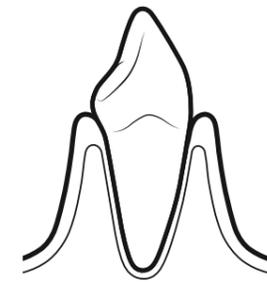
20 ADHA - Clinical Practice Guidelines for Recall and Maintenance of Patients with Tooth-Borne and Implant-Borne Dental Restorations. American Dental Hygienists' Association / Brida AS, Daubert DM, Garcia LT, Kosinsky TF, Nenn CA, Olsen JA, Platt JA, Wingrove SS, Chandler ND, Curtis DA

21 DENTAL RECALL: recall interval between routine dental examinations – appendix G National Collaborating Centre for Acute Care. 2004 Oct. A Azaripour et al Pubmed link: <https://www.ncbi.nlm.nih.gov/pub-med/21678631>

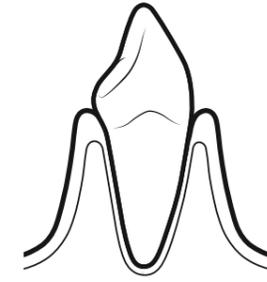
# SAVE TOOTH & IMPLANT



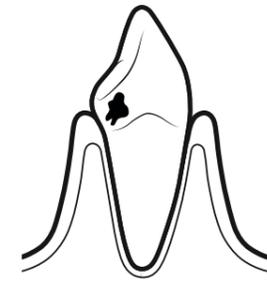
**PRESERVE HEALTHY TEETH**



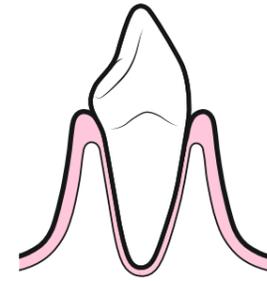
**PREVENT CARIES**



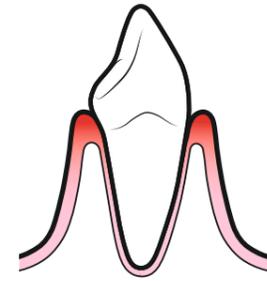
**DETECT CARIES AT AN EARLY STAGE**



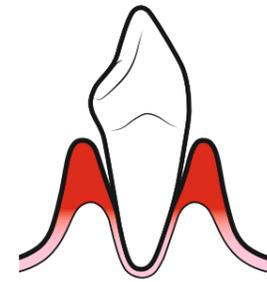
**PRESERVE HEALTHY SOFT TISSUES**



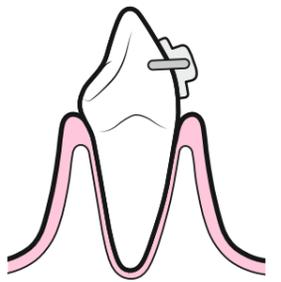
**TREAT GINGIVITIS**



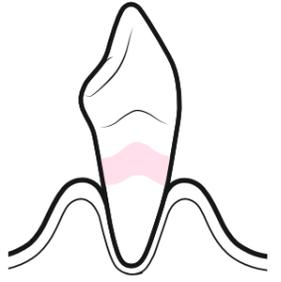
**TREAT PERIODONTITIS**



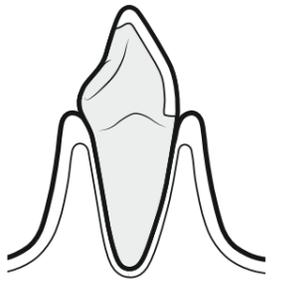
**MAINTAIN ORTHODONTIC APPLIANCES**



**TREAT EXPOSED DENTINE**



**PRESERVE AESTHETIC RESTORATIONS**



**MAINTAIN IMPLANTS**



**TREAT MUCOSITIS**



**TREAT PERI-IMPLANTITIS**



# 01 ASSESS

Case history followed by the patient exam is your opportunity to:

- ▶ Communicate with the patient on the importance of combined professional prophylaxis and home care.
- ▶ Check potential contraindications the patient could have with AIRFLOW®, PERIOFLOW® or PIEZON®.
- ▶ Diagnose the soft tissues and choose biofilm removal techniques on a case-by-case basis.

## CASE HISTORY

▶ Please find on the next page a „caries risk assessment table“.

This table can be completed with your patient in order to raise awareness of factors promoting and preventing caries.

▶ It follows the recommendations of the FDI World Dental Federation White Paper on dental caries prevention and management\*.

\* Nigel Pitts, Domenick Zéro / 2016.



Biofilm scaled X 10 000, Photo taken at the Swiss Federal Institute of Technology

# CARIES PREVENTION



FACTORS WHICH PROMOTE CARIES	FACTORS WHICH PREVENT CARIES
<p><b>ALL</b></p> <ul style="list-style-type: none"> <li>▶ Sugar input <input type="checkbox"/><input type="checkbox"/> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> ≥ 4</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> ≥ 6</li> </ul> </li> <li>▶ Active white spots lesion / cavities / fillings <input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1×</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> 2×</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/><input checked="" type="checkbox"/> ≥ 3×</li> </ul> </li> <li>▶ Medication affecting oral health <input type="checkbox"/> Sugar-containing drugs, sirups, etc.</li> </ul>	<p><b>ALL</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/><input type="checkbox"/> ▶ Oral hygiene with fluoridated toothpaste <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1× per day</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> 2× per day</li> </ul> </li> <li><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/> ▶ Professional prophylaxis <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1× per year</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> 2× per year</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/><input checked="" type="checkbox"/> 3× per year</li> </ul> </li> </ul>
<p><b>ADULTS</b></p> <ul style="list-style-type: none"> <li>▶ Salivary flow rate <input type="checkbox"/><input type="checkbox"/> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Subjective xerostomia</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> Xerostomia with reduced salivary flow</li> </ul> </li> <li>▶ Bleeding on probing <input type="checkbox"/><input type="checkbox"/> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> ≥ 10%</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> ≥ 50%</li> </ul> </li> <li>▶ Exposed cervical area <input type="checkbox"/><input type="checkbox"/> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> ≥ 2</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> ≥ 5</li> </ul> </li> <li>▶ Additional special factors <input type="checkbox"/></li> </ul>	<p><b>ADULTS</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/><input type="checkbox"/> ▶ Fluoride rinsing/ highly fluoridated toothpaste <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1× per day</li> <li><input checked="" type="checkbox"/><input checked="" type="checkbox"/> 2× per day</li> </ul> </li> <li><input type="checkbox"/><input type="checkbox"/> ▶ Additional special measures</li> </ul>
<p><b>CHILDREN</b></p> <ul style="list-style-type: none"> <li>▶ Recent immigrant <input type="checkbox"/> Child from a family of low socio-economic status</li> <li>▶ Heavy plaque load on teeth <input type="checkbox"/></li> <li>▶ Additional preventive home measures <input type="checkbox"/></li> <li>▶ &gt; age 6: orthodontic appliances <input type="checkbox"/></li> <li>▶ &lt; age 6: nighttime sugar intake <input type="checkbox"/> Use of bottle containing sugar or mother milk on demand</li> </ul>	<p><b>CHILDREN</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> ▶ Additional special measures</li> </ul>
<p><b>TOTAL</b> <input type="checkbox"/><input type="checkbox"/></p>	<p><input type="checkbox"/><input type="checkbox"/></p>
<p>▶ Measures to reduce the risk of caries: Always recommend when red exceeds green Courtesy of Prof.dr.med.dent. Adrian Lussi, University of Bern.</p>	

## ADAPT TO SPECIAL NEEDS:

⚠ First read the complete contraindications in the Instructions for Use of the main device.

THE MAIN CONTRAINDICATIONS ARE SUMMARIZED BELOW:



	AIRFLOW®	PERIOFLOW®	PIEZON®
Patients suffering from chronic bronchitis or asthma	⊘	⊘	✓
Pregnant and breastfeeding patients.	✓	⊘	✓
Endocarditis	✓	⊘	✓
Contagious disease	✓	⊘	✓
Immune deficiency (neutropenia, angranulocytosis, diabetes, hemophilia)	✓	⊘	✓
Patients under treatment (radiotherapy, chemotherapy, antibiotics)	✓	⊘	✓
Patients with a cardiac pacemaker or a defibrillator	✓	✓	⊘



SUGGESTION

Low-salt diet patients.	✓	⊘	Use PLUS
Allergy to flavor aroma.	✓	⊘	Use PLUS or Classic Neutral
Allergy to Cetyl Pyridinium Chloride (CPC)	⊘	✓	Use Classic

⚠ For patients undergoing bisphosphonate therapy, the decision to use AIRFLOW® and/or PERIOFLOW® must be taken by the dentist/medical doctor depending on the oral health of the patient.

