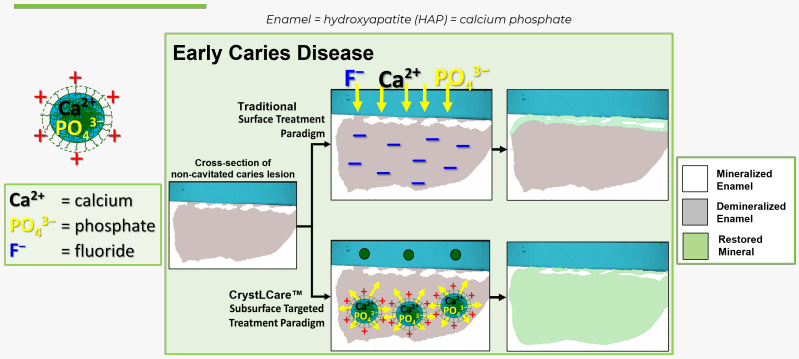
GreenMark Biomedical Secures Third NIH Grant in 2025

GreenMark awarded NIH grant to advance its innovative regenerative technology for noninvasive mineralization of early-stage dental decay.

Easy to use, fully dissolvable CrystLCare™ Biorestorative, Fluoride-Free dental strips

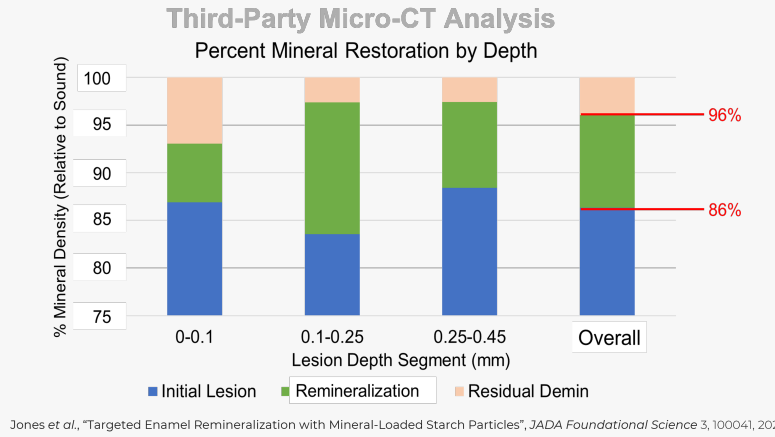


Schematic of guided CrystLCare™ Biorestorative treatment concept

ANN ARBOR, MI, UNITED STATES, November 11, 2025 / EINPresswire.com/ -- GreenMark Biomedical Inc., a company developing innovative solutions for oral health, earlier this year was awarded funding via the Translational Resource Center (TRC) regenerative medicine program, as well as a Phase I Small Business Innovation Research (SBIR) grant from the National Institutes of Health (NIH) via their NIDCR dental division. The company now announces it has been awarded a second SBIR grant from NIH/NIDCR this year and will receive $300,000 in funding to further advance its regenerative technology for noninvasive mineralization of early-stage dental caries in collaboration with the University of Michigan (U-M).

Dental caries, commonly known as tooth decay, is the most widespread human disease, affecting almost everyone in the US and worldwide. Left untreated, early enamel damage progresses into painful cavities that require costly, invasive dental procedures. Current treatments such as fluoride can slow decay,

but they are limited in their ability to restore enamel structure beneath the tooth surface, leaving teeth at risk. “GreenMark is developing first of kind treatments designed to halt early tooth decay by restoring enamel from the inside out,” explains co-inventor Dr. Nathan Jones, MSc, PhD, VP Technology for GreenMark and Co-Principal Investigator (PI) on the award. “This strategy has the potential to stop decay in its earliest stages and prevent cavities from forming.”



Jones *et al.*, “Targeted Enamel Remineralization with Mineral-Loaded Starch Particles”, *JADA Foundational Science* 3, 100041, 2024.

Third-Party evidence for mineralization of early-stage decay into the depth of tooth enamel; "Overall" is average mineral content for 50 human teeth

“This project will take a novel approach to further advance GreenMark’s foundational technology and future product pipeline. Meanwhile we are receiving highly positive customer feedback on our first CrystLCare™ Biorestorative dental strip product that we have been selling since January 2024,” explains GreenMark’s Chairman and CEO, Dr. Steven Bloembergen, PhD. “Receiving this additional NIH SBIR in 2025 underscores the impact of our science and the potential of our technology platform to change how we manage the world’s most common chronic disease.”

