

## Bijlage 5

### Beschrijvende tabel en 'GRADE' tabellen 'niet chirurgische behandeling peri-implantitis'

Beschrijvende tabel studies 'niet-chirurgische behandeling peri-implantitis'						
Study reference	Study characteristics	Patient characteristics	Intervention	Comparison/Control	Follow up	Outcome measures and effect size
<i>Adjunctive or alternative measures for biofilm removal: Ultrasonic debridement (I) versus manual debridement (C)</i>						
Karring, 2005 <sup>ncpi1</sup>	<p><u>Type of study:</u> RCT, split-mouth, single-blind</p> <p><u>Setting:</u> University</p> <p><u>Country:</u> Denmark</p> <p><u>Source of funding:</u> Dürr Dental (Bietigheim-Bissingen, Germany)</p>	<p><u>Inclusion criteria:</u> Patients having 2 non-adjacent implants of the same brand affected by peri-implantitis, showing BOP, PD <math>\geq 5</math>mm with bone loss <math>&gt;1.5</math>mm and exposed threads, but with a difference of PD <math>\leq 1</math>mm among the two implants.</p> <p><u>Exclusion criteria:</u> mechanical debridement within the last 3 months; PD at the remaining teeth exceeding 5 mm; no antibiotic therapy within the last 3 months.</p> <p><u>N total at baseline:</u> N=11</p>	<p><u>Intervention:</u> Patients were treated with the Vector system (ultrasonic debridement, Dürr Dental, Bietigheim-Bissingen, Germany) with the straight or curved flexible Vector carbon fibre tip combined with aerosol spray of Vector fluid polish with hydroxyapatite particles (grain size approximately 10 <math>\mu</math>m).</p> <p><u>Procedure:</u> No local anaesthesia was provided and the instrumentation of each implant was carried out for 2 to 3 minutes. The same treatment was repeated after 3 months. Following each treatment patients received oral hygiene instructions and the remaining teeth were scaled with hand instruments according to their need.</p>	<p><u>Control intervention:</u> Patients were treated with submucosal debridement with a carbon fibre cures. .</p>	<p><u>Length of follow up:</u> 6 months</p> <p><u>Loss to follow up:</u> N=0</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Probing pocket depth (PPD)</p> <p><u>Effect:</u> <i>BOP (% of implants):</i> I: 63.6% to 36.4% C: 72.7% to 81.8% <i>n.s.</i></p> <p><i>PPD:</i> I: 5.8 (1.1) to 5.8 (1.2) mm C: 6.2 (1.6) to 6.3 (2.2) mm <i>n.s.</i></p> <p><u>Other measures in study:</u> Presence of plaque Bone level</p>
Renvert, 2009 <sup>ncpi2</sup>	<p><u>Type of study:</u> RCT, parallel</p> <p><u>Setting:</u> University</p> <p><u>Country:</u> Sweden</p>	<p><u>Inclusion criteria:</u> Patients with one dental implant with bone loss <math>&lt;2.5</math> mm identified on intra-oral radiographs and having a PPD <math>\geq 4</math> mm with bleeding, and/or pus on probing using a 0.2N probing force.</p>	<p><u>Intervention:</u> mechanical debridement using an ultrasonic device (the Vector system) with a specially designed tip for the treatment of implants.</p> <p><u>Procedure:</u></p>	<p><u>Control intervention:</u> mechanical debridement using titanium cures. .</p>	<p><u>Length of follow up:</u> 6 months</p> <p><u>Loss to follow up:</u> I: N=4 C: N=2</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Probing pocket depth (PPD)</p> <p><u>Effect:</u> <i>BOP:</i> I: 35.4 to 28.7 C: 32.6 to 34.3 <i>n.s.</i></p>

	<p><u>Source of funding:</u> The Clinical Research Foundation, Region Skåne, Sweden</p>	<p><u>Exclusion criteria:</u> Patients with poorly controlled diabetes mellitus; use of anti-inflammatory prescription medications, or antibiotics within the preceding 3 months or during the study, with bone loss &gt;2.5 mm in comparison with findings from radiographs taken immediately following placement of the implant suprastructure.</p> <p><u>N total at baseline:</u> N=37</p>	<p>Before enrolment in the study, any periodontal lesions at remaining teeth had been treated. All implants were polished with rubber cups and polishing paste. If needed, routine local anaesthesia was used. All subjects received oral hygiene instructions on an individual basis and at all study time points (baseline, 1, 3 and 6 months).</p>			<p>PPD: I: 4.3 (0.6) to 3.9 (0.8) C: 4.0 (0.8) to 4.0 (0.8) <i>n.s.</i></p> <p><u>Other measures in study:</u> Presence of hyperplasia Presence of plaque Microbiological parameters</p>
<b>Adjunctive or alternative measures for biofilm removal: Er:YAG laser (I) versus air-abrasive device (C)</b>						
<p>Renvert, 2011 <sup>ncpi3</sup></p>	<p><u>Type of study:</u> RCT, parallel, single-blind</p> <p><u>Setting:</u> Specialty Clinic for Periodontology</p> <p><u>Country:</u> Sweden</p> <p><u>Source of funding:</u> Financial support and equipment provided by Electric Medical Systems (EMS, Nyon, Switzerland), by KAVO, Biberach, Germany) and by Philips Oral Healthcare, Snoqualmie, WA, USA).</p>	<p><u>Inclusion criteria:</u> Patients having at least 1 implant affected by peri-implantitis, showing bone loss &gt; 3mm, PPD ≥ 5mm, BOP and/or pus.</p> <p><u>Exclusion criteria:</u> Patients with poorly controlled diabetes mellitus; use of anti-inflammatory prescription medications, or antibiotics within the preceding 3 months or during the study; use of medications known to have an effect on gingival growth; subjects requiring prophylactic antibiotics.</p> <p><u>N total at baseline:</u> N=42</p>	<p><u>Intervention:</u> Patients were treated with an Er:YAG laser at an energy level of 100 mJ/ pulse and 10 Hz (12.7 J/cm<sup>2</sup>) using a cone-shaped sapphire tip. The instrument tip was used in a parallel mode using a semicircular motion around the circumferential pocket area of the implant.</p> <p><u>Procedure:</u> Before enrolment in the study, any periodontal lesions at remaining teeth were treated. Before the treatments, the supra-structures were removed. Routine local anaesthesia was used as needed. At all study time points, all subjects received individualized oral hygiene instructions. Each subject also received a sonic toothbrush. The study subjects were carefully instructed in the use of the toothbrush. They were supplied with new brush heads after 3 months.</p>	<p><u>Control intervention:</u> Patients were treated with an air-abrasive device. The nozzle was placed in the pocket and used for approximately 15 seconds in each position circumferentially around the implant.</p>	<p><u>Length of follow up:</u> 6 months</p> <p><u>Loss to follow up:</u> N=0</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD) Recurrence of peri-implantitis</p> <p><u>Effect:</u> <i>BOP:</i> I: 69.1% (at 6 months) C: 75% (at 6 months) <i>n.s.</i></p> <p><i>PD reduction:</i> I: 0.8 mm (0.5) C: 0.9 mm (0.8) <i>n.s.</i></p> <p><i>Recurrence:</i> I: 44% of implants with improved conditions C: 47% of implants with improved conditions <i>n.s.</i></p> <p><u>Other measures in study:</u> Presence of plaque Implant failure Bone level Suppuration</p>

