Table SI. List of target regions of the pan-cancer 1,021-gene panel in alphabetical order.

Coding sequence	Hot exons
ABL1, ABL2, AKT1, AKT2, AKT3, ALK, APC, AR, ARAF, ATM, ATR, AURKA, AURKB, AXL, BAP1, BCL2, BRAF, BRCA1, BRCA2, BRD2, BRD3, BRD4, BTK, C11orf30, C1QA, C1S, CBL, CCND1, CCND2, CCND3, CCNE1, CD274, CDH1, CDK13, CDK4, CDK6, CDK8, CDKN1A, CDKN1B, CDKN2A, CDKN2B, CHEK1, CHEK2, CRKL, CSF1R, CTNNB1, DDR1, DDR2, DNMT3A, EGFR, EPHA2, EPHA3, EPHA5, ERBB2, ERBB3, ERBB4, ERCC1, ERG, ESR1, EZH2, FAT1, FBXW7, FCGR2A, FCGR2B, FCGR3A, FGFR1, FGFR2, FGFR3, FGFR4, FLCN, FLT1, FLT3, FLT4, FOXA1, FOXL2, GAB2, GATA3, GNA11, GNAQ, GNAS, HDAC1, HDAC4, HGF, HRAS, IDH1, IDH2, IGF1R, IL7R, INPP4B, IRS2, JAK1, JAK2, JAK3, KDR, KIT, KRAS, MAP2K1, MAP2K2, MAPK1, MAPK3, MCL1, MDM2, MDM4, MED12, MET, MITF, MLH1, MLH3, MPL, MS4A1, MSH2, MSH3, MSH6, MTOR, MYC, MYD88, NF1, NF2, NOTCH1, NOTCH2, NOTCH3, NOTCH4, NRAS, NTRK1, NTRK3, PALB2, PDGFRA, PDGFRB, PDK1, PIK3CA, PIK3CB, PIK3R1, PIK3R2, PMS1, PMS2, PRKAA1, PSMB1, PSMB5, PTCH1, PTCH2, PTEN, PTPN11, RAF1, RARA, RB1, RET, RHEB, RHOA, RICTOR, RNF43, ROCK1, ROS1, RPS6KB1, SMARCA4, SMARCB1, SMO, SRC, STAT1, STAT3, STK11, SYK, TMPRSS2, TOP1, TP53, TSC1, TSC2, VEGFA, VHL, XPO1, XRCC1	ABCA10, ABCA8, ABCB7, ABCC8, ABCF2, ACE, ACER2, ACOT11, ACPP, ACSL1, ACSM5, ACSS3, ACTL6B, ADAM23, ADAM33, ADAMTS12, ADAMTS16, ADAMTS19, ADAMTS20, ADAMTS5, ADAMTSL1, ADD2, AGMAT, AGTPBP1, AHCTF1, AK5, AKR1B10, AKR1C1, ALDH1A3, ALDH2, ALG5, ALX4, AMOT, ANK2, ANKRD13D, ANKRD20A4, ANKRD27, ANKRD28, ANKRD30A, ANKRD30B, ANKRD36B, ANO2, AP1B1, AP1G2, AP3B1, APAF1, APLP2, APMAP, APPL2, AQP12A, ARFGAP1, ARFRP1, ARHGAP35, ARHGAP40, ARHGEF1, ARHGEF7, ARNTL, ARPC4-TTLL3, ASH2L, ASTN1, ASXL2, ATAD2B, ATG9B, ATP10B, ATP10D, ATP12A, ATP2C1, ATP6V0A2, ATP8B2, ATXN2, ATXN7L2, BAX, BBS9, BCAS1, BCAS2, BCL2L11, BCR, BLOC1S1, BMPR1B, BRF1, BRSK2, BRWD3, BSG, BTNL3, BTRC, C12orf5, C19orf38, C1orf112, C1orf35, C20orf112, C2orf47, C2orf62, C7orf53, C9orf114, C9orf43, CACNA1A, CACNA1D, CACNA1E, CADM2, CAMKK1, CAPRIN1, CARS, CARS2, CASC4, CASP8, CASP8AP2, CASQ2, CATSPER2, CBFB, CBX4, CCDC155, CCDC159, CCDC17, CCT3, CCT6B, CD1E, CD300LF, CD5L, CD9, CD97, CD99, CDH18, CDH24, CDH26, CDK11A, CDK12, CDK14, CDK18, CDK19, CDS1, CEACAM20, CECR2, CELA2B, CGN, CHD3, CHD4, CHD6, CHI3L1,

	CISD3, CLCN7, CLEC16A, CLINT1, CNGB3, CNKSR2, CNOT3, CNOT4, CNTN1, CNTN4, CNTN5, CNTNAP3B, CNTNAP5, COASY, COL14A1, COL16A1, COL19A1, COL1A1, COL25A1, COL4A5, COL4A6, COL5A1, COL5A2, COL5A3, COL6A5, COL6A6, COL9A1, COPA, COPG1, CPA1, CPSF3, CPSF6, CRTAM, CRTAP, CRYBG3, CSMD1, CSMD3, CSN3, CSNK1E, CSPP1, CTCF, CTIF, CTNNA2, CTSF, CYP2A13, CYP3A4, CYP4A11, CYTH4, DCLK2, DCST1, DDB1, DDX24, DDX3X, DEPDC4, DGKK, DHCR24, DHDDS, DHX9, DIAPH1, DKC1, DLST, DMD, DMXL1, DMXL2, DNAH10, DNAH5, DNAH9, DNAJC11, DNAJC9, DNTTIP1, DOCK11, DOCK3, DOT1L, DPP10, DPP4, DRGX, DUOX1, DYSF, DZANK1, ECHDC1, EDN1, EEF1A1, EFCAB5, EFCAB6, EFCAB7, EFHA2, EFNA5, EIF1AX, EIF2B5, EIF2C2, EIF3E, EIF3I, EIF4ENIF1, EIF4H, ELAVL3, ELL3, EMID2, ENPP2, ENTPD6, EPB41L2, EPB41L4B, EPHB1, EPS8L3, ESD, ETNK2, ETV6, EXOC4, EXOC5, EXOC6, EXOC7, EXTL3, EYA4, F8, F9, FAH, FAM114A2, FAM131B, FAM135B, FAM13C, FAM157B, FAM177B, FAM21A, FAM3A, FAM49A, FAM49B, FAM5C, FAM86B1, FAN1, FANCC, FASTK, FATE1, FBN2, FDCSP, FLNC, FLOT2, FLT3LG, FMN2, FMNL3, FNDC4, FNIP2, FOLH1, FOXJ2, FRG1, FRG2B, FRMD4A, FRMPD2, FRMPD4, FSD2, FSHR, FUBP1, FUNDC1, GAB3, GABRD, GAD2, GALNT13, GALNT14, GFRAL, GIGYF1,

