BREAST CANCER: A STORY HALF TOLD
A Focus On Metastatic Disease

Understanding Hereditary Breast Cancer

Some breast cancers are caused by genes with mutations, or changes, passed down from either parent to their daughters or sons.

Genetic testing at any stage, even when the disease has spread beyond the breast to other parts of the body, known as metastatic disease, can determine if breast cancer is hereditary. Genetic test results and other disease variables, including breast cancer subtype, are important factors in helping inform treatment decisions.

Some genes linked to hereditary breast cancer include:

- ATM
- *BRCA1*
- *BRCA2*
- PALB2
- CHEK2

***As of 2017, BRCA1* and *BRCA2* mutations are the most common cause of hereditary breast cancer, responsible for approximately:**

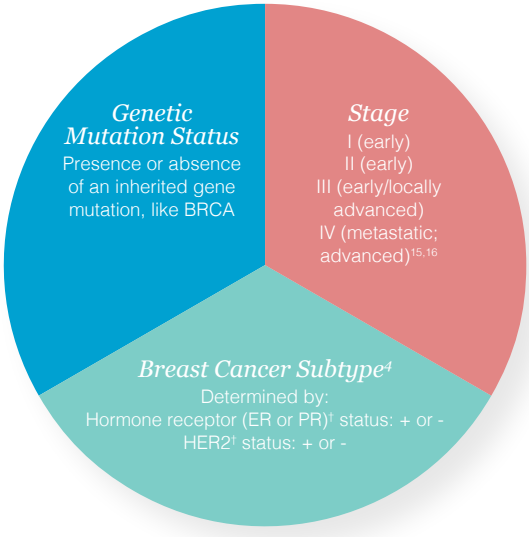
3-6% *of all breast cancers*[1-4]

25-30% *of hereditary breast cancer cases*[5]

People with inherited mutations in *BRCA1/2* genes are often younger than the overall breast cancer population, and can be diagnosed in their 30s-40s.[6]

Know the Status

Understanding the *hereditary status, subtype, and stage* of breast cancer can help patients and their physicians make informed decisions:



Any breast cancer at any stage or subtype can have an inherited gene mutation

†ER: estrogen receptor; PR: progesterone receptor; HER2: human epidermal growth factor receptor 2

Know the Risk Factors

According to epidemiologic studies and national guidelines, people with any of these *criteria* should speak with a cancer genetics professional* about getting a test to see if their breast cancer carries a hereditary mutation[7-9]:

Age
Diagnosed with breast cancer at age 50 or earlier

Multiple Breast Cancers
Cancer in both breasts or a second cancer in the same breast

Triple-Negative Breast Cancer
Diagnosed with triple-negative (ER-/PR-/HER2-)† breast cancer at age 60 or earlier

Recurrent Or Metastatic Breast Cancer
People with an inherited BRCA1 or BRCA2 mutation may be eligible for a certain type of targeted therapy

Heritage
Ashkenazi (Eastern European) Jewish, African American, or Hispanic heritage, among others[9]

Family History
Relatives with male breast cancer, ovarian, pancreatic, or metastatic prostate cancer, or breast cancer diagnosed at an early age

*These are just some of the criteria that should be considered. Individuals should consult their healthcare provider or a cancer genetics professional for more information.

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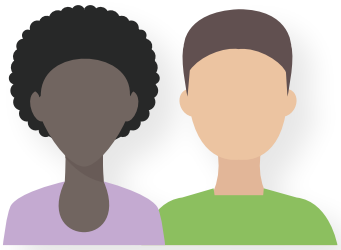
Know the Emotional Impact

It is important to know if breast cancer is hereditary to help people living with breast cancer *think through emotional considerations*, including[10,11]:

If, when, and how to share genetic test results with loved ones

Whether or not to encourage family members to be tested

Anxiety about the potential health and emotional impact on family



There is a 50% chance... that first-degree relatives—*children, siblings, or a parent of a person with hereditary breast cancer*—have the same mutated gene, increasing their risk of getting breast or other types of cancer.[12] Other, more distant relatives also are at risk of carrying the mutation.[13]

Speaking with a *genetic counselor, medical geneticist, trained physician, or advanced practice professional* can help patients at risk for hereditary breast cancer*, make decisions about genetic testing.[14]

These individuals can also help people who test positive for a hereditary mutation feel empowered, cope with the results and determine a treatment plan.

*Please refer to the "Know the Risk Factors" section.

To learn more about metastatic breast cancer, visit www.StoryHalfTold.com

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