AcneTest

Genetic awareness to personalize acne treatment

Fagron genomics

www.fagrongenomics.com

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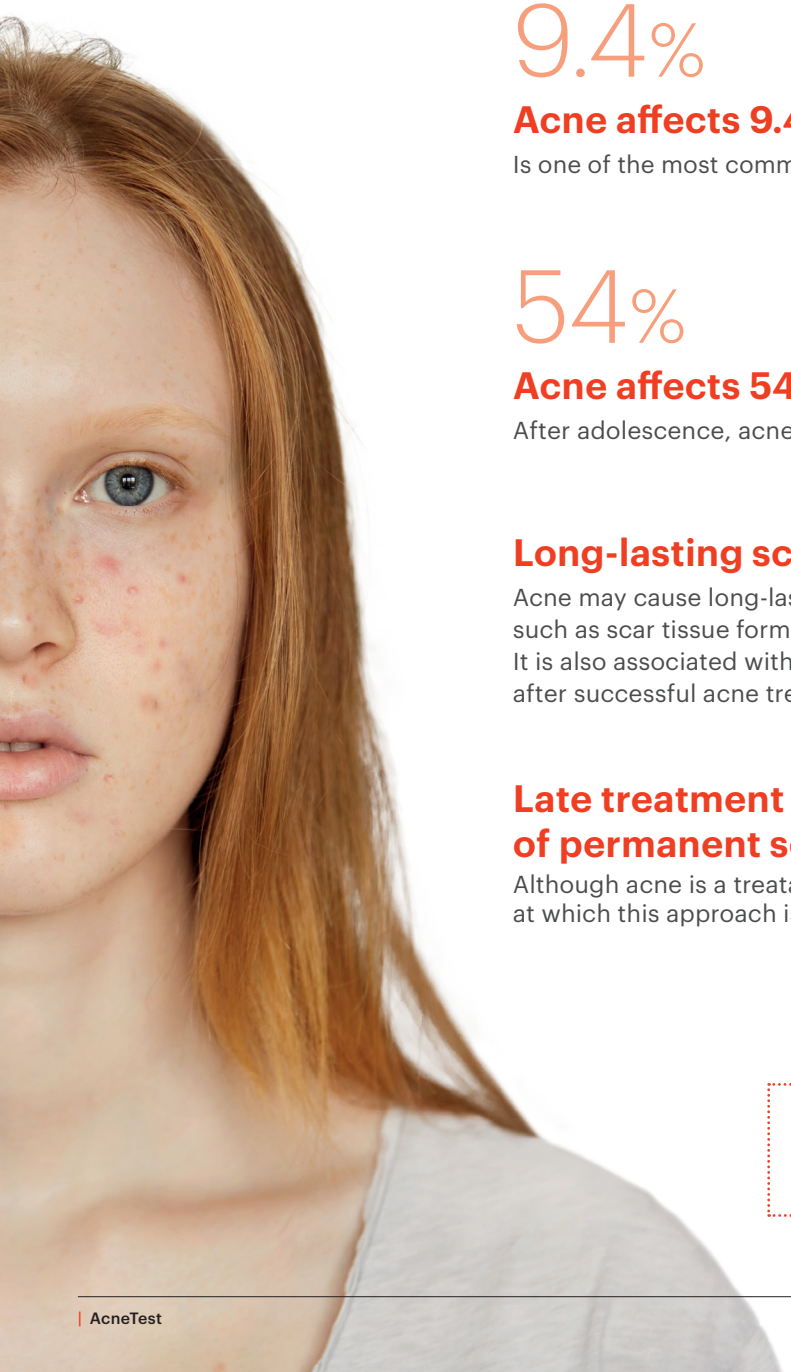
Acne is a multifactorial condition with an important inflammatory component.
While the proliferation of *Cutibacterium acne* majorly causes acne, **several genetic factors influence:**

1. **Severity of the disease**
2. **Age of onset and manifestation**
3. **Scar formation**
4. **Post-acne hyperpigmentation**



9.4%

Acne affects 9.4% of people worldwide

Is one of the most common dermatological disorders today[1].

54%

Acne affects 54% of women > 25 years

After adolescence, acne is more common in adult women than in men.

Long-lasting scars difficult to correct

Acne may cause long-lasting detrimental psychosocial and physical effects, such as scar tissue formation or post-inflammatory hyperpigmentation. It is also associated with depression and anxiety, which usually improve after successful acne treatment[3].

Late treatment can be a cause of permanent sequelae

Although acne is a treatable disease, the type of treatment and stage at which this approach is taken influences the final outcome.

Prescribing **the right treatment at the right time is key** to achieving **optimal results, avoiding** the need for **lengthy and costly treatments**.

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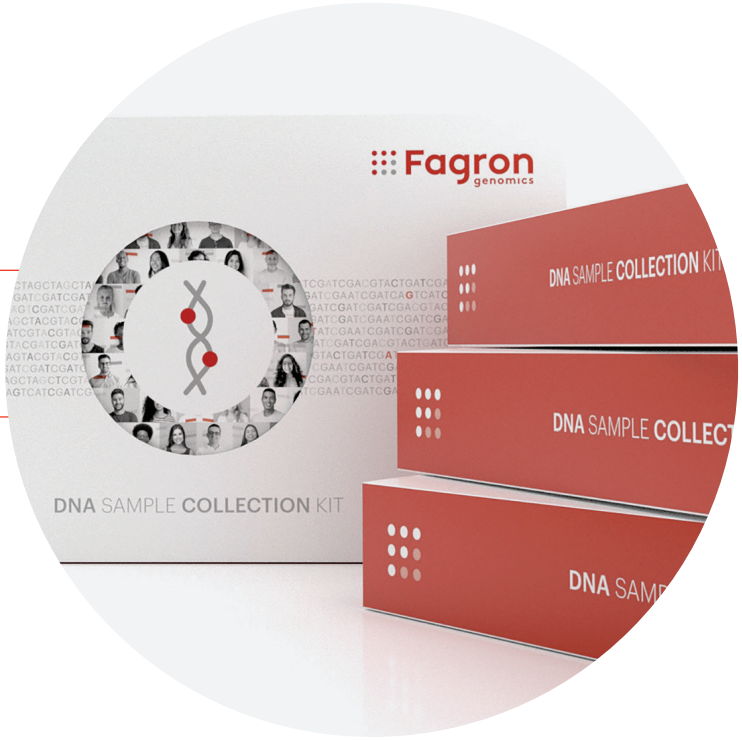
Pharmacogenomics is a branch of both pharmacology and genetics that correlates genetic information of the individual in order to guide the pharmacological treatment, improving safety, efficacy and satisfaction.