**Adjunctive or alternative measures for biofilm removal: Air-abrasive device (I) versus manual debridement with adjunctive chlorhexidine (C)**

<p>Sahm, 2011 <sup>ncpi4</sup> / John, 2015 <sup>ncpi5</sup></p>	<p><u>Type of study:</u> RCT, parallel</p> <p><u>Setting:</u> University</p> <p><u>Country:</u> Germany</p> <p><u>Source of funding:</u> Partly funded by Electric Medical Systems (EMS, Nyon, Switzerland).</p>	<p><u>Inclusion criteria:</u> Patients with presence of at least one screw-type titanium implant exhibiting clinical (i.e. PPD ≥4mm, BOP and suppuration) and radiographic (loss of supporting bone ≤30% compared with the situation after implant placement) signs of initial or moderate peri-implantitis.</p> <p><u>Exclusion criteria:</u> Implant mobility; restorations with overhangings or margins; evidence of occlusal overload; absence of at least 2 mm of keratinized attached mucosa; non-treated chronic periodontitis or improper periodontal maintenance care; insufficient level of oral hygiene (plaque index &lt;1); systemic diseases which could influence the outcome of the therapy (i.e. diabetes (HbA1c &lt;7), osteoporosis, bisphosphonate medication) smokers; hollow cylinder implants.</p> <p><u>N total at baseline:</u> N=32</p>	<p><u>Intervention:</u> Patients received debridement with an air abrasive device with amino acid glycine powder.</p> <p><u>Procedure:</u> All patients were enrolled in an oral hygiene program (OHI) and obtained supramucosal/gingival professional implant/tooth cleaning using rubber cups and polishing paste and oral hygiene instructions on two to four appointments according to individual needs. A supramucosal/gingival professional implant/tooth cleaning and reinforcement of oral hygiene was performed at baseline (immediately before treatment) as well as 2, 4, 6, 8, 10, 12, 16, 20, 24 and 52 weeks after treatment. Treatments were performed under local anaesthesia.</p>	<p><u>Control intervention:</u> Patients received manual debridement using carbon curets followed by pocket irrigation with a 0.1 % chlorhexidine digluconate solution and submucosal application of 1 % CHX gel.</p>	<p><u>Length of follow up:</u> 12 months</p> <p><u>Loss to follow up:</u> I: N=4 C: N=3</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD)</p> <p><u>Effect:</u> <i>BOP (% of sites):</i> I: 99.0 (4.1) to 57.8 (30.7) C: 94.7 (13.7) to 78.1 (30.0) <i>p &lt; 0.05</i></p> <p><i>PD:</i> I: 3.7 (1.0) to 3.2 (1.1) C: 3.9 (1.1) to 3.5 (1.2) <i>n.s.</i></p> <p><u>Other measures in study:</u> Plaque index (PI) Mucosal recession (REC) Clinical attachment loss (CAL)</p>
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**Adjunctive or alternative measures for biofilm removal: Er:YAG laser (I) versus manual debridement with adjunctive chlorhexidine (C)**

