

Evidence-based Dentistry Newsletter

GCI AG, July 2023

'GCI'

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G-ænia A'CHORD

Simplicity, aesthetics and performance
in your hands

Key Map

	Strong
	Durable
	Aesthetic
	Time-saving
	Cost-efficient




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NEW

Surface Gloss, Radiopacity and Shear Bond Strength of Contemporary Universal Composite Resins

Atalay C, Koc Vural U, Tugay B, Miletic I, Gurgan S. Appl.Sci. 2023, 13, 1902.

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Resistance of Single-shade Composites to Discoloration

Ersöz B, Karaoğlanoğlu S, Oktay EA, Oper Dent. 2022 Nov 1;47(6):686-692.

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Surface gloss, gloss retention, and color stability of 2 nano-filled universal resin composites.

Molina G, Cabral R, Mazzola I, Burrow M. Rest Dent Endod. 2022; 47:e43.

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Optical Property of Aesthetic Resin Composites

NEW

Fukuyo Y, Shinozaki Y, Kariya S. 2023. 52nd Annual Meeting & Exhibition of the AADOCR. J Dent Res Vol 102(Spec Iss A): 0272.

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Esthetic and Mechanical Durability of Direct-Filling Resin Composite.

Jin S, Machida D, Fusejima F. 2022. 51st Annual Meeting & Exhibition of the AADOCR. 46th Annual Meeting of the CADR. J Dent Res Vol 101 (Spec Iss A):Final Presentation ID 0367.

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Evaluation of Water Sorption and Color Stability of Paste-Resin Composite.

Mizukami H, Kobayashi M, Niizuma Y, Sugai R, Manabe A. 2020. 98th General Session & Exhibition of the IADR. J Dent Res 99 (Spec Iss A):abstract number 2471

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Surface Gloss and Gloss Retention of Two Nano-Filled Universal Composites.

Molina GF, Mazzola I, Carranza AC, Cabral RJ. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 0550.

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Light Scattering Property of New Direct-filling Resin Composite.

Parise Gré C, Machida D, Fusejima F. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 0947.

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Surface Gloss, Radiopacity and Shear-Bond Strength of a Newly Marketed Universal Nanohybrid Composite Resin.

Atalay C, Koc Vural U, Tugay B, Gurgan S. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 2278.

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Color Stability of Recent Resin Composites

Mizukami H, Suyama Y, Sugai R, Niizuma Y, Kobayashi M, Manabe A, Yamada T, Sugizaki J. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 2279.

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Evaluation of the Wear Resistance Property of Direct-filling Resin Composite

Jin S, Fusejima F. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 2280.

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Evaluation of Gloss Retention of Resin Composite After Toothbrush Wear Test

Jin S, Fusejima F. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B): abstract number 0231.

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Fluorescence in Dental Composite Resins

Guadix Tapia J, Gré CP, Lavoix L. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B): abstract number 0234.

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Surface and Handling Characteristics of Universal Restorative Resin Composites.

Säilynoja E, Garoushi S, Prinssi R, Vallittu P, Lassila L. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B):0240.2



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Three-Body Wear of Modern Universal Restorative Materials Against Zirconia.

Schuessler J, Lohbauer U. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B): 0240.1.



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Comparison of mechanical and optical properties of a newly marketed universal composite resin with contemporary universal composite resins: An in vitro study.

Gurgan S, Koc Vural U, Miletic I. Microsc Res Tech. 2022 Mar;85(3):1171-1179.



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Full paper

G-ænial A'CHORD

NEW

TITLE	Surface Gloss, Radiopacity and Shear Bond Strength of Contemporary Universal Composite Resins
REFERENCE	Atalay C, Koc Vural U, Tugay B, Miletic I, Gurgan S. Appl.Sci. 2023, 13, 1902. https://www.mdpi.com/2076-3417/13/3/1902
	G -ænial A'CHORD presented superior gloss after both, polishing and immersion in coffee solution. In combination with G-Premio BOND, G -ænial A'Chord had good bond strength values to enamel and dentin.
	With good mechanical and optical properties, optimal results can be achieved with G-ænial A'CHORD, that may help longevity and blend with natural dentition.

