MyRisk™
Hereditary Cancer Test

A guide to MyRisk testing

Myriad genetics

Health. Illuminated.

Determine the best treatment options for your patient

MyRisk™
Hereditary Cancer Test

The MyRisk Hereditary Cancer multi-gene panel analyzes risk for 11 cancers of focus to determine if your patient has a germline genetic mutation associated with an increased cancer risk. Receive test results in 14 days or less.

RiskScore®

RiskScore is a clinically validated tool which uses genetic markers and clinical risk factors to predict a 5-year and remaining lifetime risk of developing breast cancer.*

For certain women who receive a positive MyRisk result in *CHEK2,* RiskScore can provide a comprehensive, individualized risk estimate rather than a range, informing a screening and prevention plan with an individualized precision risk assessment.*

MyRisk hereditary cancer panel + Clinically validated genetic markers + Clinical factors and family history = **RiskScore**

1. Mavaddat N, et al. Prediction of breast cancer risk based on profiling with common genetic variants. J Natl Cancer Inst. 2015 Apr 8;107(5). PubMed. 2. Michailidou K, et al. Large-scale genotyping identifies 41 new loci associated with breast cancer risk. Nat Genet. 2013 Apr;45(4): 353-61. 3. Michailidou K, et al. Genome-wide association analysis of more than 120,000 individuals identifies 15 new susceptibility loci for breast cancer. Nat Genet. 2015 Apr;47(4):373-80. PubMed. 4. Tyrer J, et al. A breast cancer prediction model incorporating familial and personal risk factors. Stat Med. 2004 23:1111-30.

Why Myriad Genetics? The MyRisk™ test provides you with clear results

Every report includes

- Genetic results you can trust
- The MyRisk Medical Management Tool, based on leading professional and medical society guidelines, for both positive and negative results
- Patient and family cancer history
- Information for family members

Positive result
A mutation has been identified

Elevated result
An elevated risk has been identified

Negative result
No clinically significant mutation

Variant of uncertain significance
Mutation of uncertain risk identified

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CONFIDENTIAL

MyRisk™ Hereditary Cancer Test

MyRisk Genetic Result

MyRisk™ Hereditary Cancer Test

RECEIVING HEALTHCARE PROVIDER	SPECIMEN		PATIENT	
Test HCP, MD	Specimen Type:	Blood	Name:	Pt Last Name, Pt First Name
Test Medical Center	Draw Date:	Dec 03, 2021	Date of Birth:	Dec 03, 1976
6609 BLANCO RD STE 200	Accession Date:	Dec 03, 2021	Patient ID:	Patient id
SAN ANTONIO, TX 78216	Report Date:	Dec 03, 2021	Gender:	Female
			Accession #:	07007253-BLD
			Requisition #:	90026822

GENETIC RESULT: POSITIVE - CLINICALLY SIGNIFICANT MUTATION IDENTIFIED

Note: "CLINICALLY SIGNIFICANT," as defined in this report, is a genetic change that is associated with the potential to alter medical intervention.

CLINICAL HISTORY ANALYSIS: NO ADDITIONAL MANAGEMENT GUIDELINES IDENTIFIED BASED ON THE CLINICAL HISTORY PROVIDED

Other clinical factors may influence individualized management. This analysis may be incomplete if details about cancer diagnoses, ages, family relationships or other factors were omitted or ambiguous. If this patient also has a clinically significant mutation, the recommendations based on the clinical history analysis should be considered in light of the possibility that this mutation explains all or some of the cancer history in the family.

GENE	MUTATION	INTERPRETATION
BRCA2	c.1163_1164dupTA (p.Pro389Tyrfs*11) Heterozygous	High Risk This patient has Hereditary Breast and Ovarian Cancer syndrome (HBOC).

DETAILS ABOUT: *BRCA2* c.1163_1164dupTA (p.Pro389Tyrfs*11): NM_000059.3; (aka: 1392insTA)

Functional Significance: Deleterious - Abnormal Protein Production and/or Function

The heterozygous germline *BRCA2* mutation c.1163_1164dupTA is predicted to result in the premature truncation of the *BRCA2* protein at amino acid position 399 (p.Pro389Tyrfs*11).

Clinical Significance: High Risk

This mutation is associated with increased cancer risk and should be regarded as clinically significant.

ADDITIONAL FINDINGS: NO VARIANT(S) OF UNCERTAIN SIGNIFICANCE (VUS) IDENTIFIED

Details About Non-Clinically Significant Variants: All individuals carry DNA changes (i.e., variants), and most variants do not increase an individual's risk of cancer or other diseases. When identified, variants of uncertain significance (VUS) are reported. Likely benign variants (Favor Polymorphisms) and benign variants (Polymorphisms) are not reported and available data indicate that these variants most likely do not cause increased cancer risk. Present evidence does not suggest that non-clinically significant variant findings be used to modify patient medical management beyond what is indicated by the personal and family history and any other clinically significant findings.

