RESEARCH SAVES LIVES

While most cases of breast cancer occur by chance, others occur in some families because of their genetic make-up. In familial breast cancer, also called hereditary breast cancer, a mutated gene that increases the risk of developing breast cancer is passed from parent to child. BRCA1 and BRCA2 (Breast Cancer susceptibility genes 1 and 2) are the most well-known genes linked to hereditary breast cancer. However, BRCA mutations account for only 5-10% of all hereditary breast cancers in the U.S. Inherited mutations in other genes, including PALB2, CHEK2, ATM, and TP53 may increase the risk of developing breast cancer for people who carry these mutations. These gene mutations and their contribution to breast cancer are currently under study.

Learn about your risk of breast cancer here.

More than $37 million in over 100 research grants and more than 30 clinical trials focused on hereditary breast cancer.

WHAT WE’VE LEARNED

Mutations in a gene called RECQL are associated with inherited breast cancer and may increase risk by as much as 50 percent, depending on the mutation.

An inherited mutation in the PALB2 gene may increase the risk of breast cancer by 30-60%.

Including a family history of other cancers, such as prostate and pancreas, may help improve breast cancer risk prediction tools like BRCAPRO.

Read how Komen Scholar Dr. Tuya Pal is working to understand and develop strategies to improve inherited breast cancer outcomes for Black women through genetic testing and counseling here.