ULTAGENOMICS

DECODE YOUR DNA. GUIDE YOUR HEALTH.

Cardiovascular Genetic Risk

GENETICS REPORT

1	5	85
Report	Report Panels	Gene Variants

Example Client
Prepared for

September 19, 2026
Report Date

Our genetic test provides insights into how your unique genetic profile influences health areas. By understanding these genetic tendencies, you and your healthcare provider can make more informed lifestyle and wellness choices to support long-term health goals.

THESE GENE RESULTS MIGHT TELL YOU

- ✓ How your body may respond to certain nutrients
- ✓ Dietary patterns and environmental factors
- ✓ Potential predispositions in detoxification, metabolism, and physical performance
- ✓ Why some wellness strategies may work differently for you

THESE GENE RESULTS WILL NOT TELL YOU

- ✕ Any medical diagnoses
- ✕ Cancer diagnoses or clinical cancer risk assessments
- ✕ Predictions about future health conditions
- ✕ How lifestyle factors outside of genetics impact health outcomes

This report is intended for informational purposes only and does not constitute medical advice. Results reflect genetic predispositions, not guarantees of health outcomes. Always consult a qualified healthcare practitioner before making changes to your health regimen.

A typical or decreased result does not mean there is no risk, and an increased result does not mean a condition will develop. Environment, lifestyle and family history also play a role. Any result that mentions cancer reflects a genetic tendency only. It is not a clinical cancer risk assessment and does not replace recommended cancer screening.

Talk with a healthcare provider before starting any supplement, especially if pregnant or breastfeeding, taking prescription medications, or managing a medical condition. Do not start, stop or change any medication based on these results without first talking with the prescribing provider.

Statements about supplements in this report have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

Research on how genes relate to health is still developing. Some recommendations are based on limited evidence and may be updated as new research becomes available.

Testing is performed by a CLIA-certified, CAP-accredited laboratory. Genotyping is highly accurate, but no laboratory test is completely error-free. Results that will change clinical decisions may warrant confirmatory testing.

OVERVIEW

Results at a Glance

This report covers 5 panels and 11 individual results. The summary below shows where the genetic profile indicates areas worth focusing on, areas to monitor, and areas where results are favorable. The Moderate results are where targeted support may have the most impact.

1

NEEDS ATTENTION

- Venous Thrombosis Propensity

0

MODERATE

10

OPTIMAL

- CAD Propensity
- APOe Status
- Atrial Fibrillation
- CHD Benefit from Lower LDL
- Lipid Impairment Propensity
- LP(a) Risk
- Hypertension Propensity
- Ischemic Stroke Propensity
- Plant Sterol Risk
- Plant Sterol Benefit

1 Cardiovascular Genetics

14 variants analyzed

In plain terms: Cardiovascular genetics focuses on understanding how genetic variations influence the risk, progression, and treatment responses of cardiovascular diseases (CVD), including heart disease, stroke, hypertension, and arrhythmias. This section explores the critical role of genetics in cardiovascular health, offering insights into the identification, prevention, and management of genetic predispositions to cardiovascular conditions. Several genes have been identified as playing pivotal roles in cardiovascular health.

Variations in genes related to lipid metabolism, blood pressure regulation, coagulation pathways, and inflammation can significantly impact an individual's risk of developing CVD. For example, variations in the APOE gene can influence cholesterol metabolism and CVD risk.

Advancements in cardiovascular genetics are paving the way for innovative therapies, including gene editing and gene therapy approaches targeting the root genetic causes of some cardiovascular diseases. These cutting-edge treatments offer hope for conditions previously deemed challenging to manage, providing a glimpse into the future of personalized cardiovascular care.

YOUR RESULTS

CAD Propensity



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical risk for coronary artery disease genetic results exhibit genetic markers that reflect the average population's likelihood of developing CAD. This indicates a standard level of risk, with lifestyle and environmental factors playing a significant role in the actual development of heart disease. Individuals with a typical risk are advised to adopt heart-healthy habits, including eating a diet rich in fruits, vegetables, and whole grains, exercising regularly, avoiding tobacco use, and monitoring blood pressure and cholesterol levels to support overall cardiovascular well-being.

YOUR RESULTS

APOe Status



APOE 3/3 STATUS

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with apoe 3/3 status genetic results carry two copies of the most common APOe3 allele, associated with a typical risk profile for age-related health conditions. A balanced diet and regular physical activity support optimal health outcomes.

