Metastatic breast cancer (MBC) is the most advanced stage (stage 4) of breast cancer where tumor cells have spread to other parts of the body such as the bones, liver, lungs, or brain. While stage 1 breast cancer has a 99% 5-year relative survival rate, stage 4 only has a 31% 5-year relative breast cancer survival rate. MBC is treatable but not currently curable. It is crucial that researchers gain a better understanding of metastasis to help develop drugs that will slow, stop, and prevent the spread of breast cancer.

Learn more about MBC here.

Komen is a founding member of the Metastatic Breast Cancer Alliance, a coalition of more than 35 organizations working together to improve the lives and outcomes for those living with MBC.

More than 245 million in over 570 research grants and nearly 70 clinical trials focused on MBC.

64% Focus on Treatment

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**WHAT WE’RE INVESTIGATING**

- Using circulating tumor DNA (ctDNA) from blood for early detection of microscopic MBC.
- Determining how ancestry among Black and white women may affect the body’s immune response to MBC and to determine why MBC grows and spreads more quickly in Black women.
- Understanding how estrogen receptor-positive (ER+) breast cancers become metastatic to develop better treatment options.

**IN THE RESEARCH PIPELINE:**

More than 700 potential new research discoveries (drugs, biomarkers, devices, etc.) focused on MBC.

**WHAT WE’VE LEARNED FROM KOMEN-FUNDED RESEARCH**

- A new 3D model system to investigate what causes metastatic breast cancer cells to grow, die or become dormant in the bone marrow may be used to test therapies with the potential to prevent recurrence.
- Mutations in the estrogen receptor can cause hormone therapy resistance and may be targeted with new therapies to treat MBC.
- The presence of certain types of circulating tumor cells (CTCs) may be used as a biomarker to predict who is at high risk of metastasis, and these CTCs may also serve as a drug target to prevent MBC.

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