<p>Schwarz, 2005 <sup>ncpi6</sup></p>	<p><u>Type of study:</u> RCT, parallel</p> <p><u>Setting:</u> university</p> <p><u>Country:</u> Germany</p> <p><u>Source of funding:</u></p>	<p><u>Inclusion criteria:</u> Patients having at least 1 implant showing PD≥ 4mm and signs of acute peri-implantitis (bone loss, BOP and suppuration)</p> <p><u>Exclusion criteria:</u> Implant mobility; absence of keratinized peri-implant</p>	<p><u>Intervention:</u> Patients were treated with Er:YAG laser using a cone-shaped glass fiber tip at an energy setting of 100 mJ/pulse and 11 pps.</p> <p><u>Procedure:</u> For 2 weeks before treatment all patients were enrolled in a</p>	<p><u>Control intervention:</u> Patients received manual debridement performed with plastic curettes followed by pocket irrigation with 0.2% chlorhexidine and subgingival application of 0.2% chlorhexidine gel, followed by 2 weeks of mouthrinses with 0.2% chlorhexidine, twice a day for 2 minutes.</p>	<p><u>Length of follow up:</u> 6 months</p> <p><u>Loss to follow up:</u> I: N=0 C: N=1</p> <p>1 withdrawal due to persisting pus</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Probing depth (PD) Recurrence of peri-implantitis</p> <p><u>Effect:</u> <i>BOP (% of implants):</i> I: 83.2% (17.2) to 31.1 (10.1) C: 81.3% (19.0) to 58.3 (16.9) <i>p &lt; 0.001 at 3 and 6 months</i></p>
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	Not reported	<p>mucosa; systemic diseases that could influence outcome of the therapy; peri-implantitis treatment during the last 12 months; systemic use of antibiotics during the last 6 months; smoking; hollow cylinder implants.</p> <p><u>N total at baseline:</u> N=20</p>	<p>hygiene program and received supragingival professional implant/tooth cleaning using rubber cups and polishing paste and oral hygiene instructions on 2 to 4 appointments according to individual needs. Partially edentulous patients suffering from chronic periodontitis received additional scaling and root planing using hand instruments on teeth exhibiting bleeding on probing or suppuration. A supragingival professional implant/tooth cleaning and reinforcement of oral hygiene was also performed at baseline (immediately before treatment) as well as 4, 12, and 24 weeks after treatment. For both groups, instrumentation was carried out under local anesthesia until the operator felt that the implant surfaces were adequately debrided, on the average 6 minutes per implant. All implants showing persistent suppuration after treatment would receive further treatment and be excluded from the study.</p>		<p>formation 8 weeks after treatment.</p>	<p><i>PD reduction:</i> I: 0.9 (0.66) C: 0.67 (0.57) Mean diff: -0.23 [-0.31;0.77] <i>n.s.</i></p> <p><i>Recurrence:</i> I: 0/10 C: 1/10 <i>n.s.</i></p> <p><u>Other measures in study:</u> Clinical attachment level (CAL) Gingival recession (GR) Plaque index (PI) Implant failure</p>
Schwarz, 2006 <sup>ncpi7</sup>	<p><u>Type of study:</u> RCT, parallel</p> <p><u>Setting:</u> university</p> <p><u>Country:</u> Germany</p> <p><u>Source of funding:</u> A grant of the Arbeitsgemeinschaft für Kieferchirurgie</p>	<p><u>Inclusion criteria:</u> Presence of at least one screw-type implant with radiological evidence of moderate and advanced peri-implant bone loss, peri-implant probing pocket depths &gt;4mm and &gt;7 mm on at least one aspect of the implant, signs of acute periimplantitis (bleeding on probing (BOP), suppuration)</p>	<p><u>Intervention:</u> Patients were treated with Er:YAG laser using a cone-shaped glass fiber tip at an energy setting of 100 mJ/pulse and 11 pps.</p> <p><u>Procedure:</u> For 2 weeks before treatment all patients were enrolled in a hygiene program and received supragingival professional implant/tooth cleaning using</p>	<p><u>Control intervention:</u> Patients received manual debridement performed with plastic curettes followed by pocket irrigation with 0.2% chlorhexidine and subgingival application of 0.2% chlorhexidine gel, followed by 2 weeks of mouthrinses with 0.2% chlorhexidine, twice a day for 2 minutes.</p>	<p><u>Length of follow up:</u> 1 year</p> <p><u>Loss to follow up:</u> I: N=0 C: N=2</p> <p>2 withdrawals due to persisting pus formation 4 to 12 weeks after treatment. The affected implants</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD) Recurrence of peri-implantitis</p> <p><u>Effect:</u> <i>BOP:</i> <i>p &lt; 0.01 at 3 and 6 months</i> <i>p &gt; 0.05 at 12 months, n.s.</i></p> <p><i>PD:</i></p>

	innerhalb der Deutschen Gesellschaft für Zahn-, Mund- und Kieferheilkunde.	<p><u>Exclusion criteria:</u> Implant mobility; absence of keratinized peri-implant mucosa; systemic diseases that could influence outcome of the therapy; peri-implantitis treatment during the last 6 months; systemic use of antibiotics during the last 6 months; insufficient level of oral hygiene (PI<math>\geq</math>1); smoking; hollow cylinder implants.</p> <p><u>N total at baseline:</u> N=20</p>	rubber cups and polishing paste and oral hygiene instructions on 2 to 4 appointments according to individual needs. Partially edentulous patients suffering from chronic periodontitis received additional scaling and root planing using hand instruments on teeth exhibiting bleeding on probing or suppuration. A supragingival professional implant/tooth cleaning and reinforcement of oral hygiene was also performed at baseline (immediately before treatment) as well as 1, 3, 6 and 12 months after treatment. For both groups, instrumentation was carried out under local anesthesia until the operator felt that the implant surfaces were adequately debrided, on the average 6 minutes per implant. All implants showing persistent suppuration after treatment would receive further treatment and be excluded from the study.		received the Er:YAG laser treatment	<p>I: moderate lesions: 4.6 (0.9) to 4.1 (0.4), advanced lesions: 5.9 (0.9) to 5.5 (0.6) C: moderate lesions: 4.5 (0.8) to 4.3 (0.5), advanced lesions 6.0 (1.3) to 5.6 (0.9) <i>n.s.</i></p> <p><u>Recurrence:</u> I: 0/10 C: 2/10 <i>n.s.</i></p> <p><u>Other measures in study:</u> Clinical attachment level (CAL) Gingival recession (GR) Plaque index (PI) Implant failure</p>
<b>Adjunctive or alternative measures for biofilm removal: Adjunctive diode laser treatment (I) versus manual debridement (C)</b>						
Arisan, 2015 <sup>ncpi8</sup>	<p><u>Type of study:</u> RCT, split-mouth</p> <p><u>Setting:</u> University</p> <p><u>Country:</u> Turkey</p> <p><u>Source of funding:</u> A grant from Istanbul University Research Fund</p>	<p><u>Inclusion criteria:</u> Patients with at least two functioning bilateral rough-surfaced implants and demonstrating bleeding on probing (BOP), plaque, pain, and/or suppuration, 4–6mm of periodontal probing depth, and &lt;3mm of marginal bone loss.</p> <p><u>Exclusion criteria:</u> Patients with ongoing or a history of periodontitis and prescription of any antibiotics 3 months prior to the</p>	<p><u>Intervention:</u> Patients received manual debridement with a plastic implant curette + additional treatment with a diode laser (running at 1.0 W power at the pulsed mode (<math>\lambda</math>, 810 nm; energy density, 3 J/cm<sup>2</sup>; time, 1 min; power density, 400 mW/cm<sup>2</sup>; energy, 1.5 J; and spot diameter, 1 mm).</p> <p><u>Procedure:</u> Prior to the initiation of the study, proper oral hygiene instructions were given to all</p>	<p><u>Control intervention:</u> Patients received manual debridement with a plastic implant curette.</p>	<p><u>Length of follow up:</u> 6 months</p> <p><u>Loss to follow up:</u> N = 0</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD)</p> <p><u>Effect:</u> BOP: I: 100% to 95.8% C: 100% to 100% <i>n.s.</i></p> <p>PD: I: 4.71 (0.67) to 4.54 (0.74) C: 4.38 (0.42) to 4.17 (0.41) <i>n.s.</i></p> <p><u>Other measures in study:</u></p>

