VistaSeq®
hereditary cancer panel

An assessment of genetic mutations associated with hereditary cancer syndromes

Integrated GENETICS
LabCorp Specialty Testing Group

Expand your patients' understanding of their hereditary cancer risk

HEREDITARY CANCER SYNDROMES

The mapping of the human genome has provided medical professionals with the ability to refine a patient's cancer risk through an analysis of inherited (germline) mutations. Approximately five to ten percent of cancers are thought to be caused by mutations in genes that are associated with hereditary cancer syndromes.[1]

- Genetic mutations have been associated with more than 50 hereditary cancer syndromes[1]
- Patients with genetic mutations are at a higher risk of developing certain types of cancer than the general population
- Genetic tests can help confirm whether a patient's condition is the result of an inherited cancer syndrome
- Genetic tests can also help identify family members at risk for developing cancers associated with a hereditary cancer syndrome

VISTASEQ HEREDITARY CANCER PANELS - INDICATIONS FOR TESTING

- When a patient's personal or family medical history suggests a hereditary cancer syndrome
- When a patient's personal or family history includes several cancer types
- When a patient has suspicious medical history that does not meet clinical testing criteria for a specific hereditary cancer syndrome
- When a patient has tested negative or indeterminate for mutations in a single cancer gene but whose personal and/or family history suggests a hereditary predisposition for cancer
- To identify family members who may have inherited a cancer-associated mutation
- To provide clinicians with an assessment of multiple cancer-associated genes in a cost-effective and timely manner

BROADENING YOUR PATIENTS' OPTIONS

VistaSeq Hereditary Cancer Panels are designed to provide information that can be used to determine if there is an increased cancer risk in patients with an associated personal or family history. They are specifically designed to detect inherited mutations and are not appropriate for the detection of mutations in acquired cancers. Patients with a family history that is specific to one cancer type may receive more benefit from a focused genetic test such as BRCAssure® *BRCA1/2* analysis or testing for Lynch syndrome.

IDENTIFYING YOUR PATIENTS' RISK

VistaSeq hereditary cancer panels are multi-gene tests that detect inherited mutations in genes which have been associated with an increased risk of developing hereditary cancers.

NCCN Guidelines® and The Society of Gynecologic Oncology (SGO) note that hereditary multi-gene panels may be an efficient and cost-effective approach to genetic cancer testing when used in appropriate clinical settings.[2,3]

Gene	Common name or condition	VistaSeq 27 genes	VistaSeq without *BRCA* 25 genes	VistaSeq Breast 19 genes	VistaSeq High/Mod Risk Breast 9 genes	VistaSeq GYN 11 genes	VistaSeq Breast and GYN 25 genes
APC[4]	FAP (familial adenomatous polyposis); adenomatous colon polyps	✓	✓				
ATM[4]	Ataxia telangiectasia (AT)	✓	✓	✓	✓		✓
BARD1[5]	Breast and/or ovarian cancer	✓		✓			✓
BMPR1A[5]	Juvenile polyposis syndrome	✓	✓				
BRCA1[4]	Breast and ovarian cancer	✓		✓	✓	✓	✓
BRCA2[4]	Breast and ovarian cancer	✓		✓	✓	✓	✓
BRIP1[4]	Fanconi anemia	✓	✓	✓			✓
CDH1[2,4]	Hereditary diffuse gastric cancer; lobular breast cancer	✓	✓	✓	✓		✓
CDK4[5]	Melanoma; cutaneous malignant melanoma	✓	✓				
CDKN2A[5]	Melanoma; cutaneous malignant melanoma	✓	✓				
CHEK2[4]	Breast cancer; colon cancer	✓	✓	✓	✓	✓	✓
EPCAM[4]	Lynch syndrome	✓	✓			✓	✓
FAM175A[6]	Breast cancer	✓	✓	✓			✓
FANCCC[4]	Fanconi anemia						✓
MLH1[4]	Lynch syndrome	✓	✓			✓	✓
MRE11A[5]	Breast cancer; in AR form - ataxia-telangiectasia-like disorder			✓			✓
MSH2[4]	Lynch syndrome	✓	✓			✓	✓
MSH6[4]	Lynch syndrome	✓	✓			✓	✓
MUTYH[4]	MAP (MYH-associated polyposis) is AR disease; adenomatous colon polyps	✓	✓	✓		✓	✓
NBN[4]	Nijmegen breakage syndrome	✓	✓	✓			✓
NF1[5]	Neurofibromatosis type 1			✓			✓
PALB2[4]	Breast cancer	✓	✓	✓	✓		✓
PMS2[4]	Lynch syndrome	✓	✓			✓	✓
PRKAR1A[4]	Carney complex	✓	✓				
PTEN[4]	Cowden disease; Cowden's	✓	✓	✓	✓	✓	✓
RAD50[5,7]	Breast and/or ovarian cancer			✓			✓
RAD51C[4]	Breast and/or ovarian cancer	✓	✓	✓			✓
RAD51D[5]	Ovarian cancer	✓	✓	✓			✓
SMAD4[4]	Juvenile polyposis syndrome	✓	✓				
STK11[4]	Peutz-Jeghers syndrome	✓	✓	✓	✓		✓
TP53[4]	Li-Fraumeni syndrome; P53	✓	✓	✓	✓	✓	✓