Variant Classification: Myriad's myVision™ Variant Classification Program performs ongoing evaluations of variant classifications. In certain cases, healthcare providers may be contacted for more clinical information or to arrange family testing to aid in variant classification. When new evidence about a variant is identified and determined to result in clinical significance and management change, that information will automatically be made available to the healthcare provider through an amended report.

Myriad genetics

MyRisk provides accurate germline test results in 14 days or less. These results can impact your patient's therapy options, and the process can be easily integrated into your practice.

Genetic testing can help guide treatment for your patient

Breast Cancer

PARP inhibitor therapy has been shown to cut the risk of disease progression or death by up to 46% for patients with HER2-negative metastatic breast cancer and a germline *BRCA* mutation (*gBRCA*).[1,2]

Pancreatic Cancer

PARP inhibitor therapy may cut the risk of disease progression or death up to 47% for patients with pancreatic cancer and a *gBRCA* mutation.[4]

Ovarian Cancer

PARP inhibitor therapy has been shown to cut the risk of disease progression or death up to 70% for patients with ovarian cancer and a *gBRCA* mutation.[3]

Prostate Cancer

PARP inhibitor therapy may cut the risk of disease progression or death up to 66% in patients with prostate cancer and a gBRCA mutation.[5]

Tumor testing cannot replace germline testing

Germline and tumor *BRCA* testing differ in test coverage, variant classification, and detection of large rearrangements.

In the SOLO-1 trial, 5% of known *gBRCA* carriers did not have their deleterious mutation identified with tumor testing.[3]

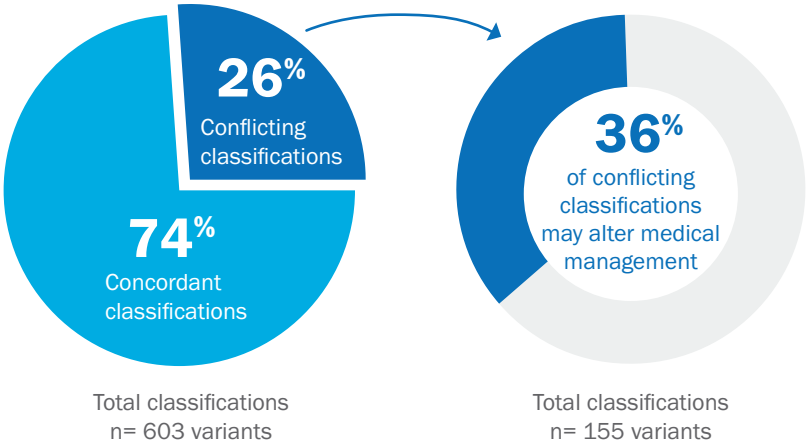
NCCN Guidelines® recommend germline testing in the workup for patients diagnosed with, or after the confirmation of, ovarian, metastatic breast, and pancreatic cancer.[5-7]

Knowing your patient's genetic status can also help family members better understand their risk

1. Robson et al. Olaparib for Metastatic Breast Cancer in Patients with a Germline BRCA Mutation. N Engl J Med (2018). 377:523-533. 2. Litton et al. Talazoparib in Patients with Advanced Breast Cancer and a Germline BRCA mutation. N Engl J Med 2018;379:753-63. 3. Moore et al. Maintenance Olaparib in Patients with Newly Diagnosed Advanced Ovarian Cancer. N Engl J Med (2018). DOI: 10.1056/NEJMoa1810858. 4. Golan et al. Maintenance Olaparib for Germline BRCA-Mutated Metastatic Pancreatic Cancer. N Eng Jnl Med (2019). 5. Referenced with permission from the NCCN: NCCN® Invasive Breast Cancer Version 1.2018 BINV-17. ©National Comprehensive Cancer Network, Inc. 2018. 6. Referenced with permission from the NCCN: Ovarian Cancer. Version 1.2019. ©National Comprehensive Cancer Network, Inc. 2019. 7. Referenced with permission from the NCCN: Pancreatic Adenocarcinoma. Version 2.2019. ©National Comprehensive Cancer Network, Inc. 2019.

Myriad Genetics provides the most accurate results

Right result



- Gradishar et al. 2017 showed that Myriad Genetics provided definitive classification for up to 63% of variants that other labs could not[1]

- Balmana et al. 2016 found that over 1/3 of conflicting classifications may alter patients' medical management[2]
- MyRisk™ and its variant classification techniques have been independently validated[3,4]

Lifetime commitment: MyVision® Myriad Variant Classification Program

Myriad Genetics has a lifetime commitment to patients with its variant classification program, with over 60,000 amended reports with updated classifications sent out between 2006-2016[5]

9% of amended reports impacted recommended medical management for patients

1. Gradishar W, et al. Clinical Variant Classification: A Comparison of Public Databases and a Commercial Testing Laboratory. The Oncologist (2017). 2. Balmana J, 2016: 26% of variants had conflicting classifications from different commercial labs. 3. Eggington JM, et al. A comprehensive laboratory-based program for classification of variants of uncertain significance in hereditary cancer genes. Clin Genet. 2014 Sep;86(3):229-37.
4. Judkins T, et al. Development and analytical validation of a 25-gene next generation sequencing panel that includes BRCA1 and BRCA2 genes to assess hereditary cancer risk; BMC Cancer, 2014.
5. Mersch J, et al, Prevalence of variant classification following hereditary cancer genetic testing; JAMA, 2018.

