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ISSUE 12 / SEPTEMBER 2026

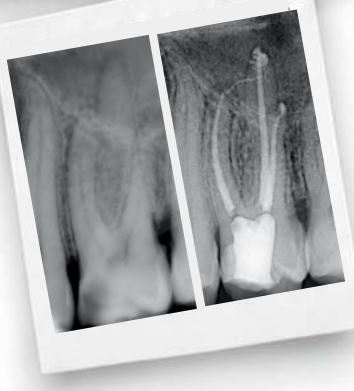












Clinical Snapshot of CeraSeal
Courtesy of Dr.Mostafa Anwar

CeraPutty Clinical protocol
Courtesy of Dr.Mohamad Zaafrani

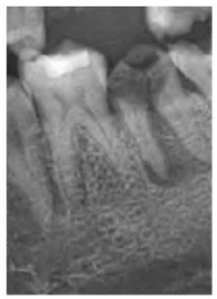
Getting to know Jet flow Bulk

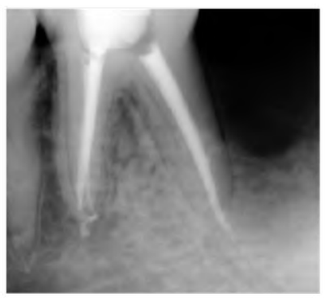
3Q Highlights & 4Q Upcoming Events

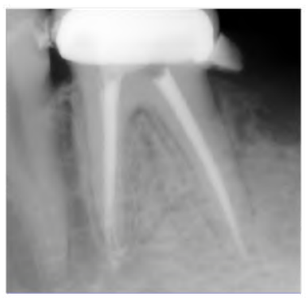
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Clinical Snapshots of CeraSeal:
From Short-Term to Long-Term Follow-Up

RCT of Lower Left First Molar


Pre-OP


Post-OP


4 months Follow-up

A 27-year-old male patient presented with symptomatic apical periodontitis affecting the mandibular left first molar. During treatment, an unfortunate instrument separation occurred in the mesiolingual (ML) canal. The separated instrument was successfully bypassed using a dedicated bypass technique, allowing complete cleaning, shaping, and disinfection of the canal. In complex cases such as this, the Hydraulic Condensation Technique combined with CeraSeal bioceramic sealer plays a pivotal role. This approach helps ensure that the bioceramic sealer (which is a root canal filling material) reaches the full working length, even if the master cone does not completely extend to the WL during the final obturation.
At the 3-month follow-up, radiographic evaluation demonstrated excellent material stability, with CeraSeal maintaining its integrity and remaining in place. More importantly, the small periapical lesion associated with the mesial root exhibited almost complete radiographic healing, reflecting a favorable biological response and successful treatment outcome.

Click to check out the full case!

RCT of Upper Left First Molar


Pre-OP


Post-OP


4 months Follow-up

Bioceramic Sealers have changed our perspective greatly towards healing periods, as we started to see shorter periods with good tissue repair.
In this case, we can see an upper first molar with two evident periapical lesions due to the periapical infection present. After root canal treatment while using CeraSeal in Single Cone Hydraulic Condensation technique and immediate coronal restoration, The patient came for follow up after 7 months.
Follow up X-rays showed remarkable healing with evident bone formation and tissue repair in such a relatively short period of time. Both periapical lesions showed a significant reduction in size, with new bone formation clearly following the root anatomy.
This case highlights the bioactivity and biocompatibility of CeraSeal and how predictable healing can be achieved within a shorter period of time.

Click to check out the full case!

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RCT of Upper Left Second Molar


Pre-OP

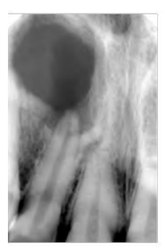

Post-OP

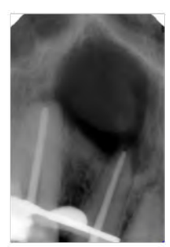

5 months Follow-up

"In love with Bioceramics "CeraSeal"!!
In this case, a male patient presented with symptomatic apical periodontitis related to the upper left second molar. After proper disinfection & Obturation using CeraSeal in Hydraulic Obturation technique, the patient was scheduled for follow up. After 5 months of follow up, the X-ray showed nearly complete healing of the periapical lesion, with evident bone formation and remarkable tissue repair in such a short period of time. The significant reduction of the periapical lesion and the progressive bone formation demonstrate the potential of CeraSeal to support predictable periapical healing. Disinfection & CeraSeal are the good combination for such results.

