





## Why undergoing this examination?

Tamoxifen is the most commonly used selective modulator in breast cancer treatment. One of the main causes of interindividual response differences to tamoxifen is the presence of alleles in the CYP2D6 gene associated with null, decreased, or increased enzymatic activity compared to normal. The CYP2D6 gene encodes the CYP2D6 enzyme, which converts tamoxifen into endoxifen, its active metabolite and the primary contributor to its antineoplastic activity. Consequently, a decrease in CYP2D6 enzyme activity results in reduced efficacy of tamoxifen treatment.

### What is the exam?

The **FG Onco Tamoxifen** genetic profile studies the 11 main allelic variants of the **CYP2D6** gene with known clinical relevance. These 11 allelic variants cover over 97% of all alleles described in this gene. The goal of the analysis is to identify patients with an increased likelihood of reduced tamoxifen treatment efficacy and the development of serious side effects.

## For whom is it indicated?

- Patients undergoing pharmacological treatment that does not yield expected results;
- Patients experiencing drug-related side effects.

# **Technology**

Next-generation sequencing (NGS)

## **Advantages**

#### **SYNLAB GROUP**

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

### **COMPLETE**

Detailed report, where the results will suggest individualized courses of action, aiding in prognosis for 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 prescription.

### **PREPARATION**

• Fasting is not necessary for the exam.



**Delivery Time**12 business days



Sample Type

5 mL of whole blood in EDTA