ONCOLOGY

One of the best ways' families can prepare and learn their chances of developing cancer is through hereditary cancer screenings. By creating a high-quality test with multiple panel options to choose from, Baylor Genetics is stopping cancer in its tracks.

BAYLOR GENETICS

HEREDITARY CANCER

Panels and Single Gene Analysis

Tailored Testing Solutions for Hereditary Cancer

Who should consider Hereditary Cancer testing?

INDIVIDUALS WITH MORE THAN ONE PRIMARY CANCER

INDIVIDUALS WITH MULTIPLE CLOSE FAMILY MEMBERS WITH CANCERS DIAGNOSED YOUNGER THAN AGE 50

INDIVIDUALS WITH 3 OR MORE CLOSE FAMILY MEMBERS DIAGNOSED WITH CANCER

INDIVIDUALS WITH RARE CANCERS AT ANY AGE

HISTORY OF CANCER FOR WHICH THERE IS A HIGH INCIDENCE IN THE INDIVIDUAL'S ETHNIC GROUP

INDIVIDUALS WITH PREVIOUS TARGETED GENETIC TESTING WHO MAY BENEFIT FROM AN EXPANDED PANEL

Sources: National Comprehensive Cancer Center Network Guidelines, American Society of Clinical Oncology, U.S. Preventative Services Task Force Recommendations, American Cancer Society

Approximately 1 in 3 people in the US will be affected by cancer during their lifetimes. 5-10% of those cancers are believed to be due to a hereditary predisposition.

ABOUT HEREDITARY CANCER

These hereditary predispositions may be shared by a person's family members including parents, siblings, and offspring. For example, if a mother or father is found to be a carrier for a pathogenic BRCA2 variant, each of their offspring also have a 50% chance of inheriting the pathogenic variant, which may lead to an increased risk for developing certain types of cancer.

One of the first steps to determine if a patient is at an increased risk for developing cancer is through the analysis of their DNA for pathogenic variants. This can help other family members assess their risks for potential cancer development.

By partnering with Baylor Genetics, organizations can order a wide range of tests including single gene studies, disease-specific panels, and comprehensive studies. BG's screening allows for a more accurate determination of personal and familial cancer risks, and may potentially inform medical management decisions. Hereditary cancer screening is suitable for individuals who are suspected of having an inherited cancer syndrome or have a personal history of cancer suggestive of an underlying genetic condition.

Testing Details

Methodology

Targeted Capture followed by Massively Parallel Sequencing (Next-Generation Sequencing).

Gene Coverage

- Analysis of all coding exons of the genes and at least 20 bp of flanking intronic sequences (>99% of target regions sequenced).
- All exonic variants and intronic variants within 20 bp of the exon/intron boundary will be reported.
- Positive sequencing results from certain genes or regions with highly homologous sequences in the genome will be confirmed by gene-specific long-range PCR and Sanger sequencing of the amplification products.
- Read depth analysis is used to detect copy number variation. Multiplex ligation-dependent probe amplification (MLPA), PCR-based methods, and/or array comparative genomic hybridization (aCGH) may be used to confirm copy number changes.

Limitations

Analysis will not detect variants within promoter or deep intronic regions*, balanced translocations, inversions*, low-level mosaicism, uniparental disomy, and imprinting defects. Single exon duplications will not be analyzed or reported unless otherwise specified.

Certain genes or regions with highly homologous sequences in the genome will be evaluated, but 100% coverage is not guaranteed due to genetic complexity.

*Unless otherwise specified.

Understanding the Results

Positive Results

Positive or “abnormal” results mean there is a clinically significant change in the genetic material related to the patient’s medical issues.

Negative Results

Negative or “normal” results mean no relevant genetic change could be detected. This does not mean that there is no genetic change, but it may mean the hereditary cancer test could not detect it.

Results of Unclear Significance

Hereditary cancer testing can detect change(s) in DNA that do not have a clear meaning. Every person has changes in their DNA; not all of these changes cause medical issues.

Hereditary Cancer Panels

- Common Hereditary Cancer
- Comprehensive Hereditary Cancer
- BRCA1 & BRCA2
- High-Risk Breast Cancer
- Breast/Ovarian/Endometrial Cancer
- High-Risk Colorectal Cancer
- Colorectal/Gastrointestinal Cancer
- Melanoma
- Prostate Cancer
- Paraganglioma/Pheochromocytoma
- Renal Cancer
- Endocrine Cancer
- Pancreatic Cancer
- Brain/Central Nervous System/Peripheral Nervous System Cancer
- Leukemia/Lymphoma
- Noonan Spectrum Disorders/RASopathy

Single gene analysis is also available.

Specimen Requirements

TYPE	REQUIREMENTS	SHIPPING CONDITIONS
 BLOOD IN EDTA	Draw blood in an EDTA (purple-top) tube(s) and send 3-5 cc (Adults/Children).	Ship at room temperature in an insulated container by overnight courier. Do not heat or freeze.
BUCCAL SWAB	Collected with ORAcollect•Dx (OCD-100) self-collection kit (provided by Baylor Genetics with instructions). It is highly recommended that the sample be collected by a healthcare professional.	Ship at room temperature in an insulated container by overnight carrier. Do not heat or freeze. Sample must arrive within 72 hours.
 PURIFIED DNA	Send at least 20ug of purified DNA (minimal concentration of 50ng/uL; A260/A280 of ~1.7).	Ship at room temperature in an insulated container by overnight courier. Do not heat or freeze.
 SALIVA	Collected with Oragene DNA Self-Collection Kit (provided by Baylor Genetics with instruction).	Ship at room temperature in an insulated container by overnight courier. Do not heat or freeze.

Fresh tissue is also an accepted specimen type. For specimen requirements and shipping conditions, please visit the Baylor Genetics website.

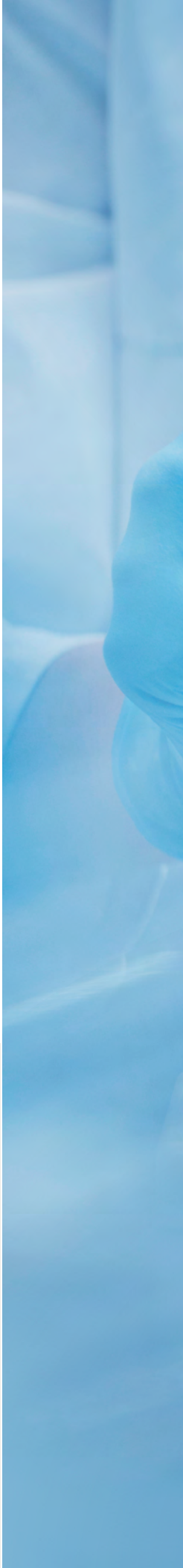
40+ YEARS OF INNOVATION

4 MILLION+ CLINICAL TESTS PERFORMED

1 MILLION+ FAMILIES HELPED

3 THOUSAND+ TESTS OFFERED

1 MISSION IMPROVE HEALTHCARE THROUGH GENETICS



Baylor Genetics pioneered the history of genetic testing. Now, we're leading the way in precision medicine.

Baylor Genetics is a joint venture of H.U. Group Holdings, Inc. and Baylor College of Medicine, including the #1 NIH-funded Department of Molecular and Human Genetics. Located in Houston's Texas Medical Center, Baylor Genetics serves clients in 50 states and 16 countries.

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