YOUR RESULTS

Atrial Fibrillation



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical risk genetic results have an average genetic likelihood of developing atrial fibrillation, aligning with the general population's risk level. This suggests a standard susceptibility to atrial fibrillation.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
LGALS3 C191A	rs4644	**AC**	**CETP G1264A**	rs5882	**AG**
APOE C388T	rs429358	**TT**	**IL6/IL6-AS1 (G>C)**	rs1800795	**CG**
APOE C526T	rs7412	**CC**	**APOC4 (T>C)**	rs10413089	**TC**
LP(a) A3947+467G	rs10455872	**AA**	**ICAM1 A1405G**	rs5498	**AA**
LP(a) T5673C	rs3798220	**TT**	**IL37 A124G**	rs3811047	**AG**

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
4q25-1	rs2200733	**CC**	**APOA2 (G>T)**	rs3813627	**TG**
4q25-2	rs10033464	**GG**	**CDKN2A (A>G) / 9p21**	rs10757278	**AG**

2 Lipid Impairment

17 variants analyzed

In plain terms: Lipid impairment, often referred to as dyslipidemia, involves abnormal levels of lipids (fats) in the blood, such as cholesterol and triglycerides. This condition is a significant risk factor for cardiovascular diseases, including heart attack and stroke. Lipid levels in the blood are influenced by both genetic and lifestyle factors. Understanding the genetic basis of lipid impairment can help identify individuals at higher risk and guide personalized approaches to prevention and treatment.

Several genes are involved in the regulation of lipid metabolism, including LDLR, APOB, and PCSK9. The LDLR gene encodes the low-density lipoprotein receptor, which plays a crucial role in removing LDL cholesterol (often called "bad" cholesterol) from the bloodstream. Variations in this gene can lead to reduced receptor function, resulting in higher LDL cholesterol levels. The APOB gene encodes apolipoprotein B, a primary component of LDL particles, and mutations can affect cholesterol transport and clearance. The PCSK9 gene encodes a protein that regulates the degradation of LDL receptors, and certain variants can lead to higher LDL cholesterol levels by reducing receptor availability. By analyzing these genetic variations, it is possible to assess an individual's risk for lipid impairment and cardiovascular disease.

Genetic insights into lipid impairment can inform personalized health strategies. For individuals with genetic variations that predispose them to higher cholesterol or triglyceride levels, lifestyle changes such as adopting a heart-healthy diet, increasing physical activity, and maintaining a healthy weight are essential. In some cases, medications like statins, which lower LDL cholesterol, or other lipid-lowering therapies may be recommended. For those with specific genetic mutations, newer treatments targeting the PCSK9 pathway might be particularly effective. Regular monitoring of lipid levels and personalized intervention plans can help manage lipid impairment and reduce the risk of cardiovascular complications. By leveraging genetic information, healthcare providers can develop targeted and effective strategies to improve lipid profiles and overall cardiovascular health.

YOUR RESULTS

CHD Benefit from Lower LDL

TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical CHD benefit from lower LDL genetic results show an average likelihood of experiencing cardiovascular benefits from decreased LDL levels. Maintaining a heart-healthy lifestyle, including a balanced diet, regular exercise, and appropriate medical care, can support overall cardiovascular health.

YOUR RESULTS

Lipid Impairment Propensity

TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical lipid impairment propensity genetic results have an average likelihood of experiencing issues with lipid metabolism. Adopting a heart-healthy lifestyle, including a balanced diet and regular exercise, can help manage lipid levels and support overall cardiovascular health.

YOUR RESULTS

LP(a) Risk

TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical Lp(a) risk genetic results have variants associated with normal function and normal to lower Lp(a) levels. Follow-up blood testing is still suggested to confirm genetic results.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
HMGCR T*372C	rs12916	**TC**	**PCSK9 (T>C)**	rs11206510	**TT**
LDLR C81T	rs2228671	**CC**	**PCSK9 G137T**	rs11591147	**GG**

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
SORT1 (C>T)	rs646776	**TT**	**LDLR G67+2015T**	rs6511720	**GG**
SORT1 (G>A)	rs599839	**AA**	**APOC1 A*459G**	rs4420638	**AA**
ABCG8 G166-718T	rs4299376	**TT**	**LPL C1019-1582T**	rs285	**TC**
IL6/IL6-AS1 (G>C)	rs1800795	**CG**	**LPL C1421G**	rs328	**CC**
TNF G-308A	rs1800629	**GG**	**CETP g.C4402A**	rs1800775	**AC**
GCKR T1423-418C	rs780094	**TC**	**LIPC C-40-517T**	rs1800588	**TC**
ApoB A7545G	rs693	**AA**			

3 Hypertension

32 variants analyzed

In plain terms: This section investigates the role of genetics in the development of hypertension, a major risk factor for cardiovascular diseases. It focuses on identifying genetic variants that contribute to elevated blood pressure, providing insight into individual susceptibility to this condition.

