

Genetic analyses for cancer

Cancers are usually caused by alterations that can either affect the germ line, in which case they are passed on from generation to generation, or arise *de novo in somatic cells* in the course of life. Depending on the entity, alterations in different genes can be causative for the development of a tumor.

Our gene panels for hereditary tumor diseases are regularly updated based on literature and variant databases and are specifically designed to address germline alterations. All gene panels can be freely combined to match the individual clinical history of each patient.

Hereditary cancer and tumor disposition syndromes

A	Adenomatous polyposis (FAP), familial
	Ataxia telangiectasia/ Louis-Bar-syndrome (AT)
B	Birt-Hogg-Dubé syndrome (BHDS)
	BRCA1/2 alterations in breast, ovarian and prostate cancer (indication for therapy selection)
C	Carney complex syndrome
	Colon carcinoma, colorectal carcinoma, comprehensive
	Cowden syndrome, PTEN-hamartoma tumor syndrome (PHTS)
F	Fanconi anaemia (FA)
G	Gastrointestinal stromal tumor (GIST), familial
H	Hepatobiliary tumors, hepatocellular carcinoma (HCC) and cholangiocarcinoma, Hereditary breast and ovarian cancer (HBOC)
	Hereditary nonpolyposis colorectal cancer (HNPCC)/Lynch syndrome
	Hereditary nonpolyposis colorectal cancer (HNPCC)/Lynch syndrome with MSI/dMMR
L	Li-Fraumeni syndrome (LFS)
	Lung cancer, familial
M	Malignant melanoma, familial
	Medulloblastoma, familial
	Multiple endocrine neoplasia type 1 and type 2 (MEN)
N	Neurofibromatosis type 1 und type 2 (NF)
	Nevoid basal cell carcinoma syndrome (NBCCS)/Gorlin syndrome
O	Osteosarcoma, familial
P	Pancreatitis, familial