



DENTAL ADVISOR RATING **Very Good** ★ ★ ★ ★

15 Clinical Evaluators / 152 Total uses / 90% Clinical rating

# BEST PART OF

## Unique Attributes

- No mixing needed with this endodontic sealer, as it is a ready-to-use, pre-mixed bioactive sealer in an injectable syringe.
- This syringe features replaceable extended length tips. These tips are designed to inject the material directly into the root canal during obturation, starting apically and working coronal.

# DIA-ROOT™ BIO Sealer



#30 Pre-op



#30 Post-op

Courtesy of Dr. Matthew Miller

“READY TO USE WITH NO MIXING NEEDED.”

## Evaluators' Comments

“Material injects into the canal very easy, and the chamber stays clean and visible because of the tip.”

“I liked this material because of its biocompatibility and ease of placement into the canals.”

“With this material I was able to establish a great apical seal, and it had good flowability into lateral canals and complex anatomy.”

“The delivery system was great.”

“Being MTA based, it does well in apically symptomatic cases.”

“I liked to use this material only in cases where I was not concerned about overextension of sealer out the apex from direct injection.”



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# BEST PART OF DIA-ROOT™ BIO Sealer

- ✓ **NO MIXING (PRE-MIEXED)**  
Easy to use
- ✓ **WELL DESIGNED TIP**  
Inject the material directly into the root canal  
Stay clean and visible
- ✓ **EXCELLENT BIOCOMPATIBILITY**  
No adverse reactions nor complications
- ✓ **GOOD FLOWABILITY**  
Easy to use with lateral canals and complex anatomy

Consultants who would:

**73%** Recommend to a colleague

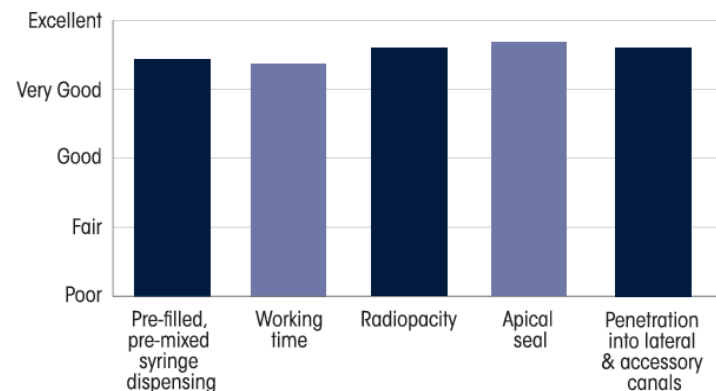
Consultants who would want to stock in office:

**20%** Yes, instead of current product

**47%** Yes, in addition to current product

**7%** No, however I might want to order it for certain cases

Evaluation Summary:



계 2024 - C 002 호



## 2024 덴트포토 초이스

DiaRoot BioSealer  
대표 유재훈  
다이아덴트

위 제품은 덴트포토 치과의사 회원들이 뽑은  
덴트포토 초이스 추천제품으로 선정되어 이 증서를  
수여합니다.

