







# **TrichoTest<sup>™</sup> Genetic report**

#### LEGAL DISCLAIMER

HOW all pages Fagron Genomics, S.L.U carries out genetic tests upon request by healthcare professionals, in relation to biological samples from patients obtained by the healthcare professional. Our tests do not replace a medical consultation, nor do they make up a diagnostic or treatment, nor should they be interpreted this way Only healthcare professionals can interpret the results of said tests, based on their knowledge of the clinical records of the patients and other relevant factors and, under their responsibility, give a diagnostic or prescribe treatment to the patient. We decline all responsibility derived from the use and interpretation of the results of our tests by the solicitant healthcare professional. Fagron Genomics, S.L.U expressly reserves any legal actions in case of an innapropiate, negligent or incorrect use or interpretation of the results of our tests. It is the responsibility of the healthcare professional who requests a test to guarantee to the patient the appropriate genetic advice as foreseen by Law 14/2007, of 3rd July, of biomedical research. As Fagron Genomics, S.L.U does not have access to the personal identifiable information about the patient from whom the sample comes, it is the responsibility of the requesting healthcare professional to comply with the applicable data protection Laws and regulations.



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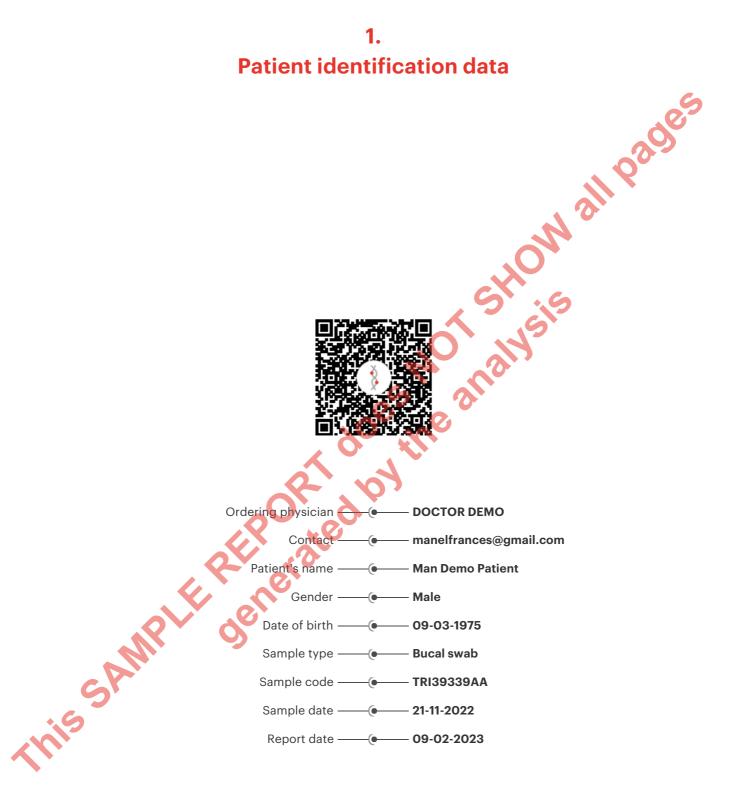
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# I. Patient identification data





II. Recommendation of the most suitable drugs and supplements

• Sample date: **21-11-2022** 

Date of the results: 09-02-2023

## 2.

# Recommendation of the most suitable drugs and supplements

The **genetic test** uses an automated qualitative pharmacogenetic algorithm that analyzes the patient's genetic data and combines this information with relevant patient history to recommend the most suitable active ingredients. Next, we show on a color scale which compounds the algorithm recommends the most. The transition from white to dark green indicates drugs from least recommended to most recommended. Medications blocked due to intolerances or contraindications are shown in red.