To see a complete listing of our VistaSeq hereditary cancer panel offerings, visit www.integratedgenetics.com.

Toll-free (within the US) at
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Integrated Genetics is a brand used by Esoterix Genetic Laboratories, LLC, a wholly owned subsidiary of Laboratory Corporation of America® Holdings.

Test name	Test code
VistaSeq® Hereditary Cancer Panel	**481220**
VistaSeq® without *BRCA1* and *BRCA2* genes	**481240**
VistaSeq® Breast Cancer Panel	**481319**
VistaSeq® High/Moderate Risk Breast Cancer Panel	**481452**
VistaSeq® GYN Cancer Panel	**481330**
VistaSeq® Breast and GYN Cancer Panel	**481341**
Specimen requirements: 10 mL whole blood lavender-top (EDTA) tube **OR** 2 mL saliva Oragene®•Dx saliva collection kit	

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A continuity of care, pioneering science, professional service

We provide the scientific expertise you need, and the customer experience patients want.

RAPID RESULTS

Samples have a typical turnaround time of three to four weeks after a test arrives at our lab.

EXTENSIVE MANAGED CARE CONTRACTS

Help patients maximize their benefits.

CONVENIENT BLOOD DRAWS

We have a nationwide network of patient service centers, allowing for convenient access to sample collection. Visit www.LabCorp.com to find your nearest location.

GENETIC COUNSELING

Patients may be offered counseling, and Integrated Genetics offers the largest national commercial network of genetic counselors to help inform and support patients.

WOMEN'S HEALTH AND WELLNESS

As a subsidiary of LabCorp, Integrated Genetics provides access to a complete women's health offering featuring a full range of testing and services that support the continuity of care for your patients through a single laboratory.

REFERENCES

1. American College of Obstetricians and Gynecologists. Hereditary Breast and Ovarian Cancer Syndrome. ACOG Practice Bulletin, No. 103, April 2009; reaffirmed 2015.
2. Petrucelli N, Daly F, Pal T, et al. BRCA1 and BRCA2 Hereditary Breast and Ovarian Cancer. GeneReviews. Available at: http://www.ncbi.nlm. nih.gov/books/NBK1247. Accessed October 22, 2013.
3. Genetic/Familial High-Risk Assessment: Breast and Ovarian. NCCN Guidelines Version 2. 2016. Available at: http://www.nccn.org/professionals/physician_gls/pdf/genetics_screening.pdf. Accessed March 22, 2016.
4. Pagon RA, Adam MP, Ardinger HH, et al., eds. GeneReviews [Internet]. Seattle, WA: University of Washington, Seattle; 1993-2016. Available at: http://www.ncbi.nlm.nih.gov/books/NBK1116. Accessed December 6, 2016.
5. Genetics Home Reference. NIH U.S. National Library of Medicine. Available at: https://ghr.nlm.nih.gov. Accessed December 6 & 7, 2016.
6. Castillo A, Paul A, Sun B, et al. The BRCA1-interacting protein, Abraxas, is required for genomic stability and tumor suppression. Available at: www.ncbi.nlm.nih.gov/pmc/articles/PMC4149256.
7. Damiola F, Pertesi M, Oliver J, et al. Rare key functional domain missense substitutions in MRE11A, RAD50, and NBN contribute to breast cancer susceptibility: results from a Breast Cancer Family Registry case-control mutation-screening study. Available at: www.ncbi.nlm.nih.gov/pubmed/24894818.