



FG Basic

Genetic Analysis of Drug
Response

SYNLAB 
SOLUTIONS IN DIAGNOSTICS

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Why undergoing this examination?

Genomic variation is one of the factors responsible for modulating the individual response to medications. Pharmacogenetics studies how genetic differences between individuals influence responses to drugs. The metabolism of a drug involves various reactions that modify it and, in general, convert it into a more soluble molecule that can be excreted more easily. Several genes responsible for the expression of enzymes acting in drug metabolism pathways have genetic variants that cause changes in enzyme expression, selectivity, or activity, reflecting the diversity of responses to drugs. Consequently, evaluating the genetic profile based on the analysis of these variants has become essential to assist in understanding drug metabolism.

What is the exam?

The **FG Basic** pharmacogenetic panel evaluates variants in genes responsible for the expression of the main enzymes involved in the metabolism of medications most commonly used in different therapeutic areas. The analysis provides relevant information on 188 drugs currently most used in medicine, based on the study of 22 genetic variants described in the scientific literature, present in the cytochrome P450 gene family: CYP450 (CYP1, CYP2, and CYP3).

For whom is it indicated?

- Patients undergoing pharmacological treatment who want to personalize medication based on their genetic profile;
- Patients on polypharmacy;
- Patients experiencing side effects to drugs;
- Patients for whom pharmacological treatments do not yield expected results.

Technology

Next-generation sequencing (NGS).

Advantages

SYNLAB GROUP

Guaranteed by the experience of the absolute European leader in laboratory diagnostics.

COMPLETE

- A simple blood sample for analysis;
- Results will suggest individualized approaches, aiding in prognosis to provide greater treatment efficacy and a significant reduction in adverse reactions.

Extra Information

DOCUMENTATION - Available on the SYNLAB Direct for clients

- Informed Consent;
- Clinical Questionnaire;
- Medical Request.

PREPARATION

- Fasting is not necessary for the exam.



Delivery Time

30 business days



Sample Type

5 mL of whole blood in EDTA

Additional Information

Class of drugs analyzed

Allergies	Antiepileptics
Respiratory system	Antihypertensives
Alzheimer's	Antimigraine
Parkinson's	Antineoplastics
ADHD	Antipsychotics
Analgesics	Cholesterol
Anxiolytics	Diabetes
Antibiotics	Steroids
Anticoagulants	Gastroenterology
Antiarrhythmics	Antidepressants
	Urology