		initiation of the study, with implants with an MBL of > 3mm necessitate a surgical approach [cumulative interceptive supportive therapy (CIST) protocol].  <u>N total at baseline:</u> N = 10	patients. All implants were restored by cement-retained fixed metal-ceramic prostheses. Any restorations with overhanging or poor margins were discarded or corrected to establish proper margin contours. Treatments were performed under local anesthesia. Suprastructures were removed before treatment and re-cemented thereafter.			Plaque index (PI) Marginal bone loss (MBL) Microbiological parameters
<b>(Adjunctive) antiseptic/antibiotic treatment: Local antibiotics (I) versus ultrasonic debridement (C)</b>						
Tang, 2002 <sup>ncpi9</sup>	<u>Type of study:</u> RCT, parallel  <u>Setting:</u> University  <u>Country:</u> China  <u>Source of funding:</u> Unknown	<u>Inclusion criteria:</u> Patients in good general health having 1 implant affected by peri-implantitis (BOP; PPD ≤ 6mm; bone loss <4mm).  <u>Exclusion criteria:</u> Patients with assumption of antibiotics over the last 3 months and antimicrobial mouthwashes over the last month.  <u>N total at baseline:</u> N=30	<u>Intervention:</u> Patients received metronidazole gel 25% injected into the pocket at a depth of 3 mm.  <u>Procedure:</u> Both interventions were repeated a second time 1 week after.	<u>Control intervention:</u> Patients received ultrasonic debridement with carbon fibre tip inserted 1 to 2 mm into the gingival sulcus at the lowest power for 15 seconds.	<u>Length of follow up:</u> 12 weeks  <u>Loss to follow up:</u> I: n=1 C: n=2	<u>Outcome measures:</u> Probing pocket depth (PPD) Recurrence of peri-implantitis  <u>Effect:</u> <i>PPD reduction:</i> I: 0.7 (0.98) C: 0.9 (1.63) Mean diff: -0.2 [-1.22;0.82] <i>n.s.</i>  <i>Recurrence</i> No recurrence of peri-implantitis in any of the groups.  <u>Other measures in study:</u> Implant failure Plaque index BANA test for bacterial quantification
<b>(Adjunctive) antiseptic/antibiotic treatment: Adjunctive chlorhexidine (I) versus ultrasonic debridement (C)</b>						
Machtei, 2012 <sup>ncpi10</sup>	<u>Type of study:</u> RCT, multi-centre, double-blind, parallel  <u>Setting:</u> University and Medical Centre.  <u>Country:</u> Israel	<u>Inclusion criteria:</u> Patients with at least one implant with PPD of 6–10mm in depth, with BOP and radiographic evidence of bone loss.  <u>Exclusion criteria:</u> History of allergy to CHX or regular use of it; horizontal inter-implant distance <2mm	<u>Intervention:</u> Debridement with ultrasonic instruments + insertion of chlorhexidine Chips (PerioC) in the peri-implant sulcus (up to four chips for each implant site with PD 6-10 mm). Chips placement was repeated at 2, 4, 6, 8, 12 and 18 weeks. At 12 weeks, supragingival	<u>Control intervention:</u> Debridement with ultrasonic instruments + insertion of with placebo chips in the peri-implant sulcus (up to four chips for each implant site with PD 6-10 mm). Chips placement was repeated at 2, 4, 6, 8, 12 and 18 weeks. At 12 weeks, supragingival debridement was also performed.	<u>Length of follow up:</u> 6 months  <u>Loss to follow up:</u> I: N=0 C: N=4	<u>Outcome measures:</u> Bleeding on probing (BOP) Probing pocket depth (PPD) Recurrence of peri-implantitis  <u>Effect:</u> <i>BOP reduction (% of sites):</i> I: 57.5 (7.92)% C: 45.5 (8.8)% <i>n.s.</i>