Click to check out the full case!

RCT of Upper Right Lateral Incisor & Canine


Pre-OP


Post-OP


4months Follow-up


1 year Follow-up


1 year Follow-up

"CeraSeal as a Cornerstone to Achieve 3D Obturation"
A conservative orthograde endodontic approach was undertaken, followed by a structured clinical and radiographic follow-up to monitor the healing process over time. Following thorough chemomechanical preparation, obturation was completed using CeraSeal bioceramic sealer with the Continuous Wave of Compaction (CWC) technique, aiming to achieve a dense, three-dimensional obturation of the root canal system while providing a biologically favorable environment for periapical repair.
Progressive Healing to Complete Resolution
At the 4-month follow-up, radiographic examination revealed clear early signs of healing, with peripheral bone formation around the periapical lesions and at the apical regions of both teeth. Subsequent follow-up demonstrated continued and progressive bone regeneration, with a remarkable reduction in lesion size and gradual restoration of the periapical tissues.
At the 2.5-year follow-up, radiographic examination demonstrated complete resolution of the periapical lesions with substantial bone regeneration and restoration of the surrounding periapical structures.
This long-term healing outcome reflects the combined effect of effective infection control, adequate three-dimensional obturation, favorable host response, and the bioactive and biocompatible properties of the CeraSeal bioceramic sealer. A 2.5-year journey from periapical pathology to complete radiographic healing.



Dr. Mostafa Anwar (Egypt)

Graduated from Ain Shams University, Egypt. Diploma of Healthcare & Hospital Management from the American University in Cairo. Master Degree of Endodontics from Ain Shams University on June 2015 & PhD Researcher. International Dental Conferences & Endodontics Key Opinion Leader. Co-Author of Retreatments by SIE. Micro-Endodontics Specialist at private practice, Cairo and the Gulf area.

Instagram @mostafa_anwar **facebook** @Mostafa Anwar

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CeraPutty
CLINICAL PROTOCOL



CeraPutty is not magic. The protocol makes it predictable.

01. Where it fits?

Indication	Clinical Purpose
Endodontic perforation	Seal a defined communication after disnfection and control.
Root resorption	Repair the defect while respecting its anatomy and limits
Root retrograde filling	Create a controlled apical seal during surgical treatment.
Apexification	Establish an apical barrier in an open apex.
Pulp capping	

02. The complete Protocol

Diagnosis
⌄
Disinfection
⌄
Placement
⌄
Coronal seal

03. STEP-BY-STEP CERAPUTTY CLINICAL GUIDE

Prepare the field
Isolate. Disinfect. Control bleeding. Define the defect.
The repair begins before the material enters the field.

Moisture activates. Excess moisture interferes.
CeraPutty hardens through moisture. The clinical goal is not a flooded field.
It is a controlled one.

Precision is built one increment at a time.
Deliver, Adapt, Verity. Control is more valuable than speed.

Deliver
Use an appropriate carrier or plugger.

Adapt
Apply gentle, controlled pressure

Verify
Look for position, thickness, and voids

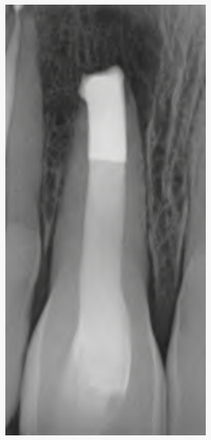
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CeraPutty
CLINICAL PROTOCOL



Dr. Mohamad Zaafrani

Open Apex



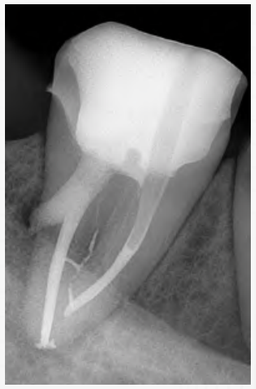
3-5 mm recommended apical barrier depth

The first increment controls the entire plug.

- Place the first increment.
- Confirm its depth radiographically.
- Then complete the barrier.

Do not build blindly.

Perforation Repair



Repair the defect. Respect the surrounding tissue.

