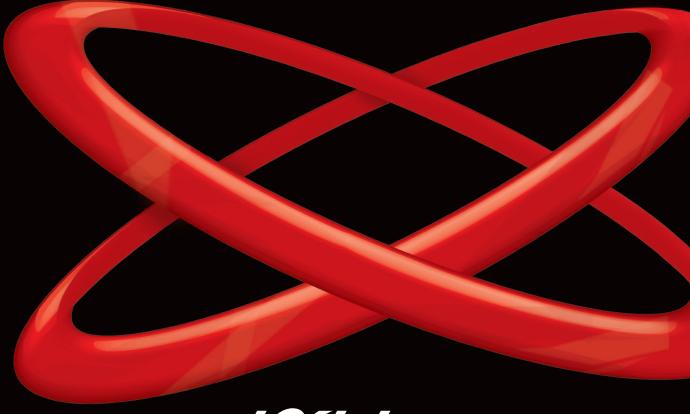
### EQUIA<sup>®</sup> Forte Glass Hybrid Restorative System

For long term posterior restorations





# The original EQUIA® system

EQUIA<sup>®</sup> is a self-adhesive posterior restorative system that combines the chemical-bonding, bulk-fill characteristics of GC Fuji<sup>®</sup> IX GP EXTRA, with unique physical and aesthetic properties gained through a lamination hardening effect of G-COAT PLUS.

EQUIA<sup>®</sup> is routinely used as part of treatment strategies for deeper lesions, caries stabilisation and general restorative care in higher caries risk, geriatric and paediatric patients. G-COAT PLUS is a tough, nano-filled, self-adhesive coating that will chemically bond to GC Fuji<sup>®</sup> IX GP EXTRA, markedly increasing fracture toughness, early wear resistance and acid resistance.

The application of G-COAT PLUS is the key step to enhance the physical properties of EQUIA® restorations, allowing them to achieve their full potential when restoring initial occlusal lesions in posterior teeth.

### EQUIA<sup>®</sup> proves its outstanding performance in class I cavities in clinical trials

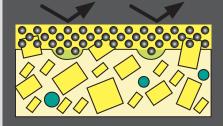
7 years – 100%	Basso et al. 2016
6 years – 100%	Gurgan et al. 2015
6 years – 100%	Turkun, Kanik 2015
4 years – 99%	Klinke et al. 2016
3 years – 100%	Diem et al. 2014
2 years – 100%	Friedl et al. 2011

Survival rates for EQUIA  $\ensuremath{^{\ensuremath{\mathbb{R}}}}$  class I restorations

### Lamination strengthening



Mechanical stress concentrates on surface voids leading to crack propagation



Mechanical stress is dispersed by the toughened laminate layer

Basso M et al. (2016). J Dent Res 95 (Spec Issue B):446. Gurgan S (2015). J Dent Res 94 (Spec Issue B):220. Turkun L, Kanik O (2015). J Dent Res 94 (Spec Issue B):016. Klinke T et al. (2016). Trials 17(1):1-14. Diem VT, Tyas MJ, Ngo HC, Phuong LH, Khanh ND (2014). Clin Oral Investig 18(3): 753-759. Friedl K, Hiller KA, Friedl KH (2011). Dent Mater 27:1031-1037.

### The new, enhanced EQUIA® Forte System

EQUIA® Forte is a Glass Hybrid Restorative System for long term posterior restorations. EQUIA® Forte builds on the remarkable clinical trials performance of the original EQUIA® system and presents as a strong, bulk-fill, self-adhesive system for rapid restoration of posterior teeth.



#### EQUIA® Forte Fil laminated with EQUIA® Forte Coat is the EQUIA® Forte System

3

EQUIA® Forte Fil reveals GC's latest evolution of highstrength glass ionomer technologies described as Glass Hybrid technology. This technology creates a selfadhesive, bulk fill restorative with similar handling, setting and aesthetics as conventional glass ionomer cements but with enhanced physical properties for superior wear resistance, fracture toughness and durability. EQUIA® Forte Coat is a clear, self-adhesive, light cured resin coating which works in synergy with EQUIA® Forte Fil. Quick to apply and featuring GC's latest single dispersion nanofiller and reinforced resin technologies, it toughens, protects and polishes to complete the EQUIA® Forte restorative system.

#### Stronger

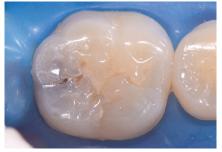




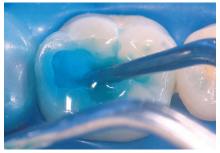
## EQUIA<sup>®</sup> Forte: for the first cut of a tooth,

The synergy of GC's latest Glass Hybrid and resin technologies, working with minimal intervention cavity techniques, accentuates EQUIA® Forte as the first choice for restoring initial occlusal lesions in permanent posterior teeth. EQUIA® Forte builds stronger restorations, using a simple placement procedure that takes less than 5 minutes to complete. Plus you can use EQUIA® Forte in all other indications where you may already be using conventional glass ionomer cements.

#### Management of occlusal caries - Dr E. Stephen Vouliotis



Female patient, age 36. Tooth 46 rapid caries approaching distal.



CAVITY CONDITIONER applied for 10sec to remove surface debris.



EQUIA® Forte Fil has up to 60sec working time and is placed in one increment.



Preliminary shaping was performed; occlusal contact, good aesthetics and shape were verified.



