Coltène Affinis Precious

FJT Burke, University of Birmingham School of Dentistry, and **RJ Crisp**, the PREP Panel, reveal the results of their latest product evaluation

DIMENSIONALLY accurate impression materials are central to success in indirect dentistry. Their ideal properties include adequate working time, fast or controlled set in the mouth, high level of dimensional accuracy, easily read by the clinician and manageable cost.

Explanatory letters, questionnaires and packs of Coltène Affinis impression material were distributed in September 2007 to 16 randomly selected members of the PREP (Product Research and Evaluation by Practitioners) Panel, a group of dentists who carry out practice-based research. The practitioners were asked to use the material and return the questionnaire requesting details of the handling of the material.

many impressions were taken in a typical week, the result was as follows:

No. impressions	No. of evaluators
<10	7
7	1
>20	1

The evaluators used a variety of impression materials, with principal reasons for choice of material being accuracy (consistently good results) and ease of use. Familiarity with the material, automatic mixing, setting time, hydrophillic properties and laboratory feedback were less frequently stated reasons for choice of material.

Fifteen evaluators (94%) stated that they generally took full arch (as opposed to sectional or quadrant) impressions for routine crown and bridge work and the most frequently used techniques for routine crown and bridge work were simultaneous putty/wash (10 evaluators) and simultaneous syringeable heavy/light body (six evaluators). When the evaluators were asked how many crown and bridge impressions were generally repeated, the result was as follows:

(a) 1 in 3	0
(b) 1 in 5	1
(c) 1 in 10	1
(d) 1 in 20	6
(e) Fewer than 1 in 20	8

Seven (44%) of the evaluators normally used an automatic mixing machine. The most common reasons for repeating a crown impression were air blows (10 evaluators) and deficient recording of preparation margins (11).

The evaluators were asked to rate the ease of use (where 5 = excellent and 1 = poor) and ease of removal (where 5 = easy and 1 = difficult) of the materials presently used for crown and bridge impressions with the following results:

The overall mean ratings of the presently used crown impression material were for:

(a) Ease of use

1 Poor **Excellent 5**

4.3

Evaluation of Coltène Affinis Precious Impression material

When the evaluators were asked to rate their view of Affinis after familiarisation, the result was as follows:

(a) Excellent	7 (44%)
(b) Good	4 (25%)
(c) Unremarkable	4 (25%)
(d) Poor	1(6%)

A total of 259 impressions were taken, principally in putty/heavy/light body. Seven (44%) of the evaluators normally used an automatic mixing machine. None of the evaluators reported any problems associated with the cleaning and disinfection of the Affinis Precious impressions.

The evaluators rated the application of Affinis around preparation margins in the following conditions as indicated below:

Dry fields above and below the gingival margins:

1 Poor **Excellent 5**

4.5

Fields above and below the gingival margin in which there were limited moisture problems:

1 Poor **Excellent 5**

4.1

Moist fields above and below the gingival margin:

1 Poor **Excellent 5**

3.6

Comments made when the evaluators were asked to describe any difficulties in loading and seating impression trays of Affinis included: "Putty too stiff – difficult to seat in mouth".

The evaluators rated the overall ease of removal of Affinis impressions from the mouth as follows:

4.2

The evaluators were asked to rate the Affinis Precious impression material in terms of its ability to blend layers, with the results as follows:

Putty/Wash	*Heavy body/Light body*
8 Very good	**8** Very good
3 Good	Good
1 Sub-optimal	**2** Sub-optimal

Comments included: "Sometimes due to heavy consistency the wash was virtually wiped out"; "Impression of 12 units in one arch – correct first time!"; "Both worked well together".

The consistency of Affinis Precious was rated as follows:

Wash	*Light Body*
6 Optimal	**7** Optimal
6 Too thin	**3** Too thin
1 Too viscous	**1** Too viscous

The colour of the light body and regular wash were rated as follows:

Putty/Wash	*Heavy Body/Light Body*
4 Very good	**8** Very good
7 Good	**5** Good
4 Sub-optimal	**0** Sub-optimal

The evaluators judged the optimised readability (contrast) of the light body and regular body as follows:

Putty/Wash	*Heavy Body/Light Body*
6 Very good	**6** Very good
4 Good	Good
3 Sub-optimal	Sub-optimal

The evaluators rated the Affinis Precious working time and setting time as follows:

Acceptable	2	2
Too long	2	2
Too short	1	1

When the evaluators were asked to rate how the Affinis impression material compared with the current impression/mixing technique, the results were as follows:

(a) Monophase

Worse **Same** **Better**

1 5

2.6

(b) Putty/heavy body/light body

Worse **Same** **Better**

1 5

2.9

Final comments included: "In ideal circumstances the best material I have used"; "Include a colour card to recommend ideal mixing times"; "I will change to the silver light body"; "Great impression material" (two similar).