

avigena

The Leading Genomic Prevention Company in the MENA

CONTACT US FOR MORE INFORMATION:

 avigena.com

 info@avigena.com

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"Prevent Breast Cancer."

**SIMPLE DNA SALIVA OR BLOOD TEST TO UNCOVER
YOUR INHERITED RISK FOR BREAST CANCER**

designed for Arab and Middle Eastern populations

PREVENTIVE STEPS IN PRECISION MEDICINE



Identify Patient Journey

Recognizing the patient's ongoing medical path

Predict Next Medical Event

Using PRS to forecast future health issues

Initiative Preventive Steps

Implementing actions to prevent or detect early

BREAST CANCER RISK MANAGEMENT SEQUENCE



Identify Patients at Risk

Recognizing individuals with potential risk factors

Initiate Preventive Steps

Implementing measures to reduce risk

Early Detection

Conducting screenings to find cancer early

Better Outcomes

Achieving improved health results

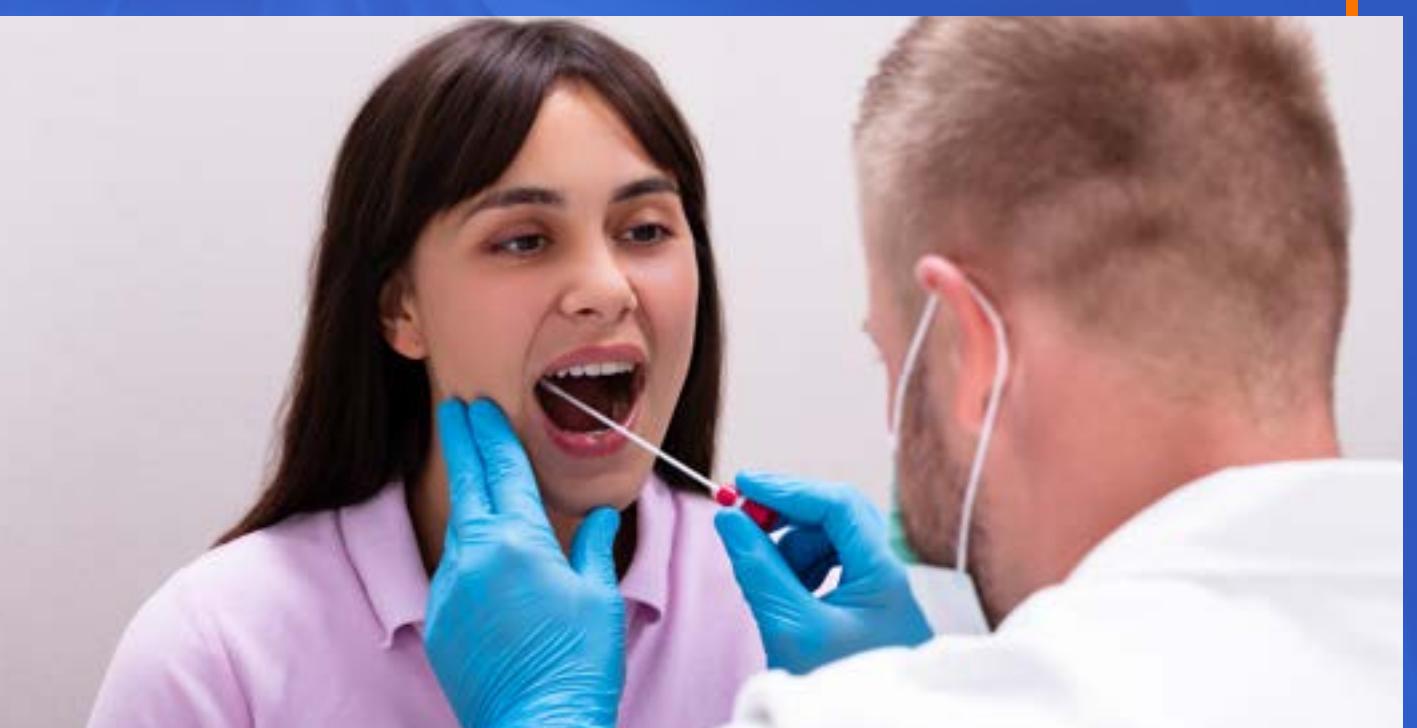
Save Lives

Preventing loss of life through effective intervention

WHAT IS A POLYGENIC SCORE?