 $\mathsf{EQUIA}^{\otimes}$  Forte Coat was applied and light-cured 20sec to complete the  $\mathsf{EQUIA}^{\otimes}$  restoration.



Finished restoration.

## and for a wider range of indications

EQUIA® Forte is a Glass Hybrid Restorative System suitable for:

- Class I restorations
- Class II restorations including stress bearing (not involving cusp peaks)
- Class V and root surface restorations
- Intermediate and Transitional restorations
- Core build up

#### Management of caries lesions in an Alzheimers' patient - Dr Matteo Basso



Secondary caries lesions on teeth 16 and 17. A new caries lesion in the mesial surface of tooth 16.



After the removal of decayed tissue, CAVITY CONDITIONER was used (10 sec.) to remove surface debris.



EQUIA® Forte Fil (A3) was placed in one single increment.



Preliminary shaping was performed with hand instruments. The presence of an efficient occlusal contact, good aesthetics and good shape of occlusal surface has been verified.



A layer of EQUIA® Forte Coat was applied with a brush (light-cured 20 sec.) to improve final mechanical properties of the EQUIA® Forte restoration.



Finished restoration.

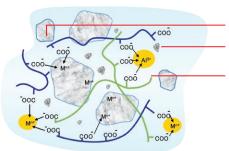
## EQUIA<sup>®</sup> Forte – innovations in technology

### Why is EQUIA<sup>®</sup> Forte Fil stronger than a conventional glass ionomer like GC Fuji<sup>®</sup> IX GP EXTRA?

EQUIA® Forte Fil is stronger because the matrix surrounding the glass fillers is stronger. This is achieved through the introduction of novel Glass Hybrid technology.

Aside from the conventional glass particles, an innovative ultrafine, highly reactive glass is dispersed into EQUIA® Forte Fil.

Combined with a higher molecular weight polyacrylic acid, this new Glass Hybrid formulation increases ion availability, enhancing matrix formation and builds a much stronger matrix structure.



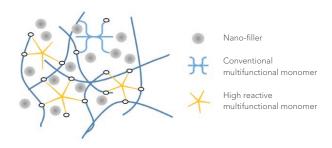
Surface-treated FAS glass (main filler) Highly reactive FAS glass

Higher-molecular weight polyacrylic acid

While EQUIA® Forte Fil is based on glass ionomer technology and will provide the many benefits these cements currently offer, the evolution to Glass Hybrid chemistry significantly increases the clinical capabilities of these materials.

### Why is EQUIA<sup>®</sup> Forte Coat tougher than G-COAT PLUS?

EQUIA® Forte Coat features new cross-linking monomer chemistry, with more efficient polymerisation characteristics. This creates a tougher resin matrix that is further reinforced by single dispersion nano-fillers. This new monomer also improves handling and creates a smoother surface finish.



#### EQUIA<sup>®</sup> Forte is aesthetic

EQUIA® Forte Fil has a great shade-matching ability and EQUIA® Forte Coat forms a high lustre, translucent coating, saving you polishing time. The synergy of these two materials in EQUIA® Forte, means you will achieve excellent aesthetics in minimal time.



1 week after placement

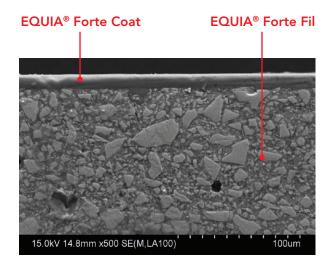
# working in synergy

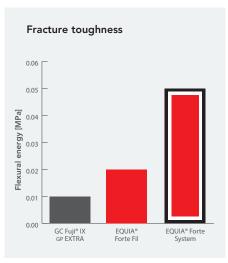
#### Lamination Strengthening

The success of the EQUIA® Forte system is derived from the synergistic combination of these two unique materials.

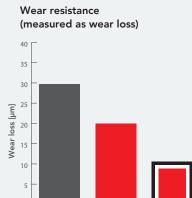
A surface lamination effect is achieved through the chemical bonding of EQUIA® Forte Coat to the surface of EQUIA® Forte Fil.

This lamination strengthening effect accentuates the physical properties of both materials so that, when combined in the EQUIA® Forte Glass Hybrid Restorative System, a new standard is set for bulk-placed, self-adhesive posterior restorations.





#### Flexural strength 40 35 30 Flexural strength [MPa] 25 20 15 10 5 0 GC Fuji<sup>®</sup> IX **EQUIA®** EOUIA<sup>®</sup> Forte Forte Fil GP EXTRA System



**EQUIA®** 

Forte Fil

EQUIA<sup>®</sup> Forte

System

0

GC Fuji<sup>®</sup> IX GP EXTRA



#### **EQUIA® Forte Fil**

Box: 50 capsules Shades: A1, A2, A3, A3.5, B1, B2, B3, C4 Assorted (contains 10 each A2, A3, A3.5, B1, B3)

#### Advantages of using EQUIA<sup>®</sup> Forte:

- Bulk placement in less than 5 minutes from start to finish
- No bonding agent needed chemical adhesion with tooth structure

,'GC,

- Low moisture sensitivity
- Optimal protection of marginal seal for long lasting restorations
- Great shade-matching ability
- High lustre, translucent coating, saving you polishing time



EQUIA<sup>®</sup> Forte Coat

Bottle 4mL

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