86%

53%

53%

50%

25%

## Anti-alopecic drugs

Prostaglandins		
• Minoxidil	73%	
<ul> <li>Latanoprost Fagron</li> </ul>	67%	
Prostaguinon TM	67%	

Antiandrogenic

# Hair care supplements

A .6	
Circulation	
• Arginine	67%
• Ginkgo biloba	67%
• Caffeine	50%
L-Carnitine L-tartrate	50%
CafeiSome TM	40%
Collagen synthesis	
🕨 🗝 Oral SiliciuMax TM	

Cystine

Insulin-like growth factor increase	
• IGrantine-F1 TM	67%
TrichoXidil	67%

#### 

- Triamcinolone acetonide
- Hydrocortisone
- Betamethasone dipropionate
- Desonide

Finasteride

• Ginseng

Saw Palmetto

17-a EstradiolMelatonin

Dutasteride

Topical Saw Palmetto

- Fluocinolone acetonide
- Prednicarbate

Immunomodulator

• Tacrolimus

Blocked

Recommended

Patient name:	Man Demo Patient	<ul> <li>Patient</li> </ul>

Antioxidant

Sample code: TRI39339AA

• Sample date: 21-11-2022

## Vitamin, mineral and antioxidant supplements

 Selenium yeast Resveratrol

Vitamin deficiency			
• Vitamin D	67%		
• Vitamin B9 (Folate)	67%		
Vitamin E (Tocoferol)	67%		
• Vitamin B7 (Biotin)			

- Retinol palmitate
- Vitamin C (Ascorbic Acid)
- Vitamin B12 (Cianocobalamin)
- Vitamin C (Ascorbic Acid)

Minerals	
<ul> <li>Iron sulfate</li> </ul>	67%
Magnesium Gluconate	67%
Zinc gluconate	

Zinc acetate

# A BARNA ALL DAOBER A BARNA ALL D Recommendations for mesotherapy

The genetic test algorithm has selected the following active ingredients for use in mesotherapy. The doctor must prepare the prescription adapted to its preparation in pharmacy.

Finasteride Liposomade 0,05%	86%
Minoxidil Liposomade 0,25%	73%
• Latanoprost Liposomade 0,001%	67%
Protasquinon Liposomade 0,4%	67%
<ul> <li>Dutasteride Liposomade 0,01%</li> </ul>	
Acid Retinoic 0,1%	

The amount and combination of active ingredients to be administered depends on medical criteria.





# III. Formulas for personalized treatment

• Sample date: **21-11-2022** 

Date of the results: 09-02-2023

## 3. Formulas for personalized treatments

The pharmacogenetic algorithm has selected a series of formulations for topical, oral use or capillary mesotherapy for the care and hygiene of your patient's scalp. These personalized formulations have been selected taking into account the genetics, the type of alopecia, and the relevant history of the patient.

