

# OncoDEEP Genes Panel

OncoDEEP screens the tumours much beyond the usual suspects

## NEXT GENERATION SEQUENCING (NGS) - 313 GENES

ABL1	BRCA1	DICER1	GATA2	MDM2	PD-1	RFC1	STAT3
ACVR1	BRCA2	DNMT3A	GATA3	MDM4	PDGFRA	RHEB	STK11
ACVR1B	BRD7	DPYD	GATA6	MECOM	PDGFRB	RHOA	TAF1
ACVR2A	BTG2	EEF2	GNA11	MED12	PD-L1	RHOB	TBL1XR1
AJUBA	BTK	EGFR	GNAQ	MEN1	PD-L2	RICTOR	TBX3
AKT1	CARD11	ELF3	GNAS	MET	PIK3CA	RNF43	TCEB1
AKT2	CASP8	EP300	H3F3A	MGA	PIK3CB	ROS1	TCF12
AKT3	CBL	EPHA2	H3F3C	MLH1	PIK3CG	RPS6KA3	TCF7L2
ALB	CCND1	EPHA3	HGF	MPL	PIK3R1	RPS6KB1	TET2
ALK	CCND2	EPHA5	HIST1H3B	MRE11A	PIK3R2	RPTOR	TGFBR2
AMER1	CCND3	ERBB2	HNF1A	MSH2	PIM1	RQCD1	TGIF1
APC	CCNE1	ERBB3	HRAS	MSH3	POLD1	RRAS2	THRAP3
APEX1	CD44	ERBB4	IDH1	MSH6	POLE	RUNX1	TLR4
APLN	CD70	ERCC2	IDH2	MTOR	PPP2R1A	RUNX1T1	TMSB4X
APOB	CD79B	ESR1	IGF1R	MUC6	PPP6C	RXRA	TNFAIP3
AR	CDH1	EZH2	IL6	MYC	PRKAR1A	SCAF4	TOP1
ARAF	CHD3	FANCA	IL6ST	MYCL	PRKCI	SETBP1	TOP2A
ARHGAP35	CHD8	FANCC	IL7R	MYCN	PRKDC	SETD2	TP53
ARID1A	CDK12	FANCD2	INSR	MYD88	PSIP1	SF1	TPMT
ARID2	CDK2	FANCE	JAK1	MYO18A	PMS2	SF3B1	TRAF3
ARID5B	CDK4	FANCF	JAK2	NCOR1	PTCH1	SIN3A	TSC1
ATF7IP	CDK6	FANCI	JAK3	NF1	PTEN	SLX4	TSC2
ATM	CDKN2A	FANCL	KDM6A	NF2	PTMA	SMAD2	TSHR
ATP11B	CDKN2B	FAS	KDR	NFE2L2	PTPDC1	SMAD4	TXNIP
ATR	CEBPA	FAT1	KEAP1	NKX2-1	PTPN11	SMARCA1	U2AF1
ATRX	CHD4	FBXW7	KIT	NKX2-8	PTPRC	SMARCA4	UGT1A1
ATXN3	CHEK2	FGF3	KNSTRN	NOTCH1	PTPRD	SMARCB1	UNCX
AURKA	COL5A1	FGFR1	KRAS	NOTCH2	RAC1	SMC1A	USP9X
AXIN1	CREBBP	FGFR2	KMT2A	NOTCH3	RAD21	SMC3	VHL
AXIN2	CSF1R	FGFR3	KMT2B	NPM1	RAD50	SMO	WHSC1
B2M	CSNK2A1	FGFR4	KMT2C	NRAS	RAD51	SOS1	WT1
BAP1	CTNNB1	FLCN	KMT2D	NSD1	RAD51B	SOX17	XPO1
BCL2	CTNND1	FLT1	LYN	NTRK1	RAD51C	SOX2	ZFHX3
BCL2L1	CUL1	FLT3	MAGOH	NTRK2	RAD51D	SOX9	
BCL2L11	CUL3	FLT4	MAP2K1	NTRK3	RAF1	SPOP	
BCL9	CYP2C19	FOXA1	MAP2K2	NUP133	RARA	SPTA1	
BCOR	CYP2D6	FOXA2	MAP2K4	NUP93	RASA1	SPTAN1	
BIRC2	DACH1	FOXQ1	MAP3K1	PALB2	RB1	SRC	
BIRC3	DCUN1D1	GAS6-AS1	MAP3K4	PAX5	RBM10	SRSF2	
BRAF	DDR2	GATA1	MAPK1	PBRM1	RET	STAG2	

xxx : Usual hospitals routine

xxx : New in OncoDEEP V6

xxx : Already in previous version

## GENES LIST BY THERAPY

### Useful for targeted therapies :

AKT1	CDKN2A	ERBB3	FANCL	HRAS	MTOR	RAC1	SMO
ALK	CDKN2B	ERBB4	FBXW7	IDH1	NRAS	RAD51	TPMT
AR	CHEK2	ESR1	FGFR1	IDH2	NTRK1	RAD51B	TSC1
ARID1A	CSF1R	EZH2	FGFR2	IGF1R	NTRK2	RAD51C	TSC2
BRAF	CTNNB1	FANCA	FGFR3	JAK2	NTRK3	RAD51D	VHL
BRCA1	CYP2C19	FANCC	FGFR4	KIT	PALB2	RAF1	
CCND1	CYP2D6	FANCD2	GNA11	KRAS	PDGFRA	RB1	
CCNE1	DPYD	FANCE	GNAQ	MAP2K1	PDGFRB	RET	
CDK4	EGFR	FANCF	GNAS	MAP2K2	PIK3CA	ROS1	
CDK6	ERBB2	FANCI	HIST1H3B	MET	PTEN	SMAD4	

### Useful for immunotherapies :

ARID2	MSH2	PD-L2
B2M	MSH3	POLD1
BRD7	MSH6	POLE
JAK1	PBRM1	PMS2
JAK2	PD-1	PTEN
MLH1	PD-L1	STK11

### Useful for PARP inhibitors :

ARID1A	FANCC	FAS
ATM	FANCD2	PALB2
BRCA1	FANCE	RAD51
BRCA2	FANCF	RAD51B
CHEK2	FANCI	RAD51C
FANCA	FANCL	RAD51D

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## THE NEW VERSION OF ONCODEEP

### 4 time more genes & genes regions

313 genes instead 75 (including strongly enlarged panel of genes for improved TMB and MSI calculation)

### Microsatellite Instability (MSI)

Broad coverage not only on the usual suspects

### Single nucleotide polymorphism (SNP)

Unequalled power – Mainly for better immunotherapy selection

### Fusion panel

OncoDEEP enable detecting broader fusions (NTRK1/2, MET-ex14, EGFRVIII, FGFR1/2/3)