## PATIENT PREPARATION:

START BY RINSING WITH A MOUTHWASH AVAILABLE IN THE US MARKET.

! For your protection and the protection of your patient, start by rinsing patient mouth with mouthwash 20 to 30 seconds.



WEAR PROTECTIVE GLASSES

⚠ Eye protection is mandatory. It is also recommended to remove the patient's glasses and optical lenses. Lip and cheek retractor protection (for example OptraGate) is recommended for maximum patient comfort and improved access to the treatment field. If a retractor is not used, place cocoa butter or equivalent on the patient's lips.



Picture: Courtesy of Mathieu Deudon DDS

## DENTIST PREPARATION:

PROTECT YOURSELF WITH THE FOLLOWING MEASURES:



WEAR PROTECTIVE MASK



WEAR PROTECTIVE GLASSES



WASH YOUR HANDS



WEAR PROTECTIVE GLOVES

The decision to use AIRFLOW® and/or PERIOFLOW® on contagious patients or on patients with a risk of infection, must be taken by the dentist/medical doctor on an individual basis following practitioner protection level, patient risk assessment and specific country regulations.

⚠ Most dental procedures involve aerosols which represent a risk factor for clinician contamination. Ensure that you are effectively vaccinated.

# ASSESS



PROBE AND SCREEN EVERY CLINICAL CASE.  
HEALTHY TEETH, CARIES, GINGIVITIS, PERIODONTITIS.  
HEALTHY IMPLANTS, MUCOSITIS, PERI-IMPLANTITIS.

## INITIAL THERAPY

During initial therapy, AIRFLOW® may not be the most efficient in case of acute inflammation and general heavy calculus.  
In these cases, it is recommended to use PIEZON® PS or P Instrument first.

### ON NATURAL TEETH

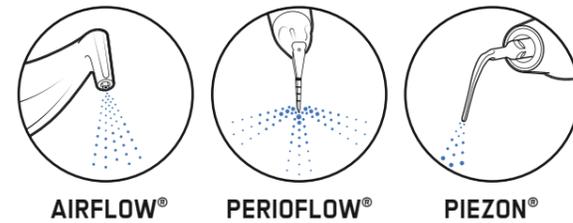


Image	Diagram	Condition	AIRFLOW®	PERIOFLOW®	PIEZON®
		<b>HEALTHY</b> ▶ HEALTHY GINGIVA ▶ NO BLEEDING ON PROBING	✓	NOT NEEDED	✓ PS TIP IF CALCULUS
		<b>GINGIVITIS</b> ▶ SHALLOW POCKET ▶ NO BONE LOSS ▶ BLEEDING ON PROBING	✓	NOT NEEDED	✓ PS TIP IF CALCULUS
		<b>PERIODONTITIS</b> ▶ DEEP POCKET ▶ BONE LOSS ▶ BLEEDING ON PROBING ▶ NO SUPPURATION	✓	✓	✓ PS TIP
		<b>SUPPURATING</b> ▶ PERIODONTITIS ▶ BONE LOSS ▶ BLEEDING ON PROBING ▶ SUPPURATION	✓	⊘	✓ PS TIP

\* Approved for 5 mm in the U.S. - 9 mm in Canada

## PROBING AND SCREENING

⚠ Subgingival use of AIRFLOW® and PERIOFLOW® requires a good soft-tissue condition and the absence of pus.

### ON IMPLANTS

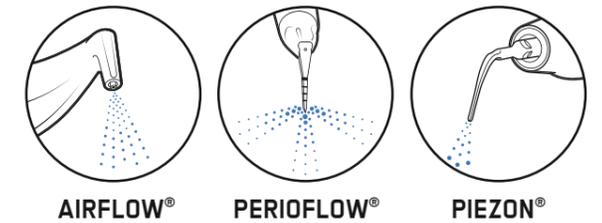


Image	Diagram	Condition	AIRFLOW®	PERIOFLOW®	PIEZON®
		<b>HEALTHY</b> ▶ NO BONE LOSS ▶ HEALTHY GINGIVA ▶ NO BLEEDING ON PROBING ▶ NO SUPPURATION	✓	✓	✓ PI TIP IF CALCULUS
		<b>MUCOSITIS</b> ▶ NO BONE LOSS ▶ BLEEDING ON PROBING ▶ NO SUPPURATION	✓	✓	✓ PI TIP IF CALCULUS
		<b>PERI-IMPLANTITIS</b> ▶ BONE LOSS ▶ BLEEDING ON PROBING ▶ NO SUPPURATION	✓	✓	✓ PI TIP IF CALCULUS
		<b>SUPPURATING PERI-IMPLANTITIS</b> ▶ BONE LOSS ▶ BLEEDING ON PROBING ▶ SUPPURATION	✓	⊘	✓ PI TIP IF CALCULUS

\* Approved for 5 mm in the U.S. - 9 mm in Canada

# 02 DISCLOSE

- ▶ The application of the disclosing agent, available in the USA market, should be done supragingivally and around implants, restorations and orthodontic appliances.
- ▶ Disclosing biofilm is a very important step in the GBT protocol.

## WHY DISCLOSE BIOFILM ?

The purpose of GBT is to remove 100% of biofilm.  
If biofilm is made visible, it is removed much faster and effectively.  
What you see is what you remove.  
It also motivates the patient on Oral Hygiene Instructions(OHI).  
Color removal = biofilm removal.



**MAKE BIOFILM VISIBLE.  
THE COLOR GUIDES THE REMOVAL OF BIOFILM.  
ONCE BIOFILM IS REMOVED, CALCULUS IS EASIER TO DETECT.**

## KEY FACT

The German independent consumer group “Stiftung Warentest” (test 7, 2015) reports that only 50% of interdental biofilm is removed during traditional professional tooth cleaning.



Biofilm is barely visible to the naked eye; disclosing (see above) makes plenty of biofilm visible.

## ORTHODONTICS

- ▶ The biofilm is made visible on the tooth as well as on the brackets.
- ▶ This is a key advantage in terms of patient motivation and complete AIRFLOW® biofilm removal.



# 03 MOTIVATE

## RAISE AWARENESS AND TEACH



- ▶ FOCUS ON PREVENTION
- ▶ EDUCATE YOUR PATIENTS ON ORAL HYGIENE
- ▶ EMS RECOMMENDS PHILIPS SONICARE AND INTERDENTAL BRUSHES

