

Twinky Star – 3 year clinical study

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Twinky Star, the coloured compomer from VOCO, was developed especially for use in paediatric dentistry. The coloured fillings with glitter-effect are well-accepted by children. They increase the awareness of the results of insufficient oral hygiene - I see that something happened to my teeth. The colour effect, however, should not be achieved at the expense of the stability and durability of the restoration. The long-term success of Twinky Star was evaluated in a study by the Vital Clinic in Yekaterinburg, Russia.^[1]

50 children with an average age of 5 years and 8 months participated in the study presented here. Children were treated that had at least one Class I or Class II cavity and at least one tooth with deep caries and pulpitis. 60 Class II fillings, 52 Class I fillings and 88 restorations after endodontic treatment (Futurabond NR was used as the bond for all) were placed within the scope of the study. 170 restorations (85%) could be tested according to the Ryge criteria after 36 months.

Results of the study

The 36 month results of the study are shown in the graphics below; the surface roughness rating is represented in its own graphic (Figure 4), due to the different rating system. It is apparent from all of the figures that Twinky Star exhibits outstanding values also after 36 months. This applies to all of the filling classes examined here.

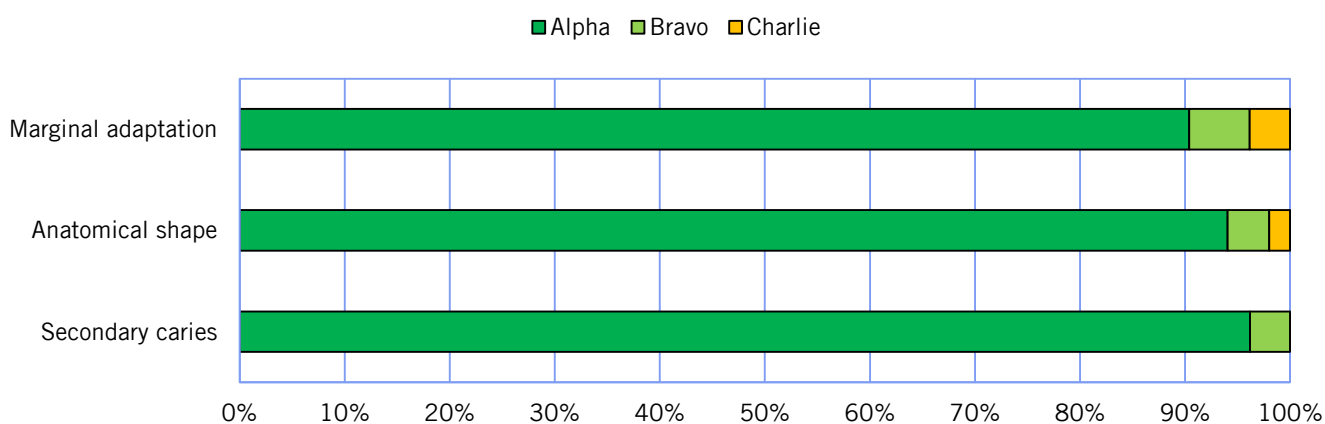


Figure 1: Results of Class I restorations after 36 months

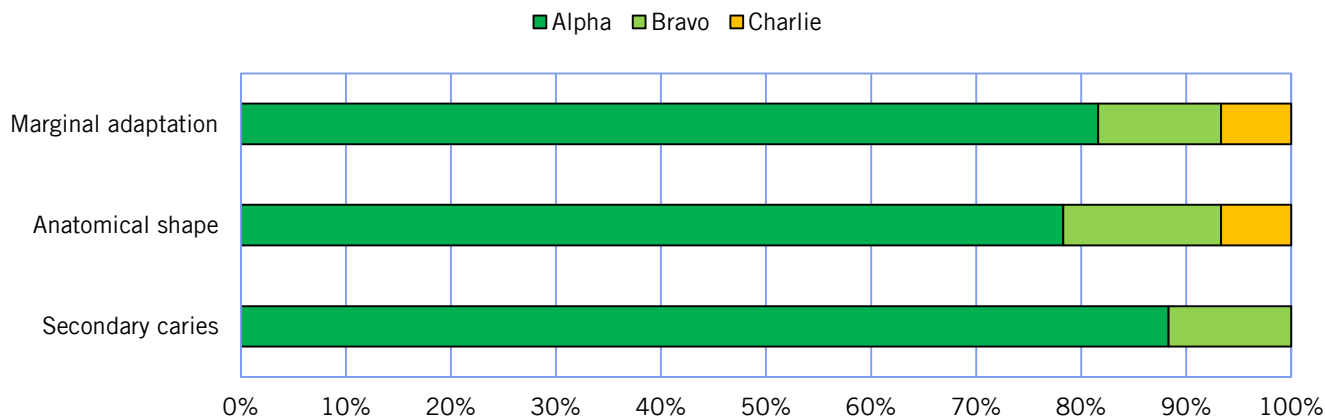


Figure 2: Results of Class II restorations after 36 months

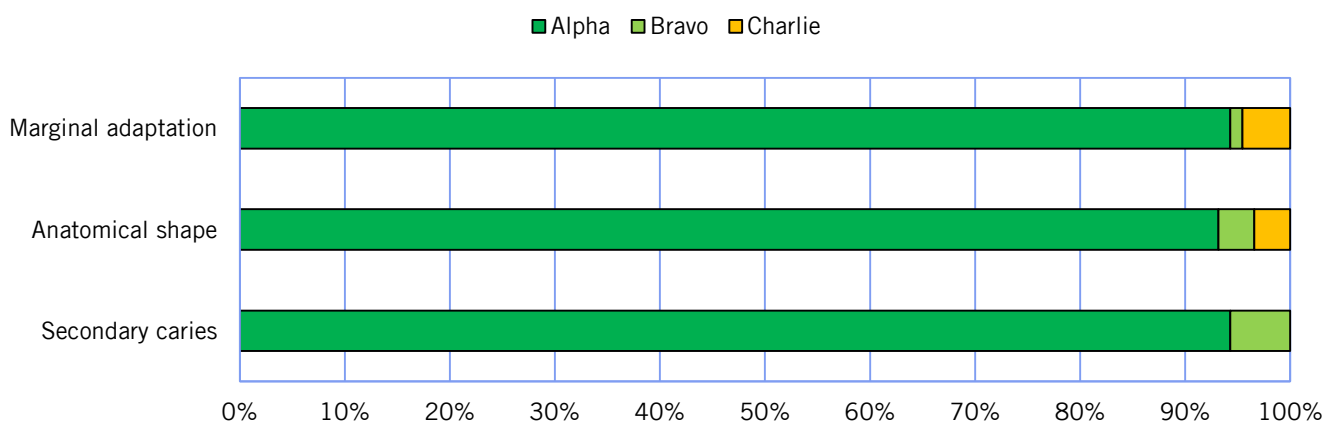


Figure 3: Results of restorations after endodontic treatment after 36 months

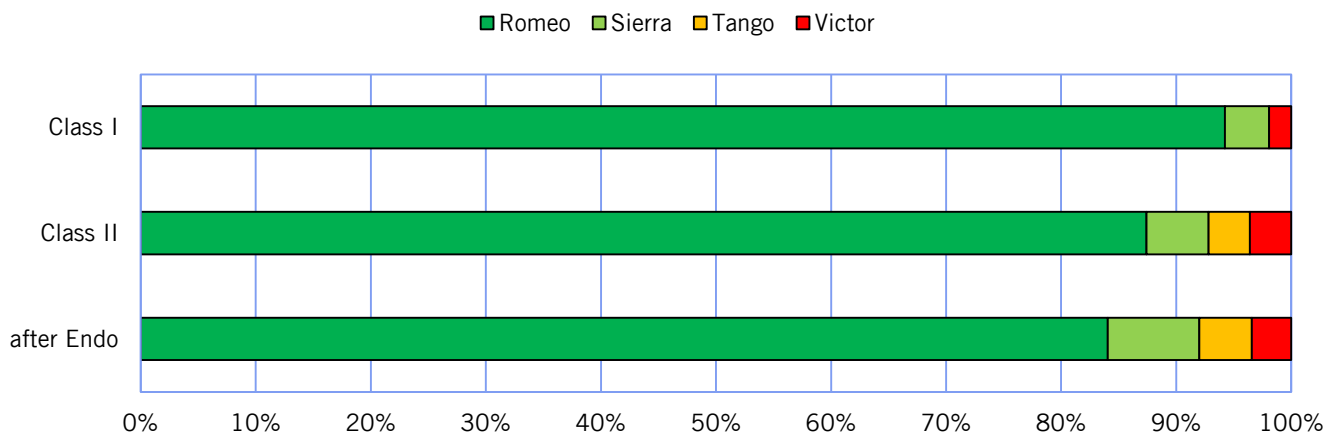


Figure 4: Surface roughness of the restoration after 36 months

Conclusion: Twinky Star permits the placement of coloured fillings with glitter effect with a material that exhibits the properties of an effective restorative with respect to stability and longevity.

[1] M. Sarapulzewa, A. Meschenko, *Kinderzahnheilkunde und Prophylaxe* 2009, 24, 43-49 (Language: Russian).