Engineered Endodontic Solutions

+ EndoUltra Ultrasonic Activation = Improved results!

Vista solutions have been specifically engineered and SCIENTIFICALLY tested to optimize dissolution and disinfection when combined with ultrasonic activation and acoustic streaming.

SmearOFFTM

One Product, Twice the Impact.

Vista Dental, the leader in endodontic irrigation, introduces a new 2-in-1 product that replaces two commonly used solutions: **EDTA** + **CHX**

The only TRUE two-step 2-in-1 irrigant.**

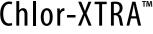
2+1 Irrigant:	Removes Smear Layer	Kills Bacteria incl. E. Faecalis	2-in-1 Solution	Irrigation Procedure	Forms a Precipitate	Cost Savings
SmearOFF™	√	√	√	2 step	No	YES!
QMix® brand	√	√	√	3 step ^{††}	Yes⁺	No

†JOE-Vol 37, No 6, June 2011 ††QMix®* irrigation instructions state that a sterile water/saline rinse is required after NaOCI and prior

*QMix® is a registered trademark of DENTSPLY International

The only TRUE 2-step irrigation protocol

Step 1: Chlor-Xtra™ Step 2: SmearOFF™



 $Chlor-XTRA^{m}$ Engineered with surfactants and propietary surface modifiers



Vista's Chlor-XTRA™ is an enhanced 6% sodium hypochlorite solution designed for irrigation, debridement and cleansing of root canals during and after instrumentation. The addition of powerful wetting agents and proprietary surface modifiers enables it to penetrate into lateral canals and isthmuses by lowering the surface tension.

Chlor-XTRA™ offers:

2+ times more wetting ability

 To reduce post-treatment complications

· 2+ times more digestive

· To increase lubricity





Specially **Engineered Solutions**



Ultrasonic Activation



Improved Results

Vista Dental. The leader in irrigation and innovation.



INTRODUCING

2200 Northwestern Avenue

Toll Free: 877-418-4782 Phone: 262-636-9755 Fax: 262-636-9760

info@vista-dental.com





Racine, WI 53404

www.vista-dental.com

ENDOULTRA Superior Activation*

The EndoUltra[™] produces ultrasonic tip frequency of 40,000 Hz (200X more powerful than sonic devices)!



*Mozo S, et al. (2012). Review of ultrasonic irrigation in endodontics: increasing action of irrigating solutions. Med Oral Patol Oral Cir Bucal. Van der Sluis LW, et al. (2007). Passive ultrasonic irrigation of the root canal: a review of the literature. Int Endod J.

Tasdemir T, et al. (2008). Effect of passive ultrasonic irrigation on apical extrusion of irrigating solution. Eur J Dent.

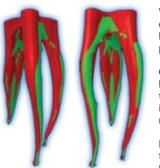
SEE WHY SCIENTIFIC EVIDENCE SUPPORTS ULTRASONIC TECHNOLOGY.

Vista Dental[™], the industry leader in endodontic irrigation, is proud to introduce **EndoUltra**[™] – the world's FIRST cordless ultrasonic dental device! **EndoUltra**[™] offers best-in-class ultrasonic activation of irrigants.

Ultrasonic technology is much more effective than rotary or hand instruments

A research study** by Dr. Ove Peters illustrated that approximately 35% or more of the canal's surface remains untouched with the use of rotary or hand instruments.

This means that much of the canal's surface has not been properly cleaned or disinfected.



Variances in the morphology of canals dictate that even the best instruments only touch a part of the canal space.

GREEN – areas that have not been treated with endodontic instruments and remain infected leading to failures/retreatments.

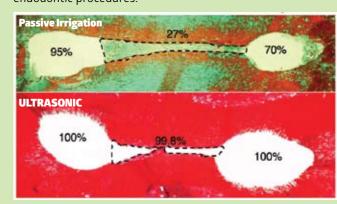
RED – areas after preparation that have been treated by hand or rotary instruments.

Furthermore, nickel titanium and stainless steel instruments leave a sufficient amount of the canal covered in smear layer, which leaves the canal populated with bacteria and debris. Rotary and hand instruments alone are insufficient to properly clean the endodontic space created. To improve clinical outcomes and reduce retreatments, ultrasonic agitation of irrigants is required.

**Peters OA, et al. (2001). Effects of four Ni-Ti preparation techniques on root canal geometry assessed by micro computed tomography. Int Endod J.

Research conducted at the University of Ohio by Dr. John Nusstein[‡] compared the in vivo debridement efficacy of hand/rotary versus a "hand/rotary/ultrasound" technique (see chart below). Dr. Nusstein's research concluded, that 1 minute of ultrasonic activation after hand/rotary instrumentation resulted in significantly cleaner canals and isthmuses in the mesial roots of mandibular molars. Only with the addition of ultrasonics can you completely clean the difficult anatomy of the root canal.

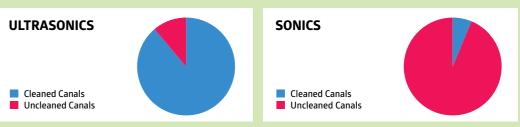
The **EndoUltra**™ provides sufficient ultrasonic energy required to effectively activate canals resulting in significantly better endodontic procedures.



[‡]Reprinted from Gutarts R, Nusstein J, Reader A, Beck M. In vivo debridement efficacy of ultrasonic irrigation following hand-rotary instrumentation in human mandibular molars. J Endod. 2005, with permission from

Ultrasonic technology has proven to be superior to Sonic

In a study by Dr. Van der Sluis, ultrasonic activation proved to be significantly more effective in the removal of dentin debris than sonic activation. Ultrasonic devices, like the **EndoUltra**™ are 89% effective in cleaning of the canals completely free from dentine debris, compared to the sonic group of 5.5% - 6.7%.



Jiang LM, et al. (2010). Evaluation of a sonic device designed to activate irrigant in the root canal. J Endod.

Additionally, only ultrasonics was proven to provide the shear forces required to produce cavitation and acoustic streaming. Activation of the irrigant resulted in significantly more dentin debris removal; ultrasonic activation was significantly more efficient than sonic activation.