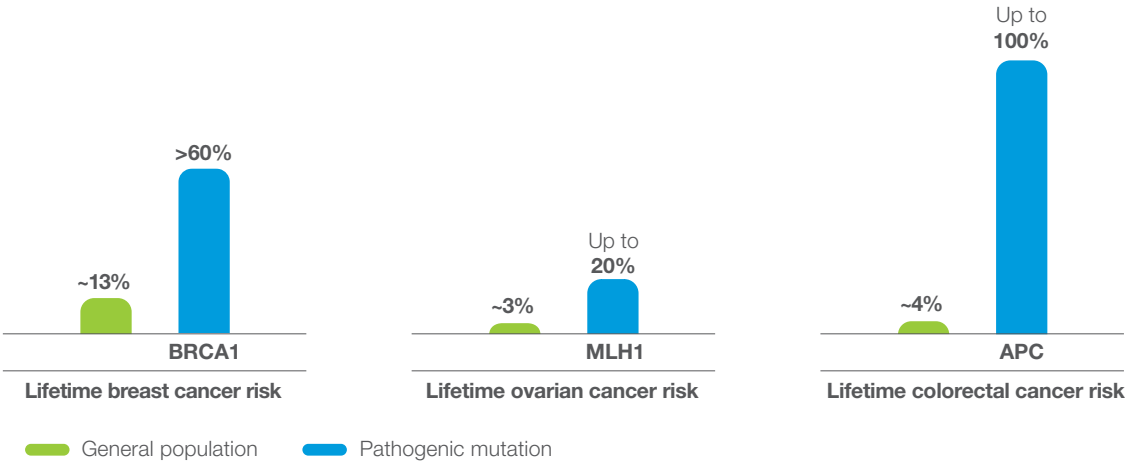
natera™ | Empower™
Hereditary cancer test

Meaningful insights, within reach.

High-quality hereditary cancer testing made accessible

Talk about hereditary cancer risk with your patients

Inherited mutations can significantly increase lifetime risk for developing cancer[1]



Many high risk patients are not tested

~85%

of women with a history of breast or ovarian cancer who meet NCCN criteria for genetic testing have not been tested[2]

~69%

of individuals at risk for Lynch syndrome were never advised by their health care provider to undergo genetic testing[3]

A central role for healthcare providers

> *"Genetic testing should be made available to all patients with a personal history of breast cancer... For patients with newly diagnosed breast cancer, identification of a mutation may impact local treatment recommendations (surgery and potentially radiation) and systemic therapy."*

CONSENSUS GUIDELINES ON GENETIC TESTING FOR HEREDITARY BREAST CANCER FROM THE AMERICAN SOCIETY OF BREAST SURGEONS (2019)[4]

Introducing Empower™

High-quality hereditary cancer testing made accessible

1

Advanced technology
Next generation sequencing used to analyze genetic risk for common hereditary cancers.

2

Clear answers you can act on
Reports include detailed patient management recommendations based on the latest medical guidelines including Tyrer-Cuzick assessments.

3

Practice support
Services to simplify testing workflow at every step, including streamlined patient education, ordering and sample collection, billing, counseling and documentation.

From Natera, the experienced leader in genetic testing

5M+	100+	CAP	CLIA	100+	100+
tests performed	clinicians, PhD's, and scientists	accredited	certified	genetic counselors	peer-reviewed publications

Hereditary cancer testing simplified

Designed with your practice in mind

Empower panels include genes associated with increased risk of common hereditary cancers, with options to suit your preferred screening strategy.

SYNDROME
Hereditary breast and ovarian cancer
2 total genes

Genes
BRCA1, BRCA2

SYNDROME
Lynch syndrome
5 total genes

Genes
MLH1, MSH2, MSH6, PMS2, EPCAM

PANEL
GYN guidelines-based
19 total genes

Breast, Ovarian, Endometrial cancers and Lynch syndrome genes

Genes
ATM, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, EPCAM, MLH1, MSH2, MSH6, NBN, NF1, PALB2, PMS2, PTEN, RAD51C, RAD51D, STK11, TP53

PANEL
Multi-cancer
40 total genes

Most commonly screened-for hereditary cancer genes across 9 cancer types

Genes
APC, ATM, AXIN2, BAP1, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDH1, CDK4, CDKN2A, CHEK2, EPCAM, GALNT12, GREM1, HOXB13, MEN1, MITF, MLH1, MSH2, MSH3, MSH6, MUTYH, NBN, NF1, NTHL1, PALB2, PMS2, POLD1, POLE, PTEN, RAD51C, RAD51D, RNF43, RPS20, SMAD4, STK11, TP53, VHL

