

The Future of
Bio Protection
is Here



Dental Restorative System with **Antibacterial Technology**
Reduces Mineral Loss that is Part of the Caries Process



The Story Behind the Science

New Restorative Materials with Antibacterial Technology that Fights Demineralization and Secondary Caries

One of the biggest issues within dentistry is managing the marginal integrity of a restoration and fighting the future demineralization and secondary caries.

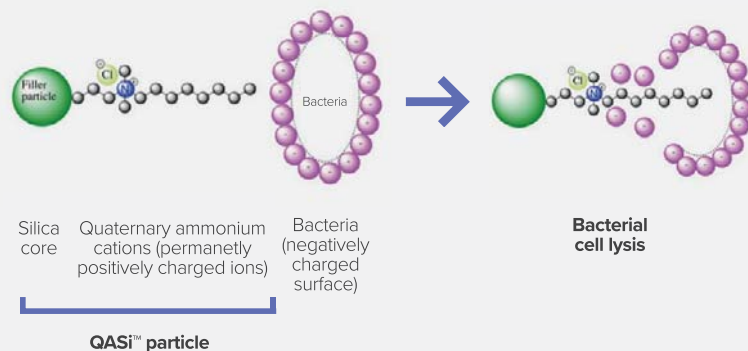
Nobio developed a non-leaching, long-term antibacterial QASi technology that is incorporated into the Infinix resin based dental restorative materials product-line that has been cleared by FDA.

Nobio technology electrostatically kills bacteria that come in direct contact with the restorative material, at its interface with the cavity wall, to reduce mineral loss that is part of the caries process.



Mechanism of Action

QASi™ particles are solid, macromolecules with a silica core and a high concentration of antimicrobial groups (quaternary ammonium), which are covalently bound to the silica core.



Proven Advantages

QASi™ particles, a non-leaching, long term antibacterial technology

Integrated into the restorative material

Effective against a broad spectrum of bacteria

Kills bacteria only where needed at the interface between the tooth and the cavity wall restoration, where the damage occurs

Reduces mineral loss that is part of the caries process

Does not impact normal oral flora

Unlikely to induce resistance

Clinical Evidence

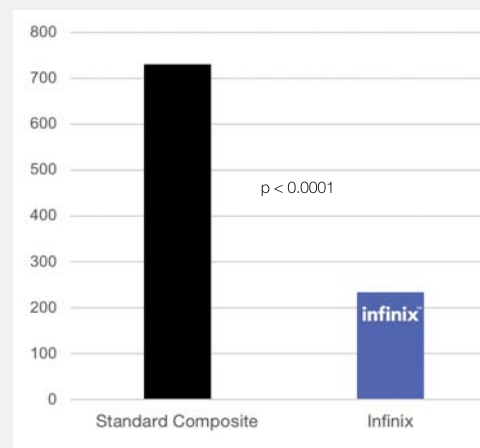
Clinical Studies

Demineralization Prevention with a New Antibacterial Restorative Technology

Prevention of mineral loss by Infinix composites (in situ study),
 Rechmann, *Clinical Oral Investigations*, 2020
 Self-control (split-mouth) in situ clinical study at UCSF (n=25).

De-mineralization from enamel adjacent to standard composite was three fold higher than enamel adjacent to Infinix composite, and the effect was present in all cases.⁽¹⁾

Mineral Loss from Adjacent Enamel
 ($\mu\text{m} \times \text{vol} \% \text{ mineral}$)



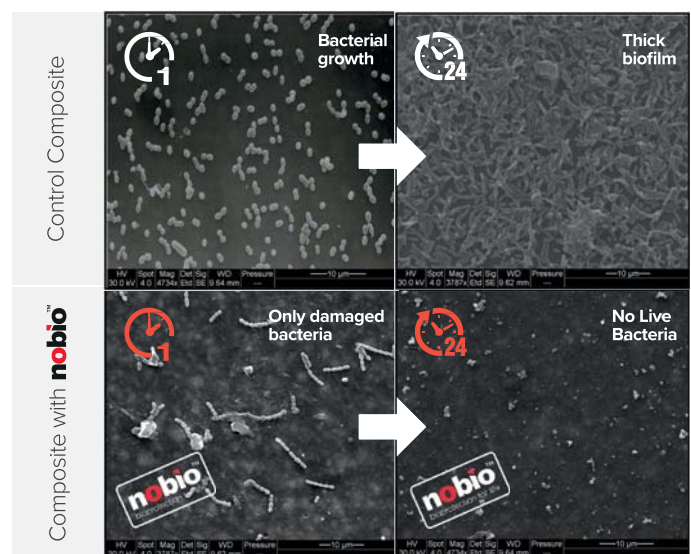
Antibacterial Testing

QPEI particles were potent antibacterial agents,

- ✓ Did not leach out
- ✓ Inhibited breakdown of the composite
- ✓ Maintained their antibacterial action over time.⁽²⁾