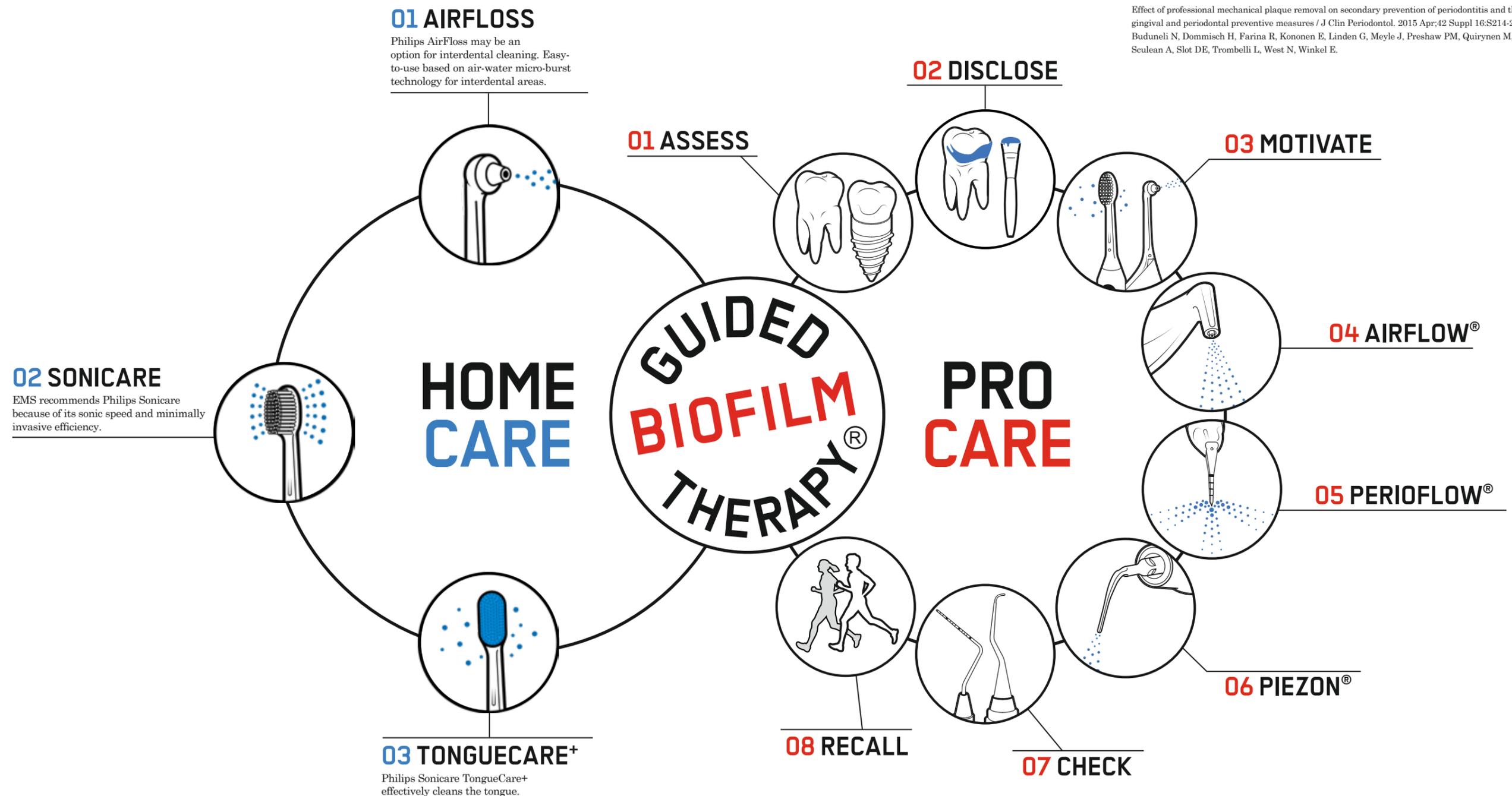


Picture: Courtesy of Prof. Magda Mensi

- ▶ Show your patient the exposed biofilm and provide Oral Hygiene Instructions (OHI). Exposed biofilm motivates patients to improve their brushing technique.
- ▶ The consensus of the European Federation of Periodontology (EFP)\*: Combining home and professional care is key to preserving natural teeth and implants. EMS and Philips have integrated their respective scientific expertise to optimize oral health care.

\*Primary and secondary prevention of periodontal and peri-implant diseases / J Clin Periodontol. 2015 Apr;42 Suppl 16:S1-4 / Tonetti, Chapple, Jepsen, Sanz.

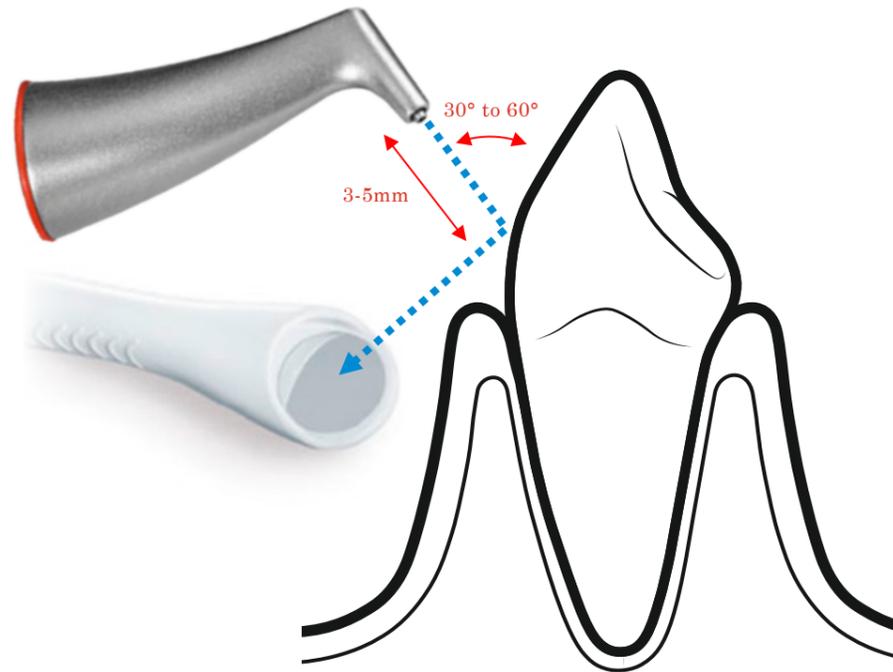
Effect of professional mechanical plaque removal on secondary prevention of periodontitis and the complications of gingival and periodontal preventive measures / J Clin Periodontol. 2015 Apr;42 Suppl 16:S214-20 / Sanz, Bäumer A, Buduneli N, Domnich H, Farina R, Kononen E, Linden G, Meyle J, Preshaw PM, Quirynen M, Roldan S, Sanchez N, Sculean A, Slot DE, Trombelli L, West N, Winkel E.



# 04 AIRFLOW®

## RECOMMENDED POSITION AND MOVEMENT

! Use high-speed suction cannula available in the US market.



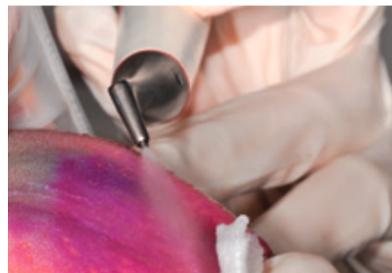
- ▶ Do not use the handpiece perpendicular to the tooth surface.
- ▶ Keep 3 to 5 mm distance.
- ▶ Direct the jet projections towards the cannula.
- ▶ Make continuous movement.

### NO MORE COLOR = NO MORE BIOFILM

- ☑ Stop AIRFLOW® once the color of the disclosing agent has disappeared.
- Minimize exposure time on dentine.
- MINIMAL ABRASIVENESS = EMS POWDER + MINIMAL TIME.**

### FULL MOUTH WITH AIRFLOW® PLUS POWDER.

- ⚠ Also safely apply AIRFLOW® PLUS Powder to the gingiva, tongue and palate.
- Do not direct the AIRFLOW® output towards openings of the salivary ducts as this may cause temporary pain and redness.



Pictures: Courtesy of Prof. Magda Mensi

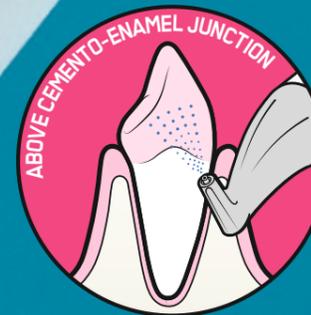
AIRFLOW® REMOVES BIOFILM, STAINS AND EARLY CALCULUS. CLEANS AND POLISHES IN ONE SINGLE PROCEDURE.



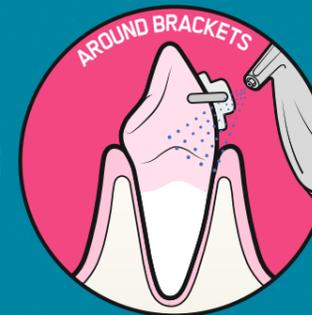
## SETTINGS



FOR HARD STAINS ON ENAMEL ONLY: AFTER USING CLASSIC COMFORT POWDER ON ENAMEL, ALWAYS FOLLOW WITH A BRIEF APPLICATION OF PLUS



30 TO 100%  
100%\*



30 TO 60%  
100%\*



30 TO 60%  
100%\*



30 TO 60%  
100%\*

\*adjust setting up to 100% for warmer water.

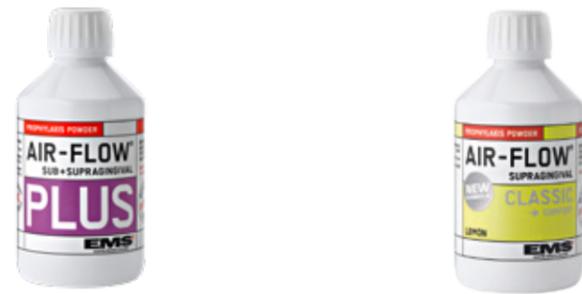
# MINIMAL ABRASION

► EMS powders are much less abrasive than traditional mechanical debridement techniques such as rubber cups and handscaling. Therefore we recommend AIRFLOW® and PERIOFLOW® first, followed by PIEZON®. GBT: the minimally invasive way for Professional Mechanical Plaque Removal (PMPR).

► Thanks to the GBT disclosing step, coloration is an additional way of minimizing AIRFLOW® abrasion: no more color, no more biofilm ; the objective of AIRFLOW® is accomplished without affecting the integrity of dental tissues.