PANEL
Comprehensive*
81 total genes

Commonly screened-for hereditary cancer genes plus genes with emerging evidence of elevated cancer risks

Genes
AIP, ALK, APC, ATM, AXIN2, BAP1, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDC73, CDH1, CDK4, CDKN1B, CDKN1C, CDKN2A, CEBPA, CHEK2, CYLD, DDX41, DICER1, EGFR, EPCAM, EXT1, EXT2, FH, FLCN, GATA2, GREM1, HOXB13, KIT, LZTR1, MAX, MEN1, MET, MITF, MLH1, MSH2, MSH3, MSH6, MUTYH, NBN, NF1, NF2, NTHL1, PALB2, PDGFRA, PHOX2B, PMS2, POLD1, POLE, POT1, PRKAR1A, PTCH1, PTEN, RAD51C, RAD51D, RB1, RET, RHBDF2, RUNX1, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, SMARCE1, STK11, SUFU, TERC, TERT, TMEM127, TP53, TSC1, TSC2, VHL, WT1

*Breast STAT panel available with 10 breast cancer genes reported within 5-7 calendar days + 71 additional genes reported within 2 weeks. Breast STAT genes include ATM, BARD1, BRCA1, BRCA2, CDH1, CHEK2, PALB2, PTEN, STK11 and TP53.

Actionable reports to guide patient management, including:

- Screenings that detect cancer at its earliest, most treatable stage
- Surgical or therapeutic decisions for patients diagnosed with cancer
- Risk-reducing surgical or therapeutic decisions for patients at elevated risk of developing cancer
- Informing family members to help them proactively manage hereditary cancer risk

Risk Management and Screening Guidelines for BRCA-Related Breast and Ovarian Cancer Syndrome[2]

The following information is a summary of current US guidelines. Please discuss with your healthcare provider as screening recommendations may vary by country and can change often.

Cancer Type	Mode of Screening or Risk Reduction	Typical Age to Begin	How Often
Female breast	Breast self-exam	18 years	Monthly
	Breast exam with clinician	25 years	Every 6-12 months
	Breast MRI with contrast	25 years (or individualized if family history of breast cancer before age 30)	Annually until age 75 years (screening after 75 should be considered on an individual basis)
	Mammogram with consideration of tomosynthesis (3-D mammogram)	30 years	Annually until age 75 years (screening after 75 should be considered on an individual basis)
	Risk-reducing medication	Individualized	Discuss with your healthcare provider
	Risk-reducing mastectomy (breast surgery); discuss with your healthcare provider	Individualized	N/A

Report supplements include detailed patient management recommendations based on medical guidelines

Empower with Tyrer-Cuzick delivers more precise breast cancer risk information for your patients

YOUR TYRER-CUZICK BREAST CANCER RISK ASSESSMENT

General Population Risk	Your Lifetime Risk
11%	**32.9%**

Based on your personalized risk calculation, your lifetime breast cancer risk is estimated to be **equal to or greater than 20%**.

General population 5-year risk for breast cancer:	1.3%
Your 5-year risk for breast cancer:	4.1%
Your risk was calculated on:	9/3/2020

Tyrer-Cuzick is a breast cancer risk assessment model used to estimate a woman's risk of developing breast cancer.[1] It uses both personal health and family history information to calculate breast cancer risk over the next five years as well as a lifetime risk up to age 85. It can be used alongside genetic testing as another tool to help provide a more personalized approach to breast cancer screening and prevention.

Breast cancer risk assessment for the next 5 years and over the course of the patient's lifetime