- ▶ Everyone has small genetic differences, called variants.
- ▶ These variants can affect the risk of developing certain diseases.
- ▶ A polygenic risk score (PRS) combines the effects of millions of genetic variants to estimate your disease risk.
- ▶ While each variant has a small effect, their combined impact can be significant.

**If you want to know more about PRS, you can visit:
<https://polygenicscores.org/explained/>**



POLYGENIC RISK SCORES:

WHAT THE NUMBERS MEAN

Percentile:

Shows how your risk compares to others. For example, being in the 90th percentile means your risk is higher than 90% of people.

Relative Risk:

Tells you how much higher or lower your risk is compared to the average person. For instance, a relative risk of 2.5 means your risk is two and a half times higher than average.

High Genetic Risk:

Indicates your score is much higher than most people's. Typically, this means your risk is more than double the average.

Lifetime Risk:

Estimates your overall chance of developing the disease during your life, such as a 25% chance by age 80.



Doctors use these numbers along with other health information to help guide your care.

WHO SHOULD TAKE THIS TEST?

Female – Adult (18-75 years)



Healthy women interested in understanding their personal risk of breast cancer.



Women diagnosed with breast cancer seeking to understand the genetic factors contributing to their disease.



Women who carry a rare monogenic mutation (e.g., BRCA) associated with increased breast cancer risk.



Women with a family history of breast cancer.

DOES AGE AFFECT PRS USE?

Your Polygenic Risk Score (PRS) stays the same as you age, but how it's used changes:



If you're younger:

A high PRS means you can start prevention early.



If you're older:

PRS helps doctors fine-tune your risk and guide care.

Doctors **always look at PRS together with your age** and other health factors to give you the best advice.



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WHY PRS MATTERS FOR BREAST CANCER

- ✓ PRS provides women with a personalized breast cancer risk estimate.
- ✓ It enables more informed decisions on screening and prevention.
- ✓ PRS stratifies risk beyond monogenic mutations like BRCA.
- ✓ Age-based screening alone can miss early cases—PRS helps detect risk earlier.
- ✓ Early detection and targeted prevention can reduce breast cancer deaths.
- ✓ High-risk women can receive tailored guidance to lower their risk.

BENEFITS OF BC-PRS TEST

For Patients:

- At-risk individuals can better understand their personal risk, optimize screening timing, and take steps to reduce their risk.
- Patients diagnosed with breast cancer may gain insight into the genetic cause of their disease, especially when no known mutations are found.

For Healthcare Providers:

- Enhances risk detection: Helps identify more high-risk patients than monogenic testing alone.
- Improves risk accuracy: Offers a more comprehensive view by incorporating all genetic risk factors.

Incorporating PRS into BC screening programs improves detection rates through personalized risk assessment and tailored screening strategies

40% improvement in early Detection with PRS vs. conventional screening

Standard Screening Only (Age-Based Mammography)



PRS + Mammography (Risk-Based Screening)

Women enter screening at age 40-50



PRS identifies risk from early life

Uniform intervals (e.g., every 2 years)



Tailored screening: early for high-risk, later for low-risk

Misses high-risk younger women



Early detection in high-risk individuals

Potential over-screening of low-risk women



Reduced over-screening in low-risk women

HOW IT WORKS – STEP-BY-STEP



Order the Test

You or your doctor places an order through our secure platform.



Collect Your Sample

The saliva kit can be used at a designated location or sent to you.



DNA Analysis

Your sample is sent to our certified lab.



Get Your Results

Your report is sent to you and available in your secure portal.



Virtual Counseling

A video call will be scheduled with a genetic counselor to explain your results and next steps.



Share with Your Doctor

With your consent, your doctor receives a clinical summary and next-step guidance.

