SIEMENS Healthineers

Beyond the nodule

5 learnings from the pioneers of lung cancer screening

In 1992 Dr. Claudia Henschke launched the world's first low-dose CT lung cancer screening study, work that helped establish the field. With Dr. David Yankelevitz, she went on to found the International Early Lung Cancer Action Program (I-ELCAP).

I-ELCAP now spans 75 institutions in 10 countries.



1. The benefit is not marginal

Overdiagnosis, radiation risk, and invasive follow-up are well known concerns. But after two decades of evidence, Henschke and Yankelevitz agree: the benefit is underestimated, and the harms are overstated.

"The harms of radiation continue to be overplayed."

Dr. Claudia Henschke

"The benefit to patients is not marginal. It vastly outweighs the potential harms."

Dr. David Yankelevitz

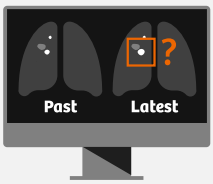


2. Nodule detection is largely solved

The current generation of AI algorithms reliably detects even small and non-solid lung nodules. On this part of the problem, Yankelevitz sees little room left for improvement.

"Siemens Healthineers is exceptionally good at finding small nodules."

Dr. David Yankelevitz

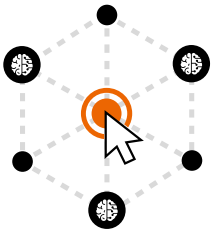


3. The real challenge is change over time

Not detection but tracking growth between scans is the next big step. Matching nodules across years and telling real growth apart from measurement variability remains unsolved.

"The next big breakthrough will come from growth assessment."

Dr. David Yankelevitz



4. The best AI is the one you barely notice

Radiologists don't want extra clicks or extra windows. Seamless integration into the existing workflow, not more features, is what counts.

"Radiologists don't want to waste time. The software has to be seamless."

Dr. David Yankelevitz



5. The next step is prevention

A single low-dose chest CT already contains more than lung information, including coronary calcium, emphysema, aorta, and vertebrae.

"In the near future, a low-dose chest CT will be standard preventive care. A true health check starting at 40."

Dr. Claudia Henschke