









Glass Hybrids

Cost-effective, long-term restorative alternative

Кеу Мар		
₩	Strong	
∞	Durable	Ī
. C.	Aesthetic	
0	Time-saving	Ī
(\$)	Cost-efficient	



Table of contents



<u>Compressive strength, microhardness, acid erosion of</u> restorative glass hybrid/glass-ionomer cements

De Lima Navarro MF, Fernandes PH, Rocha R, Tsuzuki F, Baesso M, Borges AF, Bresciani E, Pascotto R, Menezes-silva Rafael. 2020. 98th General Session & Exhibition of the IADR. 1310.



6

<u>Compression fracture resistance of four different glassionomer cements</u>

Glavina D, Gorseta K. 2020. 98th General Session & Exhibition of the IADR. J Dent Res 99 (Spec Iss A):abstract number 1284.



6

<u>Comparison of compressive strength and fluoride</u> release of GIC restoratives

Mori D. 2020. 98th General Session & Exhibition of the IADR. J Dent Res 99 (Spec Iss A):abstract number 1856.



6

<u>Clinical Performance of Restorations in Teeth Affected</u> <u>by MIH</u>

Kaya R, Kargul B. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 0584.



7





Table of contents



<u>Clinical performance of a glass-hybrid system compared</u> <u>with a resin composite in the posterior region: Results of</u> <u>a 2-year multicenter study</u>

Miletic I, Baraba A, Basso M, Pulcini M, Marković D, Perić T, Atalayin C, Turkun LS. 2020. J Adhes Dent. 22: 235–247.

(\$)

<u>Cost-effectiveness of glass hybrid vs composite in a</u> multi-country randomized trial

Schwendicke F, Gomez Rossi J, Kroisa J, Basso M, Peric T, Turkun LS, Miletic I. 2021. Journal of Dentistry. 107:103614.

(\$)

Glass Hybrid Versus Nanocomposite for Restoration of Sclerotic Non-carious Cervical Lesions: 18-Month Results of a Randomized Controlled Trial

New

8

Göstemeyer G, Seifert T, Jeggle-Engbert L, Paris S, Schwendicke F. J Adhes Dent 2021. Dec 3, 23 (6): 487-496.

\$

Glass hybrid versus composite for non-carious cervical lesions: Survival, restoration quality and costs in randomized controlled trial after 3 years

Schwendicke F, Muller A, Seifert T, Jeggle-Engbert L, Paris S, Gostemeyer G. 2021. Journal of Dentistry. 110:103689.

(\$) 9

Кеу Мар		
\leftarrow	Strong	
∞	Durable	
. C.	Aesthetic	
(1)	Time-saving	
(\$)	Cost-efficient	



Table of contents



<u>Long-term cost-effectiveness of glass hybrid versus</u> <u>composite in permanent molars</u>

New

Schwendicke F, Basso M , Markovic D, Turkun SL, Miletić I. Journal of Dentistry. 2021. 112:103751



9

Carious Lesions and First Restorative Treatment

New

International Dental Journal 2020; 70: 5-6.

10

Кеу Мар		
4	Strong	
∞	Durable	
. C.	Aesthetic	
(1)	Time-saving	
(\$)	Cost-efficient	





Abstracts

Glass Hybrids

TITLE	Compressive strength, microhardness, acid erosion of restorative glass hybrid/glass-ionomer cements
REFERENCE	De Lima Navarro MF, Fernandes PH, Rocha R, Tsuzuki F, Baesso M, Borges AF, Bresciani E, Pascotto R, Menezes-silva Rafael. 2020. 98th General Session & Exhibition of the IADR. J Dent Res 99 (Spec Iss A):abstract number 1310. <u>Compressive Strength, Microhardness, Acid Erosion of Restorative Glass Hybrid/Glass-ionomer Cements IADR Abstract Archives</u>



EQUIA Forte HT presented 26% higher compressive strength and 14% higher Knoop microhardness than Ketac Universal. Acid resistance was good and similar to the other groups.

With high compressive strength EQUIA Forte HT can better support masticatory forces.

I think the better resistance to scratching that could lead to cracking. Good values for acid erosion suggest that EQUIA Forte HT is a trustable material for Class II restorations, given the sensitivity to acid dissolution of this type of restoration.

TITLE	Compression fracture resistance of four different glass-ionomer cements
REFERENCE	Glavina D, Gorseta K. 2020. 98th General Session & Exhibition of the IADR. J Dent Res 99 (Spec Iss A):abstract number 1284. https://iadr.abstractarchives.com/abstract/20iags-3315894/compression-fracture-resistance-of-four-different-glass-ionomer-cements
Fracture resistance of EQUIA Forte HT was 43% and 53% higher than the one presented by Ketac Molar and Ionostar Molar respectively.	
Strength of EQUIA Forte HT can better support masticatory forces due to its hard surface. It will	



Strength of EQUIA Forte HT can better support masticatory forces due to its hard surface. It will have better resistance to scratching that could lead to cracking.