	GINS4, GIPR, GKN2, GLB1L3, GLYR1, GMDS, GNPTAB, GOLGA4, GPAT2, GPATCH2, GPR114, GPR125, GPR133, GPR144, GPS2, GRIA3, GRIK2, GUCY1A3, GUCY2C, GYLTL1B, HAAO, HAP1, HAUS5, HAUS6, HCN1, HDAC6, HEATR7B2, HECTD4, HECW1, HECW2, HID1, HIST1H3B, HLA-DRB1, HLA-DRB5, HMCN1, HMHA1, HNF4A, HOMER2, HPS3, HPS4, HSPA12B, HSPD1, HYDIN, IBSP, IFT172, IGSF9, IKBKAP, IKBKE, IL11RA, IL13RA2, IL1RAPL1, IL27RA, IMPG1, INHBA, INPP5J, IQCA1, ITFG2, ITGA8, ITGA9, ITIH1, ITLN2, ITM2A, ITPKB, ITPR1, KCNAB2, KCNH6, KCNQ2, KDM4A, KDM6A, KEAP1, KIAA0195, KIAA0226, KIAA0319, KIAA0922, KIAA1191, KIAA1199, KIAA1211L, KIF13A, KIF1B, KIF26B, KIF5B, KIFAP3, KIFC1, KIR2DL3, KIR3DL3, KLHL1, KLHL14, KLK1, KMT2B, KMT2C, KRT2, KRT9, KRTAP5-5, KTN1, L3MBTL1, LARP1, LCN10, LCT, LCTL, LETM1, LGALS13, LILRB3, LILRB4, LIPN, LMAN1L, LMBR1L, LPCAT4, LPHN3, LRBA, LRP1B, LRP2, LRP4, LRRC16B, LRRC2, LRRC7, LRRC72, LRRD1, LRRFIP2, LRSAM1, LTBP1, LUC7L2, LUZP4, MAEL, MAGI1, MAN2A1, MAP2, MAP2K4, MAP3K1, MAP4K1, MAPKAPK3, MAPRE3, MAST1, MBIP, MBTPS2, MCF2L2, MCOLN2, MDGA2, MDN1, MED23, MEFV, METTL14, METTL5, MGAM, MICALL1, MID1, MIER2, MLL3, MLPH, MORC1, MORN1, MRPL1, MRPL24, MRPS18B, MSI1, MTA2, MTM1, MTR, MTTP,

	MUC5B, MUS81, MYB, MYBPC2, MYCBP2, MYH15, MYH2, MYH4, MYH8, MYH9, MYL5, MYL6, MYLK2, MYO3A, MYOM1, NACAD, NARF, NAT10, NAV3, NBPF1, NBPF10, NCF2, NCKAP1, NCOR1, NCOR2, NEK5, NELL1, NFE2L2, NIPBL, NLGN3, NLRC3, NLRP4, NMI, NOP2, NOS1, NOS2, NRXN1, NRXN2, NT5C3L, NTM, NUDCD2, NUP205, NUP210, NUTM1, NWD1, NXF1, NXF5, OBP2A, OBP2B, OCA2, ODZ3, OR2T4, OR4A15, OR4C6, OR5L2, OR6F1, OSBPL10, OTOA, OTOGL, OVCH1, P4HB, PABPC4, PACS2, PAEP, PAGE1, PARK2, PARP4, PCK2, PCLO, PCNT, PCNXL2, PCSK5, PCYT1A, PDCD6, PDE1C, PDE2A, PDE4DIP, PDIA5, PDILT, PDRG1, PEX6, PGAP1, PHACTR3, PHF20L1, PHYH, PI4KB, PIP4K2C, PIP5K1C, PIWIL1, PKD1L2, PKHD1, PKLR, PLAC8, PLCB4, PLCZ1, PLEC, PLK2, PLOD3, PLXNA1, POLDIP2, POLE, POLR2J, POLR3B, POLR3GL, POLRMT, POM121L12, POTEG, PPA1, PPDPF, PPEF1, PPFIBP2, PPIL2, PPP1R17, PPP4R4, PQBP1, PREB, PREX2, PRKACA, PRKAG3, PRKCD, PRKDC, PRKX, PRRX1, PRSS1, PRUNE, PSG2, PSG5, PSIP1, PSMC4, PSMC6, PSTPIP1, PTBP3, PTCD3, PTGES3L-AARSD1, PTGS2, PTPLAD1, PTPN13, PTPRA, PTPRD, PTPRM, PYHIN1, QRICH2, RAB1B, RAB3GAP2, RAB6A, RAC2, RALBP1, RAPGEF2, RARB, RASEF, RBM6, RBMX, RCC1, REC8, REG1B, RELN, RERE, RFWD2, RFX3, RNF215, RNF219, RPL22, RPL36A, RPS5, RPS6KA1, RPTOR, RPUSD4,

	RREB1, RRP7A, RUNDC3A, RUNX1, RYR2, RYR3, SAFB2, SAG, SAGE1, SAMD8, SCN10A, SCN3A, SCN7A, SCN9A, SDK2, SEC14L4, SEC24B, SEH1L, SELP, SEMA6A, SEPT12., SERPINA7, SETD1B, SETD2, SF1, SF3B1, SF3B14, SF3B3, SGCZ, SGIP1, SGK1, SGPL1, SH2D3A, SH3BGR, SH3PXD2A, SHISA4, SI, SIDT2, SIK3, SIM1, SIM2, SLC13A3, SLC17A6, SLC17A8, SLC25A1, SLC25A30, SLC26A3, SLC2A2, SLC30A5, SLC35B2, SLC35B4, SLC38A4, SLC38A5, SLC43A1, SLC45A1, SLC4A10, SLC4A4, SLC5A1, SLC6A5, SLC8A1, SLCO1B7, SLCO5A1, SMTN, SNTG1, SORCS3, SPAG16, SPATA13, SPG20, SPINT1, SPPL2A, SPPL3, SPRED1, SPTA1, SRRT, SSBP3, SSH2, SSPO, ST18, ST6GALNAC1, STAG2, STAT4, STAT6, STK11IP, STK31, STX3, SULT1A4, SUPT5H, SUPT6H, SYCP2L, SYNE1, SYNE2, SYNJ2, TAF1B, TAF6, TARBP1, TBC1D1, TBC1D21, TBC1D3, TBC1D5, TBL1X, TBP, TBX15, TBX22, TBX3, TCF20, TCF4, TCP10, TCP11, TEK, TERT, TESC, TEX35, TFDP1, TGDS, TGM2, TGM5, THBS2, THEM5, THOC1, THSD7A, THSD7B, TIMD4, TIMM44, TIMP3, TJP3, TLE1, TLL1, TMC2, TMED8, TMEM104, TMEM120B, TMEM132D, TMEM145, TMEM247, TMEM80, TMEM87A, TMTC4, TMX3, TNFAIP6, TNFSF4, TNN, TNNT1, TNR, TNS3, TP53BP1, TPCN1, TPH2, TPMT, TPTE, TRIM33, TRIM51, TRIM58, TRIML1, TRIO, TRIP11, TRMT112, TRPC5, TRUB1, TSGA10, TSKS, TSPAN12, TSR2, TTF2, TTN, TUBA3C,

	TUBGCP4, TUBGCP5, TYK2, TYRP1, U2AF1, U2AF2, UBASH3A, UBE2Q1, UBE4B, UCHL3, UCK2, UGT8, ULK3, UMOD, UNC13A, UNC13D, UNC5D, USP12, USP34, USP39, USP45, USP48, VAV1, VEZF1, VILL, VIT, VPS13A, VPS33B, VSIG4, WAS, WASL, WDR44, WDR52, WDR62, WDR66, WDR72, WDTC1, WLS, WSCD2, WWP2, XBP1, XPO4, XPO5, ZAP70, ZBTB8OS, ZC3H13, ZC3H7B, ZDHHC11, ZFC3H1, ZFR, ZMYM4, ZNF143, ZNF350, ZNF385A, ZNF414, ZNF512B, ZNF541, ZNF563, ZNF614, ZNF687, ZNF705B, ZNF705G, ZNF711, ZNF804B, ZSWIM8

Table SII. Somatic single nucleotide variants and small insertions and deletions detected in hypermutant and non-hypermutant samples.