01

02

03

04

05

06

YOUR RESULTS



1

Your risk is categorized as low, intermediate, or high

2

Personalized report for you and your physician

3

Lifestyle, tests and medications

4

Secure, encrypted portal access

5

Complimentary virtual counseling

Understanding Your Genetic Risk Level

**KNOWING YOUR
GENETIC RISK GIVES
YOU MORE TIME, MORE
CLARITY, AND MORE
CHOICES**



Low Risk

Maintain healthy lifestyle;
routine screening



Intermediate Risk

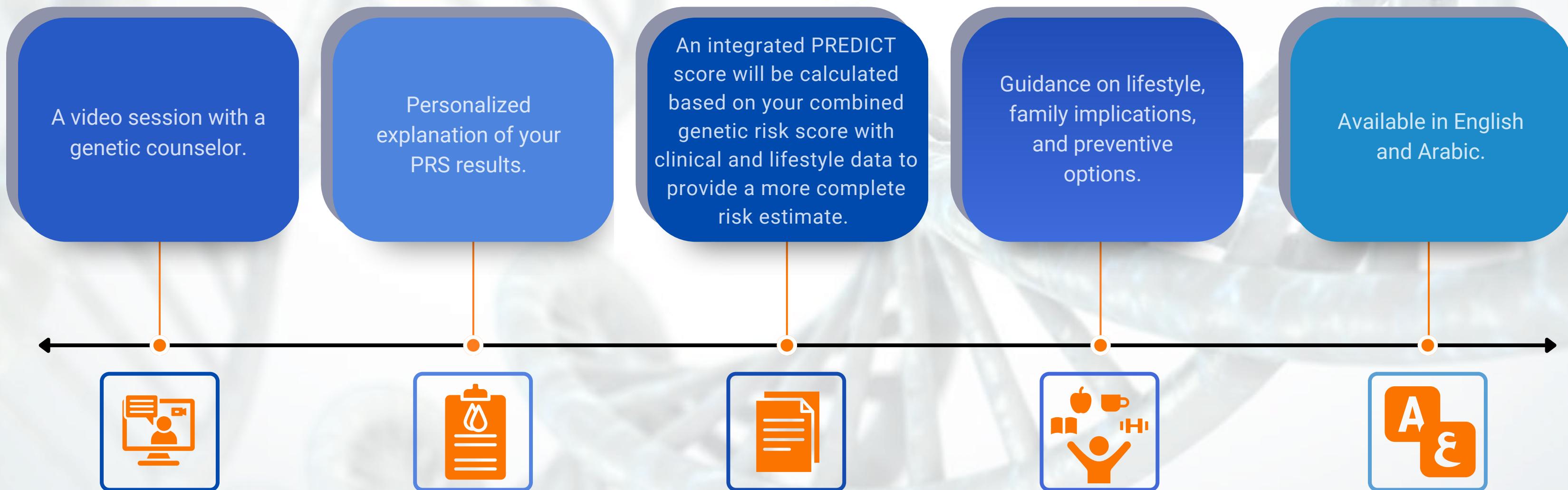
Adopt risk-reducing habits;
consider clinical follow-up



High Risk

Begin preventive plan; consult
specialist for tailored interventions

VIRTUAL GENETIC COUNSELING – WHAT TO EXPECT



VIRTUAL GENETIC COUNSELING: WHAT TO EXPECT



A 20-minute session via video (English or Arabic)



A trained counselor explains your PRS results clearly



An integrated PREDICT score will be calculated based on your combined genetic risk score with clinical and lifestyle data to provide a more complete risk estimate.



You'll get guidance on lifestyle, family implications, and medical next steps

FOLLOW-UP: COORDINATED WITH YOUR DOCTOR



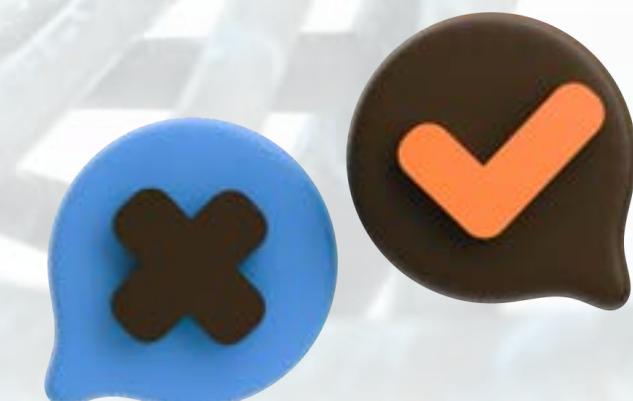
YOUR DATA IS SAFE WITH US



Testing is performed in
CAP-accredited labs



Data is securely stored under
HIPAA and regional privacy laws



No data is shared without
your explicit consent

PRICING & CONTACT

Test Price:

Please contact us or your local distributor for pricing and logistics.

