

Clinical investigation of the one bottle/one step self-etching adhesive CLEARFIL™ S³BOND as a dentine and enamel adhesive material for Class V restorations

DR. TASHIMOTO YAMADA, DDS, PHD, *Toranomon Hospital, Japan*

Objective: This trial will determine the short-term efficacy of the self-etching adhesive CLEARFIL™ S³BOND as a dentine and enamel adhesive material, in a group of patients under conditions which represent its normal conditions of use.

Design: The design is based on the guidelines of the American Dental Association for assessment of dentine and enamel adhesive materials of 2001.

Abstract: This study is a clinical trial of the self-etching adhesive CLEARFIL™ S³BOND together with a resin-based restorative material CLEARFIL MAJESTY™. A total of 30 restorations were placed in 30 human subjects in caries-free Class V eroded/abraded areas in permanent teeth.

The reports at 6 months recorded the satisfactory status of all restorations following recovery from the operative procedure of placement.

At the 6 month recall all restorations that were reviewed were satisfactory in all clinical criteria specified. No failures have so far been observed at all recalls and the Kaplan-Meier probability of survival rate for these restorations at 6 months is 1.00.

Results:

CRITERION	BASE LINE	3 MONTHS	6 MONTHS
Marginal discoloration <i>A: none, B: moderate, C: severe</i>	100% A	100% A	100% A
Marginal adaption <i>A: none, B: moderate, C: severe, D: poor</i>	100% A	100% A	100% A
Surface texture <i>A: smooth, B: slightly rough, C: rough</i>	100% A	100% A	100% A
Abrasion <i>A: none, B: slight, C: severe</i>	100% A	100% A	100% A
Marginal fracture <i>-: none, +: detected</i>	100% -	100% -	100% -
Body fracture <i>-: none, +: detected</i>	100% -	100% -	100% -
Secondary caries <i>-: none, +: detected</i>	100% -	100% -	100% -
Pain* <i>A: none, B: slight, C: severe</i>	100% A	100% A	100% A
Irritation ** <i>A: none, B: moderate, C: severe</i>	100% -	100% -	100% -

* Spontaneous, Cold water, Hot water, Occlusal

** Gingival, Soft tissue

Conclusion: The self-etching adhesive CLEARFIL™ S³BOND has been demonstrated to be a satisfactory dentine and enamel adhesive material for the restoration of caries-free Class V eroded/abraded areas in permanent teeth over a period of 6 months. Further data may become available.

