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G-Immunity

Understand Your Immunity System

Explore Your Genes
Define Your Future

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FOR

User	**Lương Linh San**
DOB	09 January 2025
Gender	F

TEST INFO

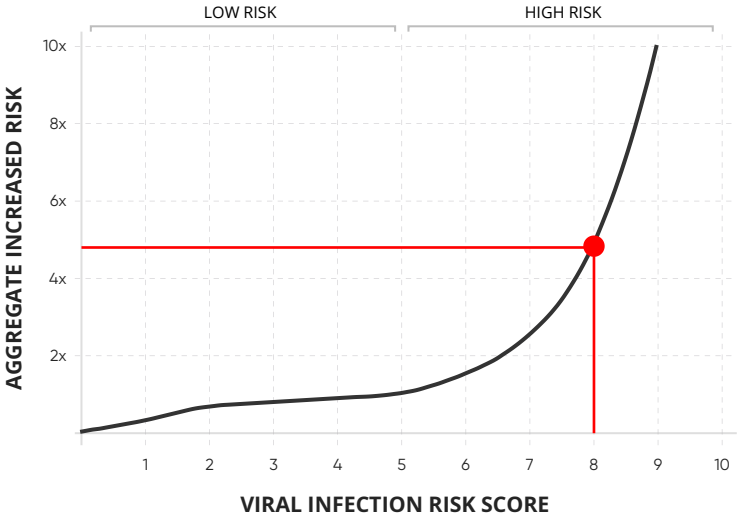
Genetica ID	56002107306279
Specimen	Saliva
Received	N/A
Physician	Ha Thi My Hanh M.D.

RESULT

■ **VIRAL INFECTION RISK SCORE**: 8/10

■ **RISK ESTIMATE**: Your immunity genes put you at risk of influenza and SARS-CoV infection. When infected, you might also develop severe inflammatory lung injuries (ARDS). ARDS is the leading cause of dead for viral infections.

Type	Status	Increased risk
Influenza	High	4.4x
SARS-CoV	Medium	2.4x
Acute respiratory distress syndrome	Medium	1.55x



■ 85 variants associated with viral infection were found in the individual's genome. Among them are:

- 3 protective variants
- 10 increased risk variants
- 0 pathogenic variants

Gene	Location	Value	Effect	Status	Impact
CPT2	53210729	**TG** NC_000001.11:g.53210729	High	Increased Risk	May have a higher risk of high fever in response to a flu infection
CD55	207321071	**TT** NC_000001.11:g.207321071	High	Increased Risk	Higher risk of H1N1 flu, linked to immune system protein suppression gene
MBL2	52771475	**TC** NC_000010.11:g.52771475	High	Increased Risk	May have an increased susceptibility to SARS, linked to a virus-tagging protein.
CD209	7747847	**AA** NC_000019.10:g.7747847	Medium	Increased Risk	Possibly poorer clinical outcome if affected by SARS-CoV virus
AGER	32183666	**TC** NC_000006.12:g.32183666	High	Protective	Potentially lower risk of developing ARDS thanks to a mediator gene of vascular inflammation
LRRC16A	25426540	**AG** NC_000006.12:g.25426540	High	Protective	Associated with favorable survival if admitted to ICU (correlating with less platelet decline)

(To view the full list of 85 variants associated with viral infection, download the Genetica mobile app from App Store or Google Play.)

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PATHOGENIC MUTATION

- NEGATIVE: 0 pathogenic mutations detected in the individual's genome.

NOTE: Having 0 pathogenic mutations does NOT mean the individual is not at risk of viral infection. Environmental factors, as well as other nonpathogenic genetic variants, also affect a person's risk of viral infection.

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INTERPRETATION

You have a harmful change in your CPT2 gene. This change is found in people who experience higher risk of running a very high fever in response to the flu.

