Cancer Core Europe Lecture

Presented by Education & Training Task Force

SPEAKER

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Image - based AI for precision screening

Date: Thursday April 18 – **Time:** 15:00 CEST

Link to Zoom

Until recently, mammography screening has retained the same basic design as in the 1990s. Now, advances in artificial intelligence (AI) offer opportunities for major improvements – in reducing the radiologist workload and in detecting more breast cancers early. Since 2019, there have been many retrospective observational studies where AI models have been trained and tested using mostly case-control study designs. Last year, 2023, we saw the first clinical interventional trials, including ScreenTrustCAD from our group at Karolinska Institutet, which was the first to start in population-wide screening. In this presentation, we will describe findings from retrospective studies, highlight issues related to proper validation of AI models and discuss key findings from the latest prospective studies on AI for breast cancer screening.

Assocate professor Fredrik Strand, MD, PhD, breast radiologist and research group leader at KI, Stockholm. He is head of the research and education committee of the Swedish society of breast imaging. Fredrik's research evolves around exploring AI for cancer imaging, including developing new AI models, performing reader studies, evaluating external models and supporting hospitals in implementing AI. The primary focus is on mammography images, but increasingly both MRI and ultrasound images are being incorporated. The long-term aim is to leverage AI on multi-modal images and data to improve outcome for women with breast cancer through earliest detection and optimal treatment.

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