Delivered with clinical rigor

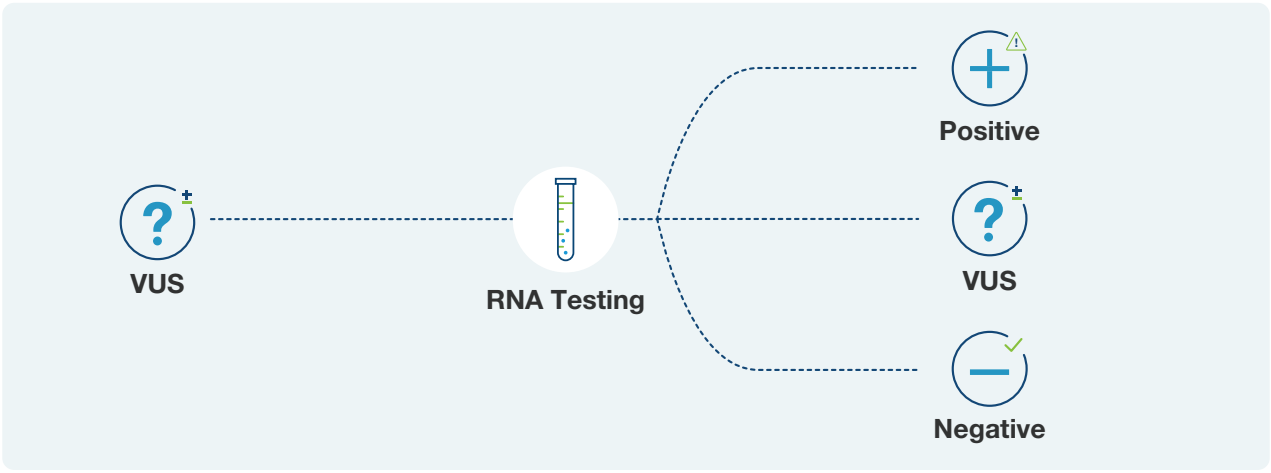
Expert variant interpretation

An experienced team of scientists, physicians and genetic counselors rigorously classifies variants according to American College of Medical Genetics (ACMG) guidelines

RNA analysis for Empower

Even more health insights, with no additional sample required.

Empower with RNA analysis offers an additional layer of functional evidence that may change a result from VUS to positive or negative, all from a single tube of blood. These genetic insights could help to further inform your patient's medical management.



More data to inform results

RNA testing can help to improve detection and classification of certain variants that fall within splice site regions. If there is evidence that a variant detected may impact splicing, RNA analysis is completed.*
An updated report is automatically issued to you and your patient if a variant is reclassified with RNA analysis.

Testing includes VUS splice sites across 54 high and moderate penetrance genes

AIP, APC, ATM, AXIN2, BAP1, BARD1, BRCA1, BRCA2, BRIP1, CDC73, CDH1, CDKN1B, CHEK2, DICER1, FH, FLCN, GATA2, LZTR1, MAX, MEN1, MLH1, MSH2, MSH3, MSH6, MUTYH, NBN, NF1, NF2, PALB2, PMS2 EX1-10, POT1, PRKAR1A, PTCH1, PTEN, RAD51C, RAD51D, RB1, RUNX1, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, SMARCE1, STK11, SUFU, TMEM127, TP53, TSC1, TSC2, VHL

How it works

1. Order an Empower hereditary cancer test
2. Patient submits a blood sample, 1 EDTA tube only
3. Receive an Empower result within 2-3 weeks
4. An updated report is automatically issued to you and to your patient if a variant is reclassified with RNA analysis

No additional sample

One EDTA tube for both DNA and RNA testing

No additional cost

RNA testing with no additional bill for the patient or insurance

*RNA analysis is performed if select criteria are met, including if blood is the specimen type and the splice site variant is reported within 21 days of sample collection.

Simple, tailored resources to support you and your patients every step of the way

Education

Patient-friendly materials and information sessions, covering basic genetics to specific tests

Results

Clear, actionable reports, served with time-saving tools and a side of expert guidance

Next steps

Value-add services that go beyond the test to address what's next

Complimentary Genetic Information Sessions

Pre- and post-test genetic information sessions –
access to boardcertified genetic counselors, available to all providers and patients

References

1 Cancer risk estimates for a positive result are typically based on individuals with a family or personal history of cancer.
NCCN Clinical Practice Guidelines in Oncology Genetic/Familial High Risk Assessment: Breast, Ovarian and Pancreatic v1.2023

2 Childers CP, Childers KK, Maggard-Gibbons M, Macinko J. National Estimates of Genetic Testing in Women With a History of Breast or Ovarian Cancer. JCO. 2017 Dec 1; 35:3800-38063.

3 Patel SG, Ahnen DJ, Kinney AY, et al. Am J Gastroenterol. Knowledge and uptake of genetic counseling and colonoscopic screening among individuals at increased risk for lynch syndrome and their endoscopists from the family health promotion project. 2016 Feb;111(2):285-93.

4 Manahan ER, Kuerer HM, Sebastian M, Hughes KS, Boughey JC, Euhus DM, Boolbol SK, Taylor WA. Consensus Guidelines on Genetic Testing for Hereditary Breast Cancer from the American Society of Breast Surgeons. Ann Surg Oncol. 2019 Oct;26(10):3025-3031.

13011 McCallen Pass, Building A Suite 100 | Austin, TX 78753 | natera.com

Empower has been developed and its performance characteristics determined by the CLIA-certified laboratory performing the test. The test has not been cleared or approved by the US Food and Drug Administration (FDA). CAP accredited, ISO 13485 certified, and CLIA certified.

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