	<p><u>Source of funding:</u> A grant from Dexcel Pharma, Or-Akiva, Israel.</p>	<p>(if an adjacent implant existed); titanium plasma-sprayed or hydroxylapatite coated implants; systemic conditions that might affect inflammation and bleeding; any local irritation that could not be negotiated (i.e. orthodontic appliances; ill-fitted restorations (with apical pathology); systemic antibiotic therapy or periodontal/mechanical/local delivery therapy within 6 weeks prior to study entry and throughout the study duration; continuous use of non-steroidal anti-inflammatory drugs or drugs known to cause gingival overgrowth; being pregnant or intention to become pregnant in the next 6 months.</p> <p><u>N total at baseline:</u> N=60</p>	<p>debridement was also performed.</p> <p><u>Procedure:</u> Each patient underwent pre-treatment of supragingival scaling of all the teeth and implants (if not done in the 6 weeks prior the Screening visit) using ultrasonic instruments with standard periodontal tips Following oral hygiene instruction, patients were given a sodium fluoride toothpaste and soft toothbrush to be used throughout the study. One to two weeks later, patients were invited to return for the baseline visit (week 0). After treatment patients were discharged with instruction to refrain from using toothpicks and other proximal hygiene aids for 10 days.</p>		<p><u>PD reduction::</u> I: 2.13 (0.22) mm C: 1.73 (0.19) mm <i>n.s.</i></p> <p><u>Other measures in study:</u> Plaque index (PI) Gingival index (GI) Gingival recession (REC) Clinical attachment loss (CAL)</p>	
<b><i>(Adjunctive) antiseptic/antibiotic treatment: Adjunctive local antibiotics (I) versus manual debridement with adjunctive chlorhexidine (C)</i></b>						
<p>Renvert, 2006 <sup>ncpi11</sup></p>	<p><u>Type of study:</u> RCT ,single-blind, parallel</p> <p><u>Setting:</u> University</p> <p><u>Country:</u> Sweden</p> <p><u>Source of funding:</u> OraPharma Inc. (Warminster, PA, USA)</p>	<p><u>Inclusion criteria:</u> Patients for this study were recruited from individuals examined in a survey evaluating the prevalence of mucositis/peri-implantitis 10-12 years following placement of Bra<sup>n</sup>emark implants. Patients were included if they had a minimum of one osseointegrated implant with loss of bone limited to ≤ 3 threads, with one or more peri-implant sites with PPD ≥4mm, combined with bleeding and/or pus on probing using 0.2N probing</p>	<p><u>Intervention:</u> OHI + supra- and subgingival debridement (implant scalers + rubber cup + polishing paste) + adjunctive application of minocycline microspheres (Arestin, single unit dose of 1 mg inserted submucosally at each of the four sites around the implant).</p> <p><u>Procedure:</u> Patients were instructed not to brush their teeth/implants for 12 h and to avoid the use of interproximal cleaning devices for 10 days in the treated area. At the follow-up visits,</p>	<p><u>Control intervention:</u> OHI + supra- and subgingival debridement (implant scalers + rubber cup + polishing paste) + adjunctive application of 1% chlorhexidine gel (approximately 0.1 ml of gel insterted submucosally into each of the four sites around the implant using a disposable 2 ml syringe).</p>	<p><u>Length of follow up:</u> 12 months</p> <p><u>Loss to follow up:</u> I: N=0 C: N=2</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD)</p> <p><u>Effect:</u> <i>BOP (% of sites):</i> I: 88 (12) to 71 (22) C: 86 (14) to 78 (13) <i>n.s.</i></p> <p><i>PDD:</i> I: 3.9 (0.7) to 3.6 (0.6) C: 3.9 (0.3) to 3.9 (0.4) <i>p &lt; 0.001</i></p> <p><u>Other measures in study:</u> Presence of plaque Microbiological parameters</p>

		<p>force, with presences of certain anaerobic bacteria.</p> <p><u>Exclusion criteria:</u> Patients being pregnant or lactating, females of child-bearing potential not using acceptable methods of birth control; patients with medication within 1 month of the screening visit with agents known to affect periodontal status; with requirement of prophylactic antibiotics for treatment; with use of systemic antibiotics within 3 months before the study, and allergy to tetracyclines.</p> <p><u>N total at baseline:</u> N=32</p>	<p>additional oral hygiene advice was given to patients requesting such information. Apart from this, no supportive treatment was provided.</p>			
<p>Renvert, 2008 <sup>ncpi12</sup></p>	<p><u>Type of study:</u> RCT, single-blind, parallel</p> <p><u>Setting:</u> University</p> <p><u>Country:</u> Sweden</p> <p><u>Source of funding:</u> OraPharma Inc. (Warminster, PA, USA)</p>	<p><u>Inclusion criteria:</u> Patients for this study were recruited from individuals examined in a survey evaluating the prevalence of mucositis/peri-implantitis 10-12 years following placement of Bra<sup>n</sup>emark implants. Patients were included if they had a minimum of one osseointegrated implant with loss of bone limited to ≤3 threads, with one or more peri-implant sites with PPD ≥4mm, combined with bleeding and/or pus on probing using 0.2N probing force, with presence of certain anaerobic bacteria.</p> <p><u>Exclusion criteria:</u> Patients being pregnant or lactating, females of child-bearing potential not using acceptable methods of birth</p>	<p><u>Intervention:</u> OHI + supra- and subgingival debridement (implant scalers + rubber cup + polishing paste) + adjunctive application of minocycline microspheres (Arestin, single unit dose of 1 mg inserted submucosally at each of the four sites around the implant). Minocycline application was repeated after 30 and 90 days.</p> <p><u>Procedure:</u> Patients were instructed not to brush their teeth/implants for 12 h and to avoid the use of interproximal cleaning devices for 10 days in the treated area. At the follow-up visits, additional oral hygiene advice was given to patients requesting such information. Apart from this, no supportive treatment was provided.</p>	<p><u>Control intervention:</u> OHI + supra- and subgingival debridement (implant scalers + rubber cup + polishing paste) + adjunctive application of 1% chlorhexidine gel (approximately 0.1 ml of gel insterted submucosally into each of the four sites around the implant using a disposable 2 ml syringe). Chlorhexidine application was repeated after 30 and 90 days.</p>	<p><u>Length of follow up:</u> 12 months</p> <p><u>Loss to follow up:</u> N=0</p>	<p><u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD)</p> <p><u>Effect:</u> <i>BOP (% of sites):</i> I: 86.5 (20.1) to 48.1 (20.7) C: 89.2 (17.2 ) to 63.5 (19.2) <i>p &lt; 0.001</i></p> <p><i>PD:</i> I: 3.85 (1.04) to 3.55 (0.98) C: 3.87 (1.16) to 3.72 (1.02) <i>n.s.</i></p> <p><u>Other measures in study:</u> Presence of plaque Microbiological parameters</p>

