

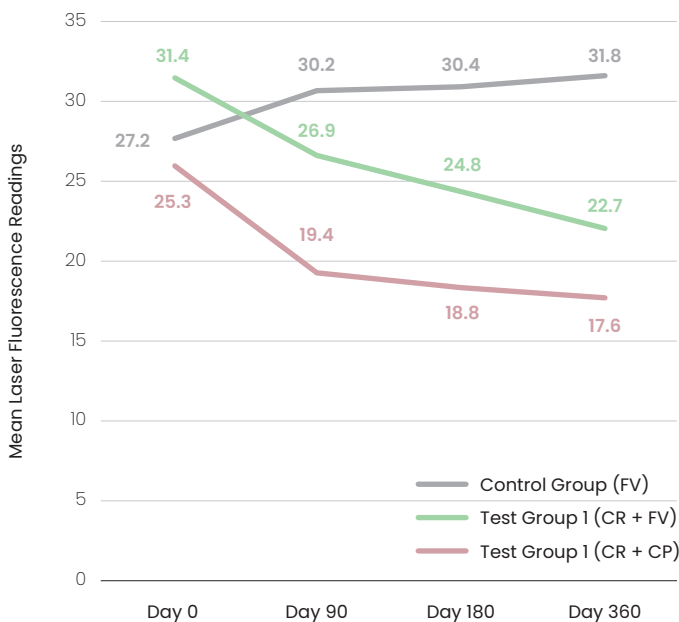


The Combination of Curodont Repair (CR) With a Twice Weekly Home Application of Curodont Protect (CP) is as Efficacious as the Combination of CR and Fluoride Varnish (FV) in Enabling Caries Regression and Inactivation

## RESULTS

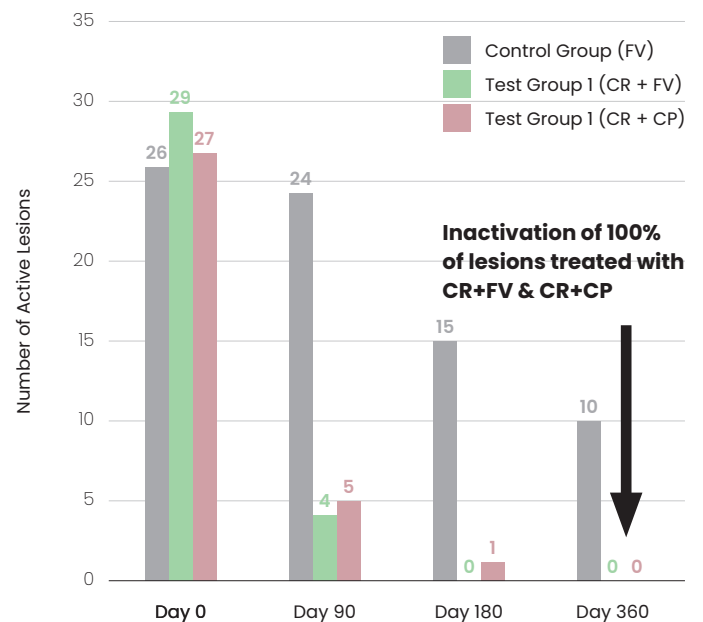
Treatment of early occlusal carious lesions with CR followed by a twice weekly home application of CP for one year led to greater caries regression and inactivation than the use of FV alone. This result was comparable to that demonstrated by the combination of CR and FV.

### Caries Regression



Cariou lesions treated with CR+FV and CR+CP showed a significant reduction in laser fluorescence values, indicating greater regression of caries, as compared to those treated with FV ( $p < 0.0005$ ), at every follow-up visit.

### Caries Inactivation

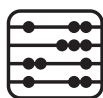


According to assessment by Nyvad Caries Activity Criteria, by Day 360 all the carious lesions treated with CR+FV and CR+CP had become inactive.

## STUDY ESSENTIALS



90 Children (6–15 Years)  
With Early Occlusal Caries



Randomized, Gold-  
Standard Controlled,  
Single Blinded Clinical Trial



12 Months



University Dentistry Clinical  
Center of Kosovo

### How can you use these results in your practice?

You can treat early caries with CR in a non-invasive, painless, and drill free manner and have the patient follow a simple 2x/week home-use regimen of CP to achieve their arrest and regression. This combination arrests early caries as well as the combination of CR+FV does and leads to higher remineralization of early caries than the combination of CR+FV.

