



AcneTest

Genetic awareness to personalize
acne treatment

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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 **87 genetic variants** on predisposition to acne-related lesions and the response to pharmacological treatment.



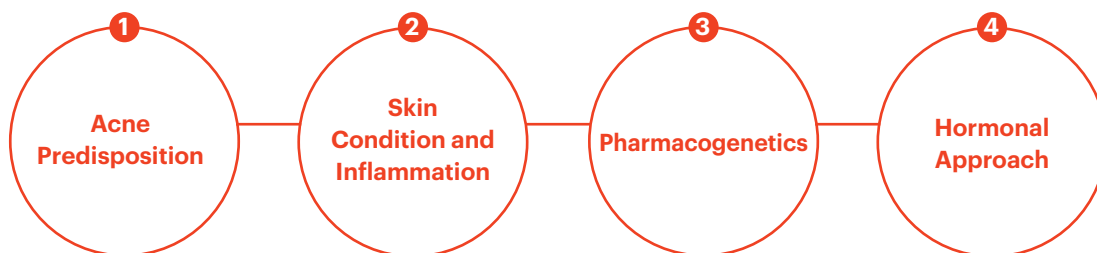
Fagron AcneTest combines genetic data with relevant patient's anamnesis through an advanced algorithm to **help healthcare professionals to make better informed decisions.**

What is evaluated?

Fagron AcneTest analyses 29 single-nucleotide polymorphisms (SNPs) in genes related to:

- Sebum production
- Pigmentation
- Inflammation
- Scar tissue formation
- Predicted treatment
- Hormone conversion

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



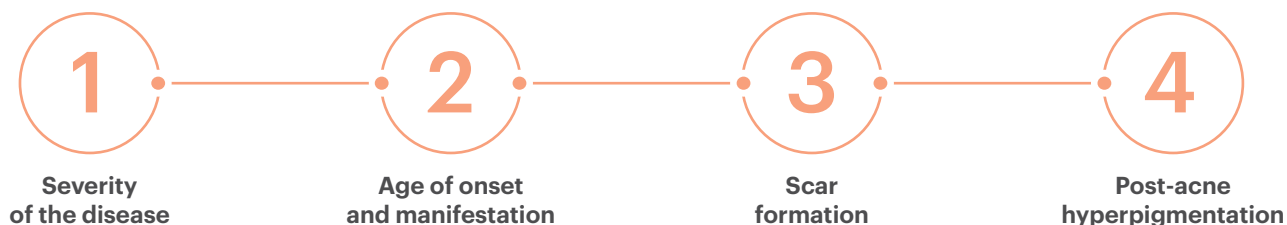
One Patient • One DNA • One Treatment

AcneTest

Genetic awareness to personalize acne treatment

Acne is a multifactorial condition with an important inflammatory component.

While the proliferation of *Cutibacterium acne* majorly causes acne, **several genetic factors influence:**



9.4%

Acne affects 9.4% of people worldwide

Is one of the most common dermatological disorders today¹.

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 treatment³.

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.**

A pharmacogenetic approach for the best personalized acne treatment



Genetic variants

Fagron AcneTest analyzes 87 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. Patient orders testing from their registered healthcare specialist, with direct drop shipping as option.
2. Collect gentle cheek swab according to the instructions, either in office or at patient's convenience.
3. Patient completes in-kit steps & questionnaire online via provided website links on instructions.
4. Ship the sample & forms to the GX Sciences laboratory via included prepaid return shipping.
5. Results are provided via portal typically in 5-7 business days after receipt of valid sample & forms.

Kit content

- 1x Swab tube
- 1x 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 your **secure personal provider portal**. . 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 V, Stables G, Cunliffe WJ. Prevalence of facial acne in adults. *J Am Acad Dermatol.* 1999;41:577-580
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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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. GX Sciences LLC expressly reserves any legal actions in case of an inappropriate, 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 provide the appropriate medical guidance and advice.

