THE BRCA+16 GENES TEST

HEREDITARY **BREAST AND OVARIAN** CANCER

Early Screening Saves Lives

LIFETIME RISK TO DEVELOP BREAST CANCER

GENERAL POPULATION	*BRCA1* MUTATION	*BRCA2* MUTATION
12%	46-87%	38-84%

LIFETIME RISK TO DEVELOP OVARIAN CANCER

GENERAL POPULATION	*BRCA1* MUTATION	*BRCA2* MUTATION
1-2%	39-63%	16-27%

WHY CHOOSE THE BRCA+16 GENES TEST?

BRCA1/BRCA2 + 16 Genes Sequencing + MLPA of BRCA1/BRCA2, EPCAM

+ COMPREHENSIVE

Genetic study that includes the analysis of *BRCA 1*, *BRCA 2* + 16 genes with robust scientific evidence related with hereditary breast, ovarian and endometrial cancer.

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

Hereditary **Breast and Ovarian** cancer is generally associated with mutations in *BRCA1* and *BRCA2* genes. These genes act as tumor suppressors blocking the development of cancer in normal situations. However, when these genes have certain mutations, they lose their functionality and cannot block or impede tumor development.

In addition to the *BRCA1* and *BRCA2* genes, there are other genes related to these cancer types that must be investigated in order to provide a more comprehensive information than only analysing *BRCA1* and *BRCA2* genes, which gives the test a high reliability.

SYNLAB

مختبر فرايبورج الطبي الشرق الأوسط (ذ.م.م)
FREIBURG MEDICAL LABORATORY MIDDLE EAST (L.L.C.)

☎ Phone +971-4-3962227 • ✉ Email info@fml-dubai.com • www.fml-dubai.com

Indications

The test is indicated in individuals with a personal or family history (1st-, 2nd-, or 3rd-degree relative in either lineage) of any of the following characteristics :

- Breast cancer diagnosed at or before age 50 years
- Ovarian cancer
- Multiple primary breast cancers either in one or both breasts
- Male breast cancer
- Triple-negative (estrogen receptor-negative, progesterone receptor-negative, and HER2/neu [human epidermal growth factor receptor 2]-negative) breast cancer, particularly when diagnosed before age 60 years
- The combination of pancreatic cancer and/or prostate cancer (Gleason score ≥7) with breast cancer, and/or ovarian cancer
- Two or more relatives with breast cancer, one under age 50
- Three or more relatives with breast cancer at any age
- A previously identified BRCA1 or BRCA2 pathogenic variant in the family

BLOOD sample

BRCA1 + BRCA2 +16 genes

For MEN and WOMEN

Results 2-3 weeks

References:
Daly M et al. NCCN Guidelines® Insights: Genetic/Familial High-Risk Assessment: Breast and Ovarian. V 2.2017. Jan. http://www.nccn.org.
Nielsen FC et al. Hereditary breast and ovarian cancer: new genes in confined pathways . Nature Reviews Cancer. August 12, 2016
Petrucelli N et al. BRCA1- and BRCA2-Associated Hereditary Breast and Ovarian Cancer. Gene Reviews. Last Update. December 15, 2016
Noone AM et al. SEER Cancer Statistics Review, 1975-2015, National Cancer Institute. Bethesda, MD, based on November 2017 SEER data submission, posted to the SEER web site, April 2018.

SYNLAB

مختبر فرايبورج الطبي الشرق الأوسط (ذ.م.م)
FREIBURG MEDICAL LABORATORY MIDDLE EAST (L.L.C.)

☎ Phone +971-4-3962227 • ✉ Email info@fml-dubai.com • www.fml-dubai.com