

12 Gene Breast Cancer Panel

Genetic testing to help guide breast cancer treatment

This test analyses 12 genes known to significantly increase an individual's risk of developing breast and ovarian cancer as a second primary.

With an accelerated turnaround time, clinicians can make informed screening, prevention, and treatment decisions by using this targeted panel to quickly assess a patient's risk.

The identification of a genetic variant in a patient may also guide the testing and management of at-risk relatives.

Genes analysed

ATM	CDH1	RAD51C
BARD1	CHEK2	RAD51D
BRCA1	PALB2	STK11
BRCA2	PTEN	TP53

All current known actionable genes conferring at least a two-fold risk of breast and ovarian cancer.

Specification

Assay type	Germline DNA NGS
Sample requirement	Saliva (Oragene Dx OGD-610) or Blood (3mL for 10mL tube, 2mL for 4mL or 6mL tube – purple EDTA tube)
Detected alterations	Detects single nucleotide variants (SNV), small insertions/deletions (InDels), and NGS-based deletion/ duplication (CNV) analysis
Minimum read	 ≥ 99% targeted regions covered at ≥ 20 x observed in CENTOGENE lab operations and expected if CENTOGENE protocols are followed
Sensitivity	SNVs and InDels (≤55bp) >99.6%, CNVs >95.0% ^[1]
Turnaround time	2-3 weeks from receipt of sample in laboratory ^[2]



The clinical care pathway

Why choose this panel?



Custom gene panel

Greater precision for clinicians who are looking at specific variants or genes associated with breast and ovarian cancer to help inform surgical and treatment decisions.



Fully validated for clinical use

Giving you confidence in the genetic information upon which you'll make life-changing patient management decisions.



Clinically actionable results

Helping you to develop a personalised screening, prevention, and treatment plan for breast cancer patients and identified atrisk relatives.



Automated ordering and reporting system

To reduce the administrative burden for clinicians, service turnaround time and carbon footprint.



Fast results turnaround

Enabling you and your patient to make surgical and treatment decisions quickly for better patient outcomes and the early identification of at-risk relatives.



Pre and post-test clinical support

An added-value service to help your patients to make an informed decision prior to taking the test and understand their personalised results report post-test.

What's included in the service?

- Test kit
- Postage and packaging to clinic and laboratory
- Sample processing
- Results report
- Pre and post-test clinician support (if required)^[3]

Contact us

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Accreditation

Berkshire & Surrey Pathology Services is an ISO accredited laboratory under ISO 15189:2012. Currently part of an Extension to Scope application to UKAS under ISO 15189:2012.

The laboratory utilises a CE marked approved procedure that controls the entire process of sample analysis from DNA extraction, library preparation, through to NGS sequencing and bioinformatic analysis providing the final results. In addition, the bioinformatic software is registered as an IVD with MHRA. This is provided by CENTOGENE and Twist Bioscience.

- $\ensuremath{^{[2]}}$ MLPA performed on all suspected CNVs may require a longer turnaround time.
- $\ensuremath{^{[3]}}$ Pre and post-test clinical support can either be provided by Everything Genetic or the patient's clinician.

 $^{^{[1]}}$ CNV detection sensitivity is decreased for repetitive and homologous regions, such as Pseudogenes.