Cancer detection in less than a second! Experience matters. Printed from https://www.cancerquest.org/newsroom/2016/09/cancer-detection-less-second-experience-matters on 12/05/2025



In just half a second, veteran radiologists can decide whether a mammogram is abnormal. This suggests that there is some large-scale feature that they have learned, however subconsciously, is a marker of abnormal images.

Termed a "global signal," this feature was explored in a recent study. Researchers found that breast texture and spatial frequencies play a role in the signal, which is probably a combination of several factors. They also found that the signal is widespread: A patient can have one normal breast and one breast with obvious signs of cancer. Just by looking at the normal breast, some radiologists can detect an abnormality! What are these radiologists seeing? That is exactly what researchers are trying to find out, via this and future studies. Once they reach a conclusion, this message can be passed on to less experienced radiologists and computer programs, improving breast cancer detection methods.

Source Research: Brigham and Women's Hospital Learn More Learn more about mammographies.