		control; patients with medication within 1 month of the screening visit with agents known to affect periodontal status; with requirement of prophylactic antibiotics for treatment; with use of systemic antibiotics within 3 months before the study, and allergy to tetracyclines.  <u>N total at baseline:</u> N=32				
Büchter, 2004 <sup>ncpi13</sup>	<u>Type of study:</u> RCT, single-blind, parallel  <u>Setting:</u> University  <u>Country:</u> Germany  <u>Source of funding:</u>	<u>Inclusion criteria:</u> Patients having 1 implant affected by peri-implantitis with bone loss exceeding 50% of the implant length on radiographs, who all had either removable or fixed partial dentures and were treated for periodontal disease if tooth replacements were the result of periodontitis.  <u>Exclusion criteria:</u> Patients with assumption of antibiotics over the last 3 months, with allergy to doxycycline.  <u>N total at baseline:</u> N=28	<u>Intervention:</u> Subgingival irrigation with 0.2% chlorhexidine + subgingival debridement with hand plastic instruments + adjunctive local antibiotics ( 8.5% doxycycline hyclate by means of a syringe with a blunt cannula inserted in the peri-implant sulcus).  <u>Procedure:</u> All patients received full-mouth debridement and subgingival irrigation with 0.2% chlorhexidine 2 to 18 weeks before baseline examination. After removal of the prosthetic restoration, the abutments were sterilised. After treatment all patients were enrolled in an oral hygiene programme with weekly attendance and repeated motivation and instruction in oral hygiene.	<u>Control intervention:</u> Subgingival irrigation with 0.2% chlorhexidine + subgingival debridement with hand plastic instruments	<u>Length of follow up:</u> 4 months  <u>Loss to follow up:</u> N=0	<u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD)  <u>Effect:</u> <i>BOP (mean):</i> I: 0.54 (0.07) to 0.27 (0.06) C: 0.63 (0.06) to 0.50 (0.07) <i>p = 0.01</i>  <i>PD:</i> I: 5.64 (0.32) to 4.40 (0.29) C: 5.68 (0.28) to 5.4 (0.34) <i>p &lt; 0.05</i>  <u>Other measures in study:</u> Implant failure Probing attachment level (PAL)
<i>(Adjunctive) antiseptic/antibiotic treatment: Adjunctive PDT versus local antibiotics (I) versus manual debridement and air-abrasive device (C)</i>						
Schär, 2013 <sup>ncpi14</sup> / Bassetti, 2014 <sup>ncpi15</sup>	<u>Type of study:</u> RCT, parallel  <u>Setting:</u> university  <u>Country:</u> Switzerland	<u>Inclusion criteria:</u> Partially edentulous subjects with healthy or treated periodontal conditions enrolled in a regular supportive care programme with initial peri-implantitis defined as: a pocket probing	<u>Intervention:</u> OHI + mechanical debridement (titanium curettes and glycine-based powder airpolishing) + adjunctive photodynamic therapy (PDT) (the dye phenothiazine chloride	<u>Control intervention:</u> OHI + mechanical debridement (titanium curettes and glycine-based powder airpolishing) + adjunctive local antibiotics (one unit-dosage of minocycline hydrochloride microspheres, equivalent to 1 mg of minocycline),	<u>Length of follow up:</u> 12 months  <u>Loss to follow up:</u> I: N=1 C: N=0	<u>Outcome measures:</u> Bleeding on probing (BOP) Pocket depth (PD)  <u>Effect:</u> <i>BOP:</i> I: 4.03 (1.66) to 1.74 (1.37) C: 4.41 (1.47) to 1.55 (1.26)

	<p><u>Source of funding:</u> Bredent Medical GmbH &amp; Co. KG, Geschäftsbereich HELBO, Walldorf, Germany</p>	<p>depth (PPD) of 4–6mm with concomitant bleeding on probing (BoP) at 1 peri-implant site and radiographic marginal bone loss ranging from 0.5 to 2mm between delivery of the suprastructure and pre-screening appointment; implant in function for <math>\geq 1</math> year; full-Mouth Plaque Score (FMPS) <math>\leq 25</math>; full-Mouth Bleeding Score (FMBS) <math>\leq 25</math>.</p> <p><u>Exclusion criteria:</u> Patients with uncontrolled medical conditions; being pregnant or lactating; smokers; patients with untreated periodontal conditions; with use of antibiotics in the past 3 months; being treated for <math>\geq 2</math> weeks with any medication known to affect soft tissue conditions (e.g. phenytoin, calcium antagonists, cyclosporin, coumadin and non-steroidal anti-inflammatory drugs) within 1 month of the baseline examination; with peri-implant mucositis defined as the absence of radiographic marginal bone loss between delivery of the suprastructure and pre-screening appointment; with failure to sign written informed consent.</p> <p><u>N total at baseline:</u> N=40</p>	<p>was applied submucosally from the bottom to the top of the peri-implant pockets and was left in situ for 3 min. Subsequently, the pockets were irrigated with 3% hydrogen peroxide according to the manufacturer's instructions. Each pocket was exposed to the (diode)laser light for 10 s.) Adjunctive PDT was repeated 1 week later according to the manufacturer's instructions. Subjects were instructed to continue flossing the day after treatment.</p> <p><u>Procedure:</u> Check-ups and reinforcement of oral hygiene instructions followed at 1, 2, 4 and 8 weeks. Clinical follow-up assessments were performed after 3, 6, 9 and 12 months from baseline. In both groups, repeated treatments equivalent to initial therapy were provided at each implant site displaying bleeding on probing after 3, 6, 9 and 12 months.</p>	<p>Prior to antibiotics application the pocket was irrigated with 3% hydrogen peroxide. Subjects in the control group were instructed to discontinue submucosal flossing for 10 days to avoid mechanical removal of the minocycline microspheres.</p>		<p><i>n.s.</i></p> <p><u>PD:</u> I: 4.19 (0.55) to 4.08 (0.81) C: 4.39 (0.77) to 3.83 (0.85) <i>n.s.</i></p> <p><u>Other measures in study:</u> Clinical attachment level (CAL) Mucosal recession (REC) Modified plaque index (mPI) Microbiological and immunological parameters</p>
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**Overzicht 'Risk of bias' studies 'niet-chirurgische behandeling peri-implantitis'**