2024년 4월 5일

덴트포토운영

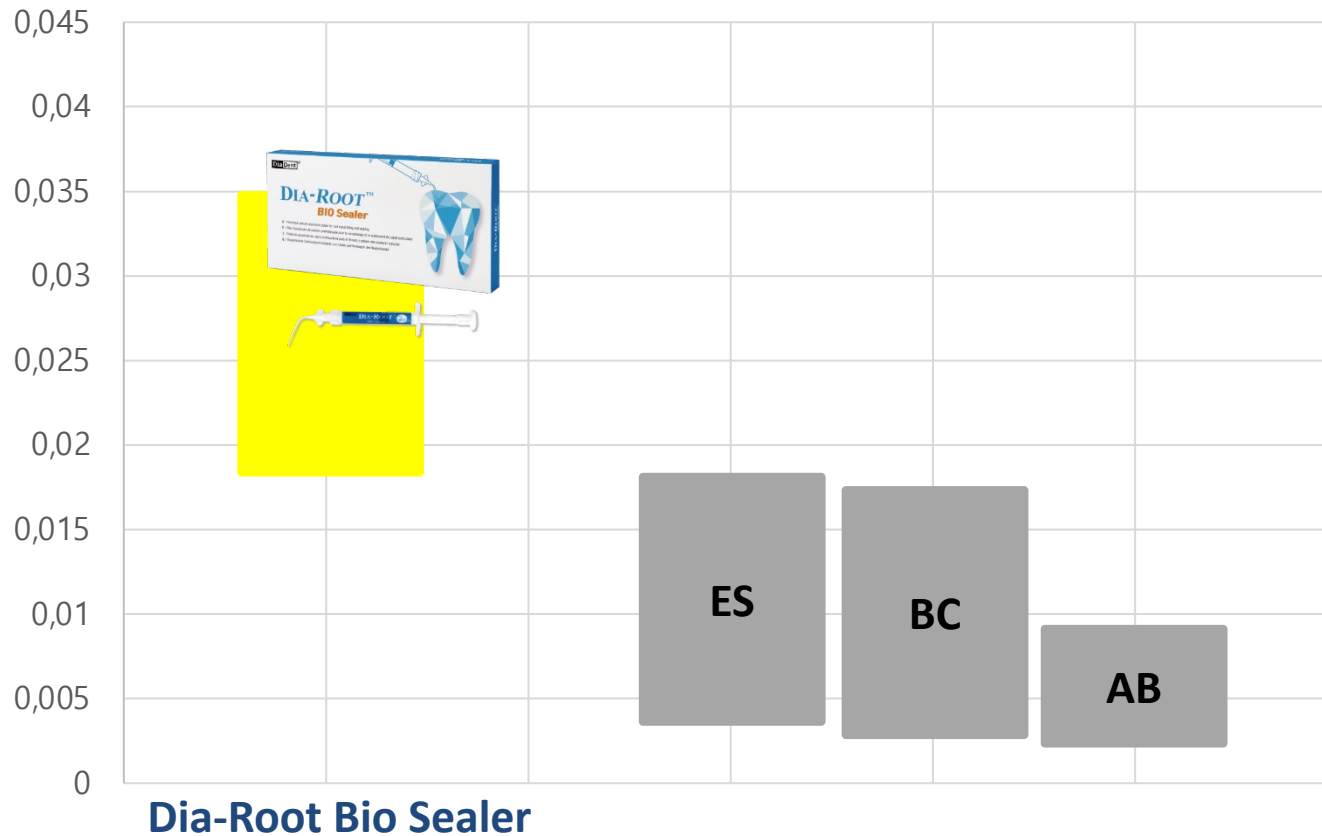


# DIA-ROOT™ BIO Sealer

has been selected  
as the **2024 recommended product**  
by “Dentphoto” one of the largest dental  
community in Korea.