Effective Against High Bacteria Concentrations

S. Mutans $10^9/\text{ml}$



Images: Scanning electronic microscopy (x4000)

For additional information or studies, go to www.infinix.com

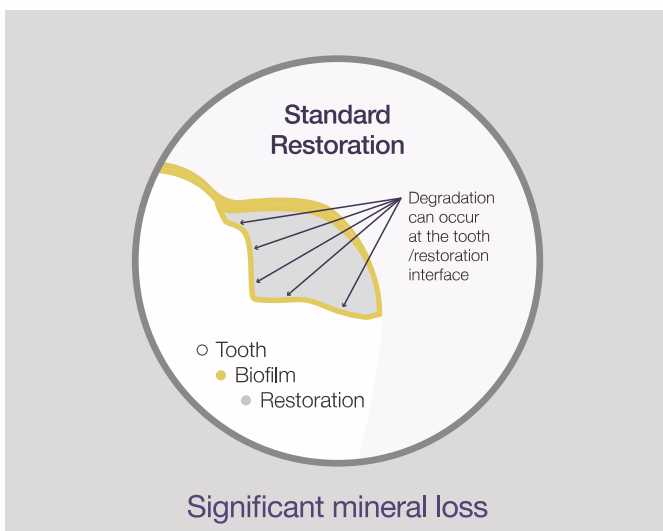
References:

1. Clin Oral Investig. 2021 doi: 10.1007/s00784-021-03837-4
2. Beyth et al, Biomaterials (2006)

Infinix Product Line System to Ensure Optimal Results

Infinix Advanced Dental Restorative System that Provides Maximum Strength and Effectiveness

- ✓ **Easy to use, no learning curve** – using it does not require any change to the procedure
- ✓ **Provides 2-in-1 support - Restoration** (current tooth structure) + **Prevention** (future caries)
- ✓ **The QASi particles remain embedded in the polymerized resin matrix**
- ✓ **Proven reduction** in demineralization and future secondary caries
- ✓ **Excellent solution** for High Risk Caries Patients



” The QASi antibacterial particles remain in place and continue their action over time, eliminating the problems of leaching, loss of activity, unnecessary ingestion, and accumulation in the body and the environment.

John D.B. Featherstone, MSc, PhD, Professor Emeritus and Dean Emeritus,
School of Dentistry, University of California San Francisco (UCSF), San Francisco, USA.

Clinical Case
Class II MO
Infinix™ Universal Composite (A2)
Contribute by Dr. Yuval Wind DMD, Israel



Infinix Advanced Restorative Products

Infinix™ Universal Bond



The Infinix Universal Bond System that provides a proven **Antibacterial Cavity Cleansing Effect**

Light-Cured Self-Etch Two-step Bonding System (Prime and Bond)

- ✓ Bonding Agent with QASi Antibacterial Technology
- ✓ The system for maximum strength and antibacterial effectiveness
- ✓ Compatible with total-etch, self-etch and selective etch techniques
- ✓ Low risk of post-operative sensitivity
- ✓ Optimized marginal efficacy

Infinix™ Flowable Composite



Light-cured, low viscosity flowable composite for class III and V restorations, base liner and pit and fissures

- ✓ With QASi Antibacterial Technology
- ✓ Excellent handling
- ✓ Perfect adaptation to cavity wall
- ✓ Excellent radiopacity and good flow rate

Infinix™ Universal Composite



Light-cured, high viscosity universal composite for class I through class VI indications

- ✓ With QASi Antibacterial Technology
- ✓ Outstanding performance
- ✓ Adaptation with structural integrity

To obtain maximum bond strength and antibacterial effectiveness, use Infinix Universal Bond with Infinix Composites

Ordering Information

infinixTM
advanced dental restoratives

Item No. Production information

INF-UB-FP-MD Infinix™ Universal Bond
1 – 5 ml Bottle Primer
1 – 5 ml Bottle Bonding Agent
Technique Procedure Guide
Instructions for use

INF-FL-FP-MD-A2 Infinix™ Flowable Composite
1 - 2g Syringe
Shade A2
10 Dispensing Tips
Technique Procedure Guide
Instructions for use

Item No. Production information

INF-UC-FP-SD-A2 Infinix™ Universal Composite
20 - 0.25g Capsules
Shade A2
Technique Procedure Guide
Instructions for use

INF-UC-FP-SD-A3 Infinix™ Universal Composite
20 - 0.25g Capsules
Shade A3
Technique Procedure Guide
Instructions for use



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