- Define the communication
- Achieve hemostasis
- Create a barrier when needed
- Adapt CeraPutty precisely

An uncontrolled defect cannot receive a controlled repair.

A repair is not complete until it is protected.
Protect the material during the remaining treatment steps.
Then provide a reliable coronal seal.
FINAL SEAL = PART OF THE REPAIR

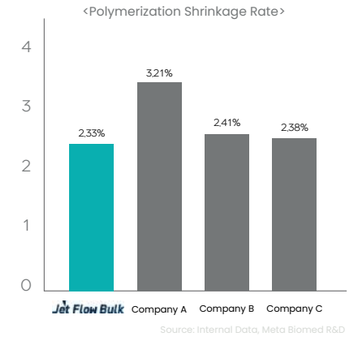
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Getting to Know
Jet Flow Bulk

Bulk-fill composites are designed to make restorative procedures simpler by reducing the number of layers required. However, placement depth alone does not determine the clinical performance of a bulk-fill material. Jet Flow Bulk offers the perfect balance of curing depth, strength, and easy handling for efficient and reliable restorations.

Worried About Shrinkage Stress in Bulk Fills?

Polymerization shrinkage is an important consideration when selecting a bulk-fill composite. The stress that develops during curing can affect the margins of the restoration.
Jet Flow Bulk uses Meta Biomed's exclusive *Low Polymerization Shrinkage (LPS) system*, designed to reduce polymerization stress and improve marginal integrity.



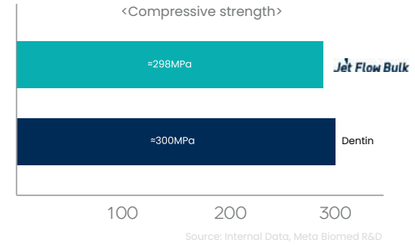
Deep Curing, Less Chair Time!

When using a bulk-fill composite, it is important to check the curing depth for the selected shade. With a depth of cure up to 5.5 mm, **Jet Flow Bulk** reduces incremental steps and significantly saves chair time.

Shade	Depth of cure	600-900mW/cm	900-1,800mW/cm
Universal	≈5.6 mm	20 sec	10 sec
Dentin	≈5.2 mm	40 sec	20 sec
A1	≈3.2 mm	40 sec	20 sec
A2	≈3.1 mm	40 sec	20 sec
A3	≈2.9 mm	40 sec	20 sec

The Strength of Dentin, the Smoothness of Flow.

Flowable bulk-fill composites need to be easy to place and strong after curing. **Jet Flow Bulk** flows evenly into deep cavities, making placement easy and controlled. Once cured, it exhibits compressive strength comparable to natural dentin.

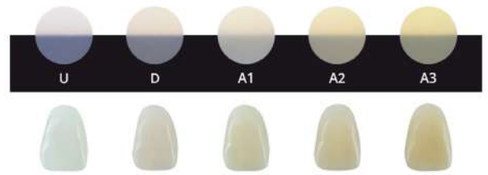


Natural Esthetics with 5 Shades

Shade selection is important for natural-looking restorations that blend with the surrounding teeth. **Jet Flow Bulk** provides five versatile shades suitable for a wide range of indications, from posterior bulk bases to anterior restorations: Universal, Dentin, A1, A2, and A3.

Shade	Clinical Applications
Universal & Dentin	Base under Class I and II restorations
A1, A2 & A3	Class III, Class V, and small Class IV restorations

Additional applications: Base and liner; repair of resin, porcelain, and acrylic temporary materials; pit and fissure sealing



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The Perfectly Balanced Bulk-fill.

Jet Flow Bulk
Bulk fill flowable Resin



Cure Shrink Deeper less!

Experience the optimal balance of curing depth, mechanical strength, and ease of use!

ADVANTAGES

Propriety LPS System
Minimizes polymerization stress and enhances marginal integrity.
*LPS System: Low Polymerization Shrinkage System

Deep-Cure Performance
Depth of cure up to 5.5mm, save chair time!
*Only for shades U and D

Superior Mechanical Properties
Dentin-like mechanical properties* support reliable, long-term restorations.
*Compressive strength: Dentin≈300MPa, Jet Flow Bulk≈298MP

Enhanced Handling & Smooth Flow
Uniform layering in all cavities with enhanced handling and smooth flow.

