



PREVENTION **REQUIRES** KNOWLEDGE

easyDNA

This report was prepared for

Example Data

Genetic Predisposition Report

The data presented in this report assumes*;

Gender: Male

Ethnicity: European

Customer ID: Example Data

* If the data assumed is incorrect, please contact the provider of your test to have it changed.

English (US)

CR-001

November 27, 2009, 11:38 am

Before looking at your results

Scope of the genetic test

The purpose of this molecular genetic test is to ascertain if you or the person being tested is carrying mutation(s) predisposing you to or causing the specific diseases or conditions covered by the test. It is important to understand that due to the complexity of DNA based testing and the important implications of the test results, you may want to consult your physician or a genetic counselor. This report is provided to you for informational and educational purposes, and it does not replace a visit to a physician, nor does it replace the advice or services of a physician.

Nature of the genetic test

The molecular genetic test is based on the study of SNP (Single Nucleotide Polymorphisms) which are genetic sites that vary between individuals with an incidence equal to or higher than 1%. Since this technique looks at the sites that differ most from one individual to another, this test is very successful at identifying DNA markers associated with diseases or conditions. Techniques based on SNP provide information about the most common variation in the human genome for research - and you - to study. It is still important to keep in mind that rare variations that affect certain diseases may not be covered by a SNP test as they still have not been discovered, or because their incidence is very low.

Limits of the genetic test

The information presented in this report is based on the latest scientific research. The diseases that are included in this report have generally been replicated in more than one important ethnic group. This yields a lot of confidence to the results that are reported. However, we cannot exclude the possibility that future research may improve upon the accuracy of the results. It is also important to note that not all disease associations have been reported for all ethnic groups and for this reason, genetic research is not comprehensive. When a disease association for your ethnicity has not yet been reported, the closest ethnicity can be used to generate the part of the report covering said disease association; in which case it will be mentioned in the report which ethnicity is assumed for each disease covered. A genetic test based on SNP cannot reveal large microsatellite genome rearrangement, insertion/deletion events or copy number variations.

How to interpret your results

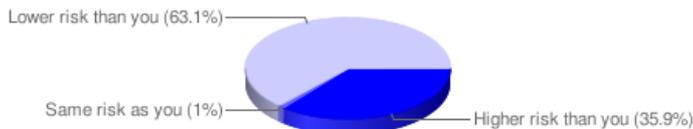
Example & common questions

The information for each condition is presented in four sections. Let us take the example of **Aneurysm** to illustrate how the report should be read.



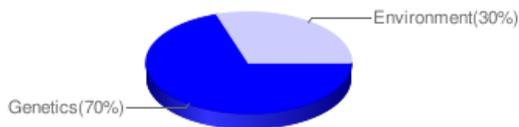
Question: How do I make sense of my results for "aneurysm?"

Your risks are presented to you in the form of estimated lifetime risk. It is important to compare this value to the average lifetime risk. Your risk level can be high, medium or low. The box to the left indicates that your estimated lifetime risk, based on the markers that we tested, is 26.8% which compares to 17%, the average lifetime risk for a male.



Question: Is there another way to look at my results?

Yes; in a sample population, we estimate that 35.9% will have a higher chance you will develop "aneurysm" and that 63.1% have a lower risk than you. The results of this graph are based on the human hapmap project and epidemiological studies of disease incidence.



Question: Does this mean I will definitely develop "aneurysm?"

The environment always plays a role. Your risks may be higher than the general population, but it does not mean that you will definitely develop the condition because both your genes as well as your environment play a part. In fact, for aneurysm, the environment is responsible for 30% of the risks, while your genes account for 70% of the risks.

Question: How does your test determine my risks?

Marker	Locus	Your genotype	Relative Risk	Genotype frequency
rs10958409	intergenic	AG	1.22	0.2688
rs1333040	intergenic	TT	1.23	0.3136
rs700651	BOLL	GA	1.05	0.42

We look at segments of your DNA where one-allele difference modifies your odds of developing aneurysm. At the location(s) displayed to the left, your genotype indicates the DNA that you inherited from both of your parents. Each letter corresponds to a different parent. Certain letters are associated with a higher risk. Your risk will reflect the number of risk allele copies that are present in your genotype for each marker.