Patient ID	Gene symbol	cHGVS	pHGVS	Intron/Exon	Allele frequency	Transcript
HC-001	MUTYH	c.758C>T	p.P253L	EX9	51.2%	NM_001128425.1
HC-001	FCGR2B	c.767C>A	p.P256Q	EX6	30.3%	NM_004001.4
HC-001	ALK	c.1867G>A	p.V623M	EX10	49.4%	NM_004304.4
HC-001	CTNNA2	c.980G>A	p.R327Q	EX7	24.0%	NM_004389.3
HC-001	NFE2L2	c.85G>C	p.D29H	EX2	35.2%	NM_006164.4
HC-001	INPP4B	c.2353A>G	p.M785V	EX23	53.5%	NM_001101669.1
HC-001	HCN1	c.2512C>T	p.R838C	EX8E	31.9%	NM_021072.3
HC-001	MSH3	c.163G>A	p.A55T	EX1	51.0%	NM_002439.4
HC-001	HIST1H3G	c.316G>A	p.E106K	EX1E	29.8%	NM_003534.2
HC-001	POM121L12	c.595G>A	p.E199K	EX1E	1.5%	NM_182595.3
HC-001	ANKRD30A	c.1559C>A	p.S520*	EX13	23.1%	NM_052997.2
HC-001	ANK3	c.634G>T	p.A212S	EX7	31.3%	NM_001204403.1
HC-001	FGFR2	c.758C>G	p.P253R	EX7	55.2%	NM_000141.4
HC-001	FGF3	c.487C[4>5]	p.R164Pfs*41	EX3E	27.8%	NM_005247.2
HC-001	MLL2	c.7426G>T	p.E2476*	EX31	35.2%	NM_003482.3
HC-001	SLX4	c.2400G>A	p.W800*	EX12	67.8%	NM_032444.2
HC-001	TP53	c.1010G>T	p.R337L	EX10	34.3%	NM_000546.5
HC-001	TP53	c.711G>T	p.M237I	EX7	33.3%	NM_000546.5
HC-001	HOXB13	c.290T>A	p.L97Q	EX1	34.6%	NM_006361.5
HC-001	BRIP1	c.508-1G>T	.	IVS5	32.5%	NM_032043.2
HC-001	CIC	c.3470-2A>G	.	IVS14	38.6%	NM_015125.3
HC-002	DDR2	c.1635G>T	p.M545I	EX13	18.5%	NM_006182.2

HC-002	ERBB4	c.2060G>A	p.R687K	EX17	2.0%	NM_005235.2
HC-002	EPHA5	c.2689C>A	p.L897M	EX16	24.2%	NM_004439.5
HC-002	FAT1	c.5958G[2>1]	p.V1987*fs*1	EX10	7.0%	NM_005245.3
HC-002	APC	c.4639G>C	p.E1547Q	EX16E	7.5%	NM_000038.5
HC-002	ROS1	c.353G>A	p.R118Q	EX5	45.4%	NM_002944.2
HC-002	HGF	c.1486delG	p.V496*fs*1	EX13	22.3%	NM_000601.4
HC-002	MLL3	c.12101C>T	p.S4034F	EX47	9.8%	NM_170606.2
HC-002	EPPK1	c.7097G>C	p.G2366A	EX1E	7.4%	NM_031308.1
HC-002	FANCG	c.422G>T	p.R141L	EX4	39.7%	NM_004629.1
HC-002	WT1	c.917G>C	p.W306S	EX4	39.0%	NM_024426.4
HC-002	MAML2	c.2887G>T	p.A963S	EX5E	22.2%	NM_032427.1
HC-002	KRAS	c.35G>C	p.G12A	EX2	53.4%	NM_033360.2
HC-002	FANCM	c.3295C>T	p.R1099C	EX14	28.0%	NM_020937.2
HC-002	AXIN1	c.1949G>T	p.G650V	EX7	26.5%	NM_003502.3
HC-002	PALB2	c.2315A>G	p.D772G	EX5	27.5%	NM_024675.3
HC-002	TP53	c.721T>G	p.S241A	EX7	43.8%	NM_000546.5
HC-002	POLD1	c.1999C>T	p.R667W	EX16	3.5%	NM_002691.3
HC-002	AURKA	c.478G>C	p.A160P	EX5	11.7%	NM_003600.2
HC-003	LRP1B	c.11195C>T	p.S3732L	EX73	6.3%	NM_018557.2
HC-003	PMS1	c.1651A>C	p.N551H	EX9	6.2%	NM_000534.4
HC-003	BMPR2	c.643G>T	p.G215*	EX6	5.9%	NM_001204.6
HC-003	CUL3	c.1894C>T	p.Q632*	EX14	25.6%	NM_003590.4
HC-003	ARID1B	c.1032GGC[4>5]	p.A340[11>12]	EX1	7.0%	NM_020732.3
HC-003	TP53	c.560-2A>T	.	IVS5	28.7%	NM_000546.5
HC-003	GNAS	c.922A>G	p.I308V	EX11	10.0%	NM_000516.4
HC-003	POM121L12	c.549C>A	p.S183R	EX1E	3.8%	NM_182595.3

HC-003	EGFR	c.2156G>C	p.G719A	EX18	66.9%	NM_005228.3
HC-003	EPHB6	c.2287C>T	p.R763W	EX16	16.5%	NM_004445.3
HC-003	EPHB6	c.2915T>A	p.F972Y	EX19	35.7%	NM_004445.3
HC-003	HEY1	c.754T>G	p.S252A	EX5E	5.9%	NM_001040708.1
HC-003	NOTCH1	c.7339G>T	p.G2447C	EX34E	7.5%	NM_017617.3
HC-003	NOTCH1	c.4235A>G	p.Y1412C	EX25	24.3%	NM_017617.3
HC-003	HRAS	c.288C>G	p.Y96*	EX3	6.8%	NM_001130442.1
HC-003	CBL	c.1007+1G>A	.	IVS6	19.4%	NM_005188.3
HC-003	MLL2	c.16169G>T	p.R5390L	EX51	25.7%	NM_003482.3
HC-003	PTPN11	c.631C>T	p.Q211*	EX5	15.5%	NM_002834.3
HC-004	LRP1B	c.13510C>A	p.H4504N	EX89	14.3%	NM_018557.2
HC-004	LRP1B	c.12310A>G	p.N4104D	EX80	12.4%	NM_018557.2
HC-004	LRP1B	c.10606G>A	p.G3536R	EX68	31.3%	NM_018557.2
HC-004	ARHGAP26	c.1539-1G>T	.	IVS17	67.1%	NM_015071.4
HC-004	FLT4	c.3620T>C	p.L1207P	EX27	1.8%	NM_182925.4
HC-004	ABCB1	c.2005C>A	p.R669S	EX17	39.4%	NM_000927.4
HC-004	TCEB1	c.315G>T	p.M105I	EX4E	53.2%	NM_005648.3
HC-004	EXT1	c.1877A>C	p.Y626S	EX9	31.2%	NM_000127.2
HC-004	MYC	c.899G>C	p.G300A	EX3E	23.4%	NM_002467.4
HC-004	CDKN2A	c.132C>A	p.Y44*	EX1	72.8%	NM_000077.4
HC-004	NOTCH1	c.4327C[2>3]	p.L1444Afs*35	EX25	71.7%	NM_017617.3
HC-004	MEN1	c.1244G>A	p.R415Q	EX9	3.2%	NM_130799.2
HC-004	MLL	c.4519C>T	p.P1507S	EX12	46.8%	NM_001197104.1
HC-004	ROBO3	c.3773A>C	p.Y1258S	EX25	1.4%	NM_022370.3
HC-004	MLL2	c.8626C>T	p.Q2876*	EX34	1.1%	NM_003482.3
HC-004	MLL2	c.4295TG[3>2]	p.C1433Wfs*13	EX15	26.6%	NM_003482.3

