



**BRCA+16 GENES**  
Prevention of hereditary  
gynecological cancer

**SYNLAB**   
SOLUTIONS IN DIAGNOSTICS

[www.synlab-sd.com](http://www.synlab-sd.com)



## Why undergoing this examination?

Hereditary gynecological cancer is characterized by its occurrence in individuals under 40 years of age. In women, it accounts for 5-15% of cases of this type of cancer. The origin of this genetic susceptibility often lies in mutations in the BRCA1 and BRCA2 genes, although there are other genes related to breast, ovarian, and endometrial cancer that should be studied to provide more comprehensive information for a broader medical analysis.

## What is this exam?

The **BRCA+** test is a patient's DNA analysis to detect point mutations, small insertions/deletions, and copy number variations (CNVs) in 18 genes. These genes include ATM, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, EPCAM, MLH1, MSH2, MSH6, NBN, PALB2, PMS2, PTEN, RAD51C, RAD51D, STK11, and TP53, all related to hereditary gynecological cancer. Additionally, in case of a positive CNV result for the BRCA1, BRCA2, and EPCAM genes, confirmation is done through MLPA.

## For whom is it indicated?

- Women over 30 without prior history, as a preventive measure for breast and/or ovarian cancer;
- Women with a family history of breast (male or female) and/or ovarian cancer;
- Family members carrying a mutation in BRCA1 or BRCA2;
- Patients with this type of tumor, to determine their possible hereditary profile.

## Technology

Next-generation sequencing (NGS).

## Advantages

### SYNLAB GROUP

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

### COMPREHENSIVE

Complete genetic study of genes related to hereditary gynecological cancer.

### COMPLETE

- Complete genetic study of genes related to hereditary gynecological cancer;
- Genetic counseling in cases where it is necessary to assess the implications of the result for the patient and their family;
- Any pathogenic or uncertain significance mutation is confirmed through a new DNA extraction followed by Sanger sequencing, ensuring 100% coverage of all DNA bases read.

## Extra Information

### DOCUMENTATION – Available on the SYNLAB Direct for clients

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

### PREPARATION

Fasting is not necessary for the test.



**Delivery Time**  
15 business days



**Sample Type**  
8 mL of total blood in EDTA  
or  
OroGene Saliva OG510

## Additional Information

Check below the list of genes analyzed in BRCA+16 GENES::

### Check below the list of genes analyzed in BRCA+16 GENES:

ATM	<b>BRCA1*</b>	<b>BRCA2*</b>
BRIP1	CDH1	CHEK2
<b>EPCAM*</b>	MLH1	MSH2
MSH6	NBN	PALB2
PMS2	PTEN	RAD51C
RAD51D	STK11	TP53

\*Confirmation by MLPA in case of CNV detection.