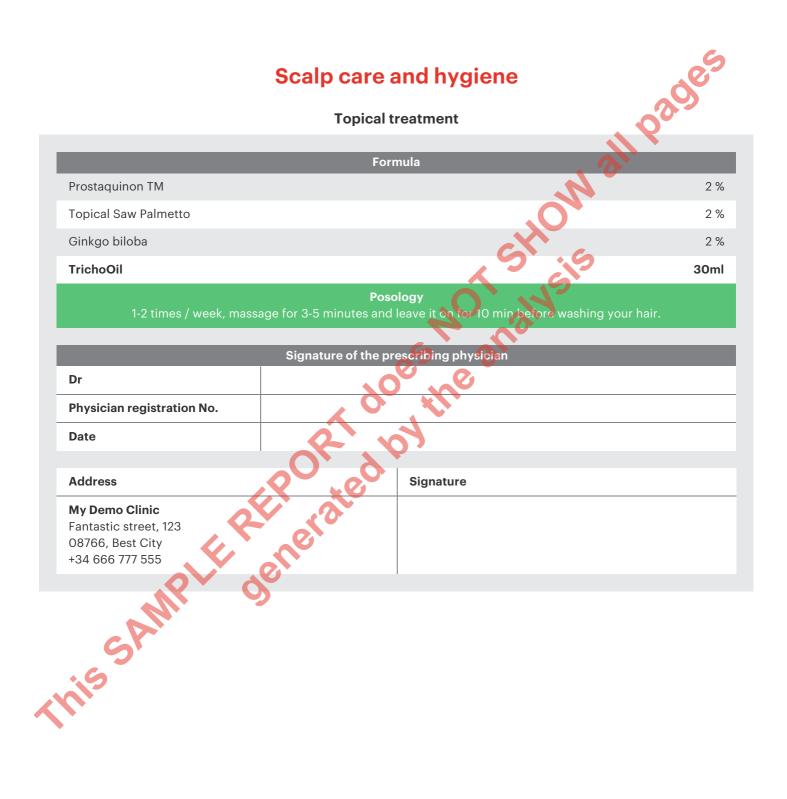




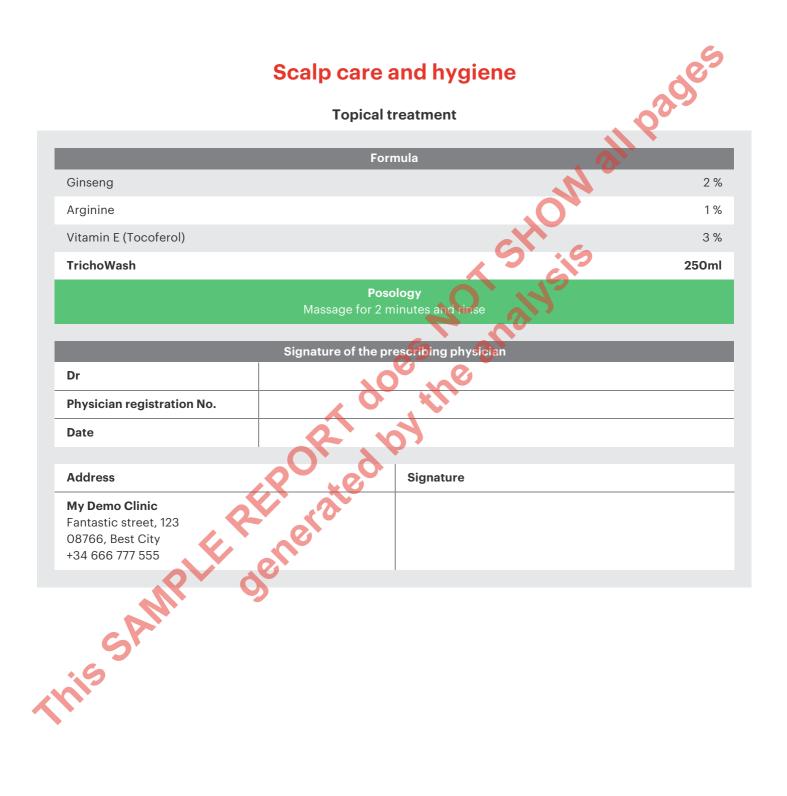
• Sample date: **21-11-2022** 



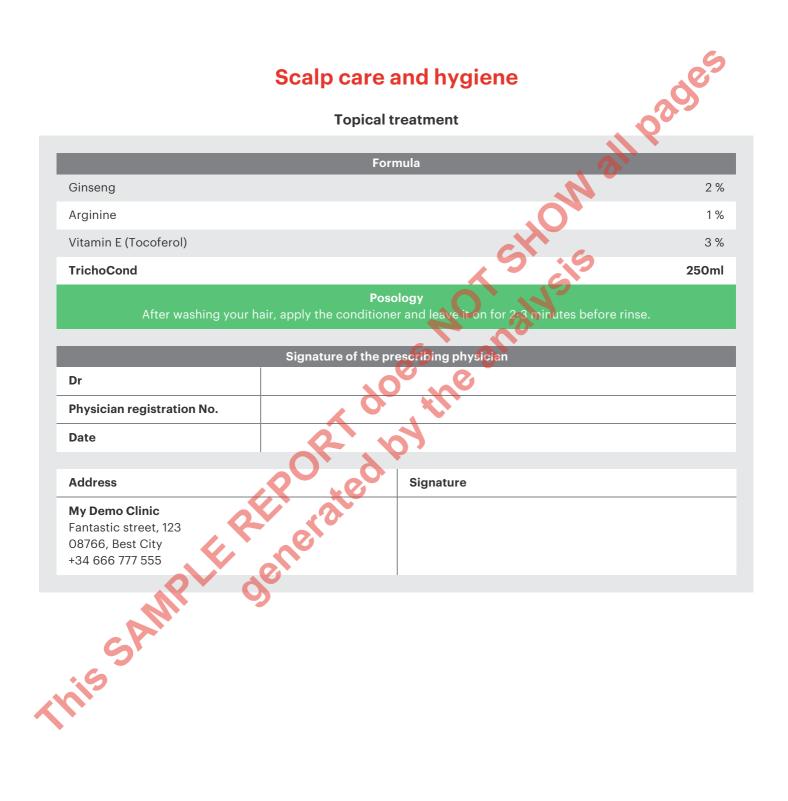
