

SDxLabs Hereditary Cancer Panel

Clear and actionable cancer risk assessment

What is the SDxLabs hereditary cancer panel?

Our Hereditary Cancer Panel is a curated test that looks for variants in 32 genes known to be associated with an increased risk of cancer. Each patient's results will include a cancer risk assessment that will provide you with actionable information that can be used to manage patient care.

Genes	Breast	Ovarian	Uterine	Colorectal	Gastric	Pancreatic	Prostate	Melanoma
APC				●	●	●		
ATM	●					●	●	
BARD1	●							
BMPR1A				●	●	●		
BRCA1	●	●				●	●	
BRCA2	●	●				●	●	●
BRIP1	●	●						
CDH1	●			●	●			
CDK4						●		●
CDKN2A (p14ARF) (p16INK4A)						●		●
CHEK2	●			●			●	
DICER1		●						
EPCAM		●	●	●	●	●	●	
FANCC	●					●		
GREM1				●				
MLH1		●	●	●	●	●	●	
MSH2		●	●	●	●	●	●	
MSH6		●	●	●	●	●	●	
MRE11A	●	●						
MUTYH				●				
NBN	●						●	
PALB2	●					●	●	
PMS2		●	●	●	●	●		
POLD1				●				
POLE				●				
PTEN	●		●	●				●
RAD51C		●						
RAD51D		●						
SMAD4				●	●	●		
SMARCA4		●						
STK11	●	●	●	●	●	●		
TP53	●	●	●	●	●	●	●	●

*Individual screening for each of these genes can be ordered.

Knowing Their Risk Improves Patient Care

Individuals with an inherited genetic variant that has been associated with an increased risk of cancer are more likely to develop cancer in their lifetime. Sometimes this increased risk is small. But often it is a substantial increase over the general population risk.

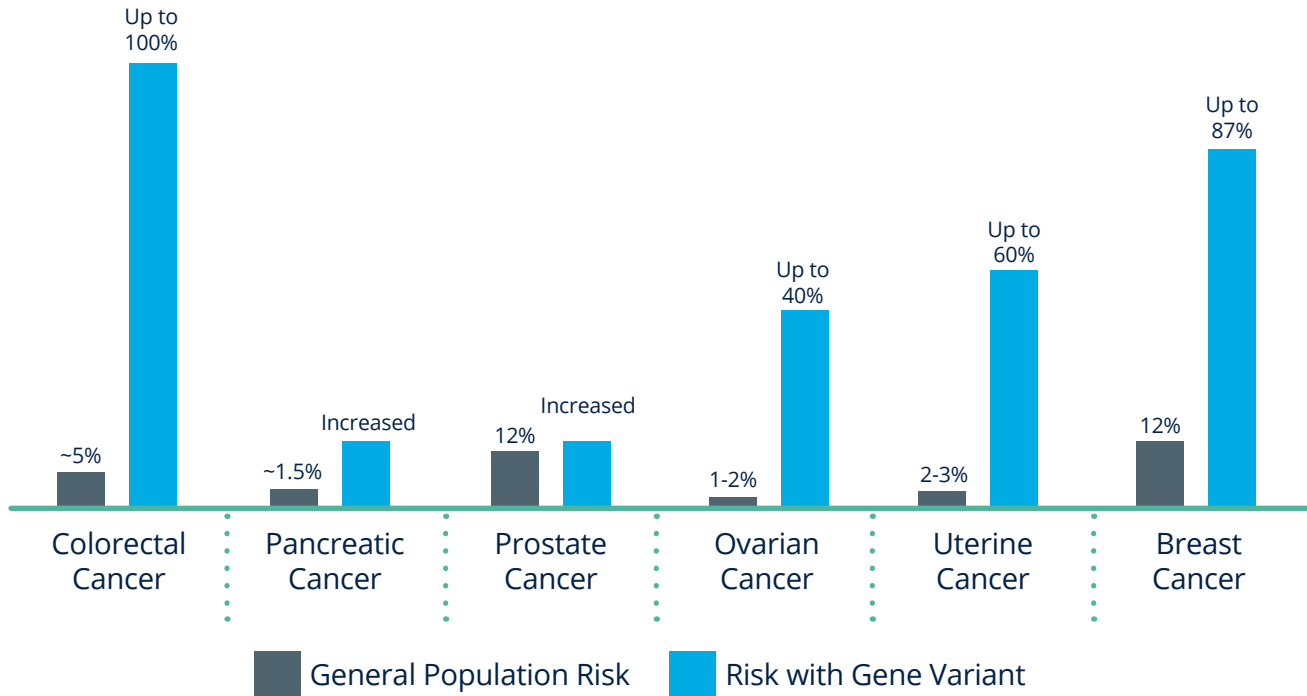


Of 1.4 million women with a family history of breast/ovarian cancer who met testing criteria, only 13.8% underwent genetic testing.¹



Over 98% of those with Lynch Syndrome (the most common cause of colorectal cancer) are not aware of their genetic variant status.²

Lifetime Risks for Common Cancers³



Who should be tested?

Knowing if a patient is at an increased risk of developing cancers such as breast, ovarian, pancreatic, colorectal, and uterine can help you and your patient put a risk management plan in place to detect and prevent them as early as possible.



One in 12 patients has a family history consistent with hereditary cancer.⁴



5-10% of all cancers are hereditary.

Patients with a strong family history of cancer should be screened for hereditary cancers.