- Components: 2g syringe 2ea, Disposable tip 20ea (18G)
- Shade: A1, A2, A3, D, U

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Highlights from Meta Biomed's first VPT Live seminar in Korea



▲ Lecture by Dr. Sung-ho Ra



Meta Biomed held its first ***VPT LIVE SEMINAR*** in Korea on July 11 at Seoul National University Dental Hospital. Under the theme "*VPT Live: Understanding the Patient's Mind*" the seminar covered practical aspects of vital pulp therapy (VPT), from diagnosis and treatment to patient communication.

Dr. Sung-ho Ra shared his clinical experience and practical tips on vital pulp therapy (VPT) using CeraPutty during the three-hour program. He covered not only treatment procedures but also how to communicate with patients in everyday practice. The program also featured an all-in-one live demonstration of VPT and crown preparation using a dental microscope and a robotic suction system. Participants followed the procedure step by step, seeing how the diagnosis, techniques, and material selection discussed in the lecture were applied during treatment. Participants also had the chance to try the equipment themselves. Questions and discussions continued outside the lecture hall, showing their interest in the techniques and equipment introduced during the seminar.







Dr. Sung-ho Ra (Korea)

Seoul Miso Dental clinic
Department of Conservative Dentistry,
Seoul National University Dental Hospital

The seminar received positive feedback for its combination of lectures, live demonstrations, and Q&A sessions. Attendees also received CeraPutty as a small gift so they could try it in their own practice. Thank you to everyone who joined our first VPT LIVE SEMINAR in Korea and shared their questions and experiences. We look forward to meeting more clinicians at our upcoming seminars and events in Korea!

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IDEX Egypt 2026: Clinical Experience with CeraSeal and CeraPutty in Egypt







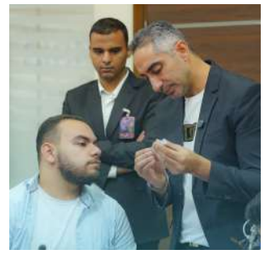
▲ Lecture by Dr. Mohamad Zaafrani

IDEX Egypt 2026 took place in Cairo from August 13 to 15. Meta Biomed joined as an official sponsor of the first World Endodontic Forum (WEF) and supported lectures and hands-on training led by ***Dr. Mohamed Zaafrany and Dr. Mostafa Anwar***. On August 13, ***Dr. Mohamed Zaafrany*** led a lecture and hands-on session on ***"Perforation Repair & Open Apex Management"*** at SPHINX Hall in the Egypt International Exhibition Center (EIEC). During the lecture, he shared his clinical experience and explained practical techniques for managing these cases using CeraPutty. The hands-on session gave participants the opportunity to put the lecture into practice. They worked directly with CeraPutty, actively practicing perforation repair and open apex management. By handling and placing the material themselves, participants became more familiar with its use and gained practical experience with the techniques introduced during the lecture.

On August 14, ***Dr. Mostafa Anwar*** presented ***"Bioceramics in Endodontics: Advanced Clinical Scenarios"*** at Pyramids Hall. His lecture and hands-on program attracted nearly 200 participants. During the lecture, he shared clinical insights into the use of bioceramic materials in complex endodontic cases. The hands-on course that followed sold out in advance. It covered bioceramics, 3D obturation, and root repair, including open apex, perforation, and resorption cases. Participants practiced with CeraSeal and CeraPutty, gaining direct experience with the materials and their handling. Throughout the session, they asked questions and discussed clinical applications with ***Dr. Mostafa Anwar***. Thank you to ***Dr. Mohamed Zaafrany, Dr. Mostafa Anwar***, and all the dental professionals who joined the sessions. Special thanks also to our Egyptian dealers, Trust Dental and Alexdent, for joining us and supporting the event. We look forward to meeting more clinicians and sharing practical experience at future events!



▲ Lecture by Dr. Mostafa Anwar





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MIDEC 2026: Strong Response to CeraSeal and CeraPutty in Malaysia





Meta Biomed's dedicated Malaysian partner, One Dental, participated in MIDEC 2026, held at the Kuala Lumpur Convention Centre from August 21 to 23, and showcased Meta Biomed's key products. In particular, local clinicians showed strong interest in Meta Biomed's bioceramic products. CeraSeal and CeraPutty received an especially positive response, with strong sales throughout the event. At one point, sales had to be temporarily stopped due to limited stock.