How can I order the test?

- [Email Us: info@avigena.com]
- [Visit our website: avigena.com]



LIMITATIONS OF POLYGENIC SCORE

A polygenic score is neither deterministic nor diagnostic. Some individuals with a high polygenic score may never develop the disease, while others with a low polygenic score may. It is important to know that:



It is not a diagnostic test.



Risk is influenced by lifestyle, clinical, and family factors.



Risk estimates may vary depending on your ancestry. This test is optimized for individuals of Middle Eastern background.



Rare single-gene conditions, such as BRCA, are not included.

WHY CHOOSE AVIGENA'S BC-PRS TEST?



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Proven Science:

Our test uses Avigena's trusted, research-based model, clinically validated for accurate Breast Cancer risk prediction.

Easy-to-Use Reports:

Clear and practical reports help you make informed decisions and guide your patients with confidence.

Support for Healthcare:

We offer training, tools, and expert support to help you use genetic risk in everyday care.

GENETICS IS A GUIDE, NOT A DIAGNOSIS

**PRS is a tool to support
—not replace—your
physician's judgment.**

**Think of it like a weather
forecast:
it informs you of risk, but you
still control the outcome.**

PHYSICIAN-LED CARE



Referring Physician

Final decisions on patient care rest with the referring physician.



Risk Reports

Avigena provides evidence-based risk reports and guidance to support decision making.



Personalized Care

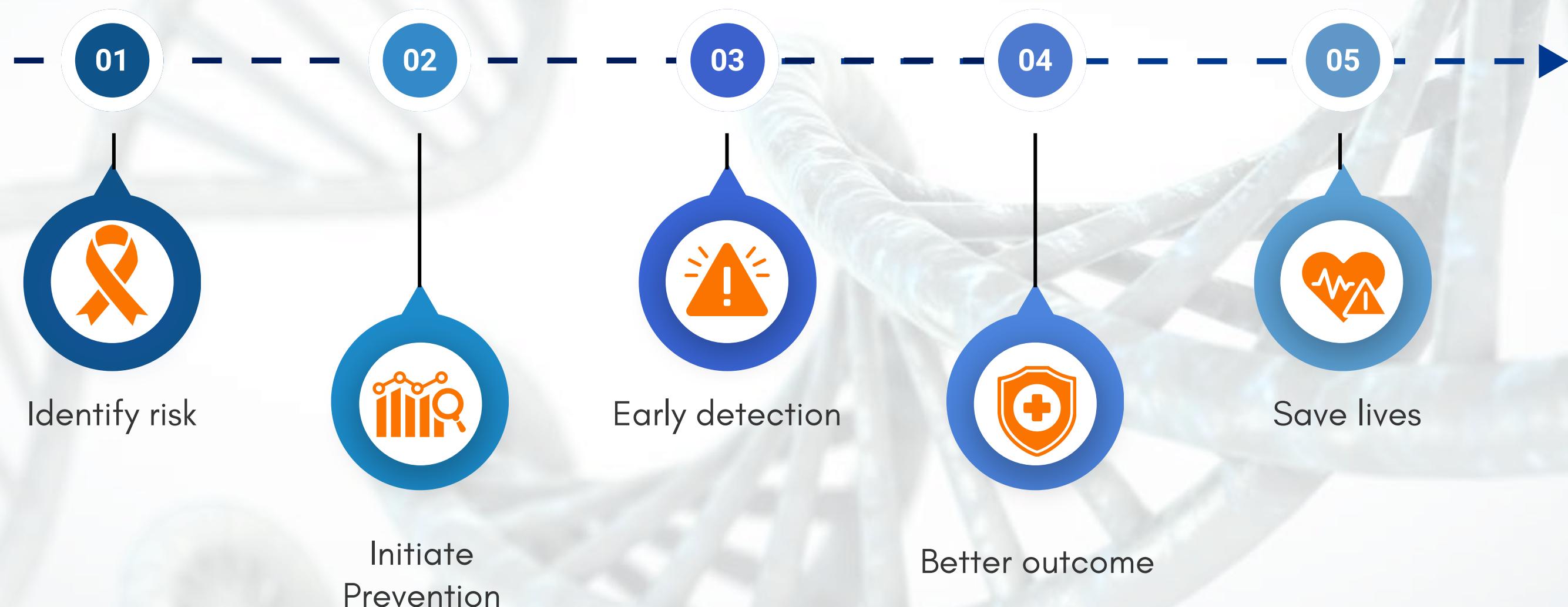
We work in partnership with clinicians to deliver personalized, preventive care.