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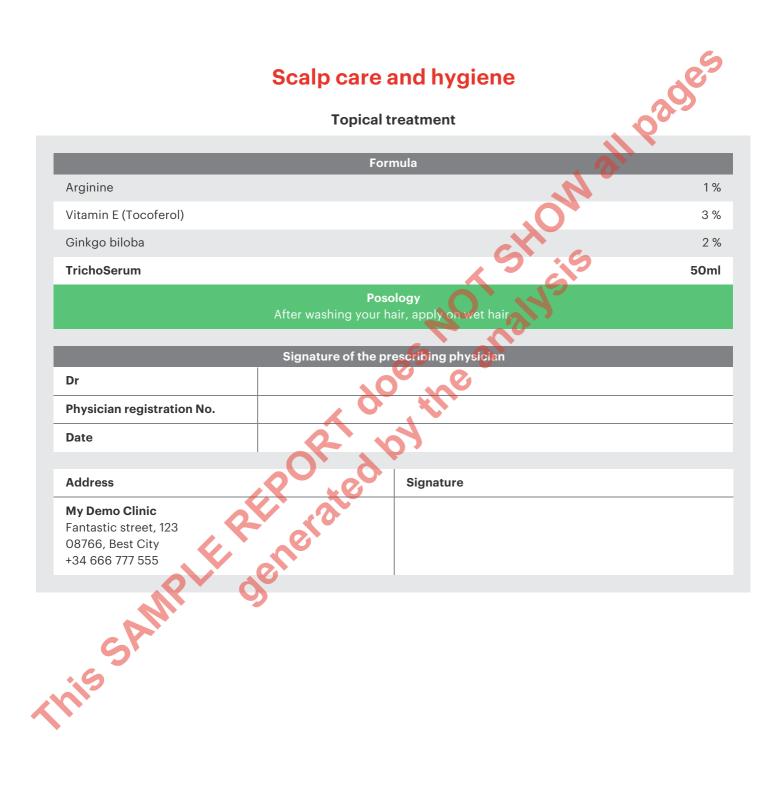
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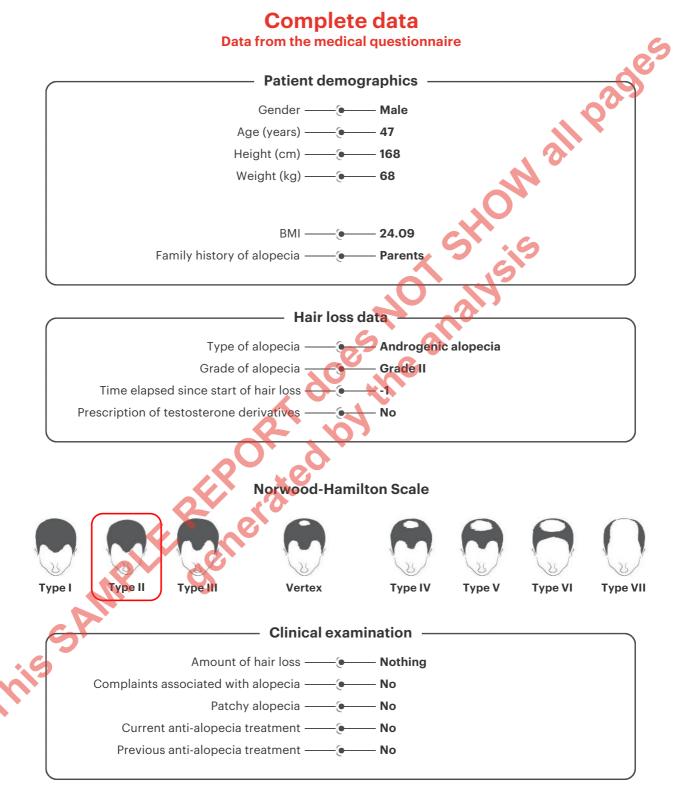