HC-004	PTPRB	c.214T>G	p.S72A	EX2	1.1%	NM_001109754.2
HC-004	FANCM	c.4447G>A	p.D1483N	EX17	43.5%	NM_020937.2
HC-004	CREBBP	c.641G>T	p.G214V	EX2	52.9%	NM_004380.2
HC-004	PALB2	c.814G>A	p.E272K	EX4	50.4%	NM_024675.3
HC-004	ABCC11	c.2393A>T	p.Q798L	EX18	47.7%	NM_032583.3
HC-004	TP53	c.560-2A>C	.	IVS5	76.4%	NM_000546.5
HC-004	TOP2A	c.3453+2_3454del	.	IVS26-EX27	12.3%	NM_001067.3
HC-004	TOP2A	c.3288+3_3290del	.	IVS25-EX26	15.5%	NM_001067.3
HC-004	BRCA1	c.2290G>A	p.V764I	EX10	13.3%	NM_007294.3
HC-004	ROCK1	c.2083A>G	p.K695E	EX18	53.8%	NM_005406.2
HC-004	SERPINB3	c.1066C>G	p.P356A	EX8E	63.1%	NM_006919.2
HC-004	KEAP1	c.714C>A	p.N238K	EX3	1.3%	NM_203500.1
HC-004	MED12	c.5330C>T	p.P1777L	EX37	73.9%	NM_005120.2
HC-005	ARID1A	c.45C>G	p.N15K	EX1	1.9%	NM_006015.4
HC-005	ARID1A	c.65C>T	p.S22L	EX1	1.8%	NM_006015.4
HC-005	PTCH2	c.1438G>A	p.E480K	EX11	16.8%	NM_001166292.1
HC-005	FLG	c.8648G>A	p.R2883K	EX3E	4.6%	NM_002016.1
HC-005	DDR2	c.2271G>C	p.E757D	EX16	5.2%	NM_006182.2
HC-005	FH	c.32C>T	p.S11L	EX1	5.5%	NM_000143.3
HC-005	ZFP36L2	c.415C>T	p.Q139*	EX2E	4.9%	NM_006887.4
HC-005	FANCL	c.94C>G	p.Q32E	EX1	13.3%	NM_001114636.1
HC-005	XPO1	c.2279C>G	p.S760C	EX19	26.4%	NM_003400.3
HC-005	DNAH6	c.1825G>C	p.E609Q	EX12	5.2%	NM_001370.1
HC-005	LRP1B	c.3905T>A	p.L1302H	EX24	31.2%	NM_018557.2
HC-005	PMS1	c.38C>T	p.S13L	EX2	14.0%	NM_000534.4
HC-005	CASP8	c.1009C>T	p.H337Y	EX8	34.2%	NM_001080125.1

HC-005	ERBB4	c.2273G>C	p.G758A	EX19	28.3%	NM_005235.2
HC-005	FOXL2	c.447G>A	p.M149I	EX1E	1.0%	NM_023067.3
HC-005	ATR	c.6334C>T	p.R2112C	EX38	10.0%	NM_001184.3
HC-005	TET2	c.5263G>A	p.E1755K	EX11E	15.6%	NM_001127208.2
HC-005	FAT1	c.6787G>T	p.A2263S	EX10	35.1%	NM_005245.3
HC-005	SDHA	c.346G>A	p.E116K	EX4	1.6%	NM_004168.2
HC-005	SDHA	c.357G>A	p.W119*	EX4	1.6%	NM_004168.2
HC-005	SDHA	c.1414G>T	p.E472*	EX10	4.1%	NM_004168.2
HC-005	RICTOR	c.4037C>G	p.S1346C	EX31	22.0%	NM_152756.3
HC-005	HCN1	c.2515G>A	p.V839I	EX8E	19.7%	NM_021072.3
HC-005	APC	c.7546G>A	p.E2516K	EX16E	1.1%	NM_000038.5
HC-005	RAD50	c.3811G>A	p.E1271K	EX25E	1.2%	NM_005732.3
HC-005	FAT2	c.9454C>G	p.L3152V	EX13	8.8%	NM_001447.2
HC-005	FAT2	c.2947C>G	p.L983V	EX1	1.0%	NM_001447.2
HC-005	PNRC1	c.817G>A	p.V273M	EX2E	47.6%	NM_006813.2
HC-005	PRDM1	c.1322C>T	p.P441L	EX5	11.4%	NM_001198.3
HC-005	ROS1	c.6962T>A	p.V2321E	EX43E	45.9%	NM_002944.2
HC-005	ROS1	c.3046C>G	p.L1016V	EX20	21.2%	NM_002944.2
HC-005	MET	c.3029-386C>G	.	IVS14	1.5%	NM_000245.2
HC-005	SMO	c.95C>G	p.S32W	EX1	10.6%	NM_005631.4
HC-005	RAD21	c.1840G>A	p.E614K	EX14E	3.5%	NM_006265.2
HC-005	PAX5	c.205C>T	p.L69F	EX2	10.7%	NM_016734.1
HC-005	ATM	c.7593G>A	p.M2531I	EX51	1.2%	NM_000051.3
HC-005	MLL	c.1838G>A	p.R613Q	EX3	5.6%	NM_001197104.1
HC-005	ROBO3	c.1675C>T	p.P559S	EX11	15.0%	NM_022370.3
HC-005	MLL2	c.13255C>G	p.P4419A	EX39	1.0%	NM_003482.3

