

## A practice-based group evaluation of a novel composite restorative

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### INTRODUCTION

In 1993 the UK-wide PREP (Product Research and Evaluation by Practitioners) Panel was established. To date over 50 evaluations and clinical trials have been completed and the results published.

### MATERIAL

N' Durance™ and N' Durance Dimer Flow™ are part of a new nano-filled dimer-acid derived low-shrinkage high intra-oral monomer conversion composite restorative system (Septodont Ltd. Maidstone, Kent, ME16 0JF, UK).

### METHOD

Packs of the composite system (in 4 shades) to use for 10 weeks, plus a questionnaire (designed to evaluate their current composite usage, and the presentation, instructions, handling, aesthetic quality and post-operative sensitivity of the new composite system) were sent to 10 practitioners. Most responses to the questionnaire were given on a visual analogue scale (VAS). Two of the practitioners were female, and the average time since graduation was 26 yrs

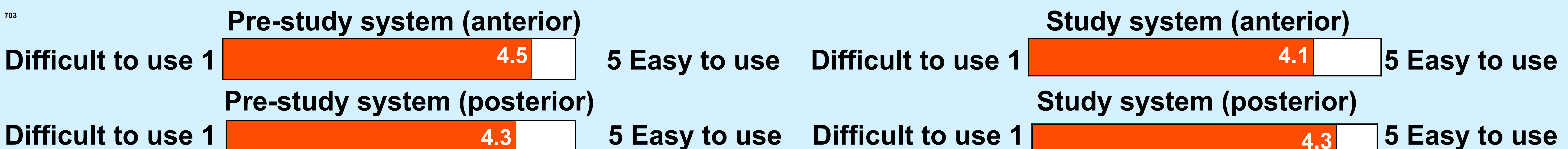
### BACKGROUND INFORMATION

All the evaluators normally placed anterior & posterior composite restorations, though 70% (n=7) typically did not use a multi-shade layering system for anterior composites. The principal reasons for the choice of composite restorative were good aesthetics, ease of use, and good results. Other reasons were familiarity, ease of finishing & low shrinkage.

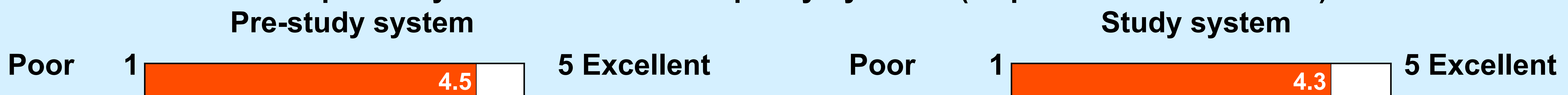
### RESULTS

A total of 583 restorations (293 anterior and 290 posterior) were placed during the evaluation. The flowable material was used in placement of 219 restorations, comprised of 14% (n=41) anterior & 61% (n=178) posterior.

The evaluators rated the pre-study & study composite systems for ease of use by a VAS (1=difficult and 5 = easy) as follows:



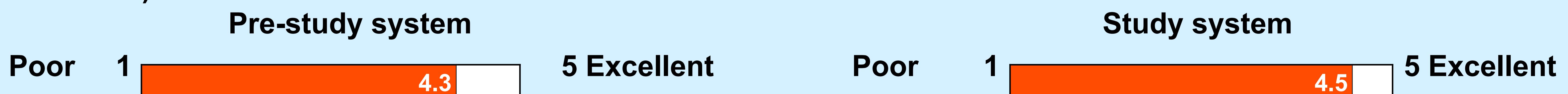
The evaluators rated the composite systems for aesthetic quality by a VAS (1= poor and 5 = excellent) as follows:



With regard to the flowable material the evaluators rated the pre-study & study for ease of use by a VAS (where 1= difficult and 5 = easy) as follows:



The pre-study and study flowable materials were rated for aesthetic quality by the evaluators on a VAS (where 1=poor and 5 = excellent) as follows:



No post-operative sensitivity was reported by the evaluators. The principle use of the N'Durance system was seen by the majority (60%) of the evaluators as a universal (anterior and posterior) system and 80% (n=8) of the evaluators stated they would purchase both materials and the same number would also recommend the materials to colleagues.

### CONCLUSION

This new low-shrink high conversion composite system has been subject to an extensive evaluation in which 583 restorations were placed. The system achieved similar good ratings to the pre-study system when its handling was evaluated by 10 UK general practitioners.

### ACKNOWLEDGEMENT

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