RESEARCH SAVES LIVES

Approximately 15-20% of all breast cancers are diagnosed as triple negative breast cancer (TNBC). TNBC gets its name because it lacks the three receptors—estrogen (ER), progesterone (PR), and human epidermal growth factor 2 (HER2)—that are present in a majority of breast tumors and can be targeted with many current therapies. Because TNBC breast cancer cells test negative for all three of these receptors, people with TNBC do not respond to hormone therapy and targeted therapy. TNBC also tends to grow and spread more aggressively than other types of breast cancer, is more difficult to treat, and is more likely to recur.

TNBC is more likely to affect young women, Black and Hispanic women and those with a BRCA1 mutation. This makes matters worse for women of color when combined with existing inequities in the care and treatment of TNBC and resulting disparities in outcomes of this disease. With limited treatment options available for TNBC, more research is still needed to better understand this type of breast cancer. Clinical trials offer people with TNBC a great opportunity to test new or emerging therapies specifically targeted for this disease. Learn more about clinical trials here.

Learn more about TNBC here.

OUR RESEARCH INVESTMENT: More than $160 million in over 240 research grants and 40 clinical trials focused on TNBC

What We’re Investigating
- Assessing whether vaccines can stimulate the body’s own immune system to make metastatic TNBC more sensitive to immunotherapies.
- Identifying how metastatic tumor cells avoid or suppress the immune system to escape being killed by the immune system.
- Using a liquid biopsy technique to test for circulating tumor DNA in people with TNBC who are at higher risk for a recurrence.
- Studying TNBC tumor DNA and liquid biopsy samples to predict and improve treatment outcomes.

WHAT WE’VE LEARNED from Komen-funded research
- There are at least six different subtypes of TNBC, each with different abnormalities, which may be treated using drugs that target these abnormalities. Read more.
- Changes in tumor DNA, gene expression, and proteins in TNBC revealed a new target for a possible treatment with immunotherapy. Read more.
- Bits of tumor DNA found in the blood, called “cell-free tumor DNA”, may be used as a biomarker to identify which TNBCs are more aggressive and aid in treatment decisions.