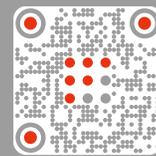




# TrichoTest™

Personalizing alopecia treatment



Register/Order

# Personalizing alopecia treatment

**Alopecia** is a multifactorial condition determined by a combination of both genetic and extrinsic factors. The combination of both factors should be addressed as a whole during alopecia treatment.

Single nucleotide polymorphisms (SNPs) are the most frequent type of DNA variation found in humans. Characterization of specific SNPs may help predict the risk of developing certain diseases and an individual's response to certain drugs.

**“Analyzing specific SNPs can provide useful insights about certain health conditions and drug metabolism.”**

## TrichoTest™

TrichoTest™ is an innovative genetic test that supports licensed providers to personalize alopecia treatment.

- **Full genetic analysis**  
3 polymorphisms within 16 SNPs, resulting in 48 (3x16) genetic variations.
- **State-of-the-art technology**  
Genetic test based on DNA OpenArray technology.
- **Personalized treatment solutions**  
Suggested personalized formulations are generated via report from the Medical Director at GX Sciences.
- **High precision**  
Genetic analysis reproducibility of 99.9%.

## What is evaluated?

TrichoTest™ analyzes both genetic factors and other relevant characteristics - such as extrinsic factors - obtained through a medical assessment of the patient. This process provides a full understanding of the underlying factors of alopecia development.



### Genetic factors

TrichoTest™ analyzes 3 polymorphisms within 16 SNPs, resulting in 48 genetic variations - the most relevant variations for personalizing alopecia treatment.

### Patient medical history

Medication, pathologies, emotional state, physical activity, habits and family history are also taken into consideration through a questionnaire.

## Personalizing treatment

The analysis of genetic factors and patient medical history provides the input needed for personalizing treatment.

# A new era in treating hair loss

## Treatment categories analyzed

The genetic variations analyzed with TrichoTest™ are associated with 7 different categories of alopecia treatment options.

- 1 Prostaglandins metabolism
- 2 Inflammation
- 3 Androgenic effect
- 4 Vasodilation and blood circulation
- 5 Collagen synthesis
- 6 Vitamins and minerals metabolism
- 7 Insulin-like growth factor metabolism

## Personalizing treatment options

### APIs selection

Supports the selection of APIs, avoiding metabolic routes that can be inhibited.

### Dose adjustment

Supports the adjustment of the APIs dose to the metabolism of each patient.

### Interactions handling

Provides insights that can help to minimize the risk of interactions between APIs.

## How are the genes related to the suggested treatment?

Gene	Evaluated effect	Example of involved APIs
GPR44	Activity of PGD2 receptors	Prostaquinon™
PGTFR	Activity of PGF2a receptors	Latanoprost
PTGES2	Activity of PTGES2 enzyme	Minoxidil
SULT1A1	Activity of sulfotransferase	Minoxidil
GR-alpha	Resistance to glucocorticoids therapy	Anti-inflammatory glucocorticoids
CYP19	Activity of aromatase	17α-estradiol
SR5DA	Activity of 5α-reductase type 1 and 2	Finasteride, Dutasteride
ACE	Activity of angiotensin-converting enzyme	Circulation modulators
COL1A1	Synthesis of collagen	Collagen synthesis enhancers
CRABP2	Transport of vitamin A	Tocopherol, Retinol
BTD	Activity of biotinidase	Biotin
IGFR-1	Activity of IGF-1 receptors	IGrantine-F1™

## TrichoTest™ procedure

### Kit content:

- 1x requisition form
- 1x instructions card
- 1x buccal swab
- 1x ID label sticker
- 1x containment bag
- 1x return shipping bag

**1.** Collect the DNA sample (cheek swab) according to the instructions.

**2.** Complete the requisition form and patient questionnaire. These items must accompany the sample.

**3.** Ship the sample and forms to the GX Sciences laboratory.

**4.** Results are provided via online portal in 5-7 business days after receipt of sample.

## TrichoTest™ report

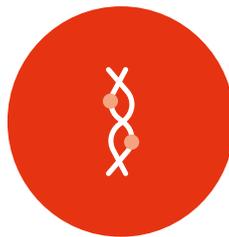
The TrichoTest™ results are shared only with the provider through the GX Sciences online platform.

The report can be used to select the most suitable treatment options for the patient.

### The TrichoTest™ report includes:



Summary of patient characteristics



Full genetic analysis and explanation



Suggested personalized formulations

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