## STUDY INFORMATION

**Title:** Randomized Clinical Trial investigating Self-Assembling Peptide P11-4 for Treatment of Early Occlusal Caries\*



**Products/Treatments Tested:** Control group - Fluoride varnish 7700 ppm (FV)  
Test Group 1 - Curodont Repair (CR) + FV  
Test Group 2 - CR + Curodont Protect (CP)



**Scope & Methodology:** The efficacy of the combination of CR and CP in enabling caries regression and inactivation was compared to that of the combination of CR and FV and of FV alone over a 12-month period. The following assessments were employed on Day 0, Day 90, Day 180, and Day 360:

- Caries progression/regression: Laser Fluorescence
- Caries activity: Nyvad Activity Criteria

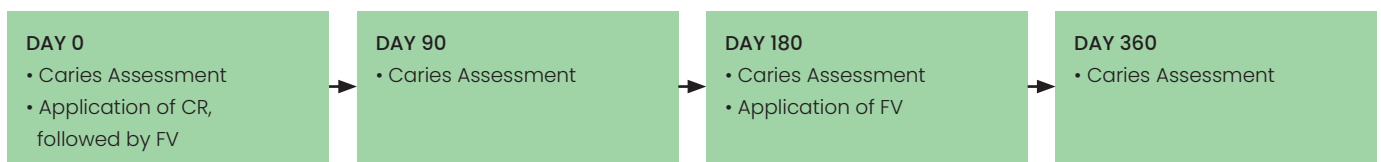


**Study Participants:** 90 participants (age: 6-15 years) with early, occlusal carious lesions (ICDAS II score 2 or 3) were randomly and equally allocated to study groups.

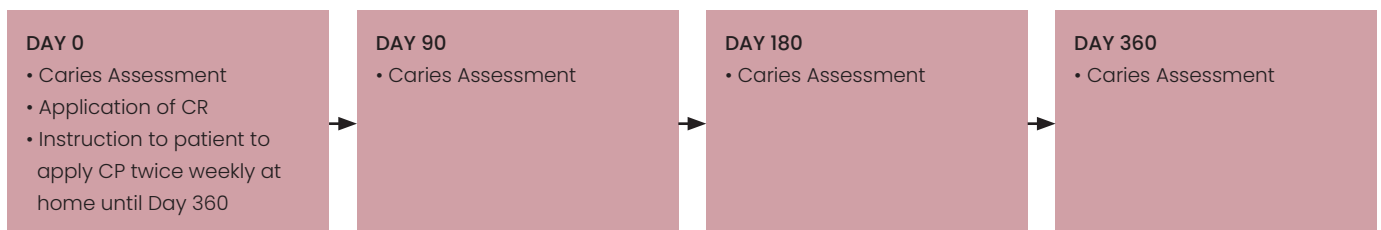


### Procedure:

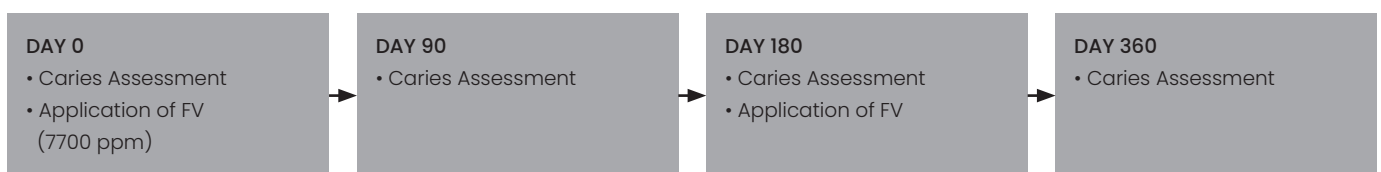
#### Test Group 1



#### Test Group 2



#### Control Group



**Conclusion:** The twice-weekly application of CP is as efficacious as FV in supporting the enamel-regenerative capacity of CR and can serve as its replacement. The self-assembling peptide technology in CR and CP can initiate regression of caries and not just its arrest/inactivation, predominantly seen with FV.

## Reference

\*Doberdoli D, Bommer C, Begzati A, Haliti F, Heinzel-Gutenbrunner M, Juric H. Randomized Clinical Trial investigating Self-Assembling Peptide P11-4 for Treatment of Early Occlusal Caries. *Sci Rep.* 2020;10:4195.

## Supporting Studies

<sup>1</sup> Bröseler F, Tietmann C, Bommer C, Drechsel T, Heinzel-Gutenbrunner M, Jepsen S. Randomised clinical trial investigating self-assembling peptide P11-4 in the treatment of early caries. *Clin Oral Investig.* 2020;24:123-132

<sup>2</sup> Alkilzy M, Tarabaih A, Santamaria RM, Splieth CH. Self-assembling Peptide P11-4 and Fluoride for Regenerating Enamel. *J Dent Res.* 2018 Feb;97(2):148-154.

<sup>3</sup> Sedlakova Kondelova P, Mannaa A, Bommer C, Abdelaziz M, Daeniker L, di Bella E, Krejci I. Efficacy of P11-4 for the treatment of initial buccal caries: a randomized clinical trial. *Sci Rep* 2020;10:20211