Research has identified several genes that play significant roles in blood pressure regulation, such as those involved in the renin-angiotensin-aldosterone system (RAAS) and sodium balance. Variations in these genes can affect an individual's risk of developing hypertension by influencing vascular resistance and fluid retention.

This knowledge can guide preventive measures and lifestyle adjustments aimed at mitigating this risk, such as dietary modifications and physical activity. For individuals with hypertension, genetic insights can help tailor medication choices to achieve better blood pressure control with fewer side effects

YOUR RESULTS

Hypertension Propensity



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical hypertension propensity genetic results have an average genetic likelihood of developing high blood pressure. Limiting sodium, staying active, maintaining a healthy weight and checking blood pressure regularly help keep it in a healthy range.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
ACE G2328A	rs4343	**AA**	**PLEKHA7 C222-9539T**	rs381815	**CC**
ADD1 G1378T	rs4961	**TG**	**CSK C-66+2306A**	rs1378942	**AC**
CYP11B2 G-344A	rs1799998	**AG**	**ATXN2 C732-14033T**	rs653178	**TC**
DIO2 T274C	rs225014	**TT**	**CABCOCO1 C679-1106T**	rs1530440	**CC**
NOS3 T-786C	rs2070744	**TT**	**ZNF652-AS1 (A>G)**	rs16948048	**AG**
NOS3 G2984+15A	rs891512	**AG**	**ATP2B1 G-221-10702A**	rs17249754	**GG**
ADRB2 G46A	rs1042713	**AG**	**CACNB2 C168+36987G**	rs12258967	**CC**
AGTR1 A1166C	rs5186	**AA**	**MECOM T38-1574C**	rs419076	**TT**
MTHFR A359+160G	rs17367504	**AA**	**H4C3 / H1-6 (A>G)**	rs198846	**GG**
CNNM2 T*9241C	rs11191548	**TT**	**ZNF831 A-36-14922G**	rs6015450	**AA**
FGF5 g.A1600T	rs16998073	**TA**	**LINC02227 (C>T)**	rs9313772	**TT**
SLC39A8 C1171T	rs13107325	**TC**	**ARHGAP42 G154+34975C**	rs633185	**CC**
NT5C2 T-25+1773C	rs11191593	**TT**	**ADRB1 (C>T)**	rs2782980	**CC**
CYP17A1 A666+35G	rs1004467	**AA**	**NPR3 (A>G)**	rs1173771	**GG**
NPPA C94T	rs5063	**CC**	**SLC4A7 (T>C)**	rs13082711	**TC**
LTA A252G	rs909253	**AG**	**ULK3 / CPLX3 (A>C)**	rs6495122	**AC**

4 Thrombosis

14 variants analyzed

In plain terms: Thrombosis, the formation of a blood clot within a blood vessel, poses significant health risks, including stroke, deep vein thrombosis (DVT), and pulmonary embolism (PE). This section delves into the genetic factors influencing thrombosis susceptibility and outlines approaches to mitigate these risks through targeted interventions.

Several genetic variations have been identified as increasing the risk of thrombosis. Notably, mutations in the Factor V gene (such as Factor V Leiden) and the prothrombin gene (F2) significantly elevate the risk of developing blood clots. These genetic markers affect the blood's clotting mechanisms, leading to a hyper-coagulable state where clots are more likely to form.

While genetic predispositions play a critical role in thrombosis risk, lifestyle and environmental factors also significantly impact clot formation. Smoking, oral contraceptive use, prolonged immobility, and obesity are known risk factors that can exacerbate genetic risks. Addressing these modifiable factors is essential for comprehensive thrombosis prevention, particularly for those with genetic vulnerabilities.

YOUR RESULTS

Ischemic Stroke Propensity



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical ischemic stroke propensity genetic results have an average genetic likelihood of ischemic stroke, similar to the general population. Managing blood pressure, cholesterol and blood sugar, staying active and not smoking help keep this risk low.

YOUR RESULTS

Venous Thrombosis Propensity



SIGNIFICANTLY INCREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with significantly increased venous thrombosis propensity genetic results carry variants linked to a higher than average likelihood of blood clots in the veins. Staying active, avoiding long periods of sitting, staying hydrated on long trips and sharing this result with a healthcare provider before surgery or starting estrogen-containing medications can help manage this risk.

RECOMMENDATIONS

SUPPLEMENT

Vitamin E

200 to 400 IU daily

Inhibits platelet activation and acts as a mild anticoagulant; protects cells from oxidative damage.

SUPPLEMENT

Nattokinase

200 mg daily (2 capsules)

A fibrinolytic enzyme that may help break down fibrin, supporting normal clot breakdown and circulation. It can increase bleeding risk, so it should be reviewed with a healthcare provider first, especially alongside blood thinners or antiplatelet medicines, or before surgery.