- A fever is your body's way of defending itself. It's a normal response to infection. The purpose of the fever is to help your body kill as many flu virus particles as possible. However, a very high fever can damage your body in some cases.
- We have found that you have a harmful genetic change in your CPT2 gene, one that's associated with a higher risk of having a high fever in response to a flu infection.
- The best way to minimize this risk is to avoid getting the flu in the first place. Talk to your doctor about getting a seasonal flu vaccine. The flu virus mutates (changes) every year, therefore you'll need a new vaccine shot when a flu season starts.

You have a mutation in the CD55, immune system suppression, gene that's linked to a higher risk of severe infection with influenza H1N1.

- The CD55 gene tells your body to create a sugar-protein molecule. This molecule suppresses the function of immune system proteins called complements.
- You have a mutation in this gene. This mutation is associated with an increased risk of having a severe infection of influenza A (H1N1) that was seen in the 2009 pandemic. This mutation may also raise some people's risk of death as a result of this virus.
- H1N1 is now a regular, seasonal, flu in many places around the world. The best thing a person can do to help minimize the risk of a severe infection is to get the yearly flu vaccine.

Your copy of the MBL2, "virus tagging protein", gene is linked to a greater susceptibility to SARS-CoV. This is a type of virus that leads to a severe respiratory infection.

- The MBL2 gene instructs the body to make proteins that assemble into larger protein structures called mannose-binding lectins (MBLs). Essentially, MBLs attach to viruses and serve as "beacons". White blood cells use these beacons to find and destroy the viruses in your body.
- During the SARS-CoV-1 pandemic, people who carry your version of this gene were shown to have greater susceptibility to corona virus. They were listed as high-susceptibility group who would be the first to get the vaccine when it was available. In addition, the people in this group were highly recommended to wear a surgical mask when they went out in public.

The CD209 gene helps the body detect and destroy viruses. Your version of this gene is seen in some people who may have 60% higher chance to get a poorer prognosis if infected with SARS-CoV virus.

- CD209 can be thought of as a "virus sensing gene". It codes for a receptor that is found on certain white blood cells. These white blood cells use this receptor as a sensor to find and destroy viruses before they cause a more serious infection.
- Your version of this gene may increase disease severity in people affected by SARS-CoV-1 virus, probably related to tissue destruction from immune hyperactivity. Given this, be careful if an epidemic occurs in your area and talk to a doctor about getting a vaccine (if available) and take higher levels of protection for yourself.

You may have a lower risk of developing an inflammatory lung condition, partially due to your version of the AGER gene.

- The AGER gene codes for a receptor that may bind to molecules involved in inflammation. It also works on cell membrane, as a mediator of both acute and chronic vascular inflammation.
- Your copy of the AGER gene is associated with a lower risk of developing ARDS in people who are admitted to ICU due to respiratory infection.
- Nevertheless, you still need to take precautions that prevent the many causes of ARDS, including respiratory viruses like the flu and coronavirus.

The LRRC16A gene influences platelets for ARDS patients after ICU admission. Your version of this gene is associated with a lower mortality risk by attenuating platelet count decline.

- Platelets are small, cell-like structures, which help your blood clot. Platelets may also contribute to the development of acute respiratory distress syndrome (ARDS), as well as a person's prognosis in this condition.
- You have a beneficial version of the LRRC16A gene that acts as a platelet activator. It helps to slow down platelet decline, leading to a favorable prognosis.
- Please note that functional studies are needed to evaluate the mechanisms that underlie the associations between LRRC16A genetic variants and ARDS outcome and the mediating pathway through platelets. Therefore, you must strictly follow doctor's instructions in case you develop acute respiratory distress syndrome (ARDS).

GENES ANALYZED

32 genes associated with viral infection were analyzed.

ACE2, CLEC5A, TNF, MICB, CD209, IFITM3, IL1B, IL6, CPT2, TLR3, RANBP2, IL1A, MXA, AHSG, TLR4, CD55, LGALS1, FCGR2A, FUT2, SFTPA2, SLFN13, RIG-I, OAS1, CCL2, MBL2, FGL2, CDHR3, ITGA2, MSR1, GSTM3, IFIH1, MDA-5.