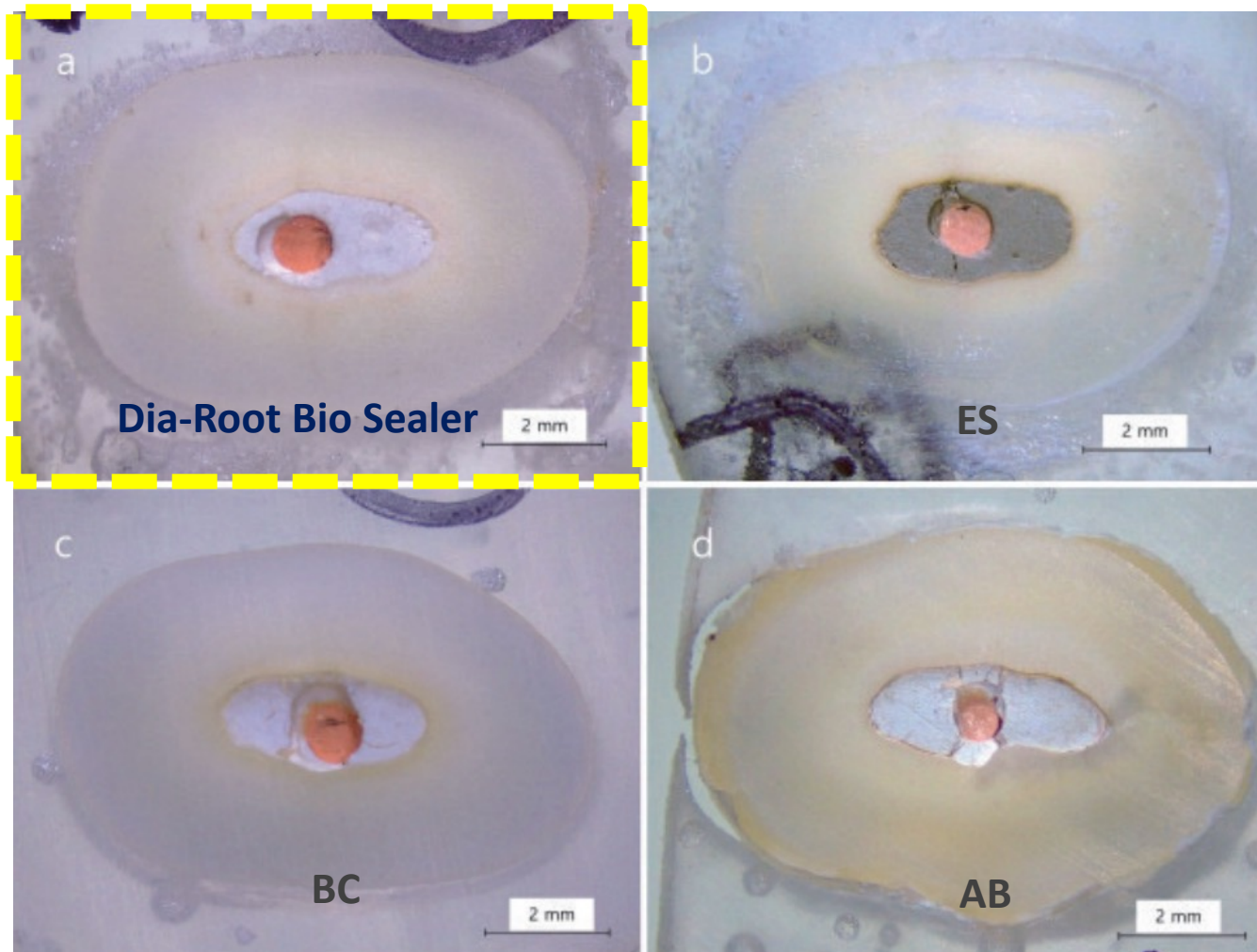
‘Dentphoto’ awards is target all dental materials, go through a first and second round of evaluation by dentists to select 4-9 products, ensuring a highly fair and objective awards.

