



PREVENTIVE
genomics

ECHOES OF WELLNESS:
DECODING YOUR GENETIC BLUEPRINT FOR

ENT Health



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INTRODUCTION OF THE HEREDITARY ENT DISORDERS RISK TESTING

Imagine the power of understanding and addressing ENT (Ear, Nose, and Throat) disorders before they significantly impact a patient's life. Hereditary ENT Disorders Risk Testing is designed to identify genetic mutations that may predispose individuals to a variety of ENT conditions. These disorders can affect hearing, balance, voice, and breathing, with early genetic testing providing the opportunity for proactive healthcare management.



By examining specific genes related to ENT function, the test can reveal genetic variants that may lead to conditions like hearing loss, speech impairment, and other ENT-related issues. With this information, healthcare professionals can better understand a patient's genetic risk, facilitate early diagnosis, and implement strategies to prevent or reduce the severity of ENT disorders. By taking a proactive approach, this test helps in improving patient outcomes and quality of life, ensuring that the impacts of hereditary ENT disorders are minimized.

EMPOWER EARLY INTERVENTION: TRANSFORMING DIAGNOSIS AND TREATMENT FOR HEREDITARY ENT DISORDERS

**GENETIC TESTING FOR HEREDITARY ENT DISORDERS OFFERS
NUMEROUS ADVANTAGES FOR BOTH PHYSICIANS AND PATIENTS,
INCLUDING:**

Early Detection: Identifies genetic variants related to ENT conditions even before symptoms arise, enabling early intervention to manage or delay the onset of disorders.



Accurate Diagnosis: Differentiates between various ENT disorders with overlapping symptoms, allowing for precise and tailored diagnosis.



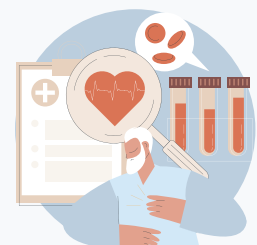
Personalized Treatment Plans: Provides information on specific gene mutations, allowing healthcare professionals to develop personalized treatment strategies targeting the root cause rather than merely managing symptoms.



Risk Assessment for Family Members: Since many ENT disorders are hereditary, genetic testing can help identify at-risk family members, promoting early screening and preventive measures.



Improved Patient Outcomes: By uncovering genetic predispositions early, patients can benefit from timely lifestyle adjustments, medical interventions, or hearing-assistive technologies, enhancing their overall quality of life.



DISEASES AND CONDITIONS RELATED TO HEREDITARY ENT DISORDERS GENES

THE FOLLOWING ARE SOME CONDITIONS RELATED TO THE GENES INVOLVED IN HEREDITARY ENT DISORDERS:

Hearing Loss (Related Gene: GJB2, GJB6) - A condition where mutations affect the function of gap junction proteins, leading to progressive or congenital hearing impairment.

Usher Syndrome (Related Gene: USH2A, MYO7A) - A disorder causing combined hearing loss and vision problems, often due to gene mutations affecting hair cells in the inner ear.

Branchiootorenal Syndrome (Related Gene: EYA1) - A syndrome characterized by hearingloss, branchial cleft abnormalities, and kidney malformtions.

Waardenburg Syndrome (Related Gene: PAX3, SOX10) - A condition resulting in hearing loss and pigmentary abnormalities, such as different-colored eyes or a white forelock.

Otosclerosis (Related Gene: COL1A1, COL11A2) - A hereditary disorder affecting the bones of the middle ear, leading to progressive hearing loss.



Pendred Syndrome (Related Gene: SLC26A4) - A genetic disorder causing hearing loss, goiter, and sometimes balance issues, often due to mutations affecting iodine transport.

Stickler Syndrome (Related Gene: COL11A1, COL2A1) - A connective tissue disorder leading to hearing loss, vision problems, and joint abnormalities.

DFNA/B Hearing Loss (Related Gene: TMC1, MYO15A) - A type of nonsyndromic hearing loss resulting from mutations in various genes responsible for inner ear function.

Jervell and Lange-Nielsen Syndrome (Related Gene: KCNQ1, KCNE1) - A rare condition leading to congenital hearing loss and heart rhythm abnormalities due to mutations affecting potassium channels.

Neurofibromatosis Type II (NF2) (Related Gene: NF2) - A condition characterized by non-cancerous tumors on nerves, primarily affecting the auditory nerve, which can result in hearing loss.