ELECTRONICALLY SIGNED BY

Duyen Bui, PhD, CSO
on 17 February 2025 at 06:27:34

FACT SHEET: PROTECT YOURSELF AGAINST VIRAL INFECTION

How to Protect Yourself Right Now[1-5]

Generally, you can significantly reduce the risk of contracting many respiratory viruses with the following measures:

1. Get vaccinated.

- When available, a vaccine is one of the most important steps to protecting yourself from a respiratory virus, like the flu. Talk to your doctor about making sure you're up to date on all of the vaccines available to you.

2. Avoid close contact with sick individuals, if you can.

- If you must speak with a person who is sick, maintain a distance of at least 2 meters away from them.
- Stay away from public gatherings, like restaurants or concerts, during an outbreak of a respiratory virus.

3. If you must be around a sick person, such as a family member, ask them to wear a surgical mask to help minimize the spread of respiratory secretions.

- For added protection, wear a surgical mask yourself.

4. Do not touch your mouth, nose, or eyes with dirty hands as this increases the odds a virus can infect you.

5. Clean and disinfect surfaces and objects in order to wash away, or kill, viruses that may have contaminated them.

- This includes utensils, doorknobs, countertops, phones, keyboards, toys, remote controls, and railings.
- Soap and water are enough to clean away many common respiratory viruses.

6. Wash your hands with soap and water for at least 20 seconds after touching any dirty or questionable surfaces or objects.

- If no soap and water is available, you can use an alcohol-based hand rub that is at least 60% alcohol.

7. Purchase an air-filter rated for virus particles in order to help clean the air in your home, the room you spend most of your time in, or the room a sick family member spends most of their time in.

Please note: generally, each of the measures above only offers an incremental benefit. Therefore, it's best to use as many of the preventative measures above as possible, simultaneously so.

For Enhanced Protection: Get the Best Mask & Wear it Correctly[6-16]

Most common masks do not offer 100% protection from respiratory viruses.

Surgical masks, dust masks, bandanas, and paper masks can help minimize the distance with which the virus can spread due to a cough or sneeze. They can also reduce the spread of large, virus-containing, droplets. Such masks can also stop you from accidentally touching your mouth and nose with dirty hands, minimizing the transmission of virus particles in that manner.

Therefore, surgical masks sold in many stores are an important preventative measure in many cases. However, these common face masks cannot fully prevent the spread of very fine (small), virus-containing, droplets. Furthermore, common surgical masks do not offer a complete seal around your face. This means you may breathe in the surrounding air through the unprotected sides of the mask.

For potentially enhanced protection in select cases, seek out a P100 (disposable particulate) respirator. A P100 respirator is a

mask-like piece of equipment. When properly worn, it offers a complete seal around your mouth and nose and is able to filter out 99.97% of very small particles of air, including many nanoparticles.

Such a respirator offers protection against the SARS-CoV-1 virus as well.

Moreover, unlike many common face masks or even N95 respirators, a P100 respirator will continue to properly work in locations with a lot of oil-based pollutants in the air.

The P100 respirator should be certified by an organization called NIOSH, or a similar government agency.

To work correctly, the P100 respirator must be properly worn:

- The top strap should go above your ears, around your head.
- The bottom strap should go below your ears, around your neck.
- Do not cross the straps over one another. Do not use only one strap. Do not use respirators with ear loops.
- If present, the metal or plastic strip on the respirator should be fitted around the top of your nose.
- Long hair should be kept out of the way of the respirator.
- For men: facial hair should be shaved off.
- The respirator's straps should be tightened until the point where the respirator forms a complete seal around your face. You will see the respirator move in and out with every breath when this happens and you will no longer hear nor feel any air escaping out of the sides of the respirator when you breathe.
- Remove the respirator by using the straps. Do not touch the respirator itself. Wash your hands after removing the respirator.
- Do not share your respirator with anyone else.
- Maintain and replace the respirator as necessary.