TITLE	Resistance of Single-shade Composites to Discoloration.
REFERENCE	Ersöz B, Karaoğlanoğlu S, Oktay EA, Oper Dent. 2022 Nov 1;47(6):686-692. https://doi.org/10.2341/21-156-L
	G -ænial A'CHORD presented the highest color stability among all materials after immersion in beverages.
	G-aenial A'Chord color stability may help in achieving excellent clinical outcomes.

TITLE	Surface gloss, gloss retention and color stability of 2 nano-filled universal resin composites
REFERENCE	Molina G, Cabral R, Mazzola I, Burrow M. Rest Dent Endod. 2022; 47:e43. https://doi.org/10.5395/rde.2022.47.e43
	G -ænial A'CHORD presented higher surface gloss and better color stability compared to Filtek Universal
	The ability to maintain a high gloss and the good color stability may help in achieving excellent clinical outcomes.









Abstracts

G-ænial A'CHORD

NEW

TITLE	Optical Property of Aesthetic Resin Composites
REFERENCE	Fukuyo Y, Shinozaki Y, Kariya S. 2023. 52 nd Annual Meeting & Exhibition of the AADOCR. J Dent Res Vol 102(Spec Iss A): 0272 https://iadr.abstractarchives.com/abstract/52am-3814672/optical-property-of-aesthetic-resin-composites
	G-ænial A'CHORD showed intermediate light-scattering effect in-between OMNICHROMA (enamel-like) and Filtek Universal (dentin-like).
	G-ænial A'CHORD demonstrated light scattering properties similar to those of enamel and dentin. This may help the material blend with natural dentition.



TITLE	Esthetic and Mechanical Durability of Direct-Filling Resin Composite
REFERENCE	Jin S, Machida D, Fusejima F. 2022. 51 st Annual Meeting & Exhibition of the AADOCR. 46th Annual Meeting of the CADR. J Dent Res Vol 101 (Spec Iss A):Final Presentation ID 0367. Esthetic and Mechanical Durability of Direct-Filling Resin Composite IADR Abstract Archives
	G-ænial A'CHORD showed the lowest wear compared to other products.
	Due to its formula, G-ænial A'CHORD has excellent wear resistance. This may contribute to excellent long-term results even under high chewing forces. The ability to maintain a high gloss may help in achieving excellent clinical outcomes.








Abstracts

G-ænial A'CHORD

TITLE	Evaluation of Water Sorption and Color Stability of Paste-Resin Composite
REFERENCE	Mizukami H, Kobayashi M, Niizuma Y, Sugai R, Manabe A. 2020. 98th General Session & Exhibition of the IADR. J Dent Res 99 (Spec Iss A):abstract number 2471. https://iadr.abstractarchives.com/abstract/20iags-3316073/evaluation-of-water-sorption-and-color-stability-of-paste-resin-composite
	The color change of G-ænial A'CHORD was 85% lower than that of Tetric EvoCeram, Filtek Supreme and Omnichroma. The lowest water sorption was registered for G-ænial A'CHORD.
	By lowering water sorption , G-ænial A'CHORD's formulation may help maintain aesthetics by reducing staining in clinical use.



TITLE	Surface Gloss and Gloss Retention of Two Nano-Filled Universal Composites
REFERENCE	Molina GF, Mazzola I, Carranza AC, Cabral RJ. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 0550 Surface Gloss and Gloss Retention of Two Nano-Filled Universal Composites IADR Abstract Archives
	Surface gloss of G-ænial A'CHORD was 13% higher than that of Flitek Universal. Gloss retention was similar for both products.
	In addition to lower water sorption reported, the ability to maintain a high gloss may help in achieving excellent clinical outcomes.



TITLE	Light Scattering Property of New Direct-filling Resin Composite
REFERENCE	Parise Gré C, Machida D, Fusejima F. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A): abstract number 0947. Light Scattering Property of New Direct-Filling Resin Composite IADR Abstract Archives
	G-ænial A'CHORD demonstrated light scattering properties similar to those of enamel and dentin. This may help the material blend with natural dentition.





