Objective: A clinical trial was conducted to evaluate the clinical effectiveness and tolerability of peroxide-containing whitening strips relative to an antitartar dentifrice control. Methods: In this double-dummy design, 28 adults were randomized to a regular dentifrice plus 5% hydrogen peroxide whitening strips or an antitartar dentifrice and placebo strips. Strips were applied unsupervised to the maxillary teeth twice daily for 30 minutes over a 2 week period. Toothpaste use was unsupervised over a 3 month period. Efficacy was measured objectively as L*a*b* color change from digital images at Week 2 and Month 3. Results: Age ranged from 22-52, and groups were balanced on age, gender and baseline tooth color. The peroxide group exhibited significant (p < 0.05) $\Delta b^*$ & $\Delta L^*$ improvement at Week 2 and Month 3. For $\Delta b^*$, the adjusted mean differences between groups was -1.4 at Week 2 and -1.4 at Month 3. Between-group differences for $\Delta L^*$ were 1.1 at Week 2 and 1.0 at Month 3. Oral irritation was the most common adverse event (27% in the peroxide group and 14% in the strip group). Transient tooth sensitivity was reported only in the peroxide group (20%). No subjects discontinued treatment early due to a treatment related adverse event. Conclusion: This placebo-controlled clinical trial demonstrated significant whitening following 2-weeks use of hydrogen peroxide strips, with appreciable color retention over a 3 month monitoring period.

Objective: To evaluate the effect of an oscillating / rotating / pulsating powered toothbrush (Oral-B Professional Care 9000) to remove plaque and prevent gingivitis over a 9-month period. Methods: The study had an examiner blind, randomized 3-group parallel design. 120 subjects =18yrs old were included, in general good health, at least 5 teeth per quadrant and no pockets ≥ 5 mm. A 3-week pre-trial period of intensive oral home care was started to improve the level of gingival health. A thorough professional OH instruction with a manual brush was provided. Additionally subjects used Bocasan® mouthwash followed by Corsodyl® mouthwash twice daily. At baseline, subjects were assigned to 1 of 3 oral hygiene regimens: twice daily brushing with 1) oscillating/rotating toothbrush, 2) manual toothbrush, 3) manual toothbrush in combination with the use of floss. The same standard toothpaste was provided to all 3 regimens. Subjects were professionally instructed in their individually assigned regimen and were given a prophylaxis in order to start with equally clean teeth. 2 weeks later an OH reinforcement was provided. Clinical parameters (gingival bleeding, plaque, staining, gingival abrasion) were assessed at pre-trial baseline, 3, 6 and 9 months. Results: The results show a significant reduction for plaque and gingivitis from pre-trial to baseline. At 3, 6 and 9 months the level of plaque was significantly lower with the power toothbrush compared to the other 2 regimens. At 3 and 6 months the level of gingivitis in the powered toothbrush group was significantly lower as compared to the other 2 regimens. At 9-months this difference was not maintained. Conclusion: The powered toothbrush more effectively maintained an improved gingival condition for at least 6-months as compared to the manual toothbrush either with or without the use of floss. This study was sponsored by P&G Oral Health Care, Mason, OH, USA.