my GeneticRisk

Genetic test to assess the risk for common diseases

Veritas

a LetsGetChecked company

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What is myGeneticRisk?

myGeneticRisk is the preventive genetic test to determine the hereditary risk of cardiovascular disease and cancer, the most common conditions worldwide. Knowing the predisposition to these diseases **allows the specialist to establish medical management strategies to prevent them or detect them in early stages**, when treatment is typically more effective.

Who is it intended for?

The test is indicated for adults who are proactive in their healthcare.

Why is it important?

5-20%

Between **5-20%**[1] of cancer cases are hereditary in origin, the percentage varies depending on the type of cancer.

30%

About **30%**[2] of sudden deaths are due to genetic abnormalities related to the structure of the heart muscle or heart rhythm.

5.4%

More than **5%**[3] of people have a variant in genes recommended to be analysed by international genetics societies (ACMG), as they are related to actionable diseases.

**American College of Medical Genetics and Genomics*

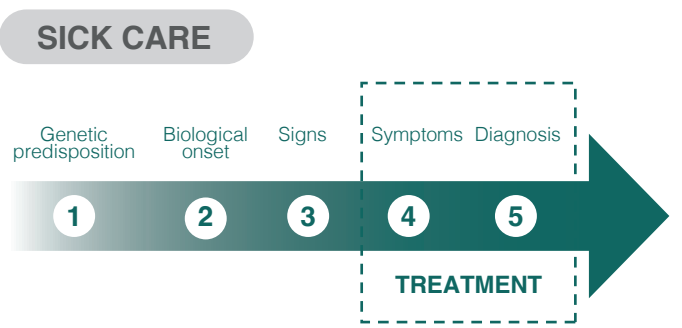
75% [4] of people with a risk variant related to cancer or familial hypercholesterolemia do not have a known family history.

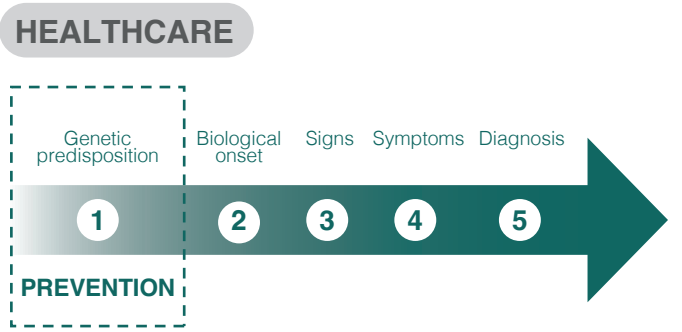
What are the advantages of the test?

- **It is carried out once in a lifetime** and allows preventive medicine strategies to be established.
- **Based on Whole Exome Sequencing (WES), myGeneticRisk analised 162 genes related to hereditary risk of cancer and cardiovascular disease**, including the genes recommended by the ACMG related to actionable diseases.
- If a variant is detected, it can be used **to screen family members who may be at risk.**
- Veritas provides a **differential service offering counselling** to the physician or the patient for result interpretation, when needed.

Why is genetic information key?
The new era of preventive medicine

The incorporation of genetic information into patient care and health check-ups provides key information before the onset of disease symptoms, allowing a truly preventive approach moving from "sick care" to "healthcare".





Which genes are included?

100 Genes related to inherited cardiovascular disease

- Cardiomyopathies
- Arrhythmias
- RASopathies
- Syndromes with vascular involvement
- Other syndromes linked to cardiac pathology
- Familial hypercholesterolemia

ABCC9	*CACNA1C*	*CSRP3*	*FHL1*	*KCNE1*	*LIPA*	*MYLK*	*PRKG1*	*SLC2A10*	*TGFBR2*
ABCG5	*CALM1*	*DES*	*FKTN*	*KCNE2*	*LMNA*	*NEXN*	*PTPN11*	*SMAD3*	*TMEM43*
ABCG8	*CALM2*	*DSC2*	*FLNA*	*KCNH2*	*LOX*	*NF1*	*RAF1*	*SMAD4*	*TNNC1*
ACTA2	*CALM3*	*DSG2*	*FLNC*	*KCNJ2*	*MAP2K1*	*NOTCH1*	*RBM20*	*SOS1*	*TNNI3*
ACTC1	*CASQ2*	*DSP*	*FXN*	*KCNQ1*	*MAP2K2*	*NRAS*	*RIT1*	*SOS2*	*TNNT2*
ACTN2	*CAV3*	*EFEMP2*	*GAA*	*KRAS*	*MYBPC3*	*PCSK9*	*RYR2*	*TAZ*	*TPM1*
APOB	*CBL*	*ELN*	*GLA*	*LAMP2*	*MYH11*	*PKP2*	*SCN5A*	*TCAP*	*TRDN*
APOE	*COL3A1*	*EMD*	*HRAS*	*LDB3*	*MYH7*	*PLN*	*SHOC2*	*TGFB2*	*TTN*
BAG3	*COX15*	*FBN1*	*JPH2*	*LDLR*	*MYL2*	*PPP1CB*	*SKI*	*TGFB3*	*TTR*
BRAF	*CRYAB*	*FBN2*	*JUP*	*LDLRAP1*	*MYL3*	*PRKAG2*	*SLC25A4*	*TGFBR1*	*VCL*