⚠ EMS devices have been designed and tested for exclusive use with EMS prophylaxis powders.

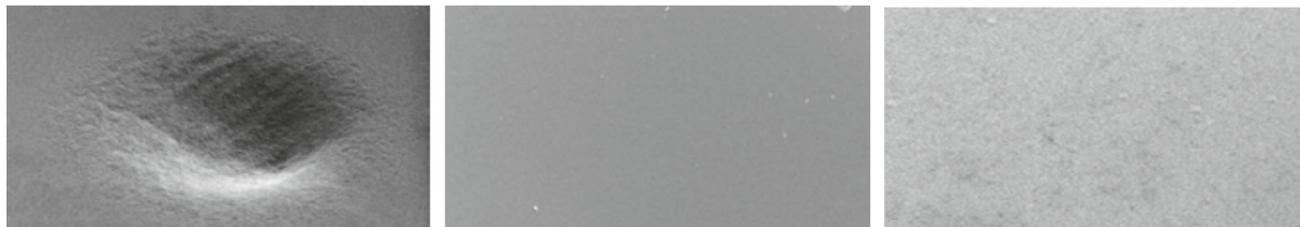
! Only use EMS powders.



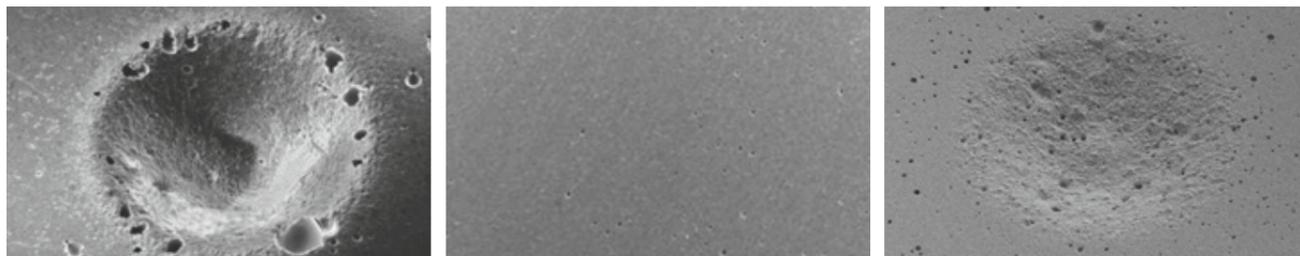
OSSPRAY  
CALCIUM SODIUM  
PHOSPHOSILICATE<sup>1</sup>

EMS AIRFLOW® PLUS  
POWDER ERYTHRITOL<sup>2</sup>

EMS SODIUM  
BICARBONATE<sup>3</sup>



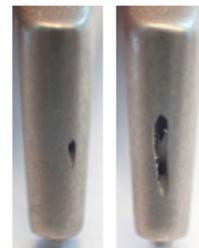
EFFECT OF 5 SEC AIR POLISHING ON HUMAN ENAMEL



EFFECT OF 5 SEC AIR POLISHING ON GLASS IONOMER

1. Barnes CM, et al. J Clin Dent 2014;25:76-87. › 2. For AIRFLOW® PLUS Powder complementary tests have been submitted to the J Clin Dent (Barnes CM, et al.). › 3. Barnes CM, et al. J Clin Dent 2014;25:76-87. The EMS sodium bicarbonate had a particle size of 65 µm. New Powder AIRFLOW® CLASSIC Comfort has 40 µm particle size, for more smoothness and patient comfort.

⚠ Be aware that so-called „EMS compatible“ powders in the market damage the patient’s tooth and the unit. See 2 cases of damaged nozzle due to the abrasion of those powders.



# THE EMS POWDER GUIDE



► With 2 chemical laboratories in Germany and Switzerland, EMS is the only company to produce its own powder. With more than 30 years of research, clinical testing, scientific studies and hundreds of millions of patients treated, EMS recommends the following 2 powders in 100% of clinical cases.

## RECOMMENDED



Name	PLUS	CLASSIC COMFORT
Ref	DV-165	DV-164/*
Flavor	NEUTRAL	LEMON/LEM MINT/MIN CHERRY/CHE NEUTRAL/NEU
Composition	ERYTHRITOL	SODIUM BICARBONATE
Particle size	~14µm	~40µm
pH	~7	~8.1
Tooth	Stains and early calculus	✓
	Enamel	✓
	Enamel white spots	✗
Gum	Dentine	✗
	Gum	✗
	Tongue and palate	✗
Restoration	Hybrid composite	✗
	Glass ionomer	✗
Implant	Implant and mucositis	✗
Orthodontics	Brackets and appliances	✗

⚠ Do not direct the powder jet of AIRFLOW® CLASSIC Powder towards white spots and fillings, crown or bridgework as this could cause damage. We recommend to use PLUS Powder for its higher efficiency, maximum comfort and minimal abrasiveness. Low-abrasive AIRFLOW® PLUS Powder also maximizes the life of the device.

AIRFLOW® NOT ONLY REMOVES BIOFILM,  
BUT ALSO PLAQUE, STAINS AND EARLY CALCULUS.



AIRFLOW® PLUS Powder has the remarkable ability to easily reach the sulcus area and interdental spaces as well as pits and fissures.

- ▶ In addition to biofilm and colorations, PLUS Powder is able to remove part of the calculus. Some studies use the term “early calculus” in order to describe less resistant partly mineralized deposits.



**“SO SMOOTH”**

Lucie Lebreton, age 13, after her first GBT treatment with AIRFLOW® PLUS Powder commenting on the smoothness of the tooth surfaces.



## AIRFLOW®: PERFECT FOR SENSITIVE AREAS

### SULCUS CLEANING

- ⚠ Observe the 3mm minimum distance when cleaning the sulcus area with AIRFLOW® PLUS Powder.

This safely opens up the sulcus preserving the junctional epithelial attachment.



### AESTHETIC DENTISTRY

- ▶ AIRFLOW® PLUS Powder is indicated for minimizing recessions on overlays and onlays.
- ▶ It is minimally invasive and removes biofilm effectively.



### AIRFLOW® ON DENTINE

- ▶ AIRFLOW® PLUS Powder is the minimally invasive way of removing biofilm on dentine.
- ▶ Disclosing step is mandatory for ensuring complete removal within minimal exposure time.



## THE IMPORTANCE OF DISCLOSING

- ▶ The disclosing agent guides biofilm removal.
- ▶ No more color, no more biofilm.
- ▶ The disclosing step makes AIRFLOW® biofilm removal more efficient and quicker.



## THE URGENCY FOR AIRFLOW®

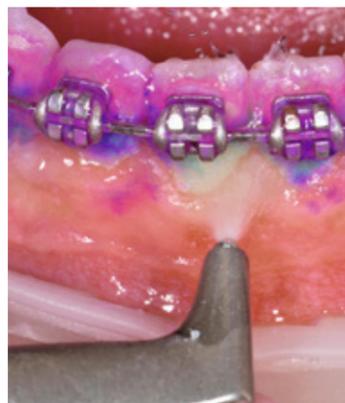
- ▶ Orthodontic appliances increase biofilm growth in critical areas that are not accessible by daily toothbrushing and traditional prophylaxis techniques.
- ▶ They dramatically foster the risk of gum disease, tooth demineralization and caries.
- ▶ In addition, biofilm creates friction on the wires which may cause up to 50% loss of bracket force.
- ▶ Scaling technique on the appliance may scratch and weaken the bonding.
- ▶ It is imperative professionals adopt AIRFLOW®.



Rubber cups are not adapted to orthodontics.

## AIRFLOW® PLUS POWDER SOLUTION

- ▶ AIRFLOW® PLUS is the unique powder for orthodontic appliance maintenance.
- ▶ Full access to tooth, gum and appliance surfaces.
- ▶ No need to remove the wires.
- ▶ AIRFLOW® PLUS Powder is gentle around soft tissues.
- ▶ Does not affect the integrity of the appliance surface.



AFTER DISCLOSING

AFTER AIRFLOW®

Pictures: Courtesy of Dentist Katrin Wolff

## IS BLEEDING DURING AIRFLOW® NORMAL?



- ▶ Yes. In case of gingivitis, bleeding will occur during AIRFLOW® treatment.

