everything genetic

Multi-Cancer Panel

Determine your patient's best treatment options with hereditary cancer testing

This panel analyses a wide range of genes associated with the reported increased risk of one or more of the following hereditary cancers:

Breast	Colorectal	Endometrial
Gastric	Melanoma	Ovarian
Pancreatic	Prostate	Renal
Skin	Thyroid	Uterine

The test can be used to confirm the presence of a genetic variant in already diagnosed cancer patients, and to inform the presence of an increased risk to develop cancer from the same variant in the immediate relatives of the cancer patient.

It is also suitable for individuals with a family history of cancer to identify their risk of developing the disease due to an inherited genetic variant.

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]

Genes analysed

ABRAXAS1	CDK4	HOXB13	MUTYH	PTEN	SDHD
APC	CDKN2A	KIT	NBN	RAD50	SMAD4
ATM	CHEK2	MC1R	NF1	RAD51C	SMARCA4
AXIN2	DICER1	MEN1	NTHL1	RAD51D	STK11
BAP1	DIS3L2	MET	PALB2	RECQL	TGFBR2
BARD1	EPCAM	MITF	PMS1	RET	TP53
BLM	FANCC	MLH1	PMS2	RNF43	TSC1
BMPR1A	FH	MLH3	POLD1	RPS20	TSC2
BRCA1	FLCN	MRE11	POLE	SDHA	VHL
BRCA2	GALNT12	MSH2	POT1	SDHAF2	WT1
BRIP1	HNF1A	MSH3	PRSS1	SDHB	XRCC2
CDH1	HNF1B	MSH6	PTCH1	SDHC	XRCC3

Why choose this panel?

Comprehensive multi-gene panel

A cost-effective way to identify inherited disease-causing variants to help guide surgical and treatment decisions.

Accurate results

Helps clinicians to develop a personalised screening, prevention, and treatment plan for cancer patients and identified at-risk relatives.

Germline genetic test

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

Clinically actionable results

Helping clinicians and patients to develop personalised screening, prevention, and treatment plans.

Accelerated turnaround time

Enabling clinicians and patients to make surgical and treatment decisions quickly for better patient outcomes.

Pre and post-test clinical support

Clinical support to help patients make an informed decision prior to taking the test and understand their personalised results report post-test.

Precision care: Identifying patients for hereditary cancer testing

Clinicians may consider recommending a hereditary cancer test for several reasons, primarily related to assessing the risk of hereditary cancer syndromes in individuals and their families. Here are some key reasons why clinicians might consider a hereditary cancer test for their patient:

Family history

Individuals with a strong family history of cancer, especially early-onset cases or multiple affected relatives, may be at an increased risk of hereditary cancer predisposition.

Personal cancer history

Patients with specific cancers linked to hereditary syndromes (e.g., breast, ovarian, colorectal) may benefit from genetic testing to identify inherited genetic variants.

Multiple primary cancers

Individuals diagnosed with multiple primary cancers are candidates for hereditary cancer testing to assess potential underlying genetic predisposition.

Specific cancer types

Certain cancers (e.g., breast, ovarian, colorectal, pancreatic, melanoma) are strongly associated with hereditary predisposition, prompting consideration of genetic testing when present in a patient or their family.

Known hereditary syndromes

If a family member has a known hereditary cancer syndrome or genetic variant, testing other family members can guide medical management and assess their risk.

Ethnic or geographic factors

Certain populations may have a higher prevalence of specific hereditary cancer syndromes, influencing the assessment of a patient's risk and the decision to pursue genetic testing.

5-10% of cancers diagnosed in the UK are linked to an inherited gene fault.[4]

The clinical care pathway

1. Clinician requests set up on online portal
2. Clinician orders test via online portal
3. Kits shipped to clinic
4. Clinician activates test kit on portal and completes TRF (before taking sample/ shipping to patient)
5. Patient completes IFC, family history questionnaire and pre-test clinical support (if selected)[3]
6. Saliva/blood sample is taken and sent to lab
7. Laboratory analyses sample
8. Results sent to clinician/patient within 2-3 weeks of sample received in lab[2]
9. Post-test clinical support provided (if selected)[3]

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]

Accreditation

BSPS 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.

Contact us

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

[2] MLPA performed on all suspected CNVs may require a longer turnaround time.

[3] Pre and post-test clinical support can either be provided by Everything Genetic or the patient's clinician.

[4] Cancer Research UK - Family history and inherited cancer genes

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