

COMPREHENSIVE CANCER PANEL

- In 2016 NCI estimated **1,685,210** new cases of cancer would be diagnosed in the United States and **595,690** people will die from the disease.
- In 2016 NCI also projected the **most common cancers** to be breast cancer, lung and bronchus cancer, prostate cancer, colon and rectum cancer, bladder cancer, melanoma of the skin, non-Hodgkin lymphoma, thyroid cancer, kidney and renal pelvis cancer, leukemia, endometrial cancer, and pancreatic cancer.
- **Lifetime Risk of Developing Cancer:**
Approximately **38.5%** of men and women will be diagnosed with cancer of any site at some point during their lifetime, based on 2012-2014 data.
- **Prevalence of Cancer:**
In 2014, there were an estimated 14,738,719 people living with cancer of any site in the United States.

BREAST AND GYNECOLOGICAL CANCER PANEL

- In 2017, NCI estimated that there will be **252,710** new cases of female breast cancer and an estimated **40,610** people will die of this disease.
- **Lifetime Risk of Developing Cancer:**
Approximately **12.4%** of women will be diagnosed with female breast cancer at some point during their lifetime, based on 2012-2014 data.
- **Prevalence of This Cancer:**
In 2014, there were an estimated **3,327,552** women living with female breast cancer in the United States.



COLON/LYNCH SYNDROME RISK PANEL

- In 2017, NCI estimated that there will be **135,430** new cases of colon and rectal cancer and an estimated **50,260** people will die of this disease.
- **Lifetime Risk of Developing Cancer:** Approximately **4.3%** of men and women will be diagnosed with colon and rectal cancer at some point during their lifetime, based on 2012-2014 data.
- **Prevalence of This Cancer:** In 2014, there were an estimated **1,317,247** people living with colon and rectal cancer in the United States.

Facts and figures cited from National Cancer Institute

READY TO IDENTIFY AT RISK PATIENTS?



844-812-7415

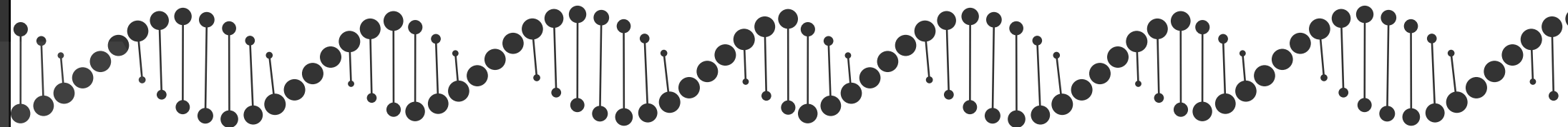


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ONCOME HEREDITARY CANCER TESTING



Facts and figures cited from National Cancer Institute



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IDENTIFY HEREDITARY CANCER RISK FOR YOUR PATIENTS

Harness the powers of DNA testing



DNA

Oncome

Inherited risk of Cancer can be a major concern for patients and their families. Ultimately, they rely on you to help them determine, classify and manage those risks. Genomic discovery is rapidly evolving, and keeping up with the pace of this evolution can be an overwhelming challenge to you as a health care provider.

As a solution to this challenge, **NEXT Molecular** brings you Oncome Inherited Cancer Risk testing. Oncome Inherited Cancer Risk testing is a comprehensive gene analysis/DNA profiling clinical test that results in the determination of your patient's inherited risk for cancer. While many offer clinical risk assessments for cancer, NEXT's advantage is in our unparalleled multi-networked genomic knowledge base that includes biomedical findings from clinical research, the FDA, population frequency data, and continuously updated treatment guidelines. The obtained gene sequencing results from each patient are compared to this medical knowledge base.

With Oncome, you will have access to superior DNA analysis and interpretative support in determining hereditary cancer risk for your patients. Specialty certified and licensed Genetic Counselors are also available to discuss results for you, your patients, and their families.

Oncome testing includes **three** Cancer Risk Panels providing medically actionable and relevant information on **60 genes** covering all related cancer types.

Comprehensive Cancer Panel

Breast and Gynecological Cancer Panel

Colon/Lynch Syndrome Risk Panel

APC ATM AXIN2 BAP1 BARD1 BMPR1A BRCA1 BRCA2 BRIP1 CDH1 CDK4 CDKN1B CDKN2A CHEK2 DICER1 ELAC2 EPCAM FANCC FH FLCN HOXB13 KIT MAX MEN1 MET MTF MLH1 MLH3 MRE11A MSH2 MSH6 MUTYH NBN NF1 NF2 NTRK1 PALB2 PALLD PDGFRB PIK3CA PMS2 POLD1 POLE PRKAR1A PTCH1 PTCH2 PTEN RAD50 RAD51C RAD51D RET SDHA SDHAF2 SDHB SDHC SDHD SMAD4 STK11 TP53 TSC1 TSC2 VHL WRN XRCC2

The result summary table distinguishes pathogenic and likely pathogenic variants from variants of uncertain significance detected in the genome of the sample provider.

Interpretations for pathogenic and likely pathogenic variants detected are written in the clinically relevant results section of the report. These interpretations expound upon the clinical significance of the variant(s) and provide evidence for classification.

Variant interpretations are researched, written, and reviewed by a team of experts: variant analysts and geneticists.



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PATIENT INFORMATION			
Name:	JANE DOE	Accession Number:	12345-00001
Date of Birth:	11/13/1964	Ordering Physician:	Stephen Smith, MD
Gender:	Female	Date Received:	08/21/2017
Date Received:	08/21/2017	Date Accessed:	08/29/2017
Date Collected:	08/09/2017	Date Reported:	08/30/2017

TEST PERFORMED			
NEXT Oncome Inherited Risk Test			
RESULT SUMMARY : POSITIVE			
Gene	Variants Detected	Classification	Zygosity
BRCA1	c.68_69delAG	Pathogenic	185delAG

Interpretation of clinical results: Genetic testing has detected a pathogenic variant in the BRCA1 gene (c.68_69delAG). Variants are listed according to the current Human Genome Variation Society (HGVS) guidelines, but (c.68_69delAG) is well-known by their previous nomenclature (185delAG or 187delAG).

Risk assessment: Approximately 20-25% of hereditary breast cancer risk and 75% of hereditary ovarian cancer risk are thought to be attributed to pathogenic variants in the BRCA1 or BRCA2 genes. Pathogenic BRCA1 or BRCA2 variants have between a 41-87% lifetime risk to develop breast cancer and up to a 63% risk for a contralateral breast cancer (5-9).

CANCER	GENE																																					
	APC	ATM	BAP1	BARD1	BMPR1A	BRCA1	BRCA2	BRIP1	CDH1	CDK4	CDKN2A	CHEK2	DICER1	EPCAM	FANCC	MLH1	MRE11A	MSH2	MSH6	MUTYH	NBN	PALB2	PMS2	POLD1	POLE	PTEN	RAD50	RAD51C	SDHA	SDHB	SDHC	SDHD	SMAD4	STK11	TP53			
BREAST																																						
OVARIAN																																						
COLORECTAL																																						
ENDOMETRIAL																																						
MELANOMA																																						
PANCREATIC																																						
STOMACH																																						
PROSTATE																																						
OTHER																																						

GENETICALLY RELATED CANCERS

Table was modified from Jackson Laboratory Genetically Related Cancers table
bit.ly/related-cancers