

Evidence-based Dentistry Newsletter

GCI AG, March 2025



Table of contents

Comparison of Flexural Strength and Wear of Injectable, Flowable and Paste Composite Resins.

- Chen Y, Bai X, Xu M, Zhou T, Loh YM, Wang C, Pow E, Tsoi J. J Dent. 2024 May 1:146:105025.



3

NEW

Fluorescence and color adjustment potentials of paste-type and flowable resin composites in cervical restorations.

- Bayraktar, E. T., Öztürk, E. K., Saygılı, C. C., Türkmen, C., & Korkut, B. (2024). Clin Oral Investig, 28, 649.



3

NEW

The mechanical, wear, antibacterial properties and biocompatibility of injectable restorative materials under wet challenge

- Chen Y, Bai X, Xu M, Zhou T, Loh YM, Wang C, Pow E, Tsoi J. J Dent. 2024 May 1:146:105025.



3

Injectable resin composite for long-lasting aesthetic restorations

- Fukuyo Y, Kariya S, Shinozaki Y. Fukuyo Y, Kariya S, Shinozaki Y. 2024. J Dent Res Vol 103 (Spec Iss A):1423.



4

Effects of cycling loading on surface roughness of highly-filled flowable composite

- Checchi V, Corciolani L, Maravic T. Generali L, Breschi L, Mazzitelli C. 2023. 300National Congress of university professors of odontostomatological disciplines



4

Key Map



Strong



Durable



Aesthetic



Time-saving



Cost-efficient

Full paper

G-ænial Universal Injectable

NEW

TITLE	Comparison of Flexural Strength and Wear of Injectable, Flowable and Paste Composite Resins
REFERENCE	Rajabi, H., Denny, M., Karagiannopoulos, K., & Petridis, H. 2024. Materials, 17, 4749. https://doi.org/10.3390/ma17194749
	GUI exhibited the highest flexural strength, and its wear resistance was high, comparable to that of Beautiful Flow Plus F00.
	Due to its technology, G-ænial Universal Injectable has excellent mechanical properties. This may contribute to successful long-term clinical aesthetic and functional results.

NEW

TITLE	Fluorescence and color adjustment potentials of paste-type and flowable resin composites in cervical restorations
REFERENCE	Bayraktar, E. T., Öztürk, E. K., Saygılı, C. C., Türkmen, C., & Korkut, B. 2024. Clin Oral Investig, 28, 649. https://doi.org/10.1007/s00784-024-06054-x
	GUI presented the best fluorescence and color match values among the flowable composites tested.
	The good fluorescence and color stability may help G-aenial Universal Injectable in achieving excellent clinical outcome

TITLE	The mechanical, wear, antibacterial properties and biocompatibility of injectable restorative materials under wet challenge
REFERENCE	Chen Y, Bai X, Xu M, Zhou T, Loh YM, Wang C, Pow E, Tsoi J. J Dent. 2024 May 1;146:105025. https://doi.org/10.1016/j.jdent.2024.105025
	GUI showed the highest level of mechanical properties: flexural strength, hardness, roughness and wear resistance.
	Due to its technology, G-ænial Universal Injectable has excellent mechanical properties. This may contribute to successful long-term clinical aesthetic and functional results.

Abstract

G-ænial Universal Injectable

TITLE	Injectable resin composite for long-lasting aesthetic restorations
REFERENCE	Fukuyo Y, Kariya S, Shinozaki Y. Fukuyo Y, Kariya S, Shinozaki Y. 2024. J Dent Res Vol 103 (Spec Iss A):1423 https://eppro02.ativ.me/web/page.php?page=IntHtml&project=IAD_R24&id=3988118
	GUI showed the highest color change resistance, and its flexural strength was very high and similar to that of Filtek Universal.
	Due to its technology, G-ænial Universal Injectable has excellent flexural strength and discoloration resistance. This may contribute to successful long-term clinical aesthetic results.

TITLE	Effects of cycling loading on surface roughness of highly-filled flowable composite
REFERENCE	Checchi V, Corciolani L, Maravic T. Generali L, Breschi L, Mazzitelli C. 2023. 300 National congress of university professors of odontostomatological disciplines. doi: 10.19256/abstract.cduo.03.2023
	GUI showed low surface roughness, without significant difference to traditional composites.
	The optimal surface smoothness of G-ænial Universal Injectable may contribute to long-lasting aesthetic restorations and minimize the retention of plaque and stains.