Indications for a strong family history of cancer may include:

- Cancer at an early age
- The presence of rare cancers such as ovarian or male breast cancer
- Multiple relatives with the same type of cancer
- One relative diagnosed with multiple primary cancers

The American College of Obstetricians and Gynecologists (ACOG) and National Comprehensive Cancer Network (NCCN) recommend:

- Couples of reproductive age should be evaluated annually to determine their need for hereditary cancer screening.^{5,6}

The U.S. Preventive Services Task Force (USPSTF):

- Issued a B grade recommendation for primary care clinicians and OBGYNs to evaluate women's family history and offer genetic testing when patients were identified at high risk for hereditary cancer.⁷

Why the SDxLabs hereditary cancer panel?

At SDxLabs, we've always used whole-gene sequencing. We're experts when it comes to giving patients a complete and comprehensive assessment of their risk.

Best-in-Class Testing

- Analyzes 32 genes
- High degree of accuracy
- Requires only a simple blood draw or saliva sample
- Provides reliable risk assessment for hereditary cancers
- Fast turnaround time of 14-21 days
- Pre- and post-screening genetic counseling



Detection

A patient's personalized risk assessment can indicate if screenings and procedures to detect cancer need to be done more often. Generally, the earlier that cancer is detected, the more effective treatment will be.



Prevention

Working together with you, your patient may choose to have early preventative procedures, risk reducing surgeries or medication to help prevent cancer from developing.



Education

Your patient's risk assessment can also serve as a powerful education tool for them and their family, allowing them to make lifestyle changes and develop their own risk management plans.

Will insurances cover this test?

At SDxLabs, we work with patients and their insurance companies through every step of the process so that you don't have to. We believe that everyone has a right to affordable, accessible genetic testing, and while most insurance cover our screening, we also offer financial assistance programs to those who qualify.

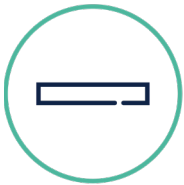
Interpreting Results

We know the results of hereditary cancer screening can be overwhelming to patients. At SDxLabs, our board-certified genetic counselors are always available to help interpret results and answer any questions patients may have about what their results mean.



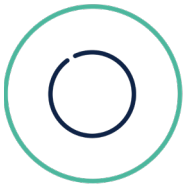
Positive

A positive result is not a diagnosis of cancer, nor is it a guarantee that your patient will develop the disease. A positive result means that there is a pathogenic variant in one of the genes tested that is known to cause an increased chance of developing one or more types of cancer over the patient's lifetime. With this knowledge, you'll have the chance to work with your patient to develop a risk management program.



Negative

While a negative result means that your patient does not have a gene variant currently known to cause an increased risk of cancer in one of the tested genes, it does not mean that they will never develop cancer in their lifetime. If a patient has a strong family history of cancer, they still may be at an elevated risk and may benefit from consulting with a genetic counselor.



VUS

A variant of unknown significance (VUS) is a genetic change that has not yet been proven as either disease-causing or benign. Therefore, a VUS should be treated as a "negative" result until further information is known. A VUS does not change cancer surveillance guidelines. A person who has a VUS would need to be managed based on their personal family history.

Board-Certified Genetic Counselors and Customer Care

Our board-certified genetic counselors are here to discuss results in further detail when needed and answer any questions you or your patients may have. Patients can reach out to our Customer Care team for questions related to billing, insurance coverage, or the status of results.

Genetic Counseling

(412) 677-0664 Option 3
Genetics@SignatureDx.com

Customer Care

(412) 677-0664 Option 1
CustomerCare@SignatureDx.com





About SDxLabs

SDxLabs delivers noninvasive diagnostic and women's health solutions that support proactive healthcare decisions. Our services focus on early detection and actionable results that enable effective treatments and improved patient outcomes. SDxLabs is committed to empowering patients, providers, and the community with access to relevant health services and unmatched service.

1501 Preble Avenue, Suite 200 Pittsburgh, PA 15233 | (412) 677-0664 | SDx-Labs.com

References

1. Childers, C. P., Childers, K. K., Maggard-Gibbons, M., & Macinko, J. (2017). National estimates of genetic testing in women with a history of breast or ovarian cancer. *Journal of Clinical Oncology*, 35(34), 3800-3806. <https://doi.org/10.1200/JCO.2017.73.6314>
2. Patel, Swati G. Swati G., Ahnen, Dennis J. Dennis J., Kinney, Anita Y. Anita Y., Horick, N. N., Finkelstein, Dianne M. Dianne M., Hill, Deirdre A. Deirdre A., Lindor, L. L., Macrae, F. F., & Lowery, Jan T. Jan T. (2016). Knowledge and uptake of genetic counseling and colonoscopic screening among persons at increased risk for lynch syndrome and their endoscopists from the family health promotion project. *The American Journal of Gastroenterology*, 111(2), 285-293. <https://doi.org/10.1038/ajg.2015.397>
3. Adapted from NCCN data.
4. Scheuner, M. T., McNeel, T. S., & Freedman, A. N. (2010). Population prevalence of familial cancer and common hereditary cancer syndromes. The 2005 California Health Interview Survey. *Genetics in medicine: official journal of the American College of Medical Genetics*, 12(11), 726-735. <https://doi.org/10.1097/GIM.0b013e3181f30e9e>
5. American College of Obstetricians and Gynecologists, Committee Opinion Number 634 (2015). Hereditary cancer syndromes and risk assessment.
6. National Comprehensive Cancer Network (2018). Genetic/familial high-risk assessment: breast and ovarian, version 2.2018, NCCN clinical practice guidelines in oncology
7. United States Preventative Services Task Force (2013). BRCA-related cancer: risk assessment, genetic counseling, and genetic testing.