Tools to make the testing process easy for you

Myriad provides easy-to-use resources that can seamlessly integrate genetic testing into your practice

Patient identification
based on medical society guidelines

OPTIONS

- Digital screening with MyGeneHistory™
- Radiology Information Systems
- Mammography Information Systems

Pre-test education*
with a Certified Genetic Counselor

INCLUDES

- Individualized education (on-demand)
- Follow-up documentation:
  - Pre-populated test request form
  - Three-generation pedigree
  - Chart note

*must be enrolled in Patient Education program

Ordering

OPTIONS

- Online portal
- Virtual orders
- EMR integrations
- Phlebotomy support

Affordability

INCLUDES

- Personalized cost estimates
- 9 out of 10 pay $0
- Financial assistance and payment plans for those that qualify

Results
with MyRisk™ Management Tool

INCLUDES

- Personalized Tyrer-Cuzick/ RiskScore® when applicable

OPTIONS

- Online portal
- EMR integration

Post-test consults
with a Certified Genetic Counselor

INCLUDES

- Individualized discussion of results (on-demand or scheduled)
- Detailed summary notes

Myriad Genetics' commitment to you

Cost should never be a barrier when your patients need genetic testing to determine their next treatment. That's why it's our promise to make it accessible and affordable. Through insurance and financial assistance:

Satisfaction

95%

Insurers have coverage for hereditary cancer testing

Affordable

75%

Patients pay $0 for testing at Myriad Genetics

≥90%

Patients have or will qualify for a payment of $100 or less

Accessible

100%

Patients covered by the Myriad Promise

Genetic testing that's affordable, results that are secure

Assistance

Myriad Genetics' Financial Assistance Program (MFAP) can help if your patients have a high deductible or co-insurance. With MFAP, they may qualify for $0 or reduced out-of-pocket cost, dependent on family size and income.†

Privacy

Myriad Genetics will not release your patient's data to public databases without their knowledge. As a co-founder of PROMPT, we believe patients should control what they do with their data. For information about Myriad Genetics' privacy policy, visit www.myriad.com/patients-families/the-myriad-difference/your-privacy.

Protection

The Genetic Information Non-discrimination Act (GINA) and laws in most states prohibit discrimination regarding employment eligibility, health benefits, or health insurance premiums solely on the basis of genetic information.

844-697-4239 / billinghelp@myriad.com / www.MyriadPro.com

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† Patients who are recipients of U.S. government-funded programs such as Medicaid, Medicare, Medicare-Advantage and Tricare may not be eligible.

MyRisk™ Hereditary Cancer 48 Gene Panel

Genes	Breast	Ovarian	Colorectal	Uterine	Skin	Pancreatic	Gastric	Prostate	Renal	Lung	Endocrine	Other
BRCA1	●	●				●		●				
BRCA2	●	●			●	●		●				
MLH1, MSH2, MSH6, PMS2, EPCAM		●	●	●	●	●	●	●				●
APC			●			●	●				●	●
MUTYH			●									●
CDK4, CDKN2A (p16INK4a), (p14ARF)					●	●						
TP53	●		●	●	●	●	●	●	●	●	●	●
PTEN	●		●	●	●				●		●	●
STK11	●	●	●	●		●	●			●		●
CDH1	●						●					
BMPR1A, SMAD4			●				●					●
PALB2	●	●				●						
CHEK2	●		●									
ATM	●					●		●				
BARD1	●											
BRIP1		●										
RAD51C, RAD51D	●	●										
POLD1, POLE, GREM1, AXIN2			●									
HOXB13								●				
NTHL1	●		●									
MSH3			●									
FH, FLCN					●				●			●
MET									●			
TSC1, TSC2									●			●
SDHA, SDHB, SDHC, SDHD,VHL									●		●	●
BAP1					●				●			●
MITF, TERT					●							
CTNNA1							●					
EGFR										●		
MEN1, RET											●	●

Red flags for hereditary cancer

Personal history of:

- Breast cancer at any age
- Ovarian cancer at any age
- Metastatic prostate cancer at any age
- Pancreatic cancer at any age
- Colon or rectal cancer at any age
- Uterine/endometrial cancer at age 64 or younger

Family history of:

- Breast cancer at age 49 or younger
- Two breast cancers in one relative at any age
- Three or more breast cancers in relatives on the same side of the family at any age
- Ovarian, metastatic prostate, pancreatic, or male breast cancer at any age
- Colon, rectal, uterine cancer at age 49 or younger (1st degree relative)
- A gene mutation found in a family member
- Ashkenazi Jewish ancestry with breast cancer at any age

Myriad Genetics / 320 Wakara Way / Salt Lake City, UT 84108 / 800-469-7423