Important: an improperly worn respirator or surgical mask won't be able to adequately protect you from infection. Some people may find respirators uncomfortable or too expensive. In such instances, a comfortable, cheaper, and properly worn surgical mask may be more effective than an improperly fitted or improperly worn or maintained respirator.

Take Proper Care of Your Animals[17-21]

Some respiratory viruses, including a few flu and coronaviruses, can spread from animals to people. This is extremely rare but it is possible in select cases. Groups of people most at risk of being affected by a zoonotic virus include the very young (<5 years old), old (≥65 years old), those with a weak immune system, or pregnant individuals.

Zoonotic viruses are those that can jump from animals to humans.

To minimize this risk, keep all of your pets (including exotic or wild ones) as healthy as possible. A veterinarian needs to vaccinate them against as many diseases as possible. These vaccines must be kept up to date.

If you ever see that your pet is sick, bring them to a veterinarian right away. Your pet's veterinarian will advise you on what you need to do in order to protect yourself and your children if your pet dog or cat is sick with a potentially zoonotic disease.

If you have a farm stocked with animals, a veterinarian needs to ensure they are vaccinated and healthy as well. Furthermore, you need to ensure your farm has proper biosecurity protocols put into place in order to minimize the risk of the development and/or transmission of zoonotic viruses like influenza and coronavirus.

For example, swine and poultry should never be kept in close quarters around people, as this increases the risk of zoonotic

disease, like influenza.

Given your genetics, **you should avoid visiting places that disregard biosecurity measures such as these.**

Pay Attention to Where You Work or Travel[22-29]

Studies have shown that people who work with poultry may be exposed to avian influenza viruses. Direct transmission of influenza from birds to humans may be rare, but possible.

Therefore, you may need to be careful of working in, or being around, the following places:

- Live bird markets
- Poultry farms
- Any location that slaughters poultry
- Any location that defeathers poultry

If you must work with poultry or visit these places, you should wear personal protective equipment (PPE) when doing so. This PPE includes, but isn't limited to:

- Disposable gloves, or heavy duty reusable gloves that can be disinfected.
- Disposable or easily disinfected outer garments, aprons, or coveralls that are ideally impermeable, lightweight, and breathable.
- Boots that can be disinfected, or disposable boot covers.
- Disposable head or hair covers.
- Safety goggles. Since you are at potentially higher risk of infection with influenza, unvented safety goggles may provide superior protection for you.
- At minimum, an N-95 respirator certified by NIOSH or a similar agency.

Like many flu viruses, some coronaviruses can be transmitted from animals to humans. Coronaviruses might infect people in animal markets. You should avoid visiting these places.

ACUTE RESPIRATORY DISTRESS SYNDROME

What is ARDS?[30-36]

ARDS stands for acute respiratory distress syndrome, a severe and inflammatory form of lung injury.

ARDS is not a disease. Rather, ARDS is a collection of specific signs and symptoms that occur around the same time as a result of one of numerous possible causes.

The possible causes of ARDS include, but aren't limited to, the following:

- Sepsis, an overwhelming immune response to an infection in the body.
  - This is the most common cause of ARDS in adults.
- Infectious pneumonia, including viral pneumonia.
  - This is another common cause of ARDS.
- Aspiration pneumonia, the inhalation of food or liquid into the lungs.
- Severe physical trauma, like that caused by a car accident.
- Inhalation injuries, like smoke inhalation.

The signs and symptoms of ARDS typically begin about 6-72 hours (and up to a week) after the initial cause. About 50% of patients develop ARDS within 24 hours of the initial cause. This percentage increases to 85% by 72 hours.

The early signs and symptoms of ARDS include the following:

- Difficulty breathing, shortness of breath, as well as fast and shallow breathing.
  - These progressively worsen as time goes on.
- A lack of oxygen within the body, which may present itself outwardly as the bluing of the lips and nails.
- A rapid heart rate.