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>
> *Dr. Nathan A. Jones, MSc, PhD, Vice President Technology at GreenMark*

This award follows GreenMark’s SBIR grant earlier this year supporting development for an AI-enabled LumiVision™ intraoral camera, a companion device to its LumiCare™ Caries Detection Rinse and further TRC funding for work on its foundational targeted remineralization project using mineral loaded starch nanoparticles. Together, the NIH-funded programs reflect the company’s integrated vision to detect, prevent, and treat dental caries before irreversible damage occurs.

“The goal is to create affordable dental products that can detect and treat early signs of decay and dramatically reduce the need for drilling and fillings,” said co-inventor Dr. Brian Clarkson, BChD, LDS, MS, PhD, Professor of Cariology at U-M School of Dentistry and Co-PI on the award. “If successful, this innovative approach could help us further transform the management of dental caries and lead to substantial improvements in oral health.”

About GreenMark Biomedical Inc.
Dental sensitivity affects up to 74% of Americans and caries impacts more than 95% of Americans over their lifetimes. GreenMark is dedicated to transforming dental care through

scientific innovation and technological excellence by developing a systems approach for treatment of dental sensitivity and management of dental caries (tooth decay). GreenMark has developed methods to identify, assess and monitor caries disease in its earliest stages, before being detected on X-ray radiographs. The company's LumiCare™ Caries Detection Rinse contains fluorescently labeled particles that target the porous subsurface of enamel lesions and illuminates them, thereby aiding in their visualization. The identification at early stages before cavities are formed, facilitates the use of preventive non-surgical management options. This results in less discomfort and improved long-term oral health outcomes for patients. GreenMark's patented products involve sub-micron particles produced from food-grade starch. CrystLCare™ dental strips instantly adhere to teeth and are fully dissolvable. They contain the tiny sub-micron starch particles, loaded with calcium and phosphate ions, which like a magnet are pulled into the tooth subsurface, then degraded by natural enzymes in saliva, to release the bioavailable ions that form apatite crystals. CrystLCare™ Biorestorative dental strips are fluoride-free, easy to use, and empower oral health for dentists and their patients, making checkups a more positive experience for dental clinics in the modern world. Visit greenmark.bio.

About University of Michigan (U-M)
The mission of the University of Michigan is to serve the people of Michigan and the world through preeminence in creating, communicating, preserving, and applying knowledge, art, and academic values, and in developing leaders and citizens who will challenge the present and enrich the future. Visit https://umich.edu/about/.

About National Institutes of Health (NIH)
NIH, the nation's medical research agency, includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency conducting and supporting basic, clinical, and translational medical research, and is investigating the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit www.nih.gov. The National Institute of Dental and Craniofacial Research (NIDCR), part of NIH is the Nation's leading funder of research on oral, dental, and craniofacial health. Visit: http://www.nidcr.nih.gov.

About The Translational Resource Center
Regeneration of dental, oral, and craniofacial (DOC) tissues through tissue engineering and regenerative medicine (RM) is a major goal in dentistry. While RM approaches have shown success in medicine, their application to DOC problems remains limited in clinical practice. To address this gap, the Michigan-Pittsburgh-Wyss Regenerative Medicine (MPWRM) Resource Center, rebranded in 2024 as the Translational Resource Center (TRC), was established as an interdisciplinary partnership among the University of Michigan, the University of Pittsburgh, and the Wyss Institute at Harvard University, together with experts in technology, clinical translation, regulation, marketing, and commercialization. Supported in part by the National Institute of Dental and Craniofacial Research (NIDCR) under Award Number U24DE029462, the TRC collaborates with C-DOCTOR (U24DE029463), Center for Dental, Oral, Craniofacial Tissue & Organ Regeneration, a consortium including the University of Southern California, the University of

California (San Francisco, Berkeley, Davis, and Los Angeles), and Stanford University. Together the TRC and C-DOCTOR bring clinicians, scientists, and regulatory experts to advance regenerative solutions for DOC tissue repair in partnership with NIDCR. Visit https://translationalresourcecenter.org/.

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