GeneAware Testing

Reproductive Carrier Screen

GENEAWARE REPRODUCTIVE CARRIER SCREEN

The **GeneAware** reproductive carrier screen is an easy-to-use medical genetic test. Baylor Genetics analyzes a small amount of your saliva or blood to reveal a world of medical knowledge for you and your family. Genetic conditions affect many people in the United States (U.S).

WHO IS ELIGIBLE FOR GENEAWARE?

Individuals and couples of reproductive age that are interested in carrier screening to identify potential risks of having a child affected with a genetic condition. Knowing your carrier status may help you consider all available options for family planning.

WHO IS ELIGIBLE FOR MEDICAL GENETIC TESTING?

All individuals and couples of adult age who are interested in discovering if they carry changes in genes that are linked to conditions known to affect individual and family health.

HEALTH INSURANCE COVERAGE

Virtually all private insurance plans cover **GeneAware.** A patient is required to meet the annual policy deductible and/or coinsurance as determined by their health insurance plan. In-network laboratories and hospital laboratories usually offer lower out-of-pocket costs for a patient.

THE DIFFERENCE BETWEEN MEDICAL GENETIC TESTING AND CONSUMER GENEALOGY TESTING

GeneAware is a medical genetic test ordered by a physician to help determine linkage between your genes and known medical conditions. **GeneAware** is not a consumer genealogy test purchased by an individual to help determine their potential genealogical or ancestral linkage to other family members or populations.

BAYLOR GENETICS LOCATION

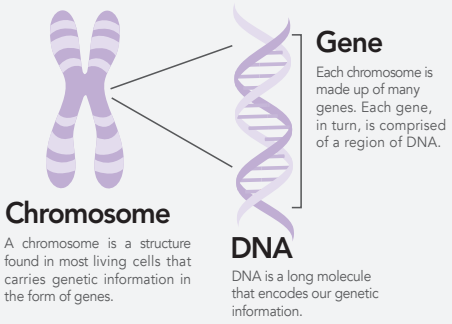
The Baylor team of over 12,000 professionals is in the heart of the world-renowned center for medical excellence, the Texas Medical Center in Houston, Texas.

BAYLOR GENETICS PEOPLE

Baylor Genetics is complemented by the entire Baylor College of Medicine staff of medical geneticists, scientists, faculty members, genetic counselors and researchers. Together, they help keep the lab up-to-date with the newest discoveries and testing.

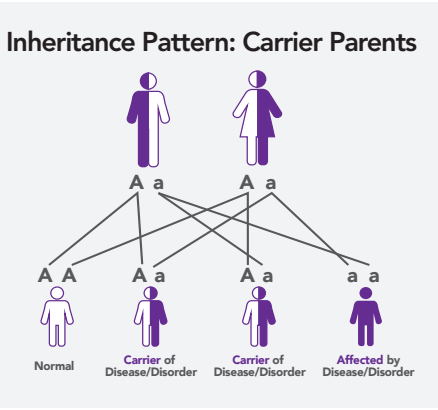
GENETIC LINKAGE TO KNOWN CONDITIONS

We all have 23 pairs of chromosomes. One pair of chromosomes determines our sex. The other 22 pairs of chromosomes are non-sex chromosomes and contain the rest of our genetic information. Every person has two copies of each gene in their body. Genes act like our body's instruction manual. Genes tell our cells what type of cell to be and how to act. On the next page is an illustration of how DNA, genes and chromosomes relate to each other in the coding of genetic information.



Scientists can study a person's genes and identify changes in the genes. Some changes, known as pathogenic variants, are severe and cause diseases/disorders and other medical problems. Many of these genetic changes are inheritable. For the majority of conditions tested in **GeneAware**, both copies of the gene need to have a gene change to cause symptoms, also referred to as an autosomal recessive condition. Therefore, a person who has a gene change in one copy of the gene is a carrier and most likely does not have any symptoms.

Below is an illustration of how a genetic condition can be inherited by the children of "carrier" parents.



When a mother or a father is a carrier, they could pass on the gene change to any of their children. Their children would only be at risk of having symptoms of the condition if both parents are carriers of the same condition. If both parents are carriers of the same autosomal recessive genetic condition, the risks of passing on the gene change to their children are:

- 1 in 2 (50%) chance that a child will inherit a normal gene from one parent and the gene change from the other parent and will be a carrier of the genetic condition;
- 1 in 4 (25%) chance that a child will inherit the normal gene from both mom and dad and will neither be a carrier of the genetic condition nor be affected by the condition; and
- 1 in 4 (25%) chance that a child will inherit the gene change, from mom and dad, and will be affected by the condition.

If a woman is a carrier of an X-linked condition, each later child is at increased risk for this condition (particularly for a male).

HOW AND WHEN TO GET GENEAWARE RESULTS

Your **GeneAware** test results will be provided to your ordering physician within two weeks after your saliva or blood sample is received at Baylor Genetics. Contact your ordering physician to review your results. Your results will report on the 158 different conditions tested by **GeneAware.**

TEST RESULTS

GeneAware test results typically fall into one of two categories:

- **Carrier (Positive)**
  One or more condition-causing gene change(s) was detected in the genes included in **GeneAware.** If your partner was not tested he or she should be tested to determine carrier status.
- **Negative**
  No known condition-causing gene change was detected in the genes included in **GeneAware.**

POTENTIAL TOPICS TO DISCUSS WITH YOUR ORDERING PHYSICIAN

GeneAware test results can influence:

- Treatment of the condition
- Prevention of the condition
- Management of overall healthcare decisions
- Other genetic screening recommendations
- Genetic condition risks for other family members
- Referral to a licensed genetic counselor and other specialist

PATIENT PRIVACY AND PROTECTION

Federal laws in the U.S. such as the Health Insurance Portability and Accountability Act (HIPAA) and the Genetic Information Nondiscrimination Act (GINA), along with many state laws in the U.S. prohibit discrimination for health benefits, employment eligibility, or health insurance premiums based solely on genetic information.

FOR MORE INFORMATION:

HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT • hhs.gov/hipaa

GENETIC INFORMATION NONDISCRIMINATION ACT • eeoc.gov

PATIENT EDUCATION

Please visit the following websites for more information about genetic testing:

BAYLOR GENETICS • bmgl.com

NATIONAL HUMAN GENOME SEQUENCING CENTER BAYLOR COLLEGE OF MEDICINE
• hgsc.bcm.edu

GENETICS HOME REFERENCE
• ghr.nlm.nih.gov/condition

NATIONAL HUMAN GENOME RESEARCH INSTITUTE • genome.gov

AMERICAN COLLEGE OF MEDICAL GENETICS AND GENOMICS • acmg.net

NATIONAL SOCIETY OF GENETIC COUNSELORS • nsgc.org

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BAYLOR GENETICS
READY WITH ANSWERS