

Hereditary Cancer Testing

Reference Guide



Hereditary Cancer Risk Assessment and/or Testing Are Recommended By:

American College of Obstetrics & Gynecology (ACOG)¹

US Preventive Services Task Force (USPSTF)²

American College of Medical Genetics and Genomics (ACMG) & National Society of Genetic Counselors (NSGC)³

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)⁴

GUIDELINES RECOMMEND GENETIC TESTING IF YOUR PATIENT HAS A PERSONAL OR FAMILY HISTORY OF ANY OF THE FOLLOWING SIGNS* OF HEREDITARY CANCER:



MULTIPLE CANCERS

- > 2 or more primary cancers in the same person
- > 3 or more cancers on the same side of the family



EARLY-ONSET CANCERS

- > Breast cancer diagnosed before 45
- > Triple negative breast cancer before 60
- > Uterine cancer diagnosed before 50



RARE CANCERS

- > Male breast
- > Ovarian
- > Pancreatic
- > Metastatic prostate



ANCESTRY

- > Ashkenazi Jewish with breast cancer

HEREDITARY CANCER TESTING OPTIONS*

14-21
DAYS

34
GENES

CancerNext®

34-gene test addressing the most common hereditary cancers; NCCN Guidelines® provide recommendations regarding risk management for most genes in the panel⁴

14-21
DAYS

21
GENES

BRCANext-Expanded®

21-gene test addressing hereditary breast and gynecologic cancers; NCCN Guidelines provide recommendations regarding risk management for most genes in the panel³

14-21
DAYS

19
GENES

BRCANext®

19-gene test addressing hereditary breast and gynecologic cancers; NCCN Guidelines provide recommendations regarding risk management for **all genes** on the panel⁴

7-10
DAYS

13
GENES

BRCAPlus®

13-gene STAT test addressing breast cancer; NCCN Guidelines provide recommendations regarding risk management for **all genes** in the panel⁴

*Additional testing options available

Add +RNAinsight® for More Accurate Results⁵⁻⁸

- Identifies more positive results
- Reduces variant of uncertain significance (VUS) rate
- Helps address evidence gaps in non-White populations

+RNAinsight Product Overview

- Has no impact on turnaround time or cost
- Is available for all tests except for BRCAPlus®
- Kit includes 1 EDTA tube (DNA) and 1 PAXgene® tube (RNA)

5%

Patients Impacted⁸

RNA evidence has been useful for 5% of hereditary cancer testing patients at Ambry.

~1/50

Positive Patients Impacted⁸

Results without +RNAinsight® would have been negative or inconclusive

References

1. ACOG COMMITTEE OPINION, Number 793. *Obstet Gynecol.* 2019
2. US Preventive Services Task Force. (2019). BRCA-related cancer: risk assessment, genetic counseling and genetic testing
3. Hampel H, ACMG, NSGC, et al., *Genetics in Medicine.* 2014
4. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic. V3.2024. ©National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed March 27, 2024. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.
5. Landrith T et al. *npj Precision Oncology.* 2020.
6. Karam R et al. *JAMA Network Open.* 2019.
7. Horton C et al. *NPJ genomic medicine.* 2022.
8. Horton C et al. *JAMA Oncology.* 2023.