GENE PANEL FOR HEREDITARY ENT DISORDERS: (171 - GENES PANEL)

ABCC9, ABCG5, ABCG8, ACTA1, ACTA2, ACTC1, ACTN2, AKAP9, ALMS1, ANK2, ANKRD1, APOA4, APOA5, APOB, APOC2, APOE, BAG3, BRAF, CACNA1C, CACNA2D1, CACNB2, CALM1, CALR3, CASQ2, CAV3, CAVIN4, CBL, CBS, CETP, COL3A1, COL5A1, COL5A2, COX15, CREB3L3, CRELD1, CRYAB, CSRP3, CTF1, DES, DMD, DNAJC19, DOLK, DPP6, DSC2, DSG2, DSP, DTNA, EFEMP2, ELN, EMD, EYA4, FBN1, FBN2, FHL1, FHL2, FKR, FKTN, FXN, GAA, GATAD1, GCKR, GJA5, GLA, GPD1L, GPIHBP1, HADHA, HCN4, HFE, HRAS, HSPB8, ILK, JAG1, JPH2, JUP, KCNA5, KCND3, KCNE1, KCNE2, KCNE3, KCNH2, KCNJ2, KCNJ5, KCNJ8, KCNQ1, KLF10, KRAS, LAMA2, LAMA4, LAMP2, LDB3, LDLR, LDLRAP1, LMF1, LMNA, LPL, LTBP2, MAP2K1, MAP2K2, MIB1, MYBPC3, MYH11, MYH6, MYH7, MYL2, MYL3, MYLK, MYLK2, MYO6, MYOZ2, MYPN, NEXN, NKX2-5, NODAL, NOTCH1, NPPA, NRAS, PCSK9, PDLIM3, PKP2, PLN, PRDM16, PRKAG2, PRKAR1A, PTPN11, RAF1, RANGRF, RBM20, RYR1, RYR2, SALL4, SCN1B, SCN2B, SCN3B, SCN4B, SCN5A, SCO2, SDHA, SELENON, SGCB, SGCD, SGCG, SHOC2, SLC25A4, SLC2A10, SMAD3, SMAD4, SNTA1, SOS1, SREBF2, TAZ, TBX20, TBX3, TBX5, TCAP, TGFB2, TGFB3, TGFB1, TGFB2, TMEM43, TMPO, TNNC1, TNNI3, TNNT2, TPM1, TRDN, TRIM63, TRPM4, TTN, TTR, TXNRD2, VCL, ZBTB17, ZHX3, ZIC3

TEST SPECIFICATIONS

Acceptable sample requirements
Buccal Swab or Saliva

Turnaround time - 7-10 Business days
Coverage $\geq 96\%$ at 20x

Reporting
Likely pathogenic and Pathogenic variants

Customization
Customizable Gene List



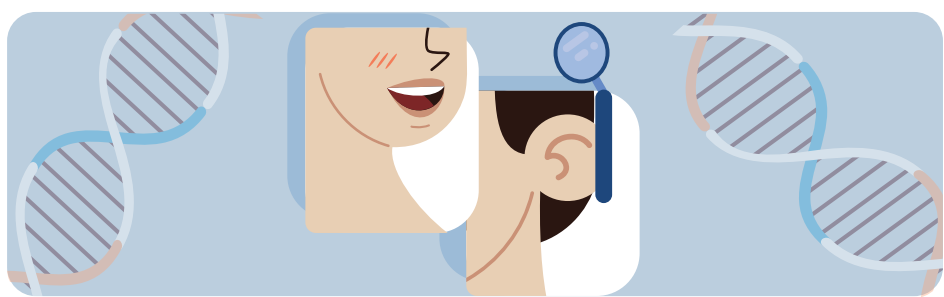
WHAT TO DO WHEN HEREDITARY ENT DISORDERS GENETIC TESTING COMES BACK POSITIVE

IF GENETIC TESTING FOR HEREDITARY ENT DISORDERS YIELDS A POSITIVE RESULT, IT IS IMPORTANT TO PROCEED AS FOLLOWS:

Patient and Family Counseling: Inform the patient and their family about the test results, implications for their health, and potential risks for family members. Genetic counseling can provide support and further understanding.

Individualized Management Plan: Develop a personalized management and treatment plan that may include medication, hearing aids, surgical interventions, and lifestyle adjustments, depending on the disorder.

Family Screening: Offer genetic testing to family members to assess their risk of developing the condition, facilitating early diagnosis and possible preventive measures.



Regular Monitoring: Establish a schedule for regular hearing assessments, ENT evaluations, and other relevant medical check-ups to monitor the patient's condition and adjust the treatment plan as necessary.