Genomic Tools

Genomic tools enhance – not replace – the physician's expertise.

PRS SAVES LIVES



HOW TO GET TESTED- CONTACT US

Ask your doctor today or Contact us directly for guidance.



Avigena Boston: 6 Liberty Square, PMB 6129,
Boston, MA 02109

Avigena Abu Dhabi: Sky Tower, Shams #2201,
Al Reem Island

Website: www.avigena.com
Email: info@avigena.com



FREQUENTLY ASKED QUESTIONS SECTIONS

How might these results affect my medical care?

These results can help your doctor decide if you need extra check-ups, tests, or treatments to lower your risk of Breast Cancer. Be sure to discuss them with your doctor.

What does this mean if I already have the disease?

If you already have Breast Cancer, this test can help explain the genetic factors that contributed and guide care for you and your family.

What is Genomic Integrated Risk Score (GIRS)?

Genomic Integrated Risk Score (GIRS) combines your genetic risk score with clinical and lifestyle data to provide a more complete risk estimate.



Why do I need to consult with a healthcare provider and a Genetic Counselor?

These results can help your doctor decide if you need extra check-ups, tests, or treatments to lower your risk of Breast Cancer. Be sure to discuss them with your doctor.

What does this mean if I already have the disease?

Your healthcare provider will interpret your results within the context of your complete medical history. A counselor will help you understand the potential benefits and limitations of the test in your specific context.

How long does testing take?

Testing takes up to 2 months, but average turnaround time is around use 4-6 weeks.



DISCLAIMER AND PRS?

-  The PRS test is not a diagnostic test and should not be used as the sole basis for any medical decision.
-  The genetic test used to generate your PRS was developed by Novo Genomics and Allelica, Inc. While it has been carefully validated for accuracy, it is not FDA-approved.
-  The PRS does not assess all possible genetic causes (e.g., rare mutations).
-  Results may vary depending on ethnic background; this PRS test was optimized for Middle Eastern populations.
-  The PRS test is intended to provide additional health insights and should be interpreted in conjunction with other clinical information provided by your healthcare provider.

WHAT IS A RELATIVE RISK IN A POLYGENIC SCORE?



✓ Your polygenic risk score (PRS) is based on your DNA and helps estimate your likelihood of developing a specific disease compared to the general population.

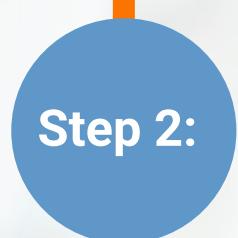
✓ **The relative risk tells you how your genetic risk compares to the average:**

- A person is considered high genetic risk if their polygenic score puts them at more than twice the average risk for Breast Cancer.
- PRS above the 88rd percentile is considered high because it confers a greater than 2-fold increased risk compared to the rest of the population.

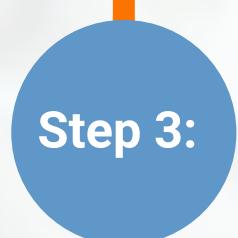
HOW IS YOUR SCORE CALCULATED?



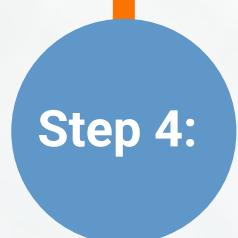
The test uses saliva or blood sample. Variants linked to disease risk are chosen from large genomic studies.



Each genetic variant (single-nucleotide polymorphism – SNP) associated with disease risk is weighted by its effect size. The sum of these weighted variants forms the individual's polygenic risk score (PRS).



To improve accuracy, the PRS is refined using ancestry data and PCA to ensure it reflects true disease risk, not ancestry-related genetic differences.



Risk by age is calculated using your PRS and ancestry data. Your score is compared to others from similar backgrounds.



Supports risk assessment for conditions like Breast Cancer, Prostate Cancer, and CAD.

WANT TO KNOW MORE ABOUT PRS?

You can visit: <https://polygenicscores.org/explained/>

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