Other signs and symptoms, such as abnormal lung sounds, abnormal x-rays of the chest, and those particular to the initial cause, can be diagnosed by a doctor.

- For example: if ARDS is caused by infectious pneumonia, a productive ("wet") cough and fever may be evident.

The doctor may also run multiple tests in order to rule out medical conditions whose signs and symptoms may overlap with ARDS.

- For example: acute cardiogenic pulmonary edema, where an increased pressure on the heart leads to an excess of fluid in the lungs.

Regardless of the initial cause, ARDS is a very serious medical condition. In Vietnam, around 57% of patients diagnosed with this syndrome may not survive.

Viruses & ARDS[37-40]

About 27% of adults with pneumonia, a common cause of ARDS, have viral pneumonia. Moreover, viral pneumonia is diagnosed in roughly 20-40% of patients with pneumonia who are admitted into the ICU (intensive care unit). Influenza and rhinoviruses

(common cold viruses) are some of the most commonly identified viruses in these cases. This means that respiratory viruses either directly cause, or play an important role in predisposing a person to, ARDS.

In Vietnam, a 2004 review of case histories showed that viral pneumonia can have serious consequences. In this review, 10 otherwise healthy patients who presented to hospitals in Hanoi and Ho Chi Minh City were diagnosed with influenza A (H5N1). 9 of the patients went on to develop severe respiratory failure and 8 of these patients passed away.

Another review in 2009 examined 37 cases of influenza A (H5N1) in Vietnamese children in Hanoi. This review described how children with influenza who develop ARDS are far more likely to perish than Vietnamese children with ARDS who do not have influenza (17% vs. 52% chance of survival, respectively).

Although flu and cold viruses appear to account for most cases of viral pneumonia and subsequent ARDS, coronaviruses like SARS-CoV-1 have been responsible as well.

IMPORTANT[41-44]

As of March 2020, no new cases of SARS-CoV-1 have been reported anywhere in the world since 2004. However, a genetically related virus has recently emerged, called SARS-CoV-2. SARS-CoV-2 causes a disease called COVID-19. COVID-19 is an emerging, rapidly evolving situation.

While the virus responsible for COVID-19 is very closely related to SARS-CoV-1, it's not exactly the same. Nonetheless, it's important to keep the following preventative measures for COVID-19 in mind. You should always check with your nation's health authority for the latest updates to these preventative measures as they may change very quickly.

To help minimize the risk of contracting SARS-CoV-2 and developing COVID-19, pay attention to the following:

- The best way to avoid getting sick is to avoid being exposed to this new virus in the first place.
- Unless stated otherwise in the points below or by your health authority, practice the recommendations outlined in the "How to Protect Yourself Right Now" section.
- In locations with a shortage of masks, masks should be reserved for healthcare workers, those who are sick, and those taking care of a sick person at home who isn't wearing a mask.
- Unless otherwise stated by your health authority, healthy people don't need to wear masks so long as they practice the general recommendations mentioned in the "How to Protect Yourself Right Now" section.
- Masks will only help you if you combine them with proper hand sanitation.
- Before putting on a mask, make sure you clean your hands. Don't touch the mask while wearing it and, if you do, clean your hands. Take the mask off by using the straps, throw it away if it's a disposable mask, and clean your hands either way.
- You should clean and disinfect surfaces. First, use detergent or soap and water to clean a surface. Then, use a disinfectant thereafter. Disinfectants effective against SARS-CoV-2 include diluted bleach or an alcohol solution with at least 70% alcohol. A full list of effective disinfectants can be found here.
- It may take at least 6-18 months to develop a safe and effective, mass-produced, vaccine for this virus. Until then, you should practice all of the recommendations outlined above.

MORE INFO

What is a viral infection?

Did you know? Viruses floating in the air around you are technically called “virions”. More commonly, however, they’re just called viruses. A virus is a microscopic piece of genetic material like RNA or DNA. This genetic material is surrounded by a protective, outer, layer.