		random sequence generation (selection bias)	allocation concealment (selection bias)	blinding (performance bias and detection bias)	incomplete outcome data (attrition bias)	selective reporting (reporting bias)	other bias
ncpi1	Karring, 2005	Unclear risk	Unclear risk	Low risk	Low risk	Unclear risk	Low risk
ncpi2	Renvert, 2009	Low risk	Unclear risk	Low risk	High risk	Low risk	Low risk
ncpi3	Renvert, 2011	Low risk	Unclear risk	Low risk	Low risk	Unclear risk	Low risk
ncpi4 / ncpi5	Sahm, 2011 / John, 2015	Low risk	High risk	Low risk	Low risk	Low risk	Low risk
ncpi6	Schwarz, 2005	High risk	Unclear risk	Low risk	High risk	High risk	Low risk
ncpi7	Schwarz, 2006	Low risk	Unclear risk	Low risk	High risk	High risk	Low risk
ncpi8	Arisan, 2015	Low risk	High risk	High risk	Low risk	Low risk	Unclear risk
ncpi9	Tang, 2002	Unclear risk	Unclear risk	Unclear risk	Unclear risk	High risk	Low risk
ncpi10	Machtei, 2002	Low risk	Low risk	Low risk	High risk	Low risk	High risk
ncpi11	Renvert, 2006	Unclear risk	Unclear risk	Low risk	Low risk	Low risk	High risk
ncpi12	Renvert, 2008	Unclear risk	Unclear risk	Low risk	Low risk	Low risk	High risk
ncpi13	Büchter, 2004	Low risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk
ncpi14 / ncpi15	Schär, 2013 / Bassetti, 2014	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk

Dit overzicht is gebaseerd op de analyse van 'risk of bias' in:

- Esposito M, Grusovin MG, Worthington HV. (2012) Interventions for replacing missing teeth: treatment of peri-implantitis (Review). Cochrane Database of Systematic reviews; issue 1, art no CD004970.
- Faggion CM, Listl S, Frühaf N, Chang H, Tu Y. (2014) A systematic review and Bayesian network meta-analysis of randomized clinical trials on non-surgical treatments for peri-implantitis. J Clin Periodontol: 41: 1015-1025.
- Suárez-López del Amo F, Yu S, Wang H. (2016) Non-surgical therapy for peri-implant diseases: a systematic review. J Oral Maxillofac Res: 7 (3): e13.

Samenvattende tabel van kwaliteitstoetsing studies 'niet-chirurgische behandeling peri-implantitis'							
Aantal studies	Design	Beperkingen <sup>1</sup>	Inconsistentie <sup>2</sup>	Indirect bewijs <sup>3</sup>	Imprecisie <sup>4</sup>	Andere overwegingen	Kwaliteit <sup>5</sup>
<i>BOP in niet-chirurgische behandeling van peri-implantitis</i>							
10	RCT	Serieus <sup>a,e</sup>	Niet serieus	Niet serieus	Zeer serieus	Nee	Zeer laag
<i>PPD in niet-chirurgische behandeling van peri-implantitis</i>							
11	RCT	Serieus <sup>a,e</sup>	Niet serieus	Niet serieus	Zeer serieus	Nee	Zeer laag
<i>R in niet-chirurgische behandeling van peri-implantitis</i>							
3	RCT	Serieus <sup>a,e</sup>	Niet serieus	Niet serieus	Zeer serieus	Nee	Zeer laag
<p>1 Beperkingen: meer of minder beperkingen in opzet en uitvoering van onderzoek. Mogelijke bronnen van vertekening zijn:</p> <ul style="list-style-type: none"> <li>a selectieve toewijzing van de onderzoekdeelnemers (selectiebias)</li> <li>b vertekening door het ontbreken van blinding (performance bias)</li> <li>c vertekening van uitkomstmetingen door gebrek aan blinding van de effectbeoordelaar (informatiebias)</li> <li>d selectieve uitval van onderzoekdeelnemers (attrition bias)</li> <li>e selectieve publicatie van uitkomsten binnen hetzelfde onderzoek (reporting bias)</li> <li>f andere mogelijke bronnen van vertekening</li> </ul> <p>2 Inconsistentie: grote verschillen in behandel-effecten tussen studies die niet verklaard kunnen worden door bijvoorbeeld verschillen in populatie, interventies, uitkomsten en studiekwaliteit</p> <p>3 Indirect bewijs: afwijking van de vraag van het onderzoek ten opzichte van de uitgangsvraag</p> <p>4 Imprecisie: Onzekerheid over de grootte van het effect door bijvoorbeeld een kleine steekproef of weinig voorkomende events.</p> <p>5 Op basis van de beoordeling van genoemde criteria wordt de volgende gradering van kwaliteit gebruikt:</p> <ul style="list-style-type: none"> <li>- Hoog: Het werkelijke effect ligt dicht in de buurt van de schatting van het effect</li> <li>- Matig: Het werkelijke effect ligt waarschijnlijk dicht bij de schatting van het effect maar er is een mogelijkheid dat het hier substantieel afwijkt</li> <li>- Laag: Het werkelijke effect kan substantieel verschillend zijn van de schatting van het effect</li> <li>- Zeer laag: Het werkelijke effect wijkt waarschijnlijk substantieel af van de schatting van het effect</li> </ul>							
Bron: Everdingen, JJE van et al. Evidence-based richtlijnontwikkeling. Een leidraad voor de praktijk. Houten, 2014.							

