Cancer Panel

Test covers genes known to increase the risk of the following types of cancers; breast, ovarian uterine, colorectal, melanoma, stomach, pancreatic and prostate.

Genes APC, ATM, BAP1, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDH1, CDK4*, CDKN2A(p14ARF), CDKN2A(p16INK4a), CHEK2, EPCAM*, GREM1*, MITF*, MLH1, MSH2, MSH6, MUTYH, NBN, PALB2, PMS2*, POLD1*, POLE*, PTEN, RAD51C, RAD51D, SMAD4, STK11, TP53

Gene	Breast	Ovarian	Uterine	Colorectal	Melanoma	Pancreatic	Stomach	Prostate
BRCA1	✓	✓				✓		✓
BRCA2	✓	✓			✓	✓		✓
MLH1		✓	✓	✓		✓	✓	
MSH2		✓	✓	✓		✓	✓	
MSH6		✓	✓	✓			✓	
PMS2***		✓	✓	✓				
EPCAM**		✓	✓	✓		✓	✓	
APC				✓		✓	✓	
MUTYH				✓				
MITF**					✓			
BAP1					✓			
CDKN2A					✓	✓		
CDK4**					✓			
TP53	✓	✓	✓	✓	✓	✓	✓	✓
PTEN	✓		✓	✓	✓			
STK11	✓	✓	✓	✓		✓	✓	
CDH1	✓						✓	
BMPR1A				✓		✓	✓	
SMAD4				✓		✓	✓	
GREM1**				✓				
POLD1**				✓				
POLE**				✓				
PALB2	✓	✓				✓		
CHEK2	✓			✓				✓
ATM	✓					✓		
NBN	✓							✓
BARD1	✓							
BRIP1	✓	✓						
RAD51C		✓						
RAD51D		✓						

10-15% of most cancers are due to inherited genetic mutations.[1,2,4,13]

Hereditary cancer is caused by an inherited genetic mutation. It is typical to see a recurring pattern of cancer across two to three generations—like multiple individuals diagnosed with the same type of cancer(s) and individuals diagnosed with cancer much younger than average.

Familial cancer refers to cancer that appears to occur more frequently in families than is expected from chance alone. While no specific mutation has been linked to these cancers, familial cancer may have a hereditary component that has not yet been identified.

Sporadic cancer refers to cancer that occurs due to spontaneous mutations that accumulate over a person's life. Sporadic cancer cannot be explained by a single cause. There are several factors, such as aging, lifestyle, or environmental exposure, that may contribute to the development of sporadic cancer.

A mutation can greatly increase your risk for developing cancer.

Mutations in the genes covered by Color's Hereditary Cancer Test are not common, but when present they significantly increase the chances of cancer.

For example, a *BRCA1* mutation can increase a woman's chance of breast cancer up to 81% by age 80.[5] An *APC* mutation can increase a man or woman's chances of colorectal cancer up to 70-100% by age 80 without surgical intervention.[6,7]

Detecting cancer early improves the odds of survival.

The 5-year survival rates for the cancers covered by Color's Hereditary Cancer Test increase dramatically when they are caught at an earlier and more treatable stage.[8]

Knowing your risk can help you take action

You can work with your healthcare provider to create a personalized screening and prevention plan, designed to help reduce your risk of developing cancer. This might include:

- Earlier and more frequent screenings

  For example, if you have an increased risk for breast cancer, your healthcare provider might recommend mammograms at an earlier age.

- Preventive measures

  Your healthcare provider may suggest preventive measures, such as certain medications that can reduce your cancer risk.

- Proactive care for your family

  As hereditary health disorders run in families, your results can help your loved ones understand their hereditary cancer risk.


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