BISCO DENTAL PRODUCTS

Strength & Simplicity
Cemented in Chemistry

Displaying its commitment to solving clinical challenges, BISCO continues to expand its THERA family of restorative solutions.

Tooth are strong. Not only can they remain intact after facing extremely high temperatures, but their internal structures are designed by nature to withstand and evenly distribute the daily force of biting and chewing. When a tooth becomes structurally damaged, traditional dentistry has called for a “drill and fill” approach. But is drilling apart a tooth and filling it with a material that’s weaker than tooth structure really the best solution in every case?

We have happily embarked on a new era of dental materials that are more compatible with the tooth. Restorative solutions like cements and liners that release calcium and fluoride ions in an effort to repair the tooth—instead of tear it down—are like cements and liners that release calcium and fluoride ions.

In 2011, BISCO changed the game with the introduction of TheraCal LC, a resin-modified, calcium silicate pulp protectant and liner. The groundbreaking material uses a unique hydrophilic resin that allows silicate pulp protectant and liner. The groundbreaking introduction of TheraCal LC, a resin-modified, calcium steady replacing the old age of drill and fill.

A Next-Generation Cement

Six years later, the THERA family welcomed TheraCem into the fold, a self-adhesive resin cement that not only bonds to dentin and various substrates—including zirconia, metal, and composite—without etching or priming, but also releases calcium and fluoride into tooth structure.

“TheraCem gives me comfort of knowing that I am placing a product that will help the tooth—and my dentistry—over time,” said Dr. Robert Beatty, who has been impressed with a product that will help the tooth—and my dentistry—over time.”

Dr. Liang Chen, Director of R&D and Chief Scientist at BISCO, recently discussed what clinicians can expect from the evolving THERA family. How should clinicians use calcium-releasing materials?

A: Calcium is the main constituent of teeth. Calcium release from materials like TheraCal and TheraCal PT may stimulate hydroxyapatite and secondary dentin bridge formation.1

Q: What sets TheraCem apart from other calcium-releasing cements?

A: The calcium source from TheraCem is calcium silicate, which not only releases calcium, but also provides an alkaline pH.2

Q: Can we expect the THERA family to continue expanding?

A: BISCO’s THERA products like TheraCem, TheraCal LC, and TheraCal PT provide better and faster solutions to clinical problems. Many clinical challenges and problems still exist that need to be addressed and solved. So yes, we are working hard to develop more great products to address and solve them.

Chemistry You Can Trust

TheraCal PT, a dual-cured, resin-modified calcium silicate that releases calcium to tooth structure during pulpotomy treatment, is the THERA family’s most recent addition. As BISCO continues to expand this growing family, along with its vast portfolio of restorative solutions, clinicians can continue to trust the thoughtful chemistry behind each and every solution.

Dr. Liang Chen, Director of R&D and Chief Scientist, many dental adhesives contain the MDP monomer, which is currently the best adhesive monomer in dentistry. “It forms a chemical bond with tooth structure and also forms a chemical bond with zirconia and metal,” he said. “It greatly simplifies the cementation procedure.”

A Growing Thera Family

2011: TheraCal LC

Light-cured, flowable resin-modified calcium silicate filled liner for direct and indirect pulp capping.

2017: TheraCem

Dual-cured, calcium- and fluoride-releasing self-adhesive resin cement indicated for luting crowns, bridges, inlays, onlays, and prefabricated metal, nonmetal, and fiber posts.

2019: TheraCal PT

Designed for pulpotomy treatment, the dual-cured, resin-modified material is formulated with synthetic Portland cement calcium silicate particles.

Data on file. BISCO, Inc.