GRADE tabel: kwaliteitstoetsing studies 'niet-chirurgische behandeling peri-implantitis'										
Aantal studies	Design	Beperkingen	Inconsistentie	Indirect bewijs	Imprecisie	Andere overwegingen	Aantal patiënten	Effect	Kwaliteit	Belang
<i>Adjunctive or alternative measures for biofilm removal: BOP in ultrasonic debridement (I) versus manual debridement (C) after 6 months</i>										
2 <sup>ncpi1,ncpi2</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	11	ncpi1 I: van 64 tot 36% C: van 73 tot 82% NS  ncpi2 I: van 35 tot 29% C: van 33 tot 34% NS	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: PPD in ultrasonic debridement (I) versus manual debridement (C) after 6 months</i>										
2 <sup>ncpi1,ncpi2</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	48	ncpi1 I: van 5.8 tot 5.8 mm C: van 6.2 tot 6.3 mm, NS  ncpi2 I: van 4.3 tot 3.9 mm C: van 4 tot 4 mm NS	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: BOP in Er:YAG laser (I) versus air-abrasive device (C) after 6 months</i>										
1 <sup>ncpi3</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	42	I: 69% C: 75% NS	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: PPD in Er:YAG laser (I) versus air-abrasive device (C) after 6 months</i>										
1 <sup>ncpi3</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	42	Afname: I: 0.8 mm C: 0.9 mm NS	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: R in Er:YAG laser (I) versus air-abrasive device (C) after 6 months</i>										
1 <sup>ncpi3</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	42	I: 44% C: 47%	Zeer laag	Cruciaal

<i>Adjunctive or alternative measures for biofilm removal: BOP in air-abrasive device (I) versus manual debridement with chlorhexidine (C) after 12 months</i>										
1 <sup>ncpi4/ncpi5</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	32	I: van 99 tot 58% C: van 95 tot 78% P < 0.05	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: PPD in air-abrasive device (I) versus manual debridement with chlorhexidine (C) after 12 months</i>										
1 <sup>ncpi4/ncpi5</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	32	I: van 3.7 tot 3.2 C: van 3.9 tot 3.5 P < 0.05	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: BOP in Er: YAG laser (I) versus manual debridement with adjunctive chlorhexidine (C) after 6 months and 12 months</i>										
1 <sup>ncpi6,ncpi7</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	20	na 6 mnd I: van 83 tot 31% C: van 81 tot 58%, P < 0.001 na 12 mnd: NS	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: PPD in Er: YAG laser (I) versus manual debridement with adjunctive chlorhexidine (C) after 6 months and 12 months</i>										
1 <sup>ncpi6,ncpi7</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	20	na 6 mnd: NS na 12 mnd: I: van 5.9 tot 5.5 mm C: van 6.0 tot 5.6 mm P < 0.01	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: R in Er: YAG laser (I) versus manual debridement with adjunctive chlorhexidine (C) after 6 months and 12 months</i>										
1 <sup>ncpi6,ncpi7</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	20	na 6 mnd: I: 0/10 C: 1/10 na 12 mnd: I: 0/10 C: 2/10	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: BOP in adjunctive diode laser treatment (I) versus manual debridement (C) after 6 months</i>										
1 <sup>ncpi8</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	10	I: 100 tot 96% C: 100 tot 100% NS	Zeer laag	Cruciaal
<i>Adjunctive or alternative measures for biofilm removal: PPD in adjunctive diode laser treatment (I) versus manual debridement (C) after 6 months</i>										
1 <sup>ncpi8</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	10	I: 4.71 tot 4.54 mm C: 4.38 tot 4.17 mm	Zeer laag	Cruciaal

								NS		
<i>(Adjunctive) antiseptic/antibiotic treatment: PPD in local antibiotics (I) versus ultrasonic debridement (C) after 3 months</i>										
1 <sup>ncpi9</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	30	Verskil 0.2 mm NS	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: R in local antibiotics (I) versus ultrasonic debridement (C) after 3 months</i>										
1 <sup>ncpi9</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	30	Geen R in beide groepen	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: BOP in chlorhexidine (I) versus ultrasonic debridement (C) after 6 months</i>										
1 <sup>ncpi10</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	60	I: 58% C: 46% NS	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: PPD in chlorhexidine (I) versus ultrasonic debridement (C) after 6 months</i>										
1 <sup>ncpi10</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	60	I: 2.13 mm C: 1.73 mm NS	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: BOP in chlorhexidine (I) versus manual debridement (C) after 12 months</i>										
1 <sup>ncpi11, ncpi12</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	32	I: van 87 tot 48% C: van 89 tot 64% P < 0.001	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: PPD in chlorhexidine (I) versus manual debridement (C) after 12 months</i>										
1 <sup>ncpi11, ncpi12</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	32	I: van 3.85 tot 3.55 mm C: van 3.87 tot 3.72 mm P < 0.001	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: BOP in adjunctive local antibiotics (I) versus manual debridement with adjunctive chlorhexidine (C) after 4 months</i>										
1 <sup>ncpi11, ncpi12</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	32	I: van 3.85 tot 3.55 mm C: van 3.87 tot 3.72 mm P < 0.001	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: BOP in adjunctive local antibiotics (I) versus manual debridement with adjunctive chlorhexidine (C) after 4 months</i>										
1 <sup>ncpi13</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	28	I: van 0.54 tot 0.27 C: van 0.63 tot 0.13 P = 0.01	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: PPD in adjunctive local antibiotics (I) versus manual debridement with adjunctive chlorhexidine (C) after 4 months</i>										
1 <sup>ncpi13</sup>	RCT	Serieus	Niet serieus	Niet serieus	Zeer serieus	No	28	I: van 5.64 tot 4.40 C: van 5.68 tot 5.40 P < 0.05	Zeer laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: BOP in adjunctive PDT versus local antibiotics (I) versus manual debridement and air-abrasive device (C) after 12 months</i>										

1 <sup>ncpi14/ncpi15</sup>	RCT	Niet serieus	Niet serieus	Niet serieus	Zeer serieus	No	40	Number of sites: I: 4.03 tot 1.74 C: 4.41 tot 1.55 NS	Laag	Cruciaal
<i>(Adjunctive) antiseptic/antibiotic treatment: PPD in adjunctive PDT versus local antibiotics (I) versus manual debridement and air-abrasive device (C) after 12 months</i>										
1 <sup>ncpi14/ncpi15</sup>	RCT	Niet serieus	Niet serieus	Niet serieus	Zeer serieus	No	40	I: van 4.19 tot 4.08 mm C: van 4.39 tot 3.83 mm NS	Laag	Cruciaal
I interventiegroep C controlegroep BOP bleeding on probing PPD probing pocket depth R recurrence of PI										