DIET

Omega-3 Rich Foods

Fatty fish, walnuts, and flaxseeds reduce platelet aggregation and support healthy blood viscosity.

DIET

Stay Well Hydrated

Especially on long flights and drives

Dehydration thickens the blood and raises clot risk.

LIFESTYLE

Reduce Sedentary Behavior

Prolonged immobility is the primary modifiable VTE risk factor; move at least every hour.

LIFESTYLE

Compression Stockings (high risk)

Recommended during long travel or prolonged immobility to reduce venous stasis and DVT risk.

FURTHER TESTING

D-Dimer

Sensitive marker for active clotting; elevated levels warrant imaging and further evaluation.

FURTHER TESTING

Homocysteine

Elevated levels damage vascular endothelium and promote a pro-thrombotic state.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
COMT C186T	rs4633	**CT**	**ABO T921G**	rs495828	**TG**
COMT G597A	rs769224	**GG**	**SERPINC1 C5301T**	rs2227589	**CC**
F5 C1601T	rs6025	**CC**	**ABO (insC)**	rs8176719	**DI**
F2 G*97A	rs1799963	**GG**	**COMT G472A**	rs4680	**GA**
4q25-1	rs2200733	**CC**	**F11 C1481-188T**	rs2289252	**CC**
4q25-2	rs10033464	**GG**	**PROCR A655G**	rs867186	**AA**
GP6 G665A	rs1613662	**AG**	**PTGS2 C872G**	rs20417	**CC**

5 Plant Cholesterol

8 variants analyzed

In plain terms: Plant sterols, also known as phytosterols, are natural compounds found in various plant-based foods. They have gained attention for their potential to lower cholesterol levels and reduce the risk of heart disease. This section explores the genetic propensities for responding to plant sterol consumption, providing insights into how the body may benefit from including these compounds in the diet.

Plant sterols have a structural similarity to cholesterol and compete with cholesterol for absorption in the digestive tract. This competition can lead to reduced cholesterol absorption, resulting in lower blood cholesterol levels. As a result, plant sterols have been incorporated into various functional foods and dietary supplements for their potential heart health benefits.

Genetic variations can influence how effectively the body responds to plant sterol consumption. Some individuals may have a genetic predisposition for a higher benefit from plant sterols, experiencing a more significant reduction in cholesterol levels in response to their consumption. For these individuals, adding plant sterol-rich foods to their diet may result in a more pronounced improvement in heart health markers.

On the other hand, some individuals may have a genetic propensity for a increased absorption of plant sterols. In these cases, bloodwork may be desirable to confirm findings and determine the ideal recommendations.

However, it's essential to note that plant sterols are just one component of a heart-healthy diet, and lifestyle factors like overall dietary quality, physical activity, and weight management also contribute to cardiovascular health.

YOUR RESULTS

Plant Sterol Risk



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical plant sterol absorption genetic results have a standard risk profile with plant sterol supplementation. Plant sterols may provide modest cholesterol-lowering benefits, particularly in individuals with elevated cholesterol levels, and work best alongside a balanced diet and regular physical activity.

YOUR RESULTS

Plant Sterol Benefit



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical plant sterol benefit genetic results may benefit from a modest reduction in blood triglycerides and cholesterol with plant sterol supplementation. Plant sterols work best as part of a heart-health plan that includes a balanced diet and regular activity.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
ABCG8 T322+206C	rs41360247	**TT**	**ABCG8 G166-718T**	rs4299376	**TT**
ABCG8 C322+981T	rs4245791	**TT**	**ABCG8 C1199A**	rs4148217	**AA**
ABCG5 G1810C	rs6720173	**GG**	**CETP G1264A**	rs5882	**AG**
ABCG8 G55C	rs11887534	**GG**	**CYP7A1 g.G2020T**	rs3808607	**TG**

APPENDIX A

Supplement Recommendations

Based on your results

Supplements listed below are recommended for panels where at least one result was outside the typical range.

SUPPLEMENT	RATIONALE	PANEL
Vitamin E 200 to 400 IU daily	Inhibits platelet activation and acts as a mild anticoagulant; protects cells from oxidative damage.	Thrombosis
Nattokinase 200 mg daily (2 capsules)	May help break down fibrin and support normal clot breakdown; can increase bleeding risk, so it needs provider review, especially with blood thinners.	Thrombosis

APPENDIX B

Further Testing Recommendations

Based on your results

Lab tests and assessments recommended for panels where at least one result was outside the typical range.

TEST / ASSESSMENT	CLINICAL RATIONALE	PANEL
D-Dimer	Sensitive marker for active clotting; elevated levels warrant imaging and further evaluation.	Thrombosis
Homocysteine	Elevated levels damage vascular endothelium and promote a pro-thrombotic state.	Thrombosis