

CancerNext®

Product Summary

CancerNext is a guideline-based, pan-cancer test that includes genes associated with the most common hereditary cancer types, including hereditary breast, ovarian, pancreatic, prostate, colorectal/polyps, endometrial, gastric, small bowel, urothelial, and renal cancers.

Guidelines Recommend Genetic Testing For Hereditary Cancer



The **NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)** recommend that hereditary cancer testing be considered in appropriate individuals when it is likely to impact any of following:

- a patient's cancer risk management
- a patient's cancer treatment
- the medical management of a patient's at-risk family members^{1,2}

The NCCN Guidelines® also explain that because an individual's personal/family history may be explained by more than one gene or inherited cancer syndrome, multigene testing may be more efficient, cost-effective, and have a higher diagnostic yield.^{1,2}

Patients with a Personal and/or Family History Suggestive of Hereditary Cancer May Benefit From CancerNext Genetic Testing

Genetic testing for hereditary cancer should be considered if your patient has a personal or family history of **ANY** of the following*:

CANCER TYPE	MULTIPLE CANCERS OR OTHER CLINICAL RISK FACTORS	EARLY-ONSET CANCERS	ANCESTRY
MALE BREAST OVARIAN PANCREATIC METASTATIC PROSTATE	2 OR MORE primary cancers in the same person 3 OR MORE cancers on the same side of the family 10 OR MORE colorectal polyps in a person's lifetime	ANY OF THE FOLLOWING CANCERS DIAGNOSED BEFORE 50 YEARS OF AGE: Breast, colorectal, uterine, gastric	ASHKENAZI JEWISH WITH BREAST CANCER

Results of Genetic Testing May Inform Personalized Medical Management

The potential benefits of genetic testing for hereditary cancer include*:



Option to modify initial age, frequency, or modality of cancer screening



Consideration of risk-reducing measures



Option to tailor treatment strategies, including eligibility for clinical trials



Ability to identify at-risk family members

* Adapted from published genetic testing guidelines

CancerNext Genes and Associated Cancers



40 genes associated with increased risks for at least one of 10 major cancers



Medical management guidelines available for all genes



* Ambry Clinician Management Resources (CMRs) are included with test reports and are available on our website.

GENE(S)	ASSOCIATED CANCERS**									
	Breast	Ovarian	Uterine	Colorectal & Polyposis	Pancreatic	Prostate	Renal	Gastric	Other	Recessive Disease Association
APC				●				●	●	
ATM	●	●			●					Ataxia telangiectasia
AXIN2				●						
BAP1							●		●	
BARD1	●									
BMPR1A, SMAD4				●				●		
BRCA1, BRCA2	●	●			●	●			●	Fanconi anemia
BRIP1		●								Fanconi anemia
CDH1	●							●		
CDKN2A					●				●	
CHEK2	●					●	●			
FH							●		●	
FLCN							●			
GREM1, POLD1, POLE				●						
HOXB13						●				
MBD4				●					●	
MET							●			
MLH1, MSH2, MSH6, PMS2, EPCAM		●	●	●	●	●	●	●	●	CMMRD††
MSH3				●†						Polyposis
MUTYH				●†					●	Polyposis
NF1	●								●	
NTHL1				●†						Polyposis
PALB2	●	●			●					Fanconi anemia
PTEN	●		●	●			●		●	
RAD51C, RAD51D	●	●								Fanconi anemia
RPS20				●						
STK11	●	●	●	●	●			●	●	
TP53	●			●					●	
TSC1							●		●	
TSC2							●		●	
VHL							●		●	

** This figure depicts primary cancer associations and may not specify all gene-disease associations. Gene-disease associations and risk estimates vary from study to study, and data are rapidly evolving.

† Biallelic/Autosomal recessive colorectal cancer risk only
†† CMMRD = constitutional mismatch repair deficiency

REFERENCES

1. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic. V1.2025. ©National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed September 13, 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.

2. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Genetic/Familial High-Risk Assessment: Colorectal, Endometrial, and Gastric. V2.2024 ©National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed October 8, 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.

3. Garutti, M. et al. 2023. Genes. 2023; 14(5):1025. Genes. 2023; 14(5):1025. <https://doi.org/10.3390/genes14051025>

4. Kamihara J. et al. 2006 Jul 31 [Updated 2020 Aug 13]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK1252/>

5. Northrup H et al. 2024. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK1220/>

6. PDQ Cancer Genetics Editorial Board. 2024.<https://www.ncbi.nlm.nih.gov/books/NBK568504/>

7. Pilarski R et al. 2016 Oct 13 [Updated 2022 Mar 24]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK390611/>

8. Sattler EC et al. 2006 Feb 27 [Updated 2020 Jan 30]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK1522/>

9. van Leeuwen RS et al. 2024. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK1463/>