Not all the viruses you come into contact with can infect you. The ones that can, however, dock to receptors on the outer surface of the cells of your body. After attaching to these receptors, the viruses enter (infect) these cells and hijack each cell’s biological machinery in order to multiply. Your body doesn’t like this, of course, and launches a counterattack. The counter-attack is composed of a wide array of molecules and cells that are collectively called the immune system. The battle between the viruses and your immune system is what leads to the initial signs and symptoms of many viral infections.

Viral infection polygenic risk score

Using the latest advances in artificial intelligence and our state of the art—proprietary—technology, we’ve calculated your polygenic risk score for viral infections.

Viral infections, and their associated diseases, are complex processes. Your susceptibility to a viral infection or disease is based upon a combination of unique genetic changes and environmental influences such as your diet, exercise, quality of sleep, and other lifestyle factors like smoking.

Research studies have identified over 85 genetic changes that are more likely to be found in people who are susceptible to a wide range of viral infections. Most of these genetic changes are spread out across a person’s many different genes. As a result, viral disorders are sometimes called “polygenic” diseases, where “poly” means many and “genic” refers to genes.

A polygenic risk score of being affected by a viral infection is computed by collecting the weighted risk from over 50 genetic variations. Polygenic risk scores are always probabilities, not certainties. Understanding the way a polygenic risk score impacts a person’s life and health is an active area of research being supported by the National Human Genome Research Institute.

How genes affect viral infections[45-47]

The cell receptors that viruses attach themselves to are encoded by your genes. Small changes in these genes can lead to variations in the number, structure, or function of these receptors. For instance, a small change can render a cell’s receptor non-functional, making it impossible for the virus to infect the cell. Such a change could protect you from infection.

Knowledge of how, and whether, your genes protect you from infection can be very important. As an example, scientists are aware of about 25 genes that may influence the outcome of a type A influenza (flu) infection. Being aware of the genetic factors that make a person susceptible to this infection can help a doctor quickly target vaccinations to those who need them most.

Report description

This report decodes genetic variants/mutations that are associated with Viral Infections, which include but not limited influenza, SARS-CoV and acute respiratory stress syndrome.

- Analyze 32 genes focusing on Pathogenic and Susceptibility Risk Factor Mutations on Viral Infections.
- Analyze over 85 variants to construct Polygenic Risk Score on Viral Infection.

Genetica testing methodology

Saliva is collected using GeneFiX™ Saliva DNA Collector which can preserve the quality of the DNA in the collected saliva for at least 6 months at room temperature. The GeneFiX™ Saliva DNA Collector is developed, manufactured and monitored in accordance with the Quality Management System based on ISO 9001:2015 and ISO 13485:2016.

The genomic DNA is extracted from the collected saliva using Chemagic Prime™ Robot. The process is entirely automated using chemagen patented M-PVA Magnetic Bead technology for DNA and RNA purification with liquid handling to provide high-throughput automated isolation of ultra-pure nucleic acids. The process is monitored in accordance with the Quality Control of ISO/IEC 17025.

The extracted DNA is then enriched for targeted regions using a hybridization-based protocol and decoded using Genetica® V3 Proprietary Gene Decoding Chip. Genetica® V3 Gene Decoding Chip includes 800,000 single-nucleotide polymorphisms (SNPs), insertions or deletions (Indels) and copy-number variants (CNVs). Genetica uses its proprietary Artificial Intelligence Engine to extract the SNPs, Indels and CNVs from more than 435,000 published, scientific papers. The Artificial Intelligence Engine ranks the variants/mutations based on the significance and extracts the top 800,000 most significant variants/mutations for Asian population. All pathogenic and likely pathogenic variants are characterized using Clinvar and ACMG databases. Genetica's workflow uses Thermo Fisher GeneTitan Platform and Illumina Hiseq 2000 (600 Gb in a single run). All samples are processed in the RUCDR Infinite Biologics Clinical Genomics Laboratory with CLIA-certified and CAP-accredited (CLIA Number: 31D2077913, CAP Number: 8981166).