Preventive and Supportive Care: Implement preventive care strategies, such as hearing protection and nutritional guidance, and provide resources for support, including speech therapy and assistive devices if needed.

Collaborative Care Approach: Work in tandem with ENT specialists, audiologists, genetic counselors, and other healthcare professionals to ensure comprehensive care for the patient.

UNLOCKING THE SECRETS OF YOUR GENETIC HEALTH

COMPREHENSIVE GENETIC TESTING AT

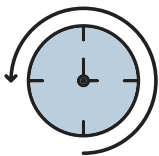
PREVENTIVE GENOMICS

PREVENTIVE GENOMICS MAY BE A GOOD CHOICE FOR GENETIC TESTING FOR SEVERAL REASONS:



HIGH-QUALITY TESTING

Preventive Genomics uses advanced technology and have experienced technicians to ensure that the testing is performed to the highest standards



FAST TURNAROUND TIME

Preventive Genomics has a fast turn around time for test results. This means that doctors can quickly get the information they need to make informed decisions about their patients' treatment.



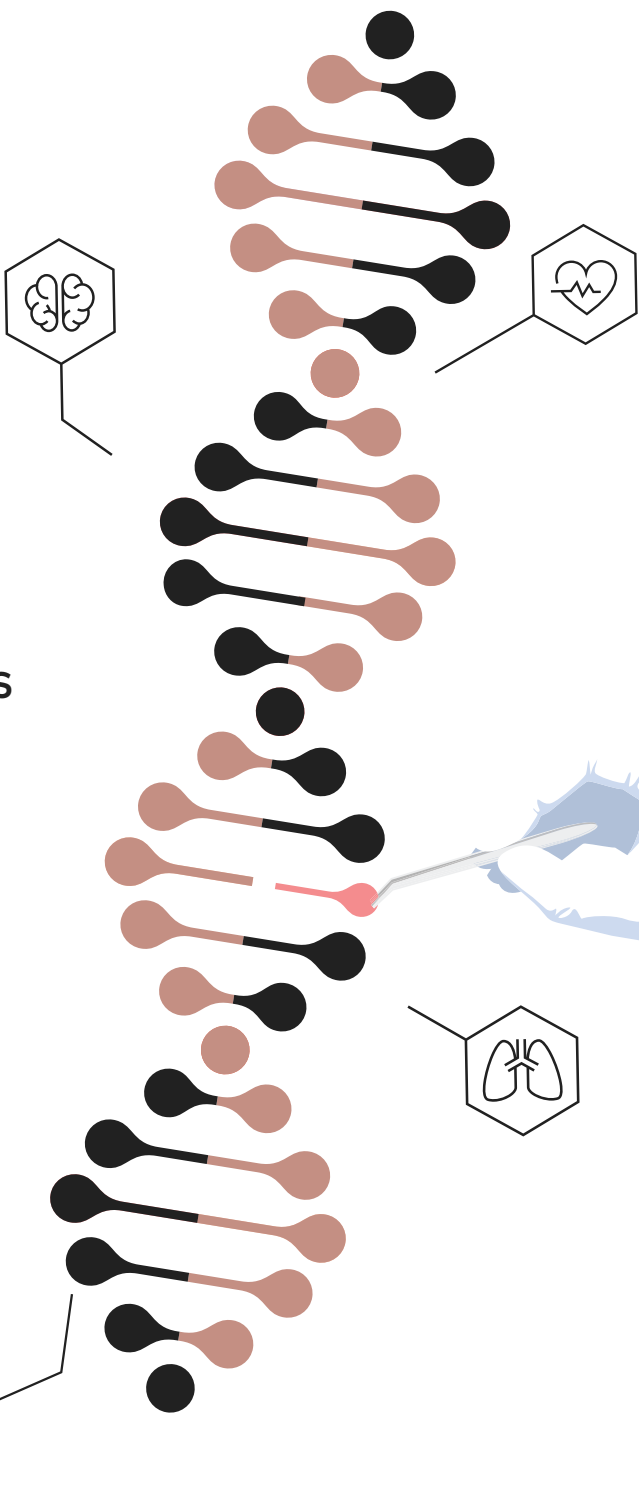
COMPREHENSIVE TESTING OPTIONS

We offer a wide range of genetic testing options, including tests for Diabetes predict, Cancer genetics, Cardiovascular, Drug-Gene Interactions and Neurological disorders.