Fagron AcneTest analysis **180 genetic variants** on predisposition to acne-related lesions and the response to pharmacological treatment.



Fagron AcneTest combines genetic data with relevant patient's anamnesis through an advanced algorithm to **help healthcare professionals to make better informed decisions**.

What is evaluated?

Fagron AcneTest analyses 60 single-nucleotide polymorphisms (SNPs) in genes related to:

- Sebum production
- Pigmentation
- Inflammation
- Hormone conversion
- Scar tissue formation
- Metabolic rate
- Response to treatment drugs
- Response to nutritional approach

Fagron AcneTest report includes **personalized treatment** based on the analysis of the following categories:

1. Acne Predisposition
2. Skin Condition and Inflammation
3. Nutritional Approach
4. Pharmacogenetics
5. Hormonal Approach

One Patient • One DNA • One Treatment

A pharmacogenetic approach
for the best personalized acne treatment

Genetic variants
Fagron AcneTest analyzes 180 genetic variants with a significant impact on the pathology and treatment of acne. Genetic variants were selected from a careful review of the relevant clinical scientific literature.

Samples handling
The patient samples are genotyped with the OpenArray technique, ensuring reproducibility and sensibility in determining genetic information.

Validation
The test was developed and validated by a team of dermatologists, nutritionists, pharmacists, geneticists, and programmers, following the highest quality standards.

Prescriptions
Personalized prescriptions were assembled regarding the best clinical practices and international guidelines to ensure that report resulting from this assay significantly improves the level of information and, thus, the clinical approach delivered by the physician.

Data privacy
Fagron Genomics digital healthcare platform meets the requisite regulatory and data protection standards.

AcneTest
How it works

Procedure

1.
Collect the DNA sample according to the instructions.

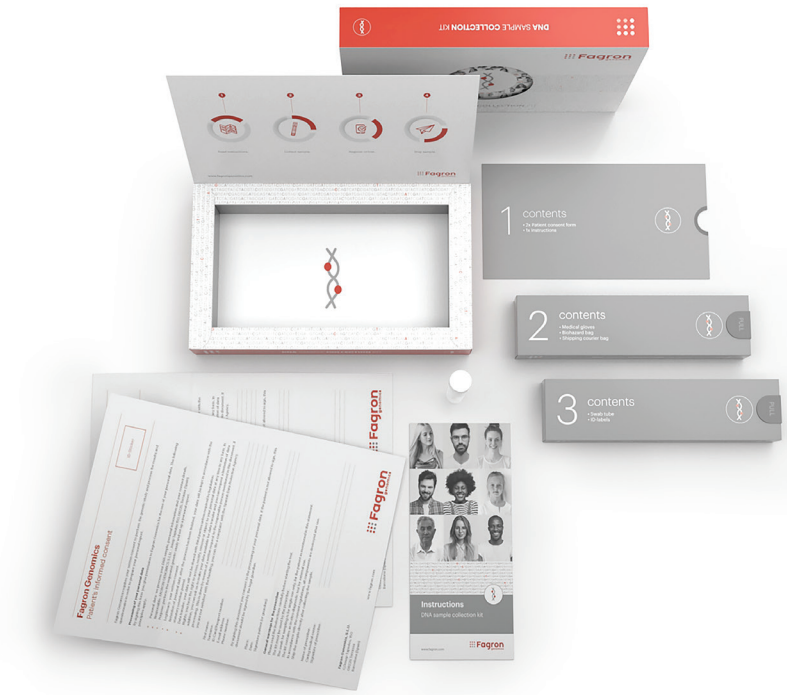
2.
Register the kit and complete the patient questionnaire online at **www.fagrongenomics.com**

3.
Send the sample following the process agreed with your sales representative.

4.
Results are provided in 4-5 weeks.

Kit content

- 1x Swab tube
- 2x Patient consent form
- 1x Instructions
- 2x ID-labels
- 1x Biohazard bag
- 1x Shipping Courier bag



AcneTest Report

Once patient's **questionnaire is complete** and genetic data available, **reports** can be **viewed and downloaded** from a **secure personal area**. Our digital healthcare platform **meets the requisite regulatory and data protection** standards. The report includes:

Summary of patient characteristics

Full genetic analysis and explanation

Suggested personalized formulations

References

1. Heng, A. H. S. & Chew, F. T. Systematic review of the epidemiology of acne vulgaris. Sci. Rep. 10, 5754 (2020)
2. Goulden VStables GICunliffe WJ Prevalence of facial acne in adults. J Am Acad Dermatol. 1999;41577- 580
3. Lauren E Barnes, Michelle M Levender, Alan B Fleischer, Steven R Feldman, Quality of life measures for acne patients, Dermatologic Clinics 2012, 30 (2): 293-300

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