



GLOBAL PGx

Genetic Analysis of Drug
Response

SYNLAB 
SOLUTIONS www.synlab.com



Why undergoing this examination?

Variation in the human genome is one of the factors responsible for modulating individual responses to medications. Pharmacogenetics studies how genetic differences between individuals influence their responses to drugs. The metabolism of a drug consists of various reactions that modify it and generally convert it into a more soluble molecule that can be more easily excreted. Several genes responsible for the expression of enzymes involved in drug metabolism pathways have genetic variants that cause changes in enzyme expression, selectivity, or activity, which result in diverse drug responses. Consequently, assessing the genetic profile based on the analysis of these variants has become essential in aiding the understanding of drug metabolism.

What is the exam?

The GLOBAL PGx Gene Panel pharmacogenetic test evaluates variants in the genes responsible for the expression of the main enzymes involved in the metabolism of drugs most commonly used across different therapeutic areas. The analysis provides relevant information on 161 drugs widely used in medicine today, based on the study of 55 genetic variants described in the scientific literature, present in 13 genes: *CYP1A2*, *CYP2C9*, *CYP2C19*, *CYP2D6*, *CYP3A5*, *ABCB1*, *COMT*, *FACTOR II*, *FACTOR V*, *MTHFR*, *SLCO1B1* e *VKORC1*.

For whom is it indicated?

- Patients undergoing pharmacological treatment who wish to personalize their medication based on their genetic profile;
- Patients on polypharmacy;
- Patients experiencing side effects from drugs;
- Patients for whom pharmacological treatments have not yielded the expected results.

Technology

MassArray (iPlex)

Advantages

SYNLAB GROUP

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

COMPLETE

- A simple blood sample for analysis;
- The results will allow for the suggestion of individualized approaches, supporting 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

22 business days



Sample Type

5 mL of whole blood in EDTA

Additional Information

Drug Classes Analyzed

Analgesics and Anti-inflammatory	Antiepileptics
Antiemetics	Anti-migraine
Antifolates	Antipsychotics
Respiratory System	Antidiabetics
Anticoagulants and Antiplatelets	Steroids
Antihypertensives	Glucocorticoids
Diuretics	Antidepressants
Cardiovascular	Genitourinary System
Anxiolytics	Hypnotics and Sedatives
Antibiotics	Psychoanaleptics
Antifungals	Antigout
Muscle Relaxants	Alzheimer's and Parkinson's