Example & common questions (cont'd)

Question: What should I do next?

First, we recommend that you bring this report to your doctor. Your doctor will be able to do an initial assessment of symptoms and determine if you have this condition or if it has not yet developed. We encourage you to contact us for any technical questions you may have or to instruct your doctor to contact the distributor you bought your test from.

Question: Why is the condition not reported for my ethnicity?



It requires quite a lot of data to be able to estimate a lifetime risk for a condition. First, the data about the incidence of the disease for both genders of the ethnic group must be available. Second, genetic twin studies to determine the contribution of the environment to the disease must also have been reported for the ethnic group. Finally, each SNP that is tested for must have been successfully reported for - again - the same ethnic group.

This high requirement on research data has the consequence that the lifetime risk cannot be explicitly given for all ethnic groups because the required data may not yet be available. However, the SNP that we report here have generally been replicated in multiple different ethnic groups (e.g. European, Japanese, African) and are therefore believed to be independent of ethnicity.

Summary of your results

The condensed view of your results is presented here. More details about each condition are presented in the following pages, sorted alphabetically. The genetic risk scoring/relative risk calculation methods used to calculate your results were developed and their performance characteristics determined by the use of standard practices. Based on your DNA and the conditions covered by this test, the following is your summary of results.

Name of the condition	Your lifetime risk	The normal risk	Your genetic risk level
	High genetic risk level		
Aneurysm	26.8%	17%	high
Atrial fibrillation	30.7%	25%	high
Coronary heart disease	74.2%	49%	high
Lung cancer	34.9%	17.2%	high
Peripheral vascular disease	20.4%	14.5%	high
	Medium genetic risk level		
Migraine	23.2%	20%	medium
Obesity	25%	25%	medium
Osteoarthritis	40.9%	43%	medium
Prostate cancer	10.5%	16%	medium
Skin cancer	31.2%	35%	medium
Type 2 diabetes	21.4%	24%	medium
Venous thromboembolism	23.3%	25%	medium
	Low genetic risk level		
Age related macular degeneration	6.8%	8%	low
Alzheimer disease	3.3%	6%	low
Bladder cancer	4.6%	4.1%	low
Breast cancer	0.4%	0.4%	low
Celiac disease	0.7%	1%	low
Colorectal cancer	5.4%	6%	low
Gastric cancer	2%	2.3%	low
Graves disease	0.2%	1%	low
Lupus	0.2%	0.25%	low
Multiple sclerosis	0.4%	0.2%	low
Psoriasis	2.3%	11.4%	low
Rheumatoid arthritis	0.6%	1%	low
Type 1 diabetes	1.3%	1%	low

Source : Example Data

Age related macular degeneration

Macular degeneration is a medical condition that usually occurs in older adults which results in a loss of vision in the center of the visual field because of damage to the retina. It occurs in dry and wet forms. It is a major cause of blindness in the elderly.



Understand your risks low

Your genetic predisposition towards this disease is low. Note that for your risk to be considered low, this requirement must be met: All conditions with a lifetime risk lower than 7% are included, except for those that are already considered of high or medium risk.

Ethnicity  Gender 
European Male

Your estimated lifetime risk

Individuals with your genetic variants are estimated to develop this condition in **6.8 out of every 100** person. These results indicate your odds of developing this condition.

6.8%

The average lifetime risk

Individuals from the average population are estimated to develop this condition in **8 out of every 100** person. These results apply to an average sample of European ancestry.

8%

Summary of your genetic results

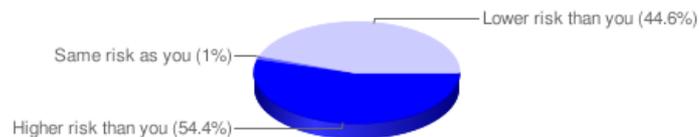
To evaluate your risks, we looked at the following markers in your DNA. The column named "Relative risk" indicates the individual contribution of each marker to your lifetime risk. If the relative risk is higher than 1, then the genetic marker increases your risk of developing this condition.