One Dental's Used Sealer Collection Promotion was also a success, with around 80–90 used syringes collected over the three-day event. Following the strong response at MIDEC 2026, One Dental plans to continue promoting CeraSeal and CeraPutty at MIDS next May. Stay tuned for what's next!

New Product Launch at GAMEX 2026 in Korea







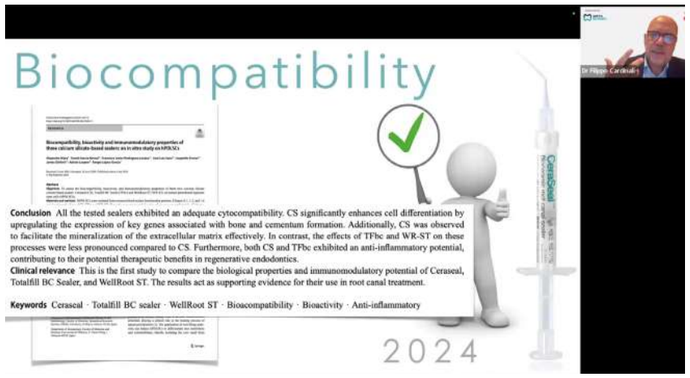
Meta Biomed participated in GAMEX 2026, held at COEX on September 19–20, showcasing our new product *"Smart Fit GP"* to dental professionals at booth C465. The highlight of the exhibition was the launch of **Smart Fit GP**, which drew strong interest from visitors for its precise dimensions and consistent quality. We also set up a hands-on area where visitors could handle **Smart Fit GP** and check its quality for themselves. We also accepted pre-orders for **Smart Fit GP** during the exhibition. The **Smart Fit GP** launch offer and special promotions for CeraSeal and CeraPutty were well received. Interest in CeraPutty was particularly high, and all bioceramic product stock prepared for the exhibition sold out. Visitors could also try CeraPutty and Jet Flow Bulk to get a feel for how each material handles. Throughout the exhibition, we welcomed feedback from clinicians and exchanged practical insights on the use of our products. We sincerely thank everyone who visited the Meta Biomed booth for their interest and support.

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Meta Biomed X CAPP

Clinical Insights on CeraSeal with Dr. Filippo Cardinali





▲ Lecture by Dr. Filippo Cardinali

CAPP hosted a live webinar featuring *Dr. Filippo Cardinali* on September 10, supported by Meta Biomed. The session welcomed dental professionals from around the world and focused on root canal obturation using CeraSeal with the Cold Hydraulic Condensation technique. Drawing on a 5 years retrospective clinical study of root canal treatment outcomes, *Dr. Filippo Cardinali* discussed the key features, limitations, and appropriate clinical indications of premixed bioceramic sealers. Based on a 5-year retrospective clinical study tracking root canal treatment outcomes, *Dr. Filippo Cardinali* clearly explained the key features, limitations, and correct indications of bioceramic sealers. Attendees gained practical clinical know-how and protocols for achieving repeatable, high-quality obturation while effectively controlling overfilling, highlighting the importance of obturation quality for overall treatment success. Meta Biomed remains committed to delivering high-quality clinical education and innovative product updates. Stay tuned and connect with us on Facebook and Instagram for upcoming events!

IFEA 2026: Sharing Clinical Experience in Sydney



▲ Dr. Filippo Cardinali



▲ Lecture by Dr. Jenner Argueta

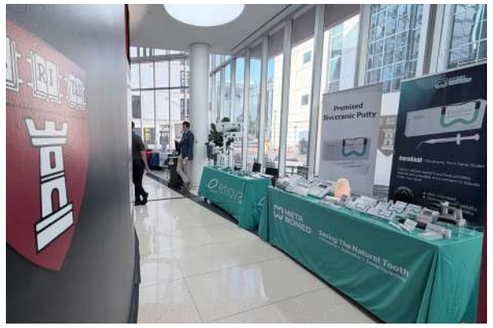
The 15th IFEA World Endodontic Congress took place at the ICC in Sydney, Australia, from August 27 to 30, 2026. During the congress, *Dr. Filippo Cardinali* delivered a lecture titled *"Factors Affecting the Outcome of Non-Surgical Endodontic Treatment of Teeth with Apical Periodontitis Using Cold Hydraulic Condensation with Bioceramic Sealer: A Retrospective Analysis."* His lecture focused on treatment outcomes using CeraSeal with the Cold Hydraulic Condensation technique and drew a large audience of dental professionals. *Dr. Jenner Argueta* also delivered a presentation titled *"Surgical Extrusion, Outcome Predictors."* He shared clinical cases and long-term follow-up cases related to surgical extrusion, providing attendees with clinical insights into the procedure and factors associated with treatment outcomes.