## NO MORE PAIN = TREATMENT COMPLIANCE

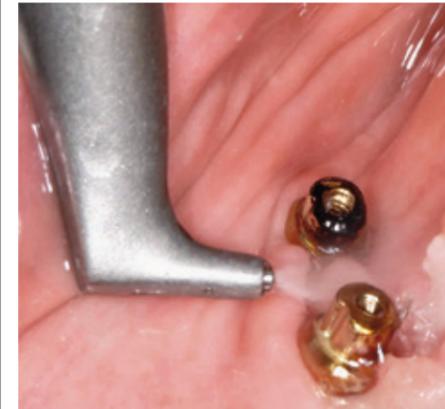
- ▶ Treating children with optimum comfort favorably impacts compliance with future recall visit recommendations.
- ▶ As much as possible, perform full treatment with AIRFLOW® PLUS Powder and consider scaling as the last option.



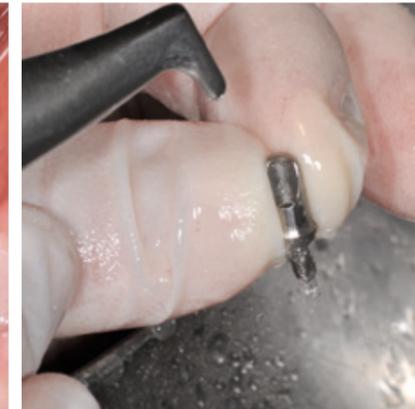
**AIRFLOW® IS COOL!**  
**SUPER COOL!**  
Morris Meyer, age 9.

## AIRFLOW® AND MUCOSITIS

- ▶ One of the major challenges of implantology is to prevent and treat mucositis and peri-implantitis. This is achieved by combining specific home care measures and regular professional biofilm removal.
- ▶ It is always preferable to dismantle the crown before cleaning. However, many implants have been installed without taking into consideration the need for regular cleaning.



Implant cleaning



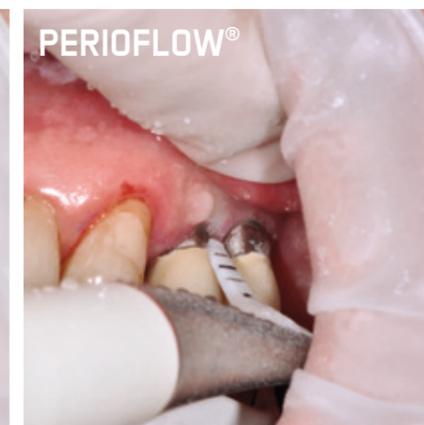
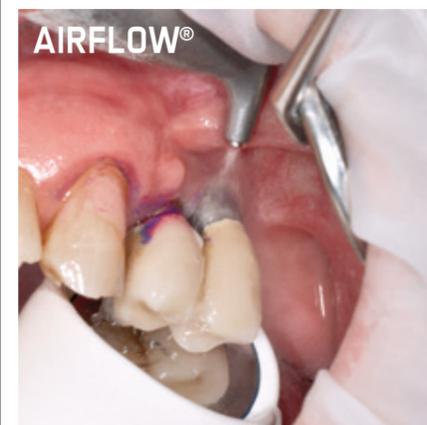
Ex-situ abutment cleaning



Cleaning if dismantling is not possible

## AIRFLOW® IN IMPLANT CLEANING SEQUENCE

- ▶ AIRFLOW® is the first cleaning procedure recommended around implant mucosa. It is comfortable, minimally invasive and adapted to soft tissues, implants, abutments and all types of veneer with no risk of scratching.
- ▶ If the mucosa is deeper than 4mm, PERIOFLOW® will be necessary. If PERIOFLOW® cannot be applied or if residual calculus is present, PIEZON® with PI Instrument is recommended.



# 05 PERIOFLOW®

## ENSURE TISSUES ARE IN GOOD CONDITION

⚠ Do not use PERIOFLOW®:

- ▶ Immediately after any subgingival treatment.
- ▶ When profuse bleeding or suppuration is present.
- ▶ In pockets deeper than the mucogingival junction.
- ▶ On a tooth adjacent to an unhealed or recently extracted site.
- ▶ On a tooth with sign of dental fracture (Endo- Perio lesions).

## NO ANESTHESIA

There is no need for anesthesia.

## GENTLE INSERTION

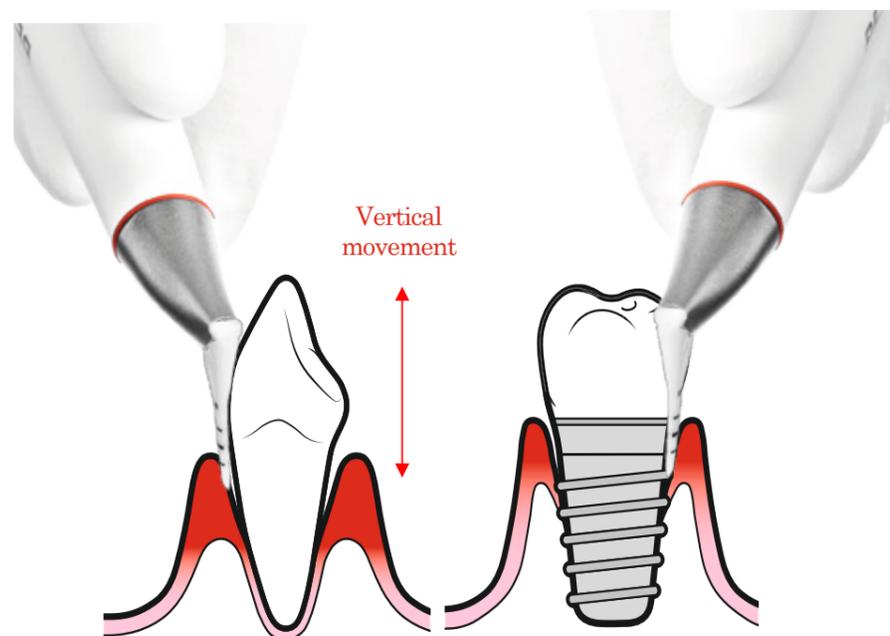
Gently insert the nozzle into the pocket.  
If the nozzle cannot penetrate sufficiently - do not force.  
Use PIEZON®.

## RECOMMENDED POSITION AND MOVEMENT

✔ Use each time up to a maximum of 5 seconds.

Make continuous vertical movements along the pocket.

Change the nozzle after maximum 20 sites.



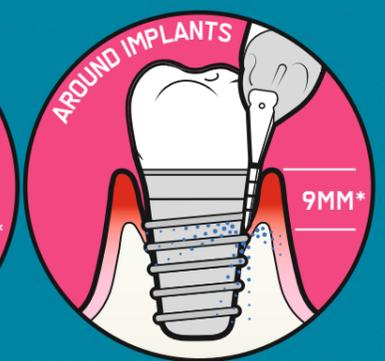
# ÉLIMINATION DU BIOFILM DANS LES POCHES ENTRE 4 ET 9 MM\*



## SETTINGS



50 TO 100%  
100%

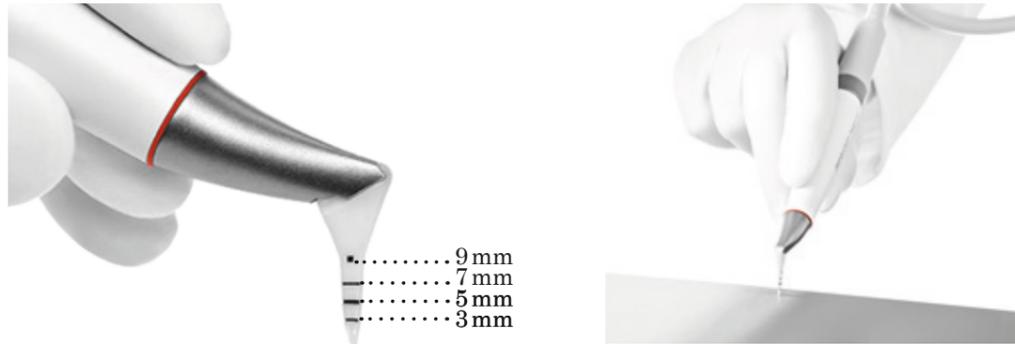


50 TO 100%  
100%

⚠ Set water spray at 100% to prevent lesions.

\* Approved for 5 mm in the U.S. - 9 mm in Canada

## PERIOFLOW® NOZZLE



PERIOFLOW® Nozzles are flexible, thereby adapting to the pocket's natural curves.