40 Genes related to the most frequent hereditary cancers

- Breast cancer
- Gynaecological
- Prostate cancer
- Colorectal cancer
- Gastric cancer
- Pancreatic cancer
- Skin cancer

*APC**	*ATM**	*AXIN2*	*BAP1*	*BARD1*	*BMPR1A*	*BRCA1**	*BRCA2**	*BRIP1*	*CDH1*
CDK4	*CDKN2A*	*CHEK2**	*EPCAM**	*FLCN*	*GREM1**	*HOXB13*	*MITF*	*MLH1**	*MLH3*
*MSH2**	*MSH3*	*MSH6**	*MUTYH*	*NBN*	*NF1*	*NTHL1*	*PALB2**	*PMS2**	*POLD1*
POLE	*POT1*	*PTCH1*	*PTEN**	*RAD51C*	*RAD51D*	*SMAD4*	*STK11**	*SUFU*	*TP53**

* Genes including analysis of copy number variations.

Other genes recommended by the ACMG [5]

myGeneticRisk includes the analysis of a heterogeneous group of actionable diseases such as haemochromatosis, malignant hyperthermia or Maturity Onset Diabetes of the Young (MODY).

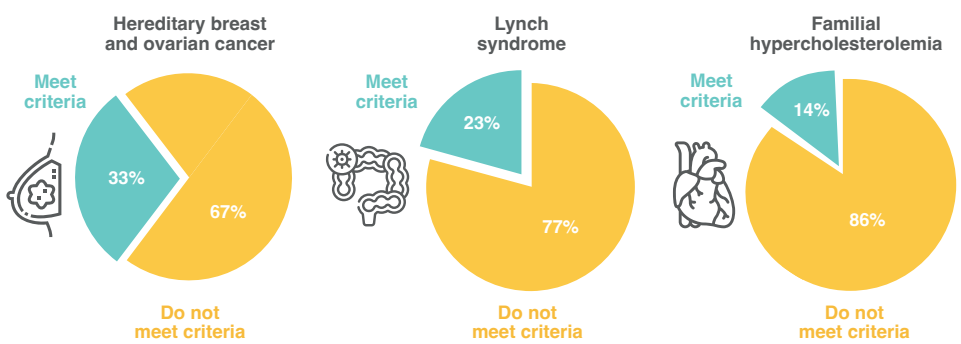
ACVRL1	*ATP7B*	*BTD*	*CACNA1S*	*ENG*	*HFE*	*HNF1A*	*MAX*
MEN1	*NF2*	*OTC*	*RB1*	*RET*	*RPE65*	*RYR1*	*SDHAF2*
SDHB	*SDHC*	*SDHD*	*TMEM127*	*TSC1*	*TSC2*	*VHL*	*WT1*

Actionable disease: a medical approach exists to prevent its development or detect it early.

Opportunistic screening for common inherited diseases:
why family history is not enough

Recent studies show that the current elegibility criteria to use genetic testing for cardiovascular and cancer risk screening exclude a significant percentage of the population with risk variants.[4]

The graphs show the total number of people in the study who have mutations related to a certain pathology. The percentage of them who meet the criteria for genetic testing is indicated.



Grzymski JJ, et al. Population genetic screening efficiently identifies carriers of autosomal dominant diseases. Nat Med 2020;26:1235-1239.

References

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3. Internal data
4. Grzymski JJ, et al. Population genetic screening efficiently identifies carriers of autosomal dominant diseases. Nat Med. 2020;26(8):1235-1239.
5. Miller DT, et al. ACMG SF v3.0 list for reporting of secondary findings in clinical exome and genome sequencing: a policy statement of the American College of Medical Genetics and Genomics (ACMG). Genet Med. 2021 Aug;23(8):1381-1390.

Veritas was founded in 2018 by Dr. Luis Izquierdo, Dr. Vincenzo Cirigliano and Javier de Echevarría, who accumulate extensive experience in the field of genetics, diagnostics and biotechnology. Initially linked to Veritas Genetics, a company founded in 2014 by Prof. George Church, one of the pioneers in preventive medicine, Veritas was born with the aim of making genome sequencing and its clinical interpretation available to all citizens as a tool to prevent diseases and improve health and quality of life.

Since its inception, Veritas has led the activity and development of the Veritas market outside the US, with the goal of turning genomics into a daily instrument at the service of people's well-being.

In March 2022 Veritas announces that it will become part of LetsGetChecked, a global healthcare solutions company based in Dublin and New York.

Veritas

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