

FOR IMMEDIATE RELEASE  
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## **E-Cigarettes and Perturbations in the Subgingival Microbiome**

**Alexandria, VA** – A study exploring the effect of e-cigarettes usage on *de novo* colonization of the subgingival microbiome was presented at the 54<sup>th</sup> Annual Meeting of the AADOOCR, which was held in conjunction with the 49<sup>th</sup> Annual Meeting of the Canadian Association for Dental Research, on March 12-15, 2025 in New York, NY.

The abstract, “E-Cigarettes and Perturbations in the Subgingival Microbiome” was presented by Priyanka Kodaganallur Pitchumani of the University of Iowa during the “Periodontal Research-Pathogenesis: Advances in Host-Microbe Interplay in Periodontal Tissues” Poster Session that took place on Thursday, March 13, 2025 at 3:15 p.m. EDT (UTC-4).

There is an alarming increase in the rate of e-cigarette use in the United States, accounting for 4.5% of American adults as per 2023 CDC statistics. The objective of this study was to explore the effect of e-cigarettes usage on *de novo* colonization of the subgingival microbiome and characterize the inflammatory biomarkers in systemically and periodontally healthy individuals.

The study demonstrated that e-cigarettes can cause significant shifts in the oral microbiome, with the enrichment of several virulence traits, and showed the need for additional research regarding the impact of e-cigarettes in oral health. Additionally, it demonstrated a need to make clinicians and patients more aware of the effects and possible complications of e-cigarette usage in oral wound healing.

### **About AADOOCR**

The American Association for Dental, Oral, and Craniofacial Research is a nonprofit organization with a mission to drive dental, oral, and craniofacial research to advance health and well-being. AADOOCR represents the individual scientists, clinician-scientists, dental professionals, and students based in academic, government, non-profit and private-sector institutions who share our mission. AADOOCR is the largest division of the International Association for Dental, Oral, and Craniofacial Research. Learn more at [www.aadocr.org](http://www.aadocr.org).