COLLABORATIVE APPROACH

Preventive Genomics works closely with doctors to ensure that the testing is tailored to the specific needs of each patient. They provide personalized support and guidance throughout the testing process.



DECODING THE MYSTERY OF GENETIC TESTING: A PATIENT'S ROADMAP TO BETTER HEALTH

Genetic testing is a medical test that examines your DNA to identify any changes or mutations that may be associated with a specific disease or condition. This guide aims to provide you with an overview of genetic testing, its significance, testing outcomes, and how it could be beneficial to you and your family members.

WHAT IS GENETIC TESTING?

DNA is the genetic material that contains the instructions for the development, growth, and function of all living organisms. Genetic testing can provide information about inherited diseases or conditions, predispositions to certain diseases, and the likelihood of passing these conditions onto your children.

WHY IS GENETIC TESTING SIGNIFICANT?

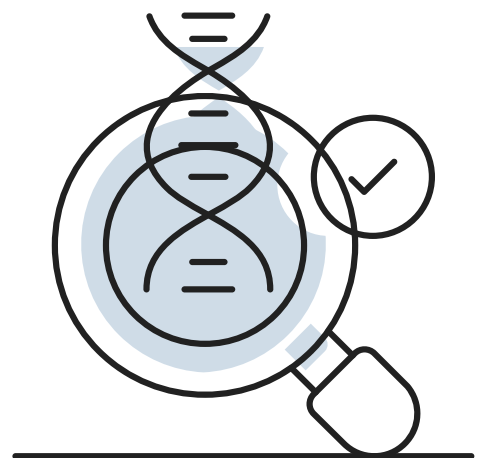
Genetic testing can provide valuable information that can help you and your healthcare provider make informed decisions about your health. It can help to:

DIAGNOSE GENETIC DISEASES:

Genetic testing can identify changes or mutations in genes that are associated with specific diseases or conditions. This information can help healthcare providers diagnose genetic diseases and develop appropriate treatment plans.

INFORM REPRODUCTIVE DECISIONS:

Genetic testing can help individuals and couples make informed decisions about family planning. If a genetic mutation is identified, it can be used to determine the likelihood of passing the condition onto future children.



DETERMINE THE RISK OF DEVELOPING A DISEASE:

Some genetic mutations are associated with an increased risk of developing certain diseases or conditions. Genetic testing can help identify these mutations, allowing for early intervention or prevention.

PERSONALIZE TREATMENT PLANS:

Genetic testing can provide information about how an individual may respond to certain medications or treatments. This information can help healthcare providers personalize treatment plans for better outcomes.

TESTING OUTCOMES

The results of genetic testing can be positive, negative, or uncertain. A positive result indicates that a genetic mutation associated with a specific disease or condition was identified. A negative result means that no mutations were identified. An uncertain result means that the test did not provide a definitive answer and further testing may be necessary.

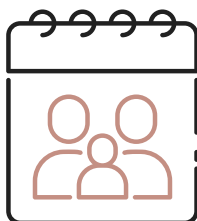
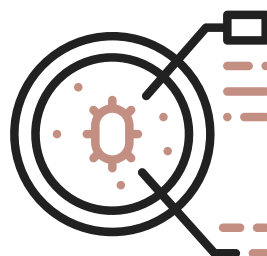


HOW CAN GENETIC TESTING BE BENEFICIAL TO YOU AND YOUR FAMILY MEMBERS?

Genetic testing can be beneficial to you and your family members in several ways, including:

EARLY DETECTION AND TREATMENT:

Genetic testing can help identify conditions at an early stage, allowing for earlier treatment and better outcomes.

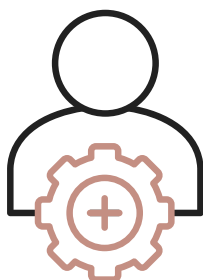


FAMILY PLANNING:

Genetic testing can help individuals and couples make informed decisions about family planning, such as whether to have children or how to manage the risk of passing on a genetic condition.