## PERIOFLOW® APPLICATIONS

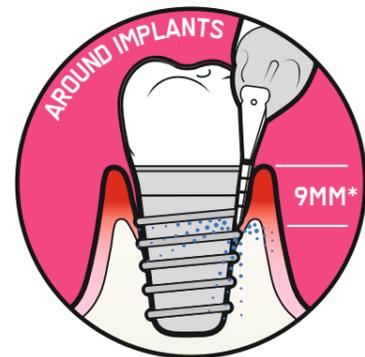
SUBGINGIVAL POCKET



ROOT FURCATION



IMPLANT



IMPLANT BRIDGE



\* Approved for 5 mm in the U.S. - 9 mm in Canada

## WHAT IS EMPHYSEMA?

► Subcutaneous emphysema occurs as a result of an abnormal introduction or presence of air or gas into tissue or tissue spaces. It has been recognized and documented as a complicating factor for any dental procedure using pressurized air. Expeditious diagnosis and management of subcutaneous emphysema are important to facilitate recovery.

### LIMIT THE RISK

⚠ Always follow contraindications, recommendations and detailed instructions.

### CLINICAL SIGNS

Crackling of mucosa upon pressure (subcutaneous crepitation).  
Pain and discomfort often accompanied by facial or neck swelling.

### IN CASE OF EMPHYSEMA

☑ Stay calm, there is no need to panic; symptoms will usually subside on their own. Observe patient for 30 minutes. Explain to the patient that symptoms will disappear within 24 to 48 hours. As a precautionary measure, the patient will receive prophylactic antibiotic treatment.

In case of patient discomfort, communicate positively. Follow up until symptoms subside. Consult a medical doctor.

# 06 PIEZON®

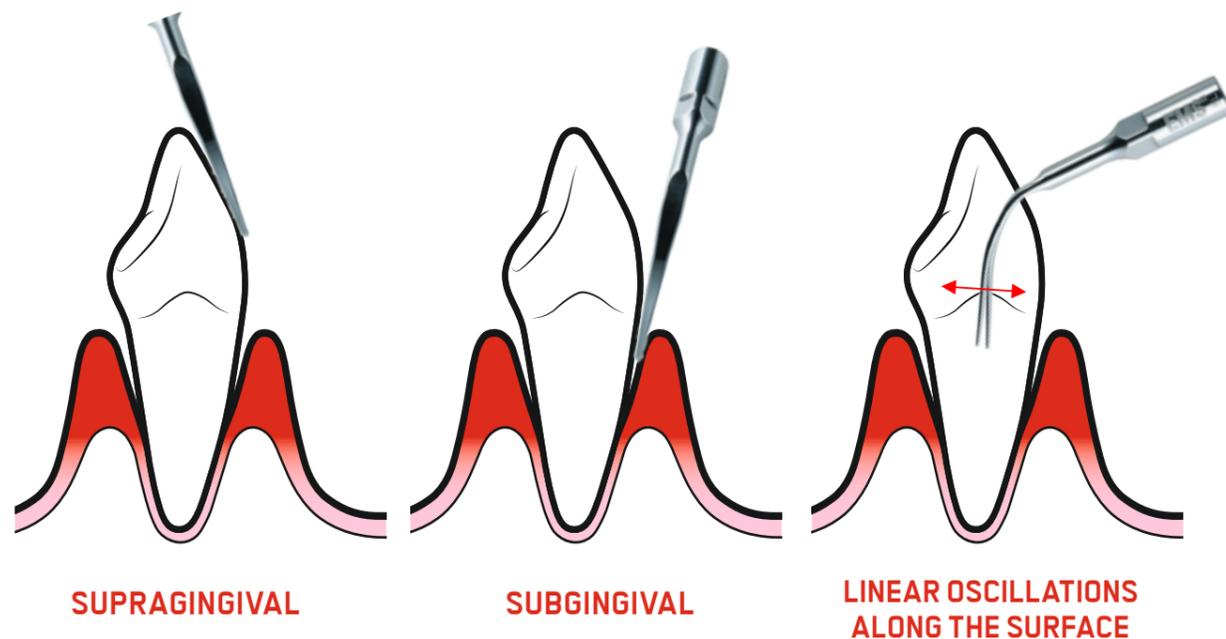


Pictures: Courtesy of Prof. Magda Mensi

- ▶ After using AIRFLOW®, remove remaining supra- and subgingival calculus with the PIEZON® PS Instrument.
- ▶ Linear movement of the PS Instrument = no damage to tooth surfaces or soft tissues. Minimally invasive with regard to root cementum. Dynamic power setting.
- ▶ EMS PIEZON® PS (Perio Slim) Instrument delivers the best interproximal and subgingival access\*.

\*CRA, Clinical Research Associates, USA, Newsletter 1998.

## SUPRA- AND SUBGINGIVAL



## PIEZON® PS INSTRUMENT FOR 95% OF ALL CASES

### PIEZON® PS INSTRUMENT SETTINGS



30 TO 100%



70 TO 100%

**“I DID NOT REALIZE THAT I WAS BEING TREATED WITH PIEZON®”**

A. Tarasconi after his first GBT treatment with PIEZON® PS Instrument.

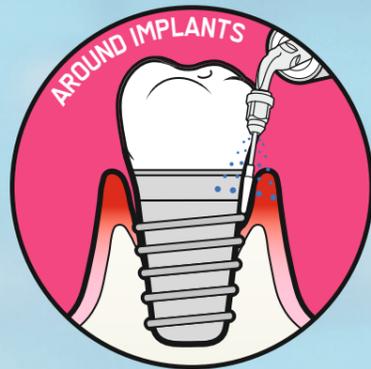
# PIEZON® PI INSTRUMENT

## PI INSTRUMENT REMOVES BIOFILM AROUND IMPLANT ABUTMENTS AND RESTORATIONS.

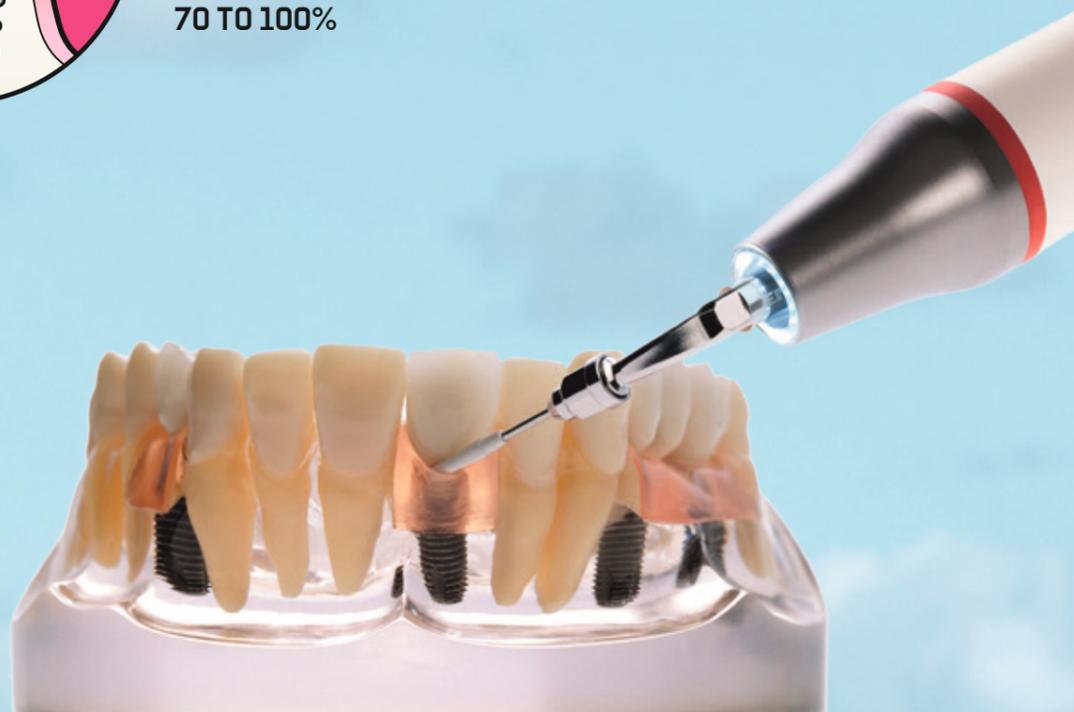
- ▶ VERIFY BEFORE USE THAT THE PLASTIC COATING IS NOT WORN OR DAMAGED.
- ▶ THE 120° ANGLED INSTRUMENT IS INCLUDED IN THE PERIOFLOW® APPLICATION BOX. USE ONLY 120° ANGLED INSTRUMENT HOLDER.



