

RESEARCH SAVES LIVES

Breast density is a measure that compares the amount of fat and the amount of tissue that make up the breast. Less-dense breasts have more fat and less tissue. More-dense breasts have more tissue and less fat.

High breast density is common. Between 40 and 50 percent of women aged 40 to 74 in the U.S. have dense breasts. Many factors can affect breast density including age, weight, genetics, family history and having fewer children, among others.

Studies have consistently found that women with high breast density have around a four to five times higher risk of breast cancer compared to women with low

breast density. However, it is not really understood why breast density increases risk, or if there are any steps that women can take to directly lower the risk related to high breast density.

One concern with breast cancer screening in women with dense breasts is that some tumors may not show up well on mammograms. The denser the breast, the harder it can be to find tumors. Because of this, new methods to better detect breast cancer in dense breasts are being developed and tested.

Learn more about breast density 

<https://ww5.komen.org/Breastcancer/Highbreastdensityonmammogram.html> 

OUR RESEARCH INVESTMENT: (1982-2019)

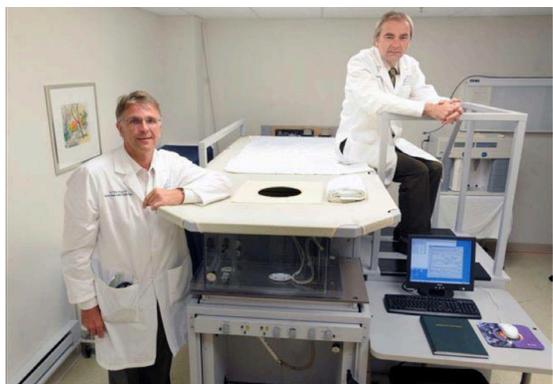
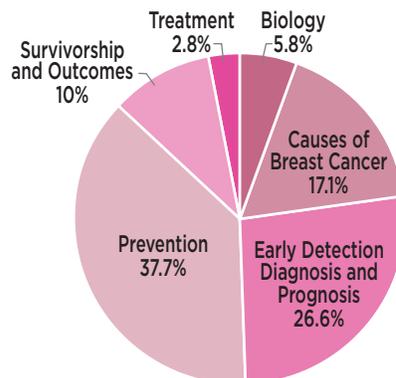
More than **\$21 million** in **40 research grants** and more than **20 clinical trials** focused on breast density

What We're Investigating

- Determining how breast density affects response to treatment and whether an “anti-stiffness” therapy can be used to treat aggressive breast cancers such as triple negative.
- Identifying the biological, behavioral and social factors that may affect breast density such as environmental chemicals, obesity, diet and other lifestyle factors.
- Developing better methods to screen for and detect breast cancer in women with dense breasts.



Topic Area of Total Investment



Read more in our Stories of Discovery series about Komen-funded research on ultrasound tomography for dense breasts from grantees at the Karmanos Cancer Institute in Detroit. <http://sgk.mn/1dGKLRI>

WHAT WE'VE LEARNED from Komen-funded research



Ultrasound tomography can detect breast cancer in dense breasts with up to 90 percent accuracy, compared to only 50 percent using mammography.



Dense breasts have higher levels of certain molecules that contribute to inflammation, and tissue stiffness and remodeling, which can promote tumor formation.



Molecular Breast Imaging that uses a low dose of radiation may more accurately detect breast cancer in dense breasts compared to mammography.