HC-005	ERBB3	c.994G>A	p.E332K	EX9	1.0%	NM_001982.3
HC-005	ERBB3	c.2191G>C	p.E731Q	EX19	9.0%	NM_001982.3
HC-005	ERBB3	c.2253G>C	p.Q751H	EX19	9.3%	NM_001982.3
HC-005	ERBB3	c.2851G>C	p.D951H	EX24	12.8%	NM_001982.3
HC-005	DICER1	c.65C>T	p.S22L	EX3	1.8%	NM_030621.3
HC-005	USP8	c.1908G>C	p.L636F	EX14	3.6%	NM_001128611.1
HC-005	SLX4	c.2848G>A	p.E950K	EX12	1.1%	NM_032444.2
HC-005	MYH11	c.4641G>C	p.Q1547H	EX34	1.9%	NM_001040113.1
HC-005	TP53	c.369T[2>3]	p.C124Lfs*25	EX4	43.7%	NM_000546.5
HC-005	CDK12	c.47G>A	p.G16E	EX1	9.0%	NM_016507.2
HC-005	CDK12	c.809C>A	p.S270*	EX1	29.6%	NM_016507.2
HC-005	BRCA1	c.1886G>A	p.R629K	EX10	10.5%	NM_007294.3
HC-005	SPOP	c.295C>T	p.R99W	EX4	29.8%	NM_001007228.1
HC-005	RNF43	c.111G>T	p.E37D	EX2	32.1%	NM_017763.4
HC-005	RPTOR	c.3472G>A	p.V1158M	EX29	3.1%	NM_020761.2
HC-005	AXL	c.616G>A	p.E206K	EX5	1.0%	NM_021913.3
HC-005	CIC	c.4600_4601delCCinsTT	p.P1534F	EX20E	4.7%	NM_015125.3
HC-005	CIC	c.4774C>A	p.P1592T	EX20E	4.8%	NM_015125.3
HC-005	POLD1	c.2447C>G	p.S816C	EX20	1.3%	NM_002691.3
HC-005	EP300	c.3448G>C	p.E1150Q	EX18	47.0%	NM_001429.3
HC-005	ATRX	c.2587C>G	p.Q863E	EX9	66.8%	NM_000489.3
HC-005	ATRX	c.2456C>G	p.S819*	EX9	68.0%	NM_000489.3
HC-005	ATRX	c.2111C>G	p.S704C	EX9	67.9%	NM_000489.3
HC-006	LRP1B	c.10248T>A	p.C3416*	EX65	11.7%	NM_018557.2
HC-006	FOXL2	c.98G>A	p.S33N	EX1E	13.5%	NM_023067.3
HC-006	APC	c.7039A>T	p.R2347W	EX16E	22.8%	NM_000038.5

HC-006	HIST1H1E	c.240C>G	p.I80M	EX1E	11.5%	NM_005321.2
HC-006	BRD2	c.1397C>G	p.S466C	EX8	7.1%	NM_001199455.1
HC-006	BRD2	c.1621C>G	p.P541A	EX9	9.1%	NM_001199455.1
HC-006	EGFR	c.1934C>G	p.S645C	EX17	85.5%	NM_005228.3
HC-006	RINT1	c.792C>A	p.Y264*	EX6	19.1%	NM_021930.4
HC-006	NOTCH1	c.6959C>T	p.P2320L	EX34E	9.9%	NM_017617.3
HC-006	GATA3	c.1314G>T	p.M438I	EX6E	13.1%	NM_002051.2
HC-006	SRGAP1	c.1748A>G	p.Y583C	EX15	28.6%	NM_020762.2
HC-006	NTRK3	c.1499C>A	p.T500N	EX14	21.9%	NM_001012338.2
HC-006	TP53	c.797G>T	p.G266V	EX8	35.5%	NM_000546.5
HC-006	NF1	c.404G>A	p.R135Q	EX4	8.7%	NM_000267.3
HC-006	RPTOR	c.2131A>C	p.S711R	EX19	7.4%	NM_020761.2
HC-006	L3MBTL1	c.1153A>G	p.T385A	EX9	7.1%	NM_015478.6
HC-006	PCK1	c.5C>T	p.P2L	EX2	24.4%	NM_002591.3
HC-006	NCAM2	c.1646G>T	p.G549V	EX12	11.6%	NM_004540.3
HC-006	RBM10	c.1546G>T	p.E516*	EX13	63.8%	NM_001204468.1
HC-006	BTK	c.1369C>G	p.L457V	EX15	40.6%	NM_000061.2
HC-007	ECT2L	c.1105G>T	p.E369*	EX10	44.8%	NM_001077706.2
HC-007	LRRC7	c.56G>T	p.G19V	EX1	34.2%	NM_020794.2
HC-007	TP53	c.451C[5>6]	p.P153Afs*28	EX5	31.8%	NM_000546.5
HC-007	LRP1B	c.9938G>T	p.C3313F	EX62	30.8%	NM_018557.2
HC-007	EPHB6	c.1307G>C	p.R436P	EX9	29.5%	NM_004445.3
HC-007	FCGR2B	c.783C>G	p.C261W	EX6	28.2%	NM_004001.4
HC-007	TBX3	c.1617G>A	p.M539I	EX7	27.0%	NM_016569.3
HC-007	PDGFRA	c.877C>A	p.R293S	EX6	25.3%	NM_006206.4
HC-007	KIT	c.480G>C	p.L160F	EX3	24.2%	NM_000222.2

HC-007	ACIN1	c.77G>T	p.G26V	EX1	21.0%	NM_014977.3
HC-007	NTRK3	c.984C[6>5]	p.P330Hfs*84	EX10	19.0%	NM_001012338.2
HC-007	FAT1	c.7777G>T	p.A2593S	EX10	17.2%	NM_005245.3
HC-007	FBXW7	c.840C>A	p.F280L	EX5	16.9%	NM_033632.3
HC-007	FLT1	c.2796G>T	p.K932N	EX20	13.7%	NM_002019.4
HC-007	LRP1B	c.916C>T	p.R306W	EX7	13.1%	NM_018557.2
HC-007	ATM	c.3622G>T	p.D1208Y	EX25	12.4%	NM_000051.3
HC-007	NTRK1	c.2182T>A	p.W728R	EX16	11.8%	NM_002529.3
HC-007	ERBB2	c.2711A>T	p.D904V	EX22	7.5%	NM_004448.2
HC-007	MLL3	c.1172G>T	p.C391F	EX8	1.8%	NM_170606.2
HC-008	MTOR	c.4603A>G	p.M1535V	EX32	20.9%	NM_004958.3
HC-008	MTOR	c.3662C>T	p.T1221I	EX25	42.4%	NM_004958.3
HC-008	MCL1	c.316G>T	p.A106S	EX1	50.8%	NM_021960.4
HC-008	RNASEL	c.1366G>A	p.E456K	EX2	45.5%	NM_021133.3
HC-008	LRP1B	c.5975C>A	p.S1992Y	EX37	59.7%	NM_018557.2
HC-008	FBXW7	c.725A>T	p.Q242L	EX4	79.0%	NM_033632.3
HC-008	HCN1	c.2537C>A	p.S846*	EX8E	28.6%	NM_021072.3
HC-008	ZFPM2	c.1078C>T	p.Q360*	EX8E	53.9%	NM_012082.3
HC-008	CDKN2A	c.181G>T	p.E61*	EX2	77.8%	NM_000077.4
HC-008	RET	c.1705C>A	p.H569N	EX9	17.4%	NM_020975.4
HC-008	MEN1	c.535G>T	p.E179*	EX3	44.0%	NM_130799.2
HC-008	ETS1	c.1325A>T	p.D442V	EX10E	85.3%	NM_001143820.1
HC-008	MLL2	c.16342C>T	p.R5448*	EX52	83.4%	NM_003482.3
HC-008	POLE	c.3595G>T	p.E1199*	EX30	19.9%	NM_006231.2
HC-008	TP53	c.794T>C	p.L265P	EX8	87.2%	NM_000546.5
HC-008	SERPINB3	c.96C>G	p.I32M	EX2	27.8%	NM_006919.2