IV. Complete data

• Sample date: **21-11-2022** 

• Date of the results: 09-02-2023

#### 4.



• Sample date: **21-11-2022** 

• Date of the results: 09-02-2023

# 4. **Complete data**

### 1. Anti-alopecic drugs

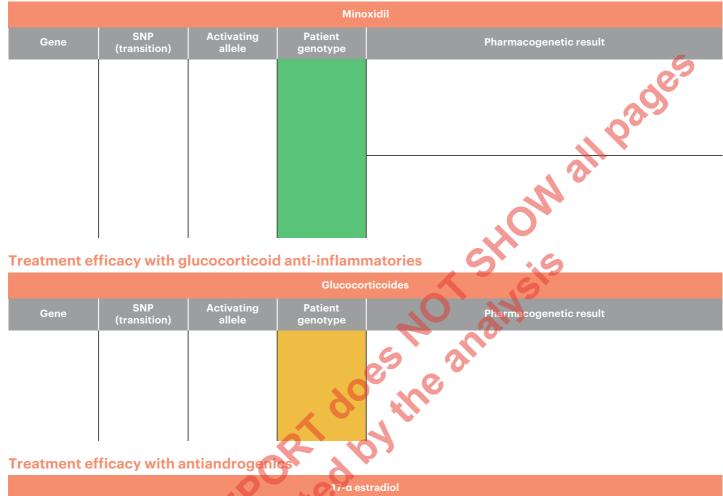
#### Treatment efficacy with prostaglandin inhibitors

			Pharmacoge	netic results
			1. Anti-alop	ecic drugs
Treatment e	fficacy with p	rostaglandin	inhibitors	
			Prostagl	andin D2
Gene	SNP (transition)	Activating allele	Patient genotype	Pharmacogenetic result
				NOTalveis
			21 20	est and

Latenoprost				
Gene	SNP (transition)	Activating allele	Patient genotype	Pharmacogenetic result
		P		
	RV	0		
G				
nis				

Patient name: Man Demo Patient	• Patient ID: 12345678Z	• Date of Birth: <b>09-03-1975</b>
• Sample code: TRI39339AA	• Sample date: <b>21-11-2022</b>	• Date of the results: <b>09-02-2023</b>

#### Treatment efficacy with minoxidil



1/-d estradiol				
Gene	SNP (transition)	Activating allele	Patient genotype	Pharmacogenetic result
	MPL	dene		
G	Dutasteride			
Gene	SNP (transition)	Activating allele	Patient genotype	Pharmacogenetic result
$\langle U \rangle$				
•				

Patient name: Man Demo Patient     Patient ID: 12345678Z     Date of Birth: 09-03-1975	2345678Z • Date o	Birth: 09-03-1975
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• Sample date: **21-11-2022** 

			Finast	teride			
Gene	SNP (transition)	Activating allele	Patient genotype	Pharmacogenetic result			
				supplements			
2. Hair care supplements Vasodilatation and blood circulation							
Vasoullatatic		circulation	Circulation	stimulators			
Gene	SNP (transition)	Activating allele	Patient genotype	Pharmacogenetic result			
			× 20	es No analy			
Collagen syn	thesis		8 Y				
Gene	SNP (transition)	Activating allele	Hair strengtheni Patient genotype	ing supplements Pharmacogenetic result			
Reduction of IGF levels							
Gene	SNP (transition)	Activating allele	Hair strengtheni Patient genotype	ing supplements Pharmacogenetic result			

Patient name: Man Demo Patient	• Patient ID: 12345678Z	• Date of Birth: 09-03-1975
• Sample code: TRI39339AA	• Sample date: <b>21-11-2022</b>	• Date of the results: <b>09-02-2023</b>

#### 3. Vitamin, mineral and antioxidant supplements



• Sample date: **21-11-2022** 



Patient name: Man Demo Patient	• Patient ID: 12345678Z	• Date of Birth: <b>09-03-1975</b>

• Sample date: **21-11-2022** 

• Date of the results: 09-02-2023

#### **Minerals**





# V. Methodology

- Sample date: **21-11-2022**
- Date of the results: 09-02-2023

## 5. Methodology

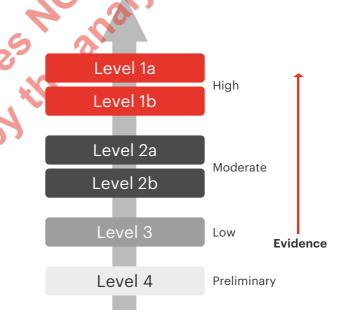
#### How were the genetic variants studied selected and evaluated?

