

Are you discussing

breast cancer risk with all of your patients?

GeneType for Breast Cancer takes risk assessment to the next level by incorporating polygenic risk factors with traditional clinical factors.

The **three most significant factors** that impact a woman's risk of developing sporadic breast cancer are:

Polygenic Risk

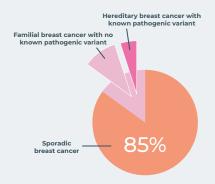
GeneType for Breast Cancer analyzes your patient's DNA for 70+ single nucleotide polymorphisms (SNPs) that have been clinically validated for their association with breast cancer. In sporadic cancer, no single gene mutation is causal of disease. Rather, many individual SNPs contribute a small, but measurable risk of developing disease. The risks associated with each of the SNPs are combined into a single polygenic risk score (PRS) for your patient.

Family History

Although 85% percent of women diagnosed with breast cancer do not have a significant family history of the disease, family history is still an important part of a sporadic breast cancer risk assessment. GeneType for Breast Cancer incorporates both first and second degree relatives with breast cancer into your patient's risk score.

Did you know...

The majority of breast cancer cases occur in women with no significant family history of the disease?



Many clinical risk assessment models exist (BCRAT or IBIS, for example), but they provide an incomplete picture.

Breast Density

Breast density is associated with an increased breast cancer risk because it can act as a "mask" in a mammogram image, causing a lesion to go undetected. In addition, the cellular composition of dense breast tissue may provide a conducive microenvironment for tumor growth. Make sure you have access to your patient's Bi-Rad score or density percentage from her mammogram results when you order GeneType for Breast Cancer.

Additional Clinical Factors Incorporated into GeneType for Breast Cancer:

- Age
- Ethnicity*
- Menopausal status
- BMI
- Polygenic risk scores are validated for African American, Caucasian and Hispanic women. GeneType for Breast Cancer is currently validated in women of Caucasian decent. The risk model incorporates ethnicity-specific polygenic risk scores and population incidence data for patients of African American and Hispanic American descent derived from the Surveillance, Epidemiology, and End Results Program (SEER), however, the model has not been validated in these populations as vet.

GeneType for Breast Cancer factors in your patient's polygenic risk by genotyping DNA extracted from a simple, non-invasive buccal swab collected in your office.

Quick Reference Guide:

Appropriate candidates for GeneType for Breast Cancer will pass this quick quiz:

- ☐ Patient is a woman 35 or older
- ☐ Patient has not previously been diagnosed with breast cancer, ductal carcinoma in situ (DCIS) or lobular carcinoma in situ (LCIS)
- ☐ Patient does not qualify for hereditary gene testing, or is negative for a germline pathogenic variant in a breast cancer susceptibility gene**
 - **ATM, BARDI, BLM, BRCA1, BRCA2, BRIPI, CDH1, CHEK2, FANCC, MRE11A, NBN, NF1, PALB2, PTEN, RAD50, RAD51C, RAD51D, STK11, TP53
- ☐ Patient self-identifies as Caucasian, African American or Hispanic

35 or older



Take breast cancer risk assessment for your patients to the next level with GeneType for Breast Cancer. A product of Genetic Technologies Limited.

Developing a Personalized Plan for Your Patient

GeneType for Breast Cancer's comprehensive risk stratification will help you understand the likelihood your patient will develop sporadic breast cancer over a five year period and in her lifetime. While guidelines for screening and prevention vary between medical bodies, GeneType for Breast Cancer can help you and your patient develop a personalized breast health plan.



Increased Screening

1 out of 3 women within the screening age have not had a mammogram in the past 2 years.***

While a number of different mammogram recommendations are available, the least restrictive recommendation is an annual mammogram starting at age 40.***

***American Cancer Society. Breast Cancer Facts & Figures 2017-2018. Atlanta: American Cancer Society, Inc. 2017.



Risk Reducing Medications

Risk reducing medications can reduce the incidence of invasive breast cancer upwards of 50% in patients at increased risk (>1.66% 5 year risk).

^results vary by medication.

See USPSTF, ASCO or NCCN breast cancer risk reduction guidelines for comprehensive review

Referral to Specialists

Cancer prevention specialists^^, particularly in the sporadic breast cancer prevention space, can be a valuable resource for both physician support and patient referral.

^^Please note that not all high-risk clinics are designed to support patients at increased risk of sporadic breast cancer. If you or your patient have trouble communicating with your local high-risk clinic, please contact us for additional support.