## Bond Strength (Mpa)



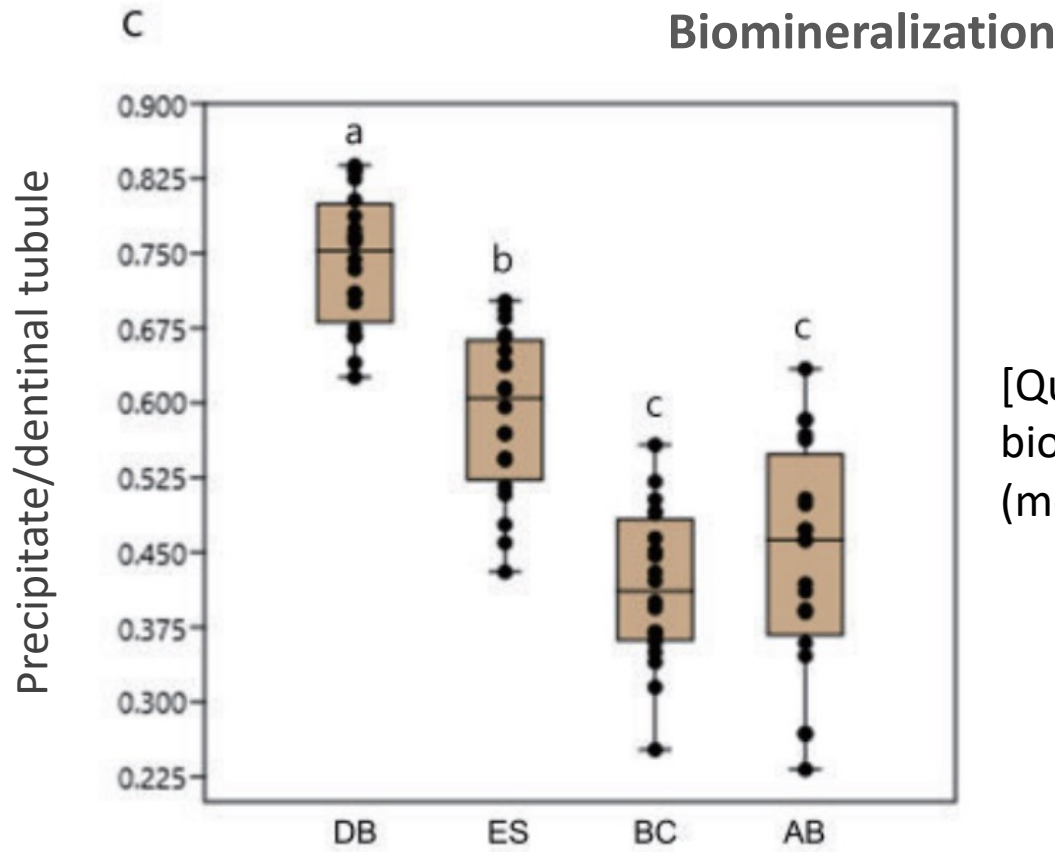
- The chart showing the bond strength (mean ± standard deviation) of the tested material groups
- The push-out bond strength in the DB group was significantly higher than that in the other groups (P < 0.05)

\*DB: Dia-Root Bio Sealer; ES: Endoseal MTA; BC: EndoSequence BC sealer; AB: AH Plus Bioceramic Sealer



- When the failure modes were analyzed, mixed failures occurred most often with AB, followed by BC, ES, and Dia-Root Bio Sealer.
- Dia-Root Bio Sealer has the least failure mode.

\*Refer to related paper : Evaluation of the root dentin bond strength and intratubular biomineralization of a premixed calcium aluminate-based hydraulic bioceramic endodontic sealer (December 12, 2023, Yuna Lee)

