Genova ESTROGENOMIC PROFILE

The EstroGenomic Profile uses genomic testing to identify susceptibility to diseases and conditions such as breast cancer, osteoporosis, and heart disease. More specifically, the EstroGenomic Profile evaluates genetic variations, called single nucleotide polymorphisms (SNPs) in genes that modulate estrogen metabolism, coagulation, cardiovascular function, bone health, and inflammation.

Why is the EstroGenomic Profile clinically useful?

Specialised genomic testing can provide a glimpse into ones potential health future. Genetic testing enables one to minimise the risk by:

- Identifying hidden gene mutations that may promote chronic disease

- Preventing disease through early intervention

- Modifying gene expression through more precise, targeted, individualised interventions

- Identifying key areas for follow-up testing

- Monitoring therapeutic effectiveness of intervention strategies with laboratory testing

Whether or not you choose to see genes, they are always there and will continue to play an important role in one´ health. With genomic testing, by choosing to look at them, you have the opportunity to influence the ultimate outcome and more actively promote a healthy life. The EstroGenomic Profile evaluations include:

POTENTIAL GENETIC SUSCEPTIBILITIES	
Breast cancer	Atherosclerosis
Osteoporosis	Heart disease
Thrombosis	Stroke

Whether or not you choose to see genes, they are always there and will continue to play an important role in one´ health. With genomic testing, by choosing to look at them, you have the opportunity to influence the ultimate outcome and more actively promote a healthy life.

The EstroGenomic Profile evaluations include:

Estrogen Metabolism

- CYP1A1, GSTM1, GSTP1), CYP1B1, COMT (catechol-O-methyl transferase)

Estrogen metabolism SNPs focus on the Phase 1 enzymes involved in the formation of anti- or procarcinogenic metabolites such as 2-hydroxyestrone and 4-hydroxyestrone, respectively, as well as the Phase 2 enzymes responsible for the subsequent metabolism of these compounds. Levels of the various estrogen metabolites modulate risk of both breast cancer and osteoporosis.

Hyper Coagulation

- GP3a (Glycoprotein 3), Factor 2, PAI-1 (Plasminogen activator inhibitor-1), Factor 5 (Leiden)

These genetic variants focus on estrogens interaction with some of the key constituents of the clot formation and fibrinolysis process, such as clotting factors and inhibitors of fibrinolysis. The SNPs can over-activate blood clotting processes, increasing the risk of sudden cardiac events such as strokes, thrombosis, heart attacks, especially among women take estrogens and oral contraceptives.

Cardiovascular

- Apo E (apoliprotein E), TNF-α, MTHFR, IL-6

These genes affect how the body processes cholesterol, responds to inflammation, and metabolizes B vitamins. The presence of these SNPs can increase risk of cardiovascular disease, hyperlipidemia, and blood vessel damage.

Osteoporosis

- VDR, TNF-α, IL-6

Osteoporosis SNPs relate to estrogens influence on inflammation, bone resorption, vitamin D function and bone collagen formation.

GENOVA CARDIOGENOMIC PLUS (buccal swab) [Test code: 8004]

- CYP1A1, CYP1B1, COMT, GSTM1, GSTP1, GP3A, PAI-1, Factor 2, Factor 5, APO-E, MTHFR, TNFα, IL-6, VDR, TNFα, IL-6.

Other genomic tests available

- **Genova DetoxiGenomic Profile:** CYP1A1, CYP1B1, CYP2A6, CYP2D6, CYP2E1, CYP2C9, CYP1C19, CYP3A4, COMT, NAT1, NAT2, GSTM1, GSTP1, SOD1, SOD2.
- **Genova CardioGenomic Plus Profile:** APOE, CETP, SELE, MTHFR, GNB3, AGTR1, Factor 2, Factor 5, PAI-1, GP3A.
- **Genova ImmunoGenomic Profile:** IL-1β, TNFα, IL-4, IL-6, IL-10, IL-13.
- **Genova NeuroGenomic Profile:** COMT, MTHFR, GSTM, GSTP, SOD2.

How to order a test kit:

To order a test kit simply request the test name or test code on a NutriPATH request form and have the patient phone NutriPATH Customer Service on **1300 688 522**.