TITLE	Comparison of compressive strength and fluoride release of GIC restoratives
REFERENCE	Mori D. 2020. 98th General Session & Exhibition of the IADR. J Dent Res 99 (Spec Iss A):abstract number 1856.
	https://iadr.abstractarchives.com/abstract/20iags-3317914/comparison-of- compressive-strength-and-fluoride-release-of-gic-restoratives



EQUIA Forte HT presented the highest strength and fluoride release when compared to other products (Ketac Universal, Riva Self cure, Chemfil Rock) in different time intervals.

High amount of fluoride release may help decrease solubility of tooth structure, providing extra protection against issues such as erosion. Strength of EQUIA Forte HT can better support chewing forces due to its hard surface. It will have better resistance to scratching that could lead to cracking.





Abstracts

Glass Hybrids

TITLE	Clinical Performance of Restorations in Teeth Affected by MIH
REFERENCE	Kaya R, Kargul B. 2021 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 0584 https://iadr2021.secure-platform.com/a/gallery/rounds/6/details/1578



EQUIA Forte HT (GH) and everX Flow were the restorative options to treat first permanent molars affected by MIH. Retention rate at 12-month was 100% for GH restoration, while marginal integrity was 89.2%.

Utilization of these materials was successful restoring teeth with Molar Incisor Hypomineralization, suggesting that EQUIA Forte HT is a good restorative option for MIH affected teeth.





Full Paper

Glass Hybrids

TITLE	Clinical performance of a glass-hybrid system compared with a resin composite in the posterior region: Results of a 2-year multicenter study	
REFERENCE	Miletic I, Baraba A, Basso M, Pulcini M, Marković D, Perić T, Atalayin C, Turkun LS. 2020. J Adhes Dent. 22: 235–247. https://pubmed.ncbi.nlm.nih.gov/32435764/	
\$ EQUIA Forte a	EQUIA Forte and Tetric EvoCeram were the restorative options to treat occlusal-proximal two-surfaced cavities in permanent molars of adults.	
Glass-hybrids performed as good as composite in moderate to large Class II restorations in a 2- year follow-up.		

TITLE	Cost-effectiveness of glass hybrid vs composite in a multi-country randomized trial
REFERENCE	Schwendicke F, Gomez Rossi J, Kroisa J, Basso M, Peric T, Turkun LS, Miletic I. 2021. Journal of Dentistry. 107:103614. https://doi.org/10.1016/j.jdent.2021.103614
EQUIA Forte and Tetric EvoCeram were the restorative options to treat occlusal-proximal two-surfaced cavities in permanent molars of adults. The cost-effectiveness of both products was assessed.	



Cost-effectiveness as related to tooth "health" as Glass Hybrid helps to better support tooth structure than composite over time.

New

TITLE	Glass Hybrid Versus Nanocomposite for Restoration of Sclerotic Non-carious Cervical Lesions: 18-Month Results of a Randomized Controlled Trial
REFERENCE	Göstemeyer G, Seifert T, Jeggle-Engbert L, Paris S, Schwendicke F. J Adhes Dent 2021. Dec 3, 23 (6): 487-496. https://pubmed.ncbi.nlm.nih.gov/34817964/
EQUIA Forte and Filtek Supreme XTE were the restorative options to treat non-carious cervical lesions in adults. Procedure time was shorter for Glass Hybrids and both products performed similarly at 18-month.	
With easy procedure and shorter chair time, Glass Hybrids can be a reliable and cost-effective restorative option for non-carious cervical lesions.	





Full Paper

Glass Hybrids

TITLE	Glass hybrid versus composite for non-carious cervical lesions: Survival, restoration quality and costs in randomized controlled trial after 3 years
REFERENCE	Schwendicke F, Muller A, Seifert T, Jeggle-Engbert L, Paris S, Gostemeyer G. 2021. Journal of Dentistry. 110:103689. https://doi.org/10.1016/j.jdent.2021.103689

EQUIA Forte and Filtek Supreme XTE were the restorative options to treat non-carious cervical lesions in adults. Glass Hybrid was less costly, survival rate was similar for both products.

Cost-effectiveness as related to tooth "health" as Glass Hybrid helps to better support tooth structure than composite over time.

New

TITLE	E	Long-term cost-effectiveness of glass hybrid versus composite in permanent molars
REFE	RENCE	Schwendicke F, Basso M , Markovic D, Turkun SL, Miletić I. Journal of Dentistry. 2021. 112:103751 https://www.sciencedirect.com/science/article/pii/S030057122100172X
Data from a multi-centre study (Miletić et al, 2020) was used to assess the cost-effectiveness of EQUIA Forte and Tetric EvoCeram		
\	Glass hybrid was significantly less costly, and more effective than composite for	



Glass hybrid was significantly less costly and more effective than composite for retaining teeth.





References – FDI World Dental Federation

Glass Hybrids

New

TITLE	Carious Lesions and First Restorative Treatment
REFERENCE	Adopted by FDI General Assembly September, 2019 in San Francisco, United States of America https://www.fdiworlddental.org/carious-lesions-and-first-restorative-treatment International Dental Journal 2020; 70: 5–6. https://doi.org/10.1111/idj.12551

This FDI policy statement gives guidance on treatment of caries in deciduous and permanent teeth differentiating the concepts of caries arrest and minimally invasive restorative concepts.

FDI World Dental Federation recognizes Glass Hybrids as a class of restorative materials to be used in permanent teeth.

