# SCIENTIFIC REPORT

# VOCO Ionofil Molar AC - Clinical study

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The clinical behaviour of VOCO Ionofil Molar AC in permanent restorations in the posterior range was examined after 6, 12 and 24 months and evaluated according to USPHS criteria in a 2 year study at the University of Munich (Germany).<sup>[1]</sup>

VOCO lonofil Molar AC, the glass ionomer cement, is indicated for the treatment of Class I and II cavities. The restoration of these cavities places high demands on the restorative, since the masticatory forces particularly affect the restorative to the full extent in the posterior range. To what extent a long-term, successful treatment is nevertheless possible with VOCO lonofil Molar AC was analysed in 50 restorations by Hickel et al.

## Results after 6 months

The results of the first examination 6 months after placement of the filling are shown in Figure 1. All restorations were clinically acceptable after this time period.

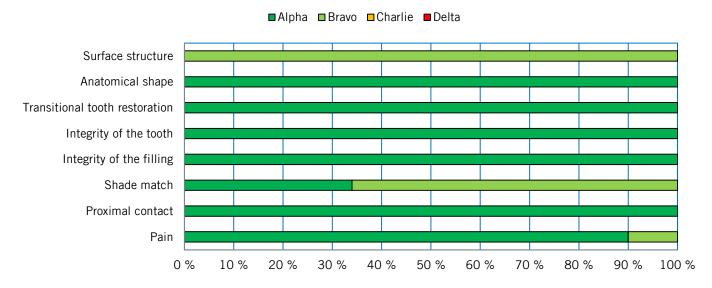


Figure 1: Results after 6 months

### Results after 12 months

Three teeth that were restored with VOCO Ionofil Molar AC had to be treated again after one year. Two restorations (involving four surfaces) had to be revised due to recurrent caries and endodontic treatment was necessary for the third tooth. The failure thus cannot be related to the restorative in the latter case. The overall results are depicted in Figure 2.



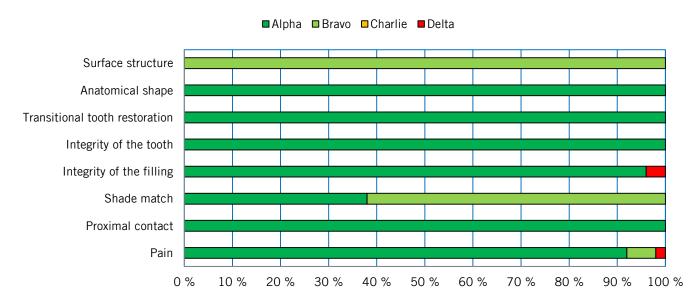


Figure 2: Results after 12 months

#### Results after 24 months

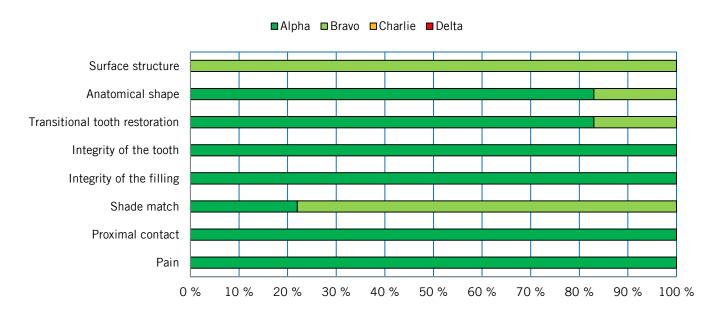


Figure 3: Results after 24 months

All (100 %) re-examined VOCO lonofil Molar AC restorations were in a clinically perfect, acceptable condition after 2 years. Initially, only 3 (6 %) of the 50 examined VOCO lonofil Molar AC restorations required treatment. There was no additional restorative loss after 2 years.

Conclusion: VOCO Ionofil Molar AC is suitable for the treatment of Class I and II cavities and exhibits outstanding values for a glass ionomer cement in the clinical evaluation.

[1] K. Salzmann, A. Mehl, R. Hickel, J. Dent. Res. 1999, 78 (Special Issue), 2282.