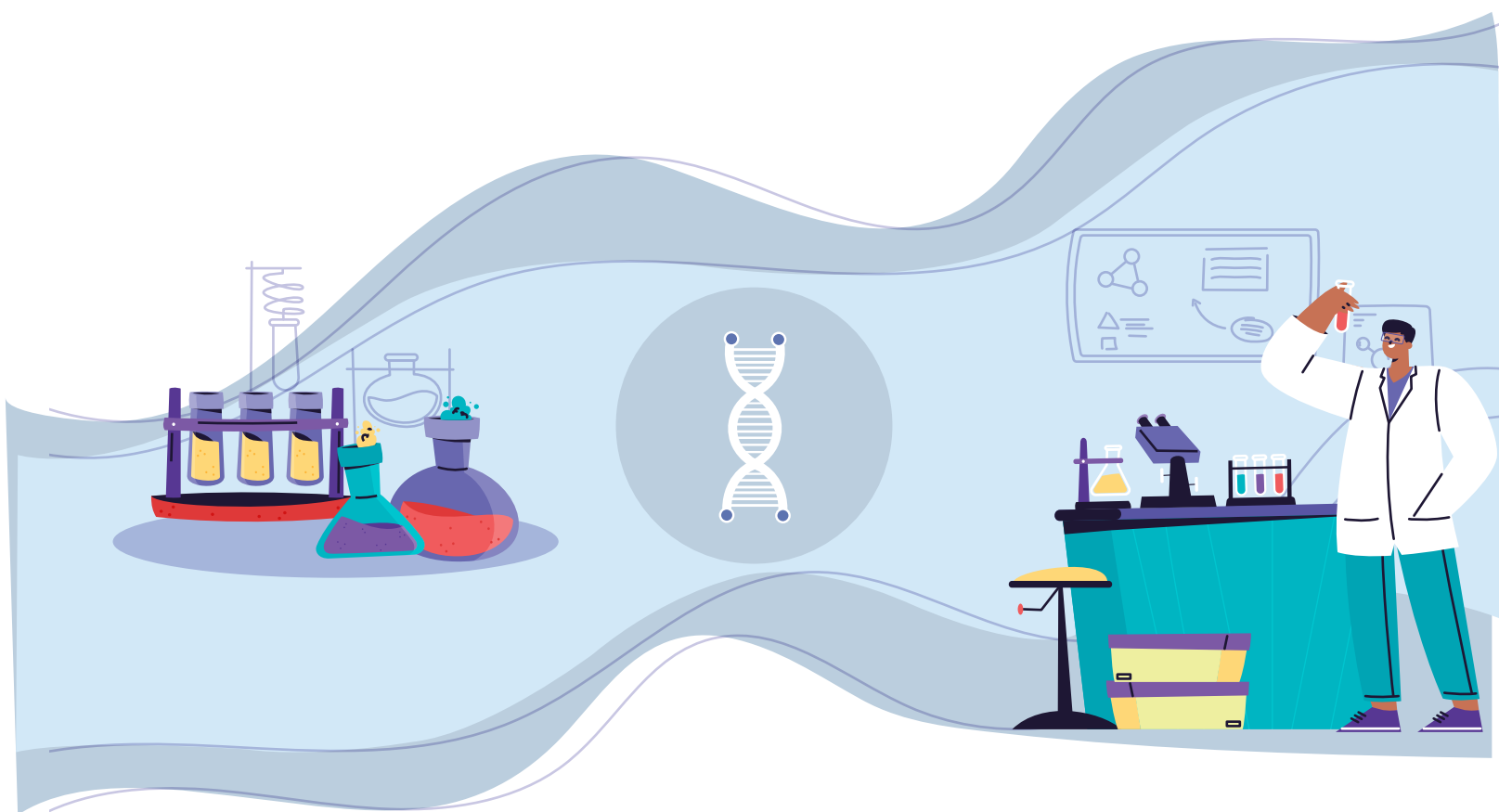
RISK REDUCTION:

Genetic testing can help identify individuals at increased risk for certain diseases or conditions, allowing for early intervention and lifestyle changes to reduce the risk.



PERSONALIZED TREATMENT:

Genetic testing can provide information about how an individual may respond to certain medications or treatments, allowing for personalized treatment plans for better outcomes.



IF YOU ARE CONSIDERING GENETIC TESTING, IT IS IMPORTANT TO CHECK WITH YOUR HEALTH INSURANCE PROVIDER TO DETERMINE YOUR COVERAGE.
YOU CAN DO THIS BY:

REVIEWING YOUR INSURANCE POLICY:

Check your insurance policy or contact your insurance provider to see if genetic testing is covered and under what circumstances.

CONSULTING WITH YOUR HEALTHCARE PROVIDER:

Talk to your healthcare provider about whether genetic testing is medically necessary and covered by your insurance.

SEEKING PRIOR AUTHORIZATION:

Some insurance plans may require prior authorization for genetic testing, which means your healthcare provider will need to submit a request to your insurance provider for approval.



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