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# Hereditary Breast Cancer



testing at ARUP Laboratories



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keyword: BREAST CANCER

*A nonprofit enterprise of the University of  
Utah and its Department of Pathology*

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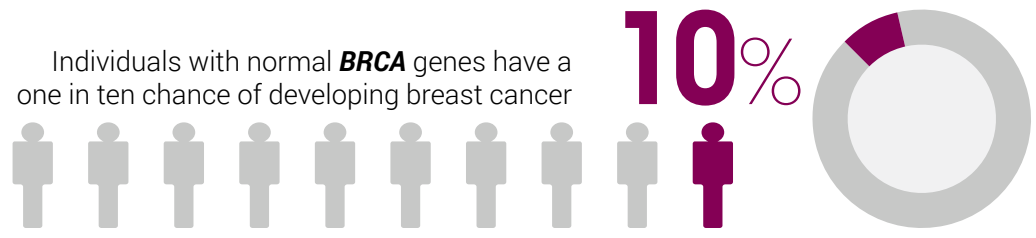
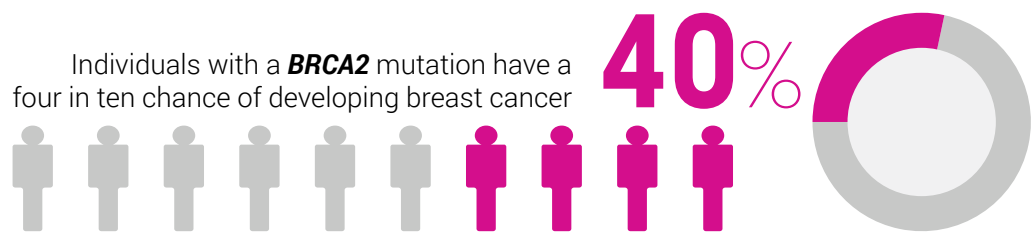
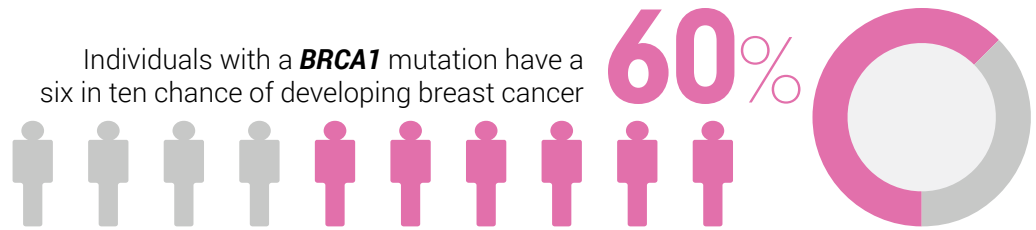
The average risk of developing breast cancer by the age of 70 is 12%. 5–10% of breast cancers are hereditary.

**Mutations in the *BRCA1* and *BRCA2* genes increase the risk of developing breast cancer.**

### Which patients should be tested for *BRCA1* and *BRCA2* mutations?

- Breast cancer diagnosed at age 50 or younger
- Ovarian cancer at any age
- Multiple primary breast cancers either in the same breast or opposite breasts
- Both breast and ovarian cancer
- Triple-negative (hormone-receptor negative and *HER2/neu* negative) breast cancer
- Pancreatic cancer with breast or ovarian cancer in the same individual or on the same side of the family
- Ashkenazi Jewish ancestry
- Two or more relatives with breast cancer, one under age 50
- Three or more relatives with breast cancer at any age

ARUP has an active *BRCA1* and *BRCA2* mutation database to provide labs, researchers, and doctors with key insights into *BRCA* variants.



### Hereditary Breast Cancer Testing

TEST NAME AND CODE	RECOMMENDED USE
Breast and Ovarian Hereditary Cancer Syndrome ( <i>BRCA1</i> and <i>BRCA2</i> ) Sequencing and Deletion/Duplication (2011949)	Acceptable first-tier genetic test for confirmation of hereditary breast and ovarian cancer (HBOC) syndrome
Breast and Ovarian Hereditary Cancer Syndrome ( <i>BRCA1</i> and <i>BRCA2</i> ) Sequencing (2011954)	Acceptable first-tier genetic test for confirmation of HBOC syndrome
Hereditary Breast and Ovarian Cancer Panel, Sequencing and Deletion/Duplication (2012026)	Preferred first-tier genetic test for confirmation of HBOC syndrome
Hereditary Cancer Panel, Sequencing and Deletion/Duplication (2012032)	Confirms diagnosis of a hereditary cancer syndrome in an individual with a personal or family history consistent with more than one cancer syndrome
Familial Mutation, Targeted Sequencing (2001961)	Used to detect known mutations in family members of a patient