HC-008	ASXL1	c.28G>T	p.E10*	EX1	42.5%	NM_015338.5
HC-008	NCAM2	c.1567G>T	p.G523*	EX12	76.9%	NM_004540.3
HC-008	PAK3	c.471delTinsCACACACAC	p.K159Hfs*91	EX9	3.1%	NM_002578.3
HC-009	HDAC1	c.1348G>C	p.E450Q	EX12	2.2%	NM_004964.2
HC-009	TAL1	c.778C>A	p.P260T	EX4E	55.4%	NM_003189.2
HC-009	FCGR2B	c.429G>T	p.Q143H	EX4	39.1%	NM_004001.4
HC-009	MDM4	c.1285G>T	p.D429Y	EX11E	18.1%	NM_002393.4
HC-009	LRP1B	c.3734T>C	p.L1245P	EX23	45.7%	NM_018557.2
HC-009	LRP1B	c.902A>T	p.D301V	EX7	25.2%	NM_018557.2
HC-009	CUL3	c.1377G>T	p.K459N	EX9	27.6%	NM_003590.4
HC-009	MLH1	c.521G>A	p.G174E	EX6	17.2%	NM_000249.3
HC-009	EPHA3	c.2073A>C	p.K691N	EX11	3.6%	NM_005233.5
HC-009	PIK3CA	c.1553C>A	p.A518D	EX10	2.8%	NM_006218.2
HC-009	KDR	c.799C>G	p.H267D	EX7	28.3%	NM_002253.2
HC-009	KDR	c.704A>T	p.E235V	EX6	28.7%	NM_002253.2
HC-009	EPHA5	c.2539C>A	p.P847T	EX15	21.4%	NM_004439.5
HC-009	EPHA5	c.1516T>C	p.Y506H	EX6	43.7%	NM_004439.5
HC-009	FAT1	c.2149A>T	p.R717*	EX2	48.4%	NM_005245.3
HC-009	MSH3	c.914G>T	p.G305V	EX6	60.8%	NM_002439.4
HC-009	FAT2	c.8907_8910delGAAG	p.K2970Pfs*61	EX10	34.6%	NM_001447.2
HC-009	TNFAIP3	c.1469A>G	p.Q490R	EX7	28.1%	NM_006290.3
HC-009	PCLO	c.8543G>A	p.R2848K	EX5	62.0%	NM_033026.5
HC-009	PIK3CG	c.2033C>A	p.A678D	EX3	9.9%	NM_002649.2
HC-009	EPHB6	c.2800A>G	p.R934G	EX18	66.6%	NM_004445.3
HC-009	ZFPM2	c.1127G>A	p.R376K	EX8E	3.9%	NM_012082.3

HC-009	GNAQ	c.264G>T	p.Q88H	EX2	56.9%	NM_002072.3
HC-009	SVEP1	c.3979G>T	p.G1327W	EX24	51.2%	NM_153366.3
HC-009	NOTCH1	c.6982G>A	p.G2328R	EX34E	10.7%	NM_017617.3
HC-009	MLL2	c.15007C>T	p.Q5003*	EX48	69.7%	NM_003482.3
HC-009	ASCL4	c.149G>A	p.W50*	EX1E	4.5%	NM_203436.2
HC-009	TSC2	c.823A>T	p.N275Y	EX9	55.5%	NM_000548.3
HC-009	GRIN2A	c.3623G>C	p.R1208P	EX13E	19.2%	NM_001134407.1
HC-009	GRIN2A	c.1141C>A	p.H381N	EX5	3.3%	NM_001134407.1
HC-009	TP53	c.645TG[2>1]	p.V216Gfs*5	EX6	44.0%	NM_000546.5
HC-009	TP53	c.332T>G	p.L111R	EX4	18.4%	NM_000546.5
HC-009	KEAP1	c.1409G>A	p.R470H	EX4	34.2%	NM_203500.1
HC-009	SMARCA4	c.4497G>C	p.E1499D	EX31	5.1%	NM_003072.3
HC-009	PIK3R2	c.521T>A	p.I174N	EX5	29.9%	NM_005027.2
HC-009	CRKL	c.302C>A	p.P101H	EX1	8.8%	NM_005207.3
HC-009	STAG2	c.2201T>A	p.L734Q	EX23	75.2%	NM_001042749.1
HC-010	MTOR	c.5998G>A	p.E2000K	EX43	26.0%	NM_004958.3
HC-010	JAK1	c.1060G>A	p.E354K	EX8	14.4%	NM_002227.2
HC-010	JAK1	c.1057G>T	p.D353Y	EX8	14.3%	NM_002227.2
HC-010	JAK1	c.1039G>A	p.E347K	EX8	14.1%	NM_002227.2
HC-010	JAK1	c.991G>C	p.V331L	EX8	13.5%	NM_002227.2
HC-010	ZC3H11A	c.514G>A	p.E172K	EX9	21.5%	NM_014827.4
HC-010	MST1R	c.1063G>C	p.D355H	EX1	34.4%	NM_002447.2
HC-010	EPHA5	c.2911G>T	p.G971C	EX17	25.2%	NM_004439.5
HC-010	MIOS	c.2377G>T	p.G793*	EX11	32.8%	NM_019005.3
HC-010	POT1	c.1114A>G	p.R372G	EX13	27.5%	NM_015450.2
HC-010	RECQL4	c.1867C>G	p.R623G	EX11	15.7%	NM_004260.3

HC-010	PTPRD	c.2155G>A	p.E719K	EX25	23.4%	NM_002839.3
HC-010	NOTCH1	c.5868C>G	p.I1956M	EX31	22.4%	NM_017617.3
HC-010	RB1	c.751C>T	p.R251*	EX8	30.2%	NM_000321.2
HC-010	CREBBP	c.5750C>T	p.S1917L	EX31E	31.5%	NM_004380.2
HC-010	CREBBP	c.4471C>G	p.Q1491E	EX27	32.1%	NM_004380.2
HC-010	TP53	c.626_627delGA	p.R209Kfs*6	EX6	30.0%	NM_000546.5
HC-010	CDK12	c.1753C[5>4]	p.P586Lfs*24	EX2	25.3%	NM_016507.2
HC-010	STK11	c.647C>A	p.S216Y	EX5	30.7%	NM_000455.4
HC-010	NF2	c.641T>C	p.L214P	EX7	31.8%	NM_000268.3
HC-010	MYH9	c.1699G>A	p.D567N	EX14	31.1%	NM_002473.4
HC-011	ARID1A	c.5372C>T	p.S1791L	EX20E	11.5%	NM_006015.4
HC-011	LRRC7	c.2312G>T	p.G771V	EX19	2.2%	NM_020794.2
HC-011	XPO1	c.200T>C	p.L67S	EX3	3.5%	NM_003400.3
HC-011	LRP1B	c.7664_7671delGCTTCAAG	p.G2555Afs*4	EX47	1.4%	NM_018557.2
HC-011	LRP1B	c.2341C>A	p.L781I	EX14	2.9%	NM_018557.2
HC-011	NFE2L2	c.235G>A	p.E79K	EX2	22.8%	NM_006164.4
HC-011	NFE2L2	c.92G>T	p.G31V	EX2	2.2%	NM_006164.4
HC-011	SF3B1	c.2230G>C	p.A744P	EX16	2.5%	NM_012433.2
HC-011	HCLS1	c.308A>G	p.Y103C	EX5	50.4%	NM_005335.4
HC-011	PIK3CA	c.1633G>C	p.E545Q	EX10	10.8%	NM_006218.2
HC-011	KIT	c.508A>T	p.I170F	EX3	24.5%	NM_000222.2
HC-011	EPHA5	c.2880C>A	p.S960R	EX17	23.5%	NM_004439.5
HC-011	NPM1	c.583T>C	p.S195P	EX8	20.3%	NM_002520.6
HC-011	FLT4	c.3990G>C	p.Q1330H	EX30E	17.4%	NM_182925.4
HC-011	PIK3CG	c.727G>T	p.A243S	EX2	33.6%	NM_002649.2

