## Fluoride Release

One of the key features of a glass ionomer-based cement is their sustained fluoride release. It is generally believed that the release of fluoride ions and uptake into the tooth structure aids in the reduction of secondary caries<sup>1</sup>, which can be difficult to detect under a crown or bridge. Fluoride release was measured in-vitro in a buffer solution using a fluoride ion-specific electrode. The chart shows the sustained release from Ketac<sup>™</sup> Cem Plus Luting Cement in comparison to the other resin-modified glass ionomers and the conventional glass ionomer (Ketac<sup>™</sup> Cem Radiopaque Luting Cement from 3M ESPE).



Source: 3M ESPE Laboratory test data



## Field Evaluation Results

With the introduction of the Ketac<sup>™</sup> Cem Plus Luting Cement , a clinical use field evaluation was conducted. 137 dentists cemented a total of 1889 restorations with the RelyX<sup>™</sup> Luting 2 cement. The observation period was approximately 6 weeks. The dentists completed a questionnaire regarding their experiences in use and application of the product.

The dentists that participated in the study used a variety of cement types for their routine cementation including resin cements, resin-modified glass ionomers, conventional glass ionomers, polycarboxylates, and zinc phosphate.

Figure 11 shows the range and numbers of types of restorations that were placed during the evaluation.





<sup>1</sup> Hicks MJ, Flaitz CM, Quintessence Int. 2000 Sep;31(8): 570-8.

Source: 3M ESPE Laboratory test data