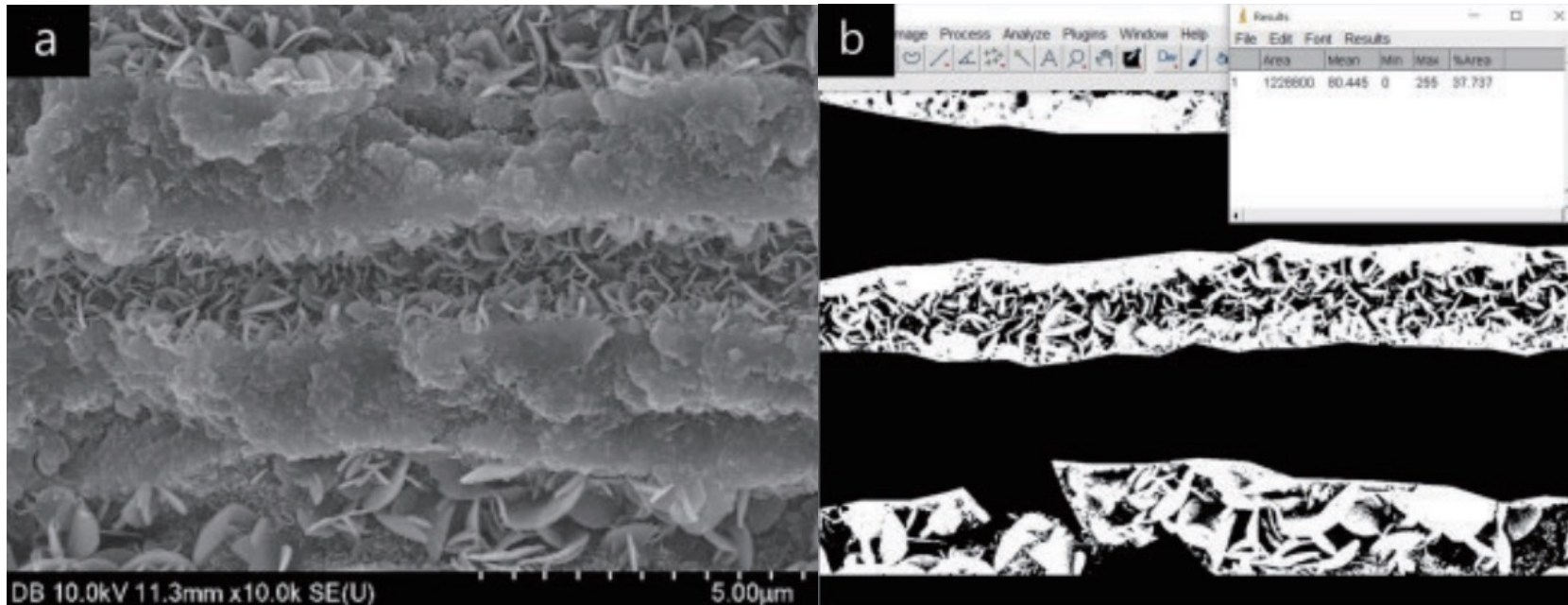


[Quantitative analysis of intratubular biomineralization in the tested groups (mean  $\pm$  standard deviation)]

- Different letters indicate statistically significant differences ( $P < 0.05$ )
- Dia-Root Bio Sealer had significantly more biomineralization than the other groups ( $P < 0.05$ )

\*Refer to related paper : Evaluation of the root dentin bond strength and intratubular biomineralization of a premixed calcium aluminate-based hydraulic bioceramic endodontic sealer (December 12, 2023, Yuna Lee)

## Biomineralization



[Representative SEM images for evaluation of intratubular biomineralization]

- Confirmation of intratubular biomineralization might provide indirect evidence for the sealing ability of a root canal filling.
- Biomineralization could contribute to strengthening the resistance of MTA to dislodgement from dentin.
- **Dia-Root Bio Sealer showed a significantly higher degree of biomineralization than the other sealers.**

\*Refer to related paper : Evaluation of the root dentin bond strength and intratubular biomineralization of a premixed calcium aluminate-based hydraulic bioceramic endodontic sealer (December 12, 2023, Yuna Lee)

## Original Article

## Evaluation of the root dentin bond strength and intratubular biomineralization of a premixed calcium aluminate-based hydraulic bioceramic endodontic sealer

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### Conclusion :

- Dia-Root Bio Sealer, a hydraulic bioceramic sealer is believed to be a **simpler technique for obturation** of all root canal systems.
- This can be considered a more appropriate method for evaluation of the **bonding performance** of hydraulic bioceramic root canal sealers.
- Based on the results, Dia-Root Bio Sealer was shown to exhibit higher bond strength and better **intratubular biomineralization**.

\*Refer to related paper : Evaluation of the root dentin bond strength and intratubular biomineralization of a premixed calcium aluminate-based hydraulic bioceramic endodontic sealer (December 12, 2023, Yuna Lee)