HC-011	NOTCH1	c.6130delG	p.A2044Qfs*5	EX33	31.9%	NM_017617.3
HC-011	NOTCH1	c.1078G>T	p.E360*	EX6	18.5%	NM_017617.3
HC-011	CDH23	c.3907C>G	p.L1303V	EX32	1.4%	NM_022124.5
HC-011	MLL2	c.1243G>T	p.E415*	EX9	62.7%	NM_003482.3
HC-011	BRCA2	c.8767G>C	p.E2923Q	EX22	22.2%	NM_000059.3
HC-011	FOXO1	c.179C>A	p.S60*	EX1	1.1%	NM_002015.3
HC-011	NTHL1	c.37A>T	p.S13C	EX1	18.0%	NM_002528.5
HC-011	GRIN2A	c.1748G>C	p.G583A	EX8	17.0%	NM_001134407.1
HC-011	TP53	c.783-2A>T	.	IVS7	62.0%	NM_000546.5
HC-011	DOT1L	c.288G>A	p.M96I	EX5	11.9%	NM_032482.2
HC-011	DOT1L	c.2807-1G>T	.	IVS23	23.7%	NM_032482.2
HC-011	SMARCA4	c.4624G>C	p.E1542Q	EX32	11.8%	NM_003072.3
HC-011	FAM123B	c.1891C>G	p.R631G	EX2E	2.2%	NM_152424.3
HC-012	TP73	c.617-1G>T	.	IVS5	19.1%	NM_005427.3
HC-012	RAD54L	c.539T>A	p.I180N	EX8	24.3%	NM_001142548.1
HC-012	SPTA1	c.2751G>T	p.E917D	EX19	30.4%	NM_003126.2
HC-012	LRP1B	c.9044C>A	p.P3015H	EX57	40.5%	NM_018557.2
HC-012	NFE2L2	c.1255G>A	p.D419N	EX5E	22.3%	NM_006164.4
HC-012	KDR	c.3762T>A	p.D1254E	EX28	22.9%	NM_002253.2
HC-012	KDR	c.2245G>A	p.E749K	EX15	46.4%	NM_002253.2
HC-012	EPHA5	c.1258G>T	p.G420C	EX5	20.3%	NM_004439.5
HC-012	PCDH18	c.2661G>C	p.L887F	EX3	19.6%	NM_019035.3
HC-012	FAT1	c.7241C>T	p.A2414V	EX10	43.2%	NM_005245.3
HC-012	FGF10	c.424G>T	p.G142C	EX2	30.4%	NM_004465.1
HC-012	FAT2	c.1232G>C	p.R411P	EX1	72.5%	NM_001447.2
HC-012	POT1	c.29T>A	p.I10K	EX6	25.7%	NM_015450.2

HC-012	MLL3	c.6500G>T	p.R2167L	EX36	27.6%	NM_170606.2
HC-012	MLL3	c.2408C>T	p.A803V	EX14	3.3%	NM_170606.2
HC-012	NBN	c.297T>A	p.F99L	EX3	38.5%	NM_002485.4
HC-012	FAM135B	c.4061T>C	p.V1354A	EX20E	13.7%	NM_015912.3
HC-012	NTRK2	c.665G>A	p.G222D	EX9	21.3%	NM_006180.3
HC-012	NOTCH1	c.3439G>T	p.D1147Y	EX21	40.8%	NM_017617.3
HC-012	RET	c.200G>T	p.R67L	EX2	43.4%	NM_020975.4
HC-012	FAT3	c.12683C>G	p.P4228R	EX23	44.2%	NM_001008781.2
HC-012	MLL	c.4190G>C	p.G1397A	EX9	2.6%	NM_001197104.1
HC-012	PTPN11	c.1508G>T	p.G503V	EX13	70.6%	NM_002834.3
HC-012	ERCC4	c.2177G>C	p.R726P	EX11E	37.0%	NM_005236.2
HC-012	TP53	c.742C>T	p.R248W	EX7	71.7%	NM_000546.5
HC-012	NF1	c.3581A>G	p.D1194G	EX27	60.6%	NM_000267.3
HC-012	ROCK1	c.1272G>T	p.L424F	EX11	49.7%	NM_005406.2
HC-012	SERPINB4	c.673G>T	p.E225*	EX7	50.9%	NM_002974.2
HC-012	SERPINB4	c.145A>T	p.T49S	EX2	27.8%	NM_002974.2
HC-012	SMARCA4	c.3491A>T	p.N1164I	EX25	62.3%	NM_003072.3
HC-012	FAM123B	c.2366G>T	p.S789I	EX2E	75.3%	NM_152424.3
HC-012	MED12	c.1060C>T	p.Q354*	EX7	25.4%	NM_005120.2
HC-012	ATRX	c.3190G>T	p.A1064S	EX9	77.3%	NM_000489.3
HC-013	ARID1A	c.1170G>C	p.M390I	EX2	4.1%	NM_006015.4
HC-013	TGFBR3	c.1819C>T	p.Q607*	EX13	8.9%	NM_001195684.1
HC-013	LRP1B	c.7814C>T	p.P2605L	EX48	7.2%	NM_018557.2
HC-013	LRP1B	c.2011G>T	p.D671Y	EX13	2.1%	NM_018557.2
HC-013	EPHA3	c.1946C>T	p.S649L	EX11	7.5%	NM_005233.5
HC-013	PIK3CA	c.3140A>T	p.H1047L	EX21E	10.1%	NM_006218.2

HC-013	IL6ST	c.1024C>G	p.Q342E	EX9	7.9%	NM_002184.3
HC-013	ROS1	c.6977C>T	p.S2326F	EX43E	8.7%	NM_002944.2
HC-013	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	13.0%	NM_005228.3
HC-013	MET	c.3839G>A	p.G1280E	EX20	6.8%	NM_000245.2
HC-013	MET	c.4126G>A	p.D1376N	EX21E	9.1%	NM_000245.2
HC-013	CDKN2A	c.68G>A	p.G23D	EX1	10.6%	NM_000077.4
HC-013	ATM	c.7923G>C	p.Q2641H	EX53	9.1%	NM_000051.3
HC-013	ATM	c.8539G>C	p.E2847Q	EX58	10.0%	NM_000051.3
HC-013	H3F3C	c.115C>T	p.H39Y	EX1E	13.2%	NM_001013699.2
HC-013	MLL2	c.10686G>C	p.E3562D	EX38	10.0%	NM_003482.3
HC-013	MLL2	c.10255G>C	p.D3419H	EX35	9.2%	NM_003482.3
HC-013	RB1	c.644C>G	p.S215*	EX7	10.0%	NM_000321.2
HC-013	CREBBP	c.4426C>G	p.P1476A	EX27	8.7%	NM_004380.2
HC-013	CREBBP	c.3665C>G	p.P1222R	EX19	8.5%	NM_004380.2
HC-013	ABCC11	c.1549G>C	p.E517Q	EX11	8.0%	NM_032583.3
HC-013	RAD51C	c.1018C>G	p.Q340E	EX8	9.1%	NM_058216.1
HC-013	SMARCA4	c.3930G>C	p.E1310D	EX28	4.2%	NM_003072.3
HC-014	TXNIP	c.100G>T	p.E34*	EX1	23.9%	NM_006472.3
HC-014	ALK	c.4584C>A	p.H1528Q	EX29E	9.6%	NM_004304.4
HC-014	RANBP2	c.2185C>T	p.L729F	EX15	5.3%	NM_006267.4
HC-014	LRP1B	c.1808G>C	p.G603A	EX12	27.7%	NM_018557.2
HC-014	CPS1	c.3215G>T	p.G1072V	EX26	23.5%	NM_001875.4
HC-014	FOXP1	c.669G>T	p.M223I	EX7	11.1%	NM_001244814.1
HC-014	PIK3CA	c.2767G>A	p.V923M	EX19	21.8%	NM_006218.2
HC-014	LZTS1	c.845G>A	p.R282H	EX2	9.6%	NM_021020.2