Limitations

Genetica V3 Gene Decoding reports pathogenic and likely pathogenic variants but does not report variants of unknown significance (VUS). VUS is a variation in a genetic sequence for which the association with disease risk is unclear. There is a possibility that a variant is characterized as VUS at the time this test may be characterized as benign or pathogenic in the future.

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Acute Respiratory Distress Syndrome

What is ARDS?

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Viruses & ARDS

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Important

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MORE INFO

How Genes Affect Viral Infections

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DISCLAIMER

Gene Friend Way provides genetic assessment services for research or investigational use. Gene Friend Way does not provide any direct medical advice to individual patients. Genetic information must always be considered in conjunction with other information about your health such as lifestyle, family history, risk factors, biomedical data, diet, nutrition and physical activity among other factors.

Gene Friend Way's role is limited to providing results of genetic test and providing a broad set of general recommendations. More detailed recommendations that may be specific to you are to be made by qualified Professional Practitioners only. General guidelines provided in our report are for information purpose only and are meant to aid your Professional Practitioner to render the relevant professional or medical advice and treatment. While assessing your genetic parameters and providing the report and recommendations, we do not consider your past or existing health conditions and or any medication taken by you (either in the past or currently), even if you may have provided us with such information. Our report and the recommendations therein are to be acted upon in consultation with a medical or other health and wellness professional practitioner.

Your reliance upon the report is solely at your own discretion. As with all health and medical related matters, you should exercise adequate care in using the information provided in this report or on our website. Gene Friend Way disclaims any responsibility for any errors and/or omissions by you or other persons either during collection of DNA samples or delivery of the DNA sample to Gene Friend Way. We make no warranties of any kind, either express or implied, including, without limitation, the implied warranties of merchantability, fitness for a particular purpose, accuracy and non- infringement. The information in this report is for Research Use Only (RUO) or Investigational Use Only (IUO), meant to assist in further clinical diagnosis or treatment by Professional Practitioners.

If your sample is rejected or testing results are invalid, it means your sample was sub-optimal and could not be tested. You will be advised to re-collect and re-test. All samples not valid for testing are disposed of according to guidelines for biohazardous waste and are HIPAA compliant.

Laboratory Developed Test (LDT). This test was developed and its performance characteristics determined by Genetica in a manner consistent with CLIA requirements. It has not been cleared or approved by the U.S. Food and Drug Administration. This test is not intended to be used without first consulting your physician and subsequent clinical testing as deemed appropriate.

Other services from Genetica®

65 genes

G-Care

Foundation To Your Quality Life

Over 18 years of age

NutriCare
- Carbohydrate metabolism
- Protein metabolism
- Fat metabolism

Facts-to-Know
- Béo bụng
- Chuyển hóa affeine
- Nguy cơ mất ngủ

HealthCare
- Breast Cancer or Prostate Cancer
- Stomach Cancer
- Asian Flush

Personality
- Belly fat
- Caffeine sensitivity
- Insomnia tendency

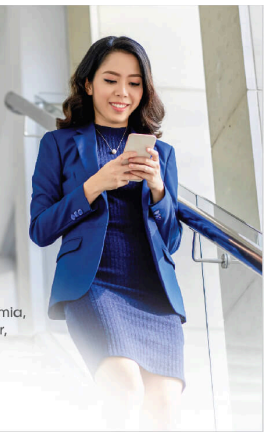
PhysiCare
- Endurance ability
- Power performance
- Cardiorespiratory fitness

300 genes

G-Pro

Unearth Your Potentials

Over 18 years of age



Mind & Spirit
- Personality
- Behavior tendency
- Cognitive ability
- IQ, EQ
- Educational attainment
- Language ability
- Math ability
- Music ability

