

17 genes

Breast & Ovarian Cancer + Lynch Syndrome



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Overview

This panel is an advanced genetic test that analyses **17 genes** known to significantly increase an individual's risk of developing hereditary breast, gynaecological and colorectal cancer, among others.

This panel's accelerated turnaround time provides clinicians with crucial genetic information that can be used, together with the patient's clinical information, to aid informed decisions about prevention or treatment.

Based on whole exome sequencing, the test enables the **expansion of the analysis** to other candidate genes outside of the panel under physician discretion^a.

17 genes included

The panel includes 17 genes related to hereditary breast and ovarian cancer together with Lynch Syndrome, with strong level of evidence as established in NCCN^b guidelines, for which specific medical management is defined.

<i>ATM</i>	<i>BARD1</i>	<i>BRCA1</i>	<i>BRCA2</i>	<i>BRIP1</i>
<i>CDH1</i>	<i>CHEK2</i>	<i>EPCAM</i>	<i>MLH1</i>	<i>MSH2</i>
<i>MSH6</i>	<i>PALB2</i>	<i>PTEN</i>	<i>RAD51C</i>	<i>RAD51D</i>
<i>STK11</i>	<i>TP53</i>			

Adding Lynch Syndrome genes to the panel enables the detection of an additional 10%-15% of the hereditary ovarian cancer cases¹

Who the test is for

- Females with breast or ovarian cancer diagnosis, males with breast cancer diagnosis or individuals presenting any cancer type related to Lynch Syndrome.
- Family history related to the conditions described above.

What is included

- Veritas test kits
- Sample sequencing and variant interpretation
- Results report
- Clinician support (if required)^c

Technical specifications



Type of sample required

Saliva (collected in Veritas kit) or blood sample (EDTA tube purple cap).



Turnaround time

2-3 weeks from the receipt of sample in laboratory.



Coverage

Whole exome sequencing (WES) with an average coverage of 100x, sequencing over 99% of genes of interest at $\geq 20x$.



Detected variants

Single nucleotide variants (SNV), small insertions/deletions, as well as NGS based copy number variants (CNVs) are detected.



Analytical sensitivity

99.9%, 95% CI [99.7%, 100%] for SNVs and 93.6%, 95% CI [88.2%, 97.0%] for small insertions/deletions.

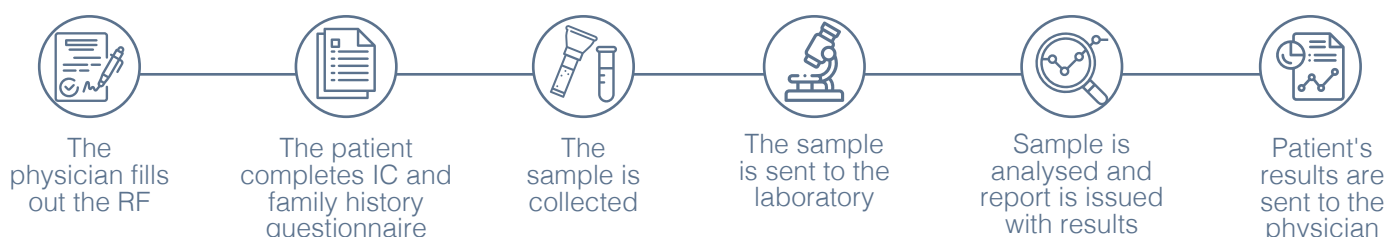


Variants reported

Pathogenic variants, likely pathogenic variants and Variants of Uncertain Significance (VUS), classified according to the American College of Medical Genetics and Genomics (ACMG) (PMID: 25741868) are included in the report.

Around 10% of breast and 15% of ovarian cancers are hereditary cases² for which preventive and treatment options are established.

Pathway



^a Additional genes analysis may have extra cost.

^b NCCN: National Comprehensive Cancer Network. NCCN Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic guidelines.

^c Clinical support can either be provided by Veritas or the patient's clinician.

^d Except for *NF1* gene that presents a 100% penetrance and clear phenotypic features.

¹ Rasmussen M, Lim K, Rambech E, et al. Lynch syndrome-associated epithelial ovarian cancer and its immunological profile. *Gynecol Oncol.* 2021 Sep;162(3):686-693.

² Sessa C, Balmaña J, Bober SL, et al. Risk reduction and screening of cancer in hereditary breast-ovarian cancer syndromes: ESMO Clinical Practice Guideline. *Ann Oncol.* 2023 Jan;34(1):33-47.

Why Veritas

Expanded analysis

Whole exome sequencing technology enables the possibility of extending the study to other genes, at physician's discretion, without taking a new sample. This might be useful in case no variant is detected, and the suspicion of genetic origin persists.

Genetic interpretation team

Veritas has a dedicated team of curators - geneticists that are experts in variant analysis and interpretation. They work with public, private and proprietary databases to ensure that the report is based on the most up-to-date genetic knowledge.

Fast and precise

The fast turnaround time empowers you and your patients to make informed surgical and treatment decisions sooner. This can lead to improved patient outcomes and earlier detection of at-risk relatives for preventative measures.

Aligned with guidelines

To ease patient management, the panel analyses the genes with strong gene-disease evidence as established in the NCCN Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic guidelines^d, which also features the risk for the patient and the specific clinical management for every gene.

Comprehensive analysis

Includes all the genes with solid evidence related to breast and ovarian cancer together with Lynch Syndrome, to confirm if there is a hereditary origin that may justify the implementation of screening or risk reduction strategies for the patient and the study of at-risk relatives.

Clinician Support

Service providing pre- and post-test clinician support with additional services available upon request.



Veritas, a LetsGetChecked company, is a leader in healthcare solutions; guided by science, empowered by technology and passionate about caring for people.

Veritas stands out as The Genome Company. We're the first to offer clinical-grade Whole Genome Sequencing (WGS) and interpretation for healthy individuals.

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