We sincerely thank *Dr. Filippo Cardinali* and *Dr. Jenner Argueta* for sharing their clinical knowledge and experience, and all attendees for their interest and participation.

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Meta Biomed Meets Harvard Global Endodontics Symposium in USA





▲ Lecture by Dr. Jenner Argueta

On September 17–18, Meta Biomed America(The America team) participated in the symposium as an official corporate sponsor, strengthening its presence within the global endodontic community and highlighting its commitment to innovative endodontic solutions. During the event, The America team actively promoted its key bioceramic products, CeraSeal and CeraPutty, through its exhibition display and introduced their clinical applications and product features to attending dental professionals. The event provided a valuable opportunity to increase awareness of Meta Biomed's bioceramic product portfolio and engage directly with clinicians, researchers, educators, and industry professionals from around the world. *Dr. Jenner Argueta* participated in the symposium, introducing Meta Biomed's products and sharing clinical experiences with attendees. A special thank you to *Dr. Jenner Argueta* for joining us and sharing his clinical expertise. Stay tuned for more exciting highlights from the America team!

Beyond the Lecture: Meta Biomed at RCDS 2026







▲ Lecture by Dr. Mostafa Anwar

On Meta Biomed participated in RCDS 2026, held on September 28 in Bangkok, Thailand, together with our local partner, VRP Dental. The event brought dental professionals together to share clinical knowledge and explore the applications of bioceramic materials in endodontics. While the planned hands-on session could not go ahead, *Dr. Mostafa Anwar*'s lecture, *"Bioceramics in Complex Endodontic Scenarios,"* was successfully held with many dental professionals in attendance. Drawing on his clinical experience, *Dr. Mostafa Anwar* introduced the use of CeraSeal and CeraPutty in 3D obturation, perforation repair, and open apex management. Through clinical cases and practical explanations, he shared useful insights into managing complex endodontic treatments. Beyond the lecture, RCDS 2026 offered a valuable opportunity to meet and exchange ideas with our local partner and dental professionals in Thailand. We thank *Dr. Mostafa Anwar* for his passionate lecture, our valued partner VRP Dental for their support in making this event a success, and all attendees for their interest and participation. Stay tuned for VRP Dental's next special event!

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CeraSeal

Bioceramic root canal Sealer

CeraSeal 2g syringe 1EA, Disposable tips 10EA



- Excellent Biocompatibility
- Excellent Healing Effect
- Superb Bioactived
- High Flowability(24mm)
- Optimal Setting time

Real Bioceramic Synergy!



- Various Uses
- Fast Setting
- Excellence Healing
- Ready to Use
- Economical Packaging

CeraPutty

Premixed Bioceramic Putty

CeraPutty 0.5g Syringe 2EA(Provided 1g)

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CeraSeal leaflet

CeraPutty leaflet

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WANTED! New Idea & Clinical Case



We're All Ears for Your Big Ideas!

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Show your BEST Clinical Cases made by CeraSeal

It'd be lovely if we could share your BEST CeraSeal Cases with our tons of followers all around the world. Don't lock up the amazing cases you got in the drawer. Show it off!

For more inquiries: dental@meta-biomed.com

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DENTAL WORLD 2026

International Dental Exhibition and Conference



DR. FILIPPO CARDINALI

9 October, 2026 - Friday

LECTURE

09:15 - 10:45 OBTURATION AND PERFORATION REPAIR FOR PATIENT-CENTERED ENDODONTIC OUTCOMES –UNDERSTANTING BIOCERAMIC MATERIALS AND PROTOCOLS

WORKSHOP

14:00 - 17:30 Mastering Bioceramic Materials in Endodontics – Obturation, Cold Hydraulic Condensation, Perforation Repair and Apical Plug

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Dental World 2026

International Dental Exhibition and Conference

Lecture & Hands on course



8-11th Oct, 2026

Hungexpo , Budapest

SPEAKER

Dr. Filippo Cardinali