



	GENE(S)	ASSOCIATED CANCERS AND RISKS
Hereditary breast and ovarian cancer	BRCA1*	Female breast (57-87%), ovarian (39-40%), pancreatic, melanoma, prostate, male breast
	BRCA2*	Female breast (45-84%), ovarian (11-18%), pancreatic, melanoma, prostate (15%), male breast (>6%)
	EPCAM*	Colorectal (52-82%), uterine (12-55%), possibly prostate, other
	MLH1*	Colorectal (52-82%), uterine (25-60%), stomach (6-13%), ovarian (4-12%), prostate (2 fold), other
	MSH2*	Colorectal (52-82%), uterine (25-60%), stomach (6-13%), ovarian (4-12%), prostate (2 fold), other
	MSH6*	Colorectal (20-44%), uterine (up to 44%), prostate (2 fold), other
	PMS2*	Colorectal (15-20%), uterine (15%), possibly prostate, other
	BRIP1*	Ovarian (up to 9%), breast
	PALB2*	Breast (33-58%), pancreatic, ovarian, possibly prostate, male breast
	PTEN*	Breast (25-85%), thyroid (10-35%), uterine (5-28%), melanoma (up to 6%), other
Lynch syndrome	RAD51C*	Ovarian (5-9%), breast
	RAD51D*	Ovarian (10-12%), breast, prostate
	TP53*	Breast, sarcoma, brain, adrenocortical, leukemia, other
	ATM*	Breast (2-4 fold), pancreatic, prostate
	BARD1	Breast, possibly ovarian
	CDH1*	Diffuse gastric (67-83%), female lobular breast (39-52%), colorectal
	CHEK2*	Breast (2 fold), colorectal, prostate, other
	DICER1	Pleuropulmonary blastoma, cystic nephroma, ovarian sex-cord tumors, brain, other
	MUTYH*	Biallelic mutations: colorectal (up to 80%), stomach, duodenal, uterine, breast/Monoallelic mutations: breast, colorectal (up to 2 fold)
	MRE11A	Breast, possibly ovarian
GYNplus	NBN*	Breast, possibly ovarian, brain, prostate
	NF1*	Breast (3-5 fold), malignant nerve sheath tumors (8-13%), PGL/PCC (up to 7%), brain, other
	RAD50	Breast, possibly ovarian
	SMARCA4	Ovarian (small cell carcinoma, hypercalcemic type), brain, other
	STK11*	GI cancers (up to 57%), breast (up to 45%), pancreatic, other
	APC*	Colorectal (up to 100%), small bowel, stomach, pancreatic, thyroid, brain, other
	BMPRI1/SMAD4*	Colorectal (40-50%), stomach (up to 21%)
	CDK4	Melanoma (up to 74% by age 50)
	CDKN2A	Melanoma (28-67%), pancreatic (17-25%), brain
	GREM1*	Colorectal
OvaNext	HOXB13	Prostate
	POLD1/POLE*	Colorectal
CancerNext		

*NCCN® management guidelines available, excludes MUTYH monoallelic mutations

PGL: Paraganglioma

PCC: Pheochromocytoma