Nutrition
- Protein, Fat, Carbohydrate metabolism
- Vitamin requirements
- Liver Detoxification
- Food and Drink sensitivities
- Eating behavior
- Cardiometabolic risk
- Diabetes risk scores
- Cardiometabolic health

Fitness
- Endurance ability
- Power performance
- Cardiorespiratory fitness
- Recover ability
- Tendency to get injuries
- Weight Management Difficulty
- Tendon/ Ligament strength
- Exercise benefit

Resting
- Insomnia tendency
- Belly fat
- Caffein metabolism

Health

Up to 20 common cancers for both genders
- Breast, Bladder, Brain, Cervical,
- Colorectal, Colon, Esophageal,
- Uterine, Kidney, Stomach, Leukemia,
- Liver, Lung, Pancreatic, Testicular,
- Prostate, Ovarian, Skin
- Pheochromocytoma and
- Paraganglioma

125 genes

G-Kid Care

Foundation For Child's Development

From 0 to 18 years of age

Behavioural tendencies
- Extraversion
- Conscientiousness
- Emotional instability

Macronutrient metabolism
- Carbohydrate metabolism
- Fat metabolism
- Protein metabolism

Health risk
- Obesity risk score

Intelligence
- IQ
- EQ
- Cognitive ability

300 genes

G-Kid Pro

Reaching An Optimal Future

From 0 to 18 years of age

Mind
- IQ
- EQ
- Educational attainment
- Cognitive ability
- Math ability
- Language ability
- Music ability
- Fitness potentials

Body
- Vitamin requirement
- Mineral requirement
- Macronutrients requirement
- Eating behavior
- Sweet and bitter taste
- Health risk: Obesity Cardiometabolic/ Diabetes risk.

Spirit
- Personality
- Behavior tendency

Other services from Genetica®

97 genes

G-Health

Access Risk Of Hereditary Diseases

Over 18 years of age

Up to 20 common cancers for both genders

- Breast
- Bladder
- Brain
- Cervical
- Colorectal
- Colon
- Esophageal
- Uterine
- Kidney
- Stomach
- Leukemia
- Liver
- Lung
- Pancreatic
- Testicular
- Prostate
- Ovarian
- Pheochromocytoma
- and Paraganglioma
- Skin

48 genes

G-Autism

Hereditary Autism Risk Screening

The G-Autism report will unveil the genetic risk of an individual via:
- Detect any known pathogenic or likely pathogenic mutations associated with ASD.
- Evaluate the Autism Risk Score: A polygenic score which indicates the user's increased risk of autism.

Everyone will benefit from this report. However, young children who display symptoms of autism are especially advised to take the genetic test.

This report will provide you:
- In-depth knowledge about gene-related causes of ASD.
- Information that enables best-suited personalized therapy and developmental care in regard to the user's risk of autism.

73 genes

G-Stroke

Hereditary Stroke Screening

The G-Stroke report will provide the following information:
- Pathogenic or likely pathogenic mutations that increase risk of strokes (ischemic stroke, hemorrhagic stroke).
- Stroke Risk Score: a polygenic score that indicates the patient's increased risk of stroke.

Everyone will benefit from this report.

Benefits:
- In-depth knowledge about gene-related causes of stroke.
- Information to make informed medical and lifestyle decisions in regard to the user's risk of stroke.
- Personalized recommendations for preventive and monitoring options.

28 genes

G-ADHD

Hereditary ADHD Risk Screening

The G-ADHD report will provide the following information:
- Pathogenic or likely pathogenic mutations that increase risk of ADHD.
- ADHD Risk Score: a polygenic score that indicates the user's increased risk of ADHD.

Young children and teenagers are especially advised to take the genetic test.

Benefits:
- In-depth knowledge about gene-related causes of ADHD.
- Information to help make informed medical and lifestyle decisions in regard to the user's risk of ADHD, as well as available treatment options.
- Helpful and personalized recommendations.

Thank you,

It is our honor to be able to contribute
to your healthy and happy life.

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in Vietnam and in the US.

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