Abstracts

G-ænial A'CHORD

TITLE	Surface Gloss, Radiopacity and Shear-Bond Strength of a Newly Marketed Universal Nanohybrid Composite Resin
REFERENCE	Atalay C, Koc Vural U, Tugay B, Gurgan S. 2020. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 2278. <u>SURFACE GLOSS, RADIOPACITY and SHEAR-BOND STRENGTH of a NEWLY MARKETED UNIVERSAL NANOHYBRID COMPOSITE RESIN IADR Abstract Archives</u>
	G-ænial A'CHORD presented the highest surface gloss and adequate radiopacity.
	G-ænial A'CHORD's formula may help the material blend with natural dentition.



TITLE	Color Stability of Recent Resin Composites
REFERENCE	Mizukami H, Suyama Y, Sugai R, Niizuma Y, Kobayashi M, Manabe A, Yamada T, Sugizaki J. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A):abstract number 2279. <u>Color Stability of Recent Resin Composites IADR Abstract Archives</u>
	G-ænial A'CHORD presented the lowest color change among the six products tested.
	G-ænial A'CHORD's formula may help the material blend with natural dentition.



TITLE	Evaluation of the Wear Resistance Property of Direct-filling Resin Composite
REFERENCE	Jin S., Fusejima F. 2021. 99th General Session & Exhibition of the IADR. J Dent Res 100 (Spec Iss A): abstract number 2280. <u>Evaluation of the Wear Resistance Property of Direct-Filling Resin Composite IADR Abstract Archives</u>
	G-ænial A'CHORD showed lowest wear among all the products
	Due to its formula, G-ænial A'CHORD has excellent wear resistance. This may contribute to long-term results even under high masticatory forces.





Abstracts

G-ænial A'CHORD

TITLE	Evaluation of Gloss Retention of Resin Composite After Toothbrush Wear Test
REFERENCE	Jin S, Fusejima F. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B): abstract number 0231. https://ced-iadr2021.com/abstract-book/ p.110.
	G-ænial A'CHORD maintained the gloss at 50% after 1,200 brushing cycles.
	The ability to maintain a high gloss may help in achieving excellent clinical outcome.



TITLE	Fluorescence in Dental Composite Resins
REFERENCE	Guadix Tapia J, Gré CP, Lavoix L. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B): abstract number 0234. https://ced-iadr2021.com/abstract-book/ p.111
	G-ænial A'CHORD presented a uniform response when exposed to different UV lights.
	G-ænial A'CHORD's formula may help the material blend with natural dentition.

TITLE	Surface and Handling Characteristics of Universal Restorative Resin Composites
REFERENCE	Säilynoja E, Garoushi S, Prinssi R, Vallittu P, Lassila L. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B): abstract number 0240.2 https://ced-iadr2021.com/abstract-book/ p.114
	G-aenial A'CHORD showed improved surface and optical characteristics and non-sticky consistency in handling.
	G-aenial A'CHORD showed improved surface and optical characteristics as well as non-sticky consistency in handling. These clinically relevant findings may indicate good performance of G-aenial A'CHORD as a universal restorative material.





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G-ænial A'CHORD

TITLE	Three-Body Wear of Modern Universal Restorative Materials Against Zirconia
REFERENCE	Schuessler J, Lohbauer U. 2021. CED-IADR/NOF Oral Health Research Congress. J Dent Res 100 (Spec Iss B): abstract number 0240.1. https://ced-iadr2021.com/abstract-book/ p.114
	G-ænial A'CHORD showed the lowest wear compared to other products.
	Due to its formula, G-aenial A'CHORD has excellent wear resistance. This may contribute to excellent long-term results even under high chewing forces against Zirconia restorations.

Full paper

G-ænial A'CHORD

TITLE	Comparison of mechanical and optical properties of a newly marketed universal composite resin with contemporary universal composite resins: An in vitro study
REFERENCE	Gurgan S, Koc Vural U, Miletic I. Microsc Res Tech. 2022 Mar;85(3):1171-1179. doi: 10.1002/jemt.23985. Epub 2021 Nov 12 https://pubmed.ncbi.nlm.nih.gov/34766666/
	G-ænial A'CHORD presented low values for surface roughness and color change. Translucency parameter and microhardness were considered good.
	With good mechanical and optical properties, optimal results can be achieved with G-ænial A'CHORD, that may help longevity and blend with natural dentition.