Marker	Locus	Your genotype	Relative Risk	Genotype frequency
rs800292	C2	CC	0.67	0.6084
rs1061170	CFH	CT	1.26	0.4032

Source : Example Data

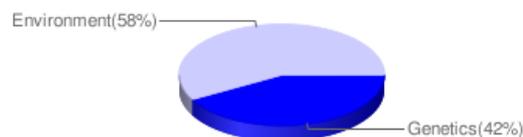
Your risks compared to a similar group of individuals

Here is another way of interpreting your results. The information that we use for this comparison comes in part from the international HapMap Project, the largest publicly available database of human genome variation, and in part from the Center for Disease Control and Prevention.



Factors responsible for Age related macular degeneration

Although your risks of developing this condition may seem high to you, keep in mind that your environment is a significantly responsible factor as well. This gives you a degree of control over your odds.



Alzheimer's disease

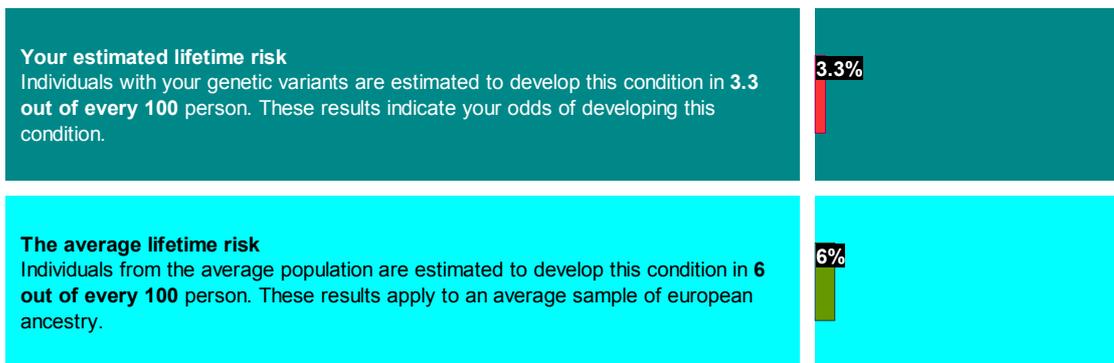
Alzheimer's disease is the most common form of dementia. It is incurable, degenerative, and terminal. Generally, it is diagnosed in people over 65 years of age, although the less-prevalent early-onset Alzheimer's can occur much earlier.



Understand your risks low

Your genetic predisposition towards this disease is low. Note that for your risk to be considered low, this requirement must be met: All conditions with a lifetime risk lower than 7% are included, except for those that are already considered of high or medium risk.

Ethnicity  Gender 
European Male



Summary of your genetic results

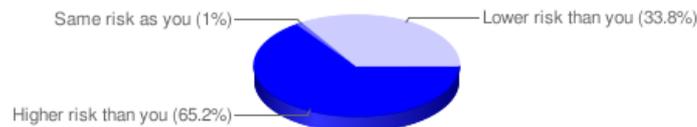
To evaluate your risks, we looked at the following markers in your DNA. The column named "Relative risk" indicates the individual contribution of each marker to your lifetime risk. If the relative risk is higher than 1, then the genetic marker increases your risk of developing this condition.

Marker	Locus	Your genotype	Relative Risk	Genotype frequency
rs4420638	APOC1	AA	0.57	0.6724
rs429358	ApoE	TT	0.96	0.9794

Source : Example Data

Your risks compared to a similar group of individuals

Here is another way of interpreting your results. The information that we use for this comparison comes in part from the international HapMap Project, the largest publicly available database of human genome variation, and in part from the Center for Disease Control and Prevention.



Factors responsible for Alzheimer disease

Although your risks of developing this condition may seem high to you, keep in mind that your environment is a significantly responsible factor as well. This gives you a degree of control over your odds.