HC-014	PDCD1LG2	c.622G>A	p.D208N	EX4	1.6%	NM_025239.3
HC-014	EPC1	c.601G>C	p.G201R	EX4	11.1%	NM_025209.2
HC-014	OR4A15	c.497G>A	p.R166H	EX1E	13.7%	NM_001005275.1
HC-014	KRAS	c.35G>T	p.G12V	EX2	54.7%	NM_033360.2
HC-014	ARID2	c.784G>T	p.G262*	EX8	33.5%	NM_152641.2
HC-014	ZFHX3	c.10537_10539delAGT	p.S3513del	EX10E	3.4%	NM_006885.3
HC-014	TP53	c.527G>C	p.C176S	EX5	23.6%	NM_000546.5
HC-014	SMARCA4	c.812G>T	p.G271V	EX5	29.2%	NM_003072.3
HC-014	POLD1	c.1646G>A	p.R549H	EX13	10.3%	NM_002691.3
HC-014	FAM123B	c.917G>T	p.G306V	EX2E	26.3%	NM_152424.3
HC-014	AR	c.1417G>T	p.G473C	EX1	16.8%	NM_000044.3
HC-015	SPEN	c.985G>C	p.D329H	EX4	4.1%	NM_015001.2
HC-015	NRAS	c.38G>A	p.G13D	EX2	4.7%	NM_002524.4
HC-015	LRP1B	c.11209A>G	p.N3737D	EX73	1.4%	NM_018557.2
HC-015	RAF1	c.770C>T	p.S257L	EX7	3.8%	NM_002880.3
HC-015	SETD2	c.4918-2A>T	.	IVS7	40.4%	NM_014159.6
HC-015	ATR	c.4103G>A	p.R1368Q	EX22	12.1%	NM_001184.3
HC-015	PIK3CA	c.1633G>A	p.E545K	EX10	9.6%	NM_006218.2
HC-015	PIK3CA	c.2077C>T	p.R693C	EX14	2.0%	NM_006218.2
HC-015	IL7R	c.718_719delCCinsAA	p.P240N	EX6	21.0%	NM_002185.3
HC-015	IFNGR1	c.1210G>A	p.E404K	EX7E	1.3%	NM_000416.2
HC-015	JAK2	c.1612C>G	p.H538D	EX12	2.9%	NM_004972.3
HC-015	JAK2	c.2638G>C	p.A880P	EX20	2.5%	NM_004972.3
HC-015	CDKN2A	c.421A>T	p.N141Y	EX2	41.2%	NM_000077.4
HC-015	SYK	c.1246G>C	p.E416Q	EX10	1.6%	NM_003177.5
HC-015	TSC1	c.1001C>T	p.S334L	EX10	4.9%	NM_000368.4

HC-015	SUFU	c.629C>G	p.S210*	EX5	7.7%	NM_016169.3
HC-015	SCUBE2	c.1937C>A	p.P646H	EX16	3.2%	NM_020974.2
HC-015	CCND1	c.529A>G	p.I177V	EX3	10.0%	NM_053056.2
HC-015	ROBO3	c.2038G>A	p.V680I	EX13	2.3%	NM_022370.3
HC-015	MLL2	c.11119C>T	p.R3707*	EX39	31.0%	NM_003482.3
HC-015	ACVR1B	c.667C>T	p.R223W	EX4	7.4%	NM_020328.3
HC-015	ERCC5	c.256C>T	p.Q86*	EX2	12.6%	NM_000123.3
HC-015	ZFHX3	c.7240G>A	p.E2414K	EX9	8.5%	NM_006885.3
HC-015	TP53	c.659A>G	p.Y220C	EX6	44.6%	NM_000546.5
HC-015	NF1	c.4071C>G	p.F1357L	EX30	1.5%	NM_000267.3
HC-015	SMAD4	c.733C>T	p.Q245*	EX6	16.5%	NM_005359.5
HC-015	SERPINB3	c.1116C>G	p.F372L	EX8E	2.0%	NM_006919.2
HC-015	SERPINB3	c.944C>G	p.S315*	EX8E	2.2%	NM_006919.2
HC-015	KEAP1	c.655G>C	p.E219Q	EX3	26.7%	NM_203500.1
HC-015	NOTCH3	c.4246G>C	p.D1416H	EX24	1.5%	NM_000435.2
HC-015	BTK	c.1957G>C	p.D653H	EX19E	1.9%	NM_000061.2
HC-015	STAG2	c.2026-2A>T	.	IVS20	58.6%	NM_001042749.1
HC-016	ARID1A	c.226G>A	p.G76R	EX1	6.3%	NM_006015.4
HC-016	EIF2C3	c.553G>T	p.A185S	EX5	15.8%	NM_024852.3
HC-016	RYR2	c.6919T>A	p.F2307I	EX45	11.9%	NM_001035.2
HC-016	LRP1B	c.13537G>A	p.G4513S	EX89	8.6%	NM_018557.2
HC-016	LRP1B	c.8871C>G	p.F2957L	EX56	8.3%	NM_018557.2
HC-016	PMS1	c.253G>A	p.E85K	EX3	3.5%	NM_000534.4
HC-016	PMS1	c.2178G>T	p.L726F	EX10	16.6%	NM_000534.4
HC-016	BARD1	c.1811-1G>A	.	IVS8	2.4%	NM_000465.2
HC-016	HDAC4	c.3190G>A	p.V1064M	EX26	17.9%	NM_006037.3

HC-016	NUP210	c.3338C>T	p.S1113F	EX25	4.5%	NM_024923.2
HC-016	SETD2	c.6208C>G	p.Q2070E	EX14	4.3%	NM_014159.6
HC-016	PIK3CA	c.45G>T	p.L15F	EX2	13.0%	NM_006218.2
HC-016	MAP3K1	c.1238C>T	p.S413L	EX6	2.9%	NM_005921.1
HC-016	DAXX	c.1906G>T	p.D636Y	EX6	17.2%	NM_001141970.1
HC-016	SEMA3A	c.2068G>C	p.E690Q	EX17E	2.1%	NM_006080.2
HC-016	BRAF	c.2083G>A	p.E695K	EX17	4.7%	NM_004333.4
HC-016	EPHB6	c.164G>T	p.G55V	EX6	5.3%	NM_004445.3
HC-016	EPHB6	c.1232A>T	p.E411V	EX9	8.8%	NM_004445.3
HC-016	NBN	c.1411G>T	p.E471*	EX11	8.6%	NM_002485.4
HