



## Plaque Removal

in vivo study\*

# Comparison of Plaque Removal by Philips Sonicare DiamondClean and Oral-B Triumph®

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### Objective

To compare the plaque removal efficacy and safety of two power toothbrushes; Philips Sonicare DiamondClean and Oral-B Triumph with FlossAction brush head.

### Methodology

One-hundred four healthy adults aged 18-65 were enrolled in a randomized, single-blind, cross-over design, ethics-approved clinical trial (67 females, 37 males; mean age 37 years). Eligible subjects were non-smokers who were routine manual toothbrush users with a minimum plaque score of 1.8 (Lobene and Soparker Modified Quigley and Hein) following 24 hours (+/-4) plaque accumulation. Enrolled subjects were randomized and dispensed appropriate products for a familiarization period of three days, followed by manual toothbrush use for a three-day wash-out. Subjects returned to clinic following 24 hours (+/-4) plaque accumulation and received a pre-brushing plaque assessment by a blinded examiner, followed by supervised brushing with the assigned power toothbrush, and a post-brushing plaque examination. Subjects were then dispensed the alternate power toothbrush per randomization and followed the same home-use procedure of power toothbrush familiarization followed by manual toothbrush wash-out. Subjects presented to clinic for their final study visit with 24 hours (+/-4) plaque accumulation and underwent 'pre' plaque exam followed by product use and 'post' plaque exam. Subjects were then dismissed from the study.

### Results

Philips Sonicare DiamondClean was statistically significantly superior to Oral-B Triumph in reducing surface plaque overall, (p-value 0.0059), and in hard-to-reach posterior interproximal areas, (p-value 0.0048). Both products were safe for use.

### Conclusion

Philips Sonicare DiamondClean removed significantly more plaque than Oral-B Triumph when assessed over the entire dentition, as well as in hard-to-reach areas.

% of Plaque Reduction

