POLYGENIC RISK MAP

Boston Heart's Polygenic Risk Map test is a genetic test that leverages Polygenic Risk Score (PRS) analysis and reporting. The resulting risk scores provide clinical insights into a variety of important health conditions.

CLINICAL UTILITY OF THE POLYGENIC RISK MAP

- Risk scores are determined by numerous well-studied genetic variations, and allow for impactful and targeted application of genomic testing to personalized medicine.
- High-risk individuals generally have a substantially increased relative genetic risk for these conditions as compared to low-risk subjects.
- Because lifetime risk of these conditions are also substantially influenced by environment, lifestyle, and medical care, a greater understanding of genetic risks may lead to greater preventive efforts.
- Cost effectiveness studies suggest that providers can reduce cardiovascular events and healthcare system costs by using polygenic risk scores in appropriate patients.[1]
- This type of testing is meant to augment rather than replace standard risk factor assessments for cardiovascular disease, breast cancer, prostate cancer or other conditions.
- Risk scores provide the lifetime risk of developing the condition of interest.

Improve decision-making, outcomes, and healthcare costs[1]

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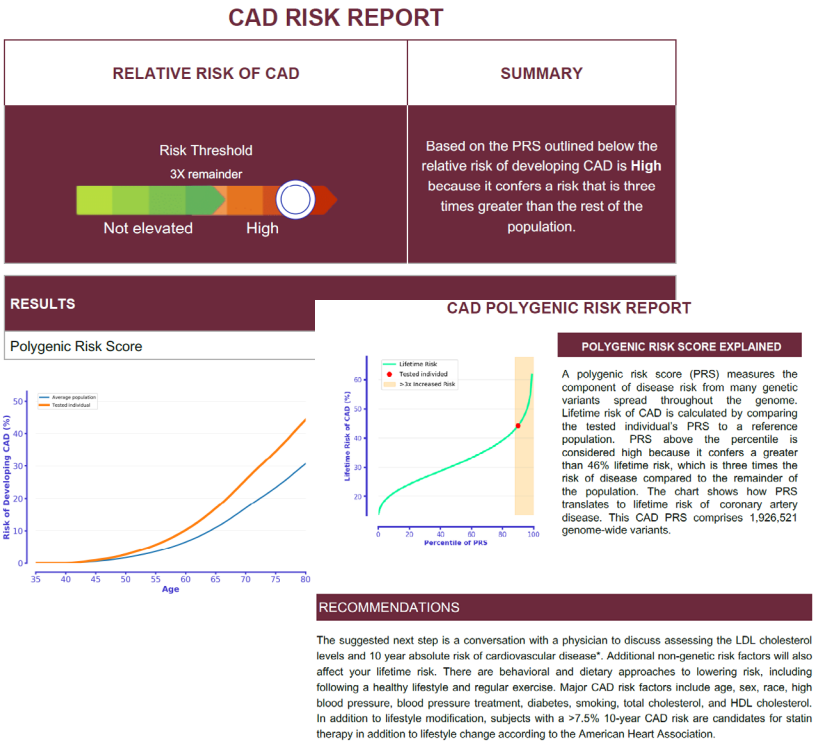

POLYGENIC RISK MAP REPORTS

Validated polygenic risk scores are available for many of the most prevalent causes of premature death and morbidity.

- **Coronary Artery Disease (CAD)** - Leading cause of death.
- **Stroke** - 5th most common cause of death in the US.
- **Atrial Fibrillation** - 5-fold increase in stroke risk.
- **Type 2 Diabetes** - 3-fold increase in CAD risk.
- **Hypertension** - Causes CAD, stroke, and kidney disease.
- **BMI** - Increases risk of CAD, diabetes and some cancers.
- **High LDL Cholesterol** - Increases risk of CAD.
- **Lipoprotein (a)** - Increases risk of CAD and aortic stenosis.
- **Triglycerides** -Increases risk of CAD and pancreatitis.
- **Low HDL Cholesterol** - Increases risk of CAD.
- **Alzheimer`s Disease** - The leading cause of dementia.
- **Prostate Cancer** - A leading cause of cancer in men.
- **Breast Cancer** - A leading cause of cancer in women.
- **Ovarian Cancer -** Hormone driven cancer in women.
- **Brain Cancer** - Difficult cancer to diagnose.
- **Pancreatic Cancer -** Difficult cancer to diagnose in early stages.
- **Kidney Cancer** - Cancer that responds well to early intervention.
- **Melanoma** - Early screening for those at high risk.
- **Inflammatory Bowel Disease (IBD)** - Ulcerative colitis and Crohn's disease risk.
- **Early Menopause** - Risk of menopause before age 45.
- **Osteoporosis** - A common cause of bone fractures.
- **Psoriasis** - Auto-Immune skin disorder.
- **Celiac Disease** - Auto-Immune gastrointestinal disorder.
- **Ancestry** - Based on 26 global populations.

ABOUT THE METHODS

- Uses the Illumina Infinium Global Screening Array technology that assesses over 650,000 DNA markers across the human genome.
- Risk scores are based on over 500,000 subjects from the United Kingdom BioBank and multiple other studies.
- The risk informatics are provided by Allelica, a leading polygenic risk score company.

ORDERING, REPORTING, AND SAMPLE INFORMATION

	Female Complete	Male Complete	CVD	Cancer (Female)	Female Essential	Immune	Alzheimer's Disease	Cancer (Male)
Order Code	87108	87109	87110	87111	87112	87113	87114	87115
Price	$349	$349	$199	$199	$199	$199	$199	$199
CAD	√	√	√					
Stroke	√	√	√					
Atrial Fibrillation	√	√	√					
Type 2 Diabetes	√	√	√					
Hypertension	√	√	√					
BMI	√	√	√					
Polygenic Hypercholesterolemia	√	√	√					
Lipoprotein (a)	√	√	√					
Triglycerides	√	√	√					
Hypo-HDL Cholesterolemia	√	√	√					
Alzheimer's Disease	√	√					√	
Prostate Cancer		√						√
Breast Cancer	√			√	√			
Ovarian Cancer	√			√	√			
Brain Cancer	√	√		√				√
Pancreatic Cancer	√	√		√				√
Kidney Cancer	√	√		√				√
Melanoma	√	√		√				√
Inflammatory Bowel Disease	√	√				√		
Early Menopause	√				√			
Osteoporosis	√				√			
Psoriasis	√	√				√		
Celiac Disease	√	√				√		
Ancestry	√	√	√	√	√	√	√	√

The $199 panels can be combined: $199 for the first and $49 for each additional.

Specimen Requirements

- Saliva

For more information, contact your **Area Sales Manager** or
Customer Care at **877.425.1252** or **customercare@bostonheart.eurofinsus.com**

References

1. Mujwara D, Henno G, Vernon ST, et al. Integrating a Polygenic Risk Score for Coronary Artery Disease as a Risk-Enhancing Factor in the Pooled Cohort Equation: A Cost-Effectiveness Analysis Study. J Am Heart Assoc. 2022;11(12):e025236

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