FS-443 PERIOFLOW® APPLICATION BOX



  
 70 TO 100%  
  
 70 TO 100%



# ONLY USE EMS SWISS INSTRUMENTS!



Following the FDI International Dental Federation (2016) statement on „Non Compliant Dental Products“, please be aware that EMS devices have been designed and tested for the exclusive use with EMS PIEZON® Instruments.

USING SO-CALLED „COMPATIBLE“ INSTRUMENTS MAY HARM YOUR PATIENT AND DAMAGE THE HANDPIECE CONNECTION. DAMAGE THAT MAY RESULT FROM THE USE OF NON-ORIGINAL COMPONENTS IS NOT COVERED BY THE EMS WARRANTY.



Minimal invasiveness = very limited wear.

## PIEZON® SCALING = FEW INSTRUMENTS.

- ▶ Clinicians initially used to the exclusive use of hand instruments and new to GBT and EMS PIEZON® scaling in particular, are amazed to find that few instruments are needed to cover most clinical cases.

APPLICATION	INSTRUMENT		
HARD CALCULUS SUBGINGIVAL	 <b>P</b>	30 TO 60%	70 TO 100%
HARD CALCULUS SUPRA ONLY	 <b>A</b>	30 TO 60%	70 TO 100%
EASIER LATERAL ACCESS	 <b>PL1</b>	30 TO 60%	70 TO 100%
	 <b>PL2</b>	30 TO 60%	70 TO 100%
ROOT FURCATIONS AND CONCAVITIES	 <b>PL4</b>	30 TO 60%	70 TO 100%
	 <b>PL5</b>	30 TO 60%	70 TO 100%

# 07 CHECK



## FINAL CHECK

Check for any remaining biofilm, stains and calculus. Absence of biofilm and stains in supragingival areas allows to effectively diagnose hard-tissue caries.

Exception:

Following the use of PIEZON® on recessed gum with visible dentine, briefly apply AIRFLOW® PLUS Powder in order to ensure a smooth surface.



## CARIES DIAGNOSIS

For a proper caries diagnosis, biofilm stains and calculus need to be removed. Cleanliness is key in order for any caries check to be effective.



Pictures: Courtesy of Wolfgang Gutwerk DDS

See below how biofilm may hinder caries detection.



DO A FINAL CHECK FOR REMAINING BIOFILM.  
MAKE CERTAIN CALCULUS IS FULLY REMOVED.  
ACCURATELY DIAGNOSE CARIES. PROTECT WITH FLUORIDE.

## BLEEDING

In case of gingivitis or mucositis some bleeding may occur:

- ▶ during initial probing
- ▶ during AIRFLOW® step
- ▶ during final subgingival check

## FLUORIDE PROTECTION

Protect teeth by applying fluoride.



## POST-TREATMENT RECOMMENDATIONS

Treatment cleans the teeth but also eliminates the pellicle acquired by the patient. Since the restoration by salivary proteins takes time, the teeth are left without natural protection against coloration for 1 hour.

**DURING 1 HOUR:**



NO COFFEE



NO SMOKING

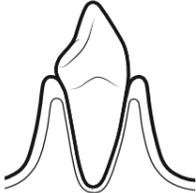
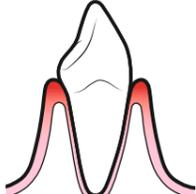
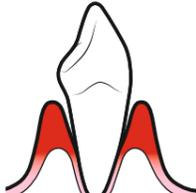


NO ALCOHOL

# 08 RECALL

Recall frequency is to be based on the individual patient's risk assessment. Please find below the general recommended indications.

## NATURAL TEETH

		<p><b>HEALTHY</b></p> <ul style="list-style-type: none"> <li>▶ HEALTHY GINGIVA</li> <li>▶ NO BLEEDING ON PROBING</li> </ul>	6 MONTHS
		<p><b>GINGIVITIS</b></p> <ul style="list-style-type: none"> <li>▶ SHALLOW POCKET</li> <li>▶ NO BONE LOSS</li> <li>▶ BLEEDING ON PROBING</li> </ul>	6 MONTHS
		<p><b>PERIODONTITIS</b></p> <ul style="list-style-type: none"> <li>▶ DEEP POCKET</li> <li>▶ BONE LOSS</li> <li>▶ BLEEDING ON PROBING</li> <li>▶ NO SUPPURATION</li> </ul>	1 MONTH
		<p><b>SUPPURATING PERIODONTITIS</b></p> <ul style="list-style-type: none"> <li>▶ BONE LOSS</li> <li>▶ BLEEDING ON PROBING</li> <li>▶ SUPPURATION</li> </ul>	1 MONTH

## SPECIFIC NEEDS

	<b>CHILDREN</b>	6 MONTHS
	<b>ORTHODONTICS</b>	1 to 3 MONTHS

SCHEDULE RECALL FREQUENCY ACCORDING TO RISK ASSESSMENT. ASK YOUR PATIENT IF HE OR SHE LIKED THE TREATMENT.



## IMPLANT

		<p><b>HEALTHY</b></p> <ul style="list-style-type: none"> <li>▶ NO BONE LOSS</li> <li>▶ HEALTHY GINGIVA</li> <li>▶ NO BLEEDING ON PROBING</li> <li>▶ NO SUPPURATION</li> </ul>	6 MONTHS
		<p><b>MUCOSITIS</b></p> <ul style="list-style-type: none"> <li>▶ NO BONE LOSS</li> <li>▶ BLEEDING ON PROBING</li> <li>▶ NO SUPPURATION</li> </ul>	3 MONTHS
		<p><b>PERI-IMPLANTITIS</b></p> <ul style="list-style-type: none"> <li>▶ BONE LOSS</li> <li>▶ BLEEDING ON PROBING</li> <li>▶ NO SUPPURATION</li> </ul>	1 MONTH
		<p><b>SUPPURATING PERI-IMPLANTITIS</b></p> <ul style="list-style-type: none"> <li>▶ BONE LOSS</li> <li>▶ BLEEDING ON PROBING</li> <li>▶ SUPPURATION</li> </ul>	1 MONTH

	<b>GERIATRICS</b>	6 MONTHS
---	-------------------	----------

# WHY GBT IS THE ...

- ▶ Dental biofilm is the main etiological factor for caries, periodontal and peri-implant infections. Periodontitis may increase the risk of systemic diseases, such as cardiovascular and respiratory disorders, arthritis or diabetes.
- ▶ Regular oral hygiene, combined with professional measures, keeps the biofilm under control – for a better oral and systemic health. Axelsson and Lindhe pioneered preventive dentistry in the 1970<sup>ies</sup> with studies and clinical protocols based on prophylaxis in “recall hours”.<sup>1-2</sup>
- ▶ GBT follows the recommendations on Professional Mechanical Plaque Removal (PMPR) and Oral Hygiene Instructions (OHI) for Home Care issued by the European Federation of Periodontology (EFP).<sup>3-5</sup>
- ▶ “Periodontal Health for a Better Life!”

## DENTAL PROPHYLAXIS IS TRADITIONALLY PERFORMED IN THIS ORDER:

- 1** Removing calculus with hand instruments and scalers may be painful and invasive, and scratch dental and implant surfaces. With many areas not reachable, the gingiva will be affected mechanically. Dental hygienists and assistants know that traditional cleaning may be a painful experience.
- 2** Polishing with rotary rubber cups and brushes is time-consuming and often messy. For this reason, patients may not return for follow-up appointments. Now, almost fifty years later, it is time for change.

1. Axelsson P. Preventive Materials, Methods and Programs: Quintessence Publishing, 2004. ▶ 2. Axelsson P, Nystrom B, Lindhe J. The long-term effect of a plaque control program on tooth mortality, caries and periodontal disease in adults. Results after 30 years of maintenance. *Journal of Clinical Periodontology* 2004;31:749-757. ▶ 3. Tonetti MS, Chapple ILC, Jepsen S, Sanz M. Primary and secondary prevention of periodontal and peri-implant diseases. *Journal of Clinical Periodontology* 2015;42:S1-S4. ▶ 4. Tonetti MS, Eickholz P, Loos BG, Papapanou P, van der Velden U, Armitage G, et al. Principles in prevention of periodontal diseases. *Journal of Clinical Periodontology* 2015;42:S5-S11. ▶ 5. Sanz M, Bäumer A, Buduneli N, Dommisch H, Farina R, Kononen E, et al. Effect of professional mechanical plaque removal on secondary prevention of periodontitis and the complications of gingival and periodontal preventive measures. *Journal of Clinical Periodontology* 2015;42:S214-S220.

