

OncoSELECT - Breast Cancer



TARGETED HOTSPOT

GENE	CODON	PREDICTS RESPONSE TO
ERBB2	309	HER2-inhibitors
AKT1	17	mTOR-inhibitors, AKT-inhibitors
PIK3CA	542/545/1047	HER2-inhibitors, mTOR-inhibitors, PIK3CA-inhibitors, anti-ER

TARGETED WHOLE EXON

GENE	EXON	PREDICTS RESPONSE TO
mTOR	Ex19/30/39/40/43/44/45/47/48/53/56	mTOR-inhibitors
PTEN	1/2/3/4/5/6/7/8/9	mTOR-inhibitors
ERBB2	19/20/21/22	HER2-inhibitors
ESR1	5/6/7/8	anti-ER, aromatase-inhibitors
PIK3CA	2/5/6/8/10/21	HER2-inhibitors, mTOR-inhibitors, PIK3CA-inhibitors, anti-ER

COPY NUMBER VARIATION

GENE	SENSITIVITY	PREDICTS RESPONSE TO
ERBB2	6 copies	HER2-inhibitors
FGFR1	6 copies	anti-FGFR1
PIK3CA	6 copies	HER2-inhibitors, mTOR-inhibitors, PIK3CA-inhibitors, anti-ER



OncoSELECT - Colorectal Cancer



TARGETED HOTSPOT

GENE	CODON	PREDICTS RESPONSE TO
NRAS	12 / 13 / 59 / 61 / 117 / 146	anti-EGFR
KRAS	12 / 13 / 59 / 61 / 117 / 146	anti-EGFR
AKT1	17	AKT-inhibitors
MAP2K1	56 / 57 / 67	anti-EGFR, MEK inhibitors
CTNNB1	41 / 45	anti-EGFR
PIK3CA	542 / 545 / 546 / 1047	anti-EGFR, PIK3CA-inhibitors
EGFR	451/467/464/465/491 / 468/492	anti-EGFR
BRAF	466 / 469 / 472 594 / 597 / 600	anti-EGFR

TARGETED WHOLE EXON

GENE	EXON	PREDICTS RESPONSE TO
SMAD4	3/4/5/6/8/9/10/11/12	anti-EGFR
FBXW7	5/8/9/10/11	regorafenib

COPY NUMBER VARIATION

GENE	SENSITIVITY	PREDICTS RESPONSE TO
ERBB2	6 copies	HER2-inhibitors
MET	6 copies	MET-inhibitors



OncoSELECT - Non Small Cell Lung Cancer



TARGETED HOTSPOT

GENE	CODON	PREDICTS RESPONSE TO
NRAS	12 / 13 / 59 / 61 / 117 / 146	EGFR-TKIs
KRAS	12 / 13 / 59 / 61 / 117 / 146	EGFR-TKIs
DDR2	S768R	anti-NSCLC therapies (associated with evolution to SCL)
AKT1	17	EGFR-TKIs, AKT-inhibitors
MAP2K1	56 / 57 / 67	MEK-inhibitors
BRAF	466 / 469 / 472 594 / 597 / 600	EGFR-TKIs, combination BRAF & MEK-inhibitors
ROS1	L2155S / L2026M / G2032R / D2033N / L1951R	ROS1-inhibitors
MET	Y1230C	ALK-inhibitors, MET-inhibitors

TARGETED WHOLE EXON

GENE	EXON	PREDICTS RESPONSE TO
ALK	21 / 22 / 23 / 24 / 25	ALK-inhibitors
EGFR	18 / 19 / 20 / 21	EGFR-TKIs
ERBB2	20	HER2-inhibitors

COPY NUMBER VARIATION

GENE	SENSITIVITY	PREDICTS RESPONSE TO
ERBB2	6 copies	HER2-inhibitors
MET	6 copies	MET-inhibitors
FGFR1	6 copies	anti-FGFR1



TRANSLOCATIONS

GENE	FUSION TRANSCRIPT	PREDICTS RESPONSE TO
ALK	EML4/ALK, KIF5B/ALK, ...	ALK-inhibitors
ROS1	CD74/ROS1, SLC34A2/ROS1, ...	ROS1-inhibitors
RET	CCDC6/RET, KIF5B/RET, ...	RET-inhibitors
NTRK1/3	SQSTM1/NTRK1, ETV6/NTRK3, ...	NTRKs-inhibitors

EXON SKIPPING

GENE	EXON	PREDICTS RESPONSE TO
MET	MET-ex14	MET-inhibitors