



# IADR

International Association  
for Dental Research

FOR IMMEDIATE RELEASE

EMBARGOED UNTIL 2 P.M. CHINA STANDARD TIME (UTC+08:00)

JUNE 25, 2022

Contact:

Matt Niner

+1.703.299.8084

[media@iadr.org](mailto:media@iadr.org)

## AI-supported Detection of Proximal Caries Assessed for Cost-effectiveness

**Alexandria, VA, USA, June 17, 2022** – A study assessing the cost-effectiveness of AI-supported detection of proximal caries will be presented at the [100<sup>th</sup> General Session and Exhibition of the IADR](#), to be held in conjunction with the 5<sup>th</sup> Meeting of the IADR Asia Pacific Region.

The Interactive Talk presentation, “Artificial Intelligence and non-/micro-invasive was cost-effective in a Randomized Trial”, will be presented by Falk Schwendicke, Charite - Universitaetsmedizin Berlin, Germany and take place on **Saturday, June 25<sup>th</sup>, 2022 at 2 p.m. China Standard Time (UTC+08:00)** during the “e-Oral Health Network I” session.

The study investigated the cost-effectiveness of AI-supported detection of proximal caries in a randomized controlled clustered cross-over superiority trial. Twenty-three dentists assessed 20 bitewings; 10 of which were randomly evaluated supported by an AI-based software and the other 10 without AI. The study then evaluated the proportion of true and false positive and negative detections and the treatment decisions taken for each detected lesion (non-invasive, micro-invasive, invasive). The results found that for detecting early (E2 or D1) lesions, dentists were significantly more sensitive when using AI. However, treatment decisions determined the lifetime cost-effectiveness. If, however, all detected early lesions had been treated non- or micro-invasively, AI was far less costly (266; (200-352) Euro) than no AI. AI applications should not only support caries detection, but also subsequent evidence-based management of caries lesions.

[View this Interactive Talk in the IADR General Session Virtual Experience Platform.](#)

### About IADR

The International Association for Dental Research (IADR) is a nonprofit organization with over 10,000 individual members worldwide, with a Mission to drive dental, oral and craniofacial research to advance health and well-being worldwide. To learn more, visit [www.iadr.org](http://www.iadr.org).

+1.703.548.0066

+1.703.548.1883

1619 Duke Street

Alexandria, VA 22314-3406, USA

[www.iadr.org](http://www.iadr.org)