The **genetic test** was developed by a multidisciplinary team of medical doctors, pharmacists, geneticists, and programmers, following the highest quality standards. In particular, an expert team specialized in the curation of genetic variants reviewed each variant to ensure that selection, interpretation and impact of variants in the algorithms are based on the highest scientific evidence. Relevant patient's anamnesis (intolerances, diseases, medication, blood pressure, among others) that can affect recommendations was taken into account through medical questionnaires elaborated by health professionals.

- Level 1A: Annotation for a variant in medical societyendorsed or implemented in a major health system.
- Level 1B: Annotation for a variant where the preponderance of evidence shows an association. The association must be replicated in more than one cohort with significant p-values, and prefera- bly will have a strong effect size.
- Level 2A: Annotation for a variant that qualifies for level 2B where the variant is within a Very Import- ant known gene, so functional significance is more likely.
- Level 2B: Annotation for a variant with moderate evidence of an association. The association must be replicated but there may be some studies that do not show statistical significance, and/or the ef- fect size may be small.
- Level 3: Annotation for a variant based on a single significant (not yet replicated) study or annotation for a variant evaluated in multiple studies but lack- ing clear evidence of an association.

• Level 4: Annotation based on a case report, nonsignificant study or in vitro, molecular or func- tional assay evidence only.

Only variants from level 1a to 2b were selected.



#### How was this test performed?

DNA was extracted from the buccal swab sample provided and was analyzed by our clinical analysis laboratory. DNA was extracted using the KingFisher Flex<sup>®</sup> robotic extraction system (Thermo Fisher Scientific). The study of the genetic variants was carried out using a custom-designed microfluidic card to measure for the chemilumines- cent detection of each of them using TaqMan<sup>®</sup> technology. TaqMan<sup>®</sup> technology for genotyping testing is proven and widely used in clinical and research settings. The sensitivity (detection limit) of this study is 99%.

Patient name: Man Demo Patient

• Patient ID: 12345678Z

Sample code: TRI39339AA

• Sample date: 21-11-2022

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#### genetic test algoritm

The genetic test qualitative pharmacogenetic algorithm analyzes single nucleotide polymorphisms(SNPs) associated with metabolic pathways involved in alopecia predisposition and treatment and combines thisdata with relevant patient history to predict treatmen tresponses and recommends the most appropriate activeing redients.

The genetic test is an in vitro diagnostic medical device developed by Fagron Genomics and marketed underthe QENVD mark in conformity with European Directive 98/79/EC and the transitional provisions (article 130) of European Regulation 2017/746. OW all P

Fagron Genomics S.L.U.,

SRN: ES-MF-000001092 C/ de les Cosidores, 150 08226 Terrassa, Barcelona (Spain)

#### What are the limits of this report?

Each genetic marker tested is just one factor that predicts the likelihood of a particular outcome. However, the lifestyle, diet, and environment to which the patient is exposed may impact the expected outcomes. These external factors cannot be taken into account in this report.

The information in this report is not used to diagnose genetic diseases or abnormalities, as it does not predict the risk and likelihood of certain genetic outcomes. It is also not intended to diagnose or cure any disease. The genetic test is intended to assist health professionals in making patientspecific care decisions regarding the treatment or prevention of androgenetic alopecia, areata alopecia, and telogen effluvium.

Our clinical laboratory has standard and effective procedures to protect against technical and operational problems. However, problems may occur in the shipment to the laboratory or in the handling of the sample, including, but not limited to, damage to the sample, mislabeling, and loss or delay in receiving the sample. In such cases, the medical laboratory may need to request a new sample.

As with all medical laboratory tests, there is a small chance that the laboratory may provide inaccurate information.

It is the responsibility of the professional who requests a test from us to guarantee the interested party appropriate genetic counseling in accordance with Law 14/2007, of July 3, on Biomedical Research.

Fagron Genomics S.L.U. declines all responsibility derived from the use and interpretation of the results of our tests by the requesting health professional.

Fagron Genomics S.L.U. does not access data identifying the patient from whom the sample comes, so it is also the responsibility of the requesting professional to comply with the applicable data protection regulations.

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# VI. References

- Sample code: TRI39339AA
- Sample date: **21-11-2022**
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Patient name: Man Demo Patient	• Patient ID: <b>12345678Z</b>	• Date of Birth: <b>09-03-1975</b>

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• Patient name: Man Demo Patient

- Sample code: TRI39339AA
- Sample date: 21-11-2022
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