# GAME CHANGER



## GUIDED BIOFILM THERAPY IS THE NEW STATE-OF-THE-ART APPROACH

- 1** Before removal, biofilm is always disclosed with a dye solution. Biofilm and early calculus are easily removed with AIRFLOW<sup>®</sup> and PERIOFLOW<sup>®</sup> – supra- and subgingivally.
  - 2** If needed, this is followed by debridement with PIEZON<sup>®</sup> PS piezoceramic instruments.
- ▶ Guided Biofilm Therapy means that the clinician is guided by the disclosed biofilm during tooth cleaning procedures.
  - ▶ Guided Biofilm Therapy is truly minimally invasive and reduces the need of hand and sonic/ultrasonic instrumentation. It is safe, effective and gentle to teeth and soft tissues, implants and restorations.<sup>1-4</sup>
  - ▶ GBT is also very comfortable for patients and practitioners.<sup>5</sup> It is efficient and time-saving.<sup>6</sup> This also applies to primary caries and perio prevention in children and teenagers.
  - ▶ GBT is part of a comprehensive preventive concept – to preserve your patients’ oral health – and to make the patients feel good.

## GBT IS A CLINICALLY SOUND AND PATIENT-ORIENTED CONCEPT

- ▶ Since 1982 EMS has provided dental practices all over the world with AIRFLOW<sup>®</sup> air polishing and PIEZON<sup>®</sup> PS piezoceramic scaling technology.
- ▶ In 2003 EMS invented PERIOFLOW<sup>®</sup> for subgingival biofilm removal – in combination with the AIRFLOW<sup>®</sup> PERIO Powder on a glycine basis.<sup>7</sup> This was an important paradigm shift in perio and preventive dentistry.
- ▶ In 2012 EMS added the high-tech erythritol-based AIRFLOW<sup>®</sup> PLUS Powder with a particle size of only 14 µm.
- ▶ Guided Biofilm Therapy is based on clinically proven technologies invented by EMS. It was developed in cooperation with highly respected and experienced periodontologists, caries specialists and dental hygienists.
- ▶ GBT is a systematic, predictable, risk-oriented and user-friendly treatment adaptable to all age groups and each individual patient.

1. Wennstrom JL, Dahlen G, Ramberg P. Subgingival debridement of periodontal pockets by air polishing in comparison with ultrasonic instrumentation during maintenance therapy. *Journal of Clinical Periodontology* 2011;38:820-827. ▶ 2. Ronay V, Merlini A, Attin T, et al. In vitro cleaning potential of three implant debridement methods. Simulation of the non-surgical approach. *Clinical Oral Implants Research* 2017;28:151-155. ▶ 3. Bühler J, Amato M, Weiger R, Walter C. A systematic review on the effects of air polishing devices on oral tissues. *International Journal of Dental Hygiene* 2016;14:15-28. ▶ 4. Barnes CM, Covey D, Watanabe H, et al. An in vitro comparison of the effects of various air polishing powders on enamel and selected esthetic restorative materials. *The Journal of Clinical Dentistry* 2014;25:76-87. ▶ 5. Aslund M, Suvan J, Moles DR, et al. Effects of two different methods of non-surgical periodontal therapy on patient perception of pain and quality of life: a randomized controlled clinical trial. *Journal of Periodontology* 2008;79:1031-1040. ▶ 6. O’Hehir TE. How subgingival air polishing will turn dental hygiene upside down. Interview with Prof. Dr. Thomas Flemmig. *dentaltown.com* 2014:94-96. ▶ 7. Flemmig TF, Arushanov D, Daubert D, et al. Randomized controlled trial assessing efficacy and safety of glycine powder air polishing in moderate-to-deep periodontal pockets. *Journal of Periodontology* 2012;83:444-452.

# SETTINGS

Setting recommendations of the present document apply to AIRFLOW® Prophylaxis Master and AIRFLOW® One.

The following table may help users to find corresponding settings for older EMS devices.

AIRFLOW DEVICES:	PROPHYLAXIS MASTER AND AIRFLOW ONE	MASTER PIEZON	MASTER	S2	S1
	PLUS Powder chamber	EL-607	EL-474	EL-474	INTERNAL CHAMBER
	CLASSIC Powder chamber	EL-606	EL-368	EL-368	INTERNAL CHAMBER
	AIRFLOW® Handpiece	EL-308	EL-308	EL-308	EL-308
	PERIOFLOW® Handpiece	EL-354	EL-354	EL-354	EL-354
	PIEZON® LED Handpiece	EN-060	EN-060	NOT AVAILABLE	NOT AVAILABLE
	PIEZON® Handpiece	EN-061	EN-061	EN-046	NOT AVAILABLE
	100%	10	17 LED	17 LED	
	50%	5	9 LED	9 LED	
	10%	1	2 LED	2 LED	
	100%	10	11 LED	11 LED	
	50%	5	6 LED	6 LED	
	10%	1	1 LED	1 LED	

# EMS WORLDWIDE



## HEADQUARTERS

 **NYON, SWITZERLAND**  
**E.M.S. ELECTRO MEDICAL SYSTEMS S.A.**  
 Chemin de la Vuarpillière 31  
 CH-1260 Nyon  
 ems-dental.com/contact  
 T. +41 22 99 44 700  
 F. +41 22 99 44 701

## WORLDWIDE EMS AFFILIATES

**MUNICH, GERMANY**  
**EMS ELECTRO MEDICAL SYSTEMS GMBH**  
 Schatzbogen 86  
 D-81829 München  
 Tel. +49 89 42 71 61 0  
 Fax +49 89 42 71 61 60  
 e-mail: info@ems-ch.de

**FONCINE, FRANCE**  
**EMS ELECTRO MEDICAL SYSTEMS FRANCE SARL**  
 32, Route de Pontarlier  
 F-39460 Foncine-le-Haut  
 Tel. +33 3 84 51 90 01  
 Fax. +33 3 84 51 94 00  
 e-mail: info@ems-france.fr

**MADRID, SPAIN**  
**EMS ELECTRO MEDICAL SYSTEMS ESPAÑA SLU**  
 C/ Tomás Bretón, 50-52 2ª planta  
 E-28045 Madrid  
 Tel. +34 91 528 99 89  
 e-mail: info@ems-espana.com

**MILANO, ITALY**  
**EMS ITALIA S.R.L**  
 Via Faravelli 5  
 I-20149 Milano  
 Tel. +39 02 3453 8111  
 e-mail: dental@ems-italia.it

## CONTACT EMS

If any serious incident occurs that is directly or indirectly related to the treatment, please report it immediately to EMS and to the competent authority of your country and that of your patient's place of residence (if different).

**ADVERSE EVENT NOTIFICATION :**  
 vigilancemailbox@ems-ch.com

**GENERAL SUPPORT:**  
 ems-dental.com/contact  
 TSAV@ems-ch.com

**SHANGHAI, CHINA**  
 医迈斯电子医疗系统贸易(上海)有限公司  
**E.M.S. ELECTRO MEDICAL SYSTEMS TRADING (SHANGHAI) CO., LTD.**  
 24A, Jin Sui Mansion,  
 N°379 Pudong Nan Rd.  
 Shanghai, China 200120  
 Tel. +86 21 3363 2323  
 e-mail: emschina@ems-ch.com

**DALLAS, USA**  
**EMS CORPORATION**  
 11886 Greenville Avenue, Ste. 120  
 Dallas, Texas 75243  
 United States of America  
 Phone : +001 972 690 8382  
 Fax : +001 972 690 8981  
 E-mail : info@ems-na.com

**TOKYO, JAPAN**  
**E.M.S. JAPAN BRANCH OFFICE**  
 501, 73 Kanda Neribeicho  
 Chiyoda-ku  
 Tokyo 101-0022 - Japan  
 Phone : +81 (0) 3 5207 6795  
 Fax : +81 (0) 3 5207 6796  
 E-mail : emsjapan@ems-ch.com

# FROM THE VALLEY

# TO THE TOP



► For more than 35 years EMS has developed high-end technologies and protocols in conjunction with the world's most advanced clinicians, enabling the patients to enjoy natural teeth and implants for much longer.

„Primum non nocere“\* and minimal invasiveness are not only a must, they are our way of life.

\* „First do no harm“ from the Hippocratic Oath.

MONT BLANC, 4807M

EMS RESEARCH AND MANUFACTURE CENTER  
NYON, SWITZERLAND

# GET STARTED



"I FEEL  
GOOD"

Copyright: 2020 EMS.  
E.M.S. Electro Medical Systems S.A.  
Ch. de la Vuarpillière 31  
1260 Nyon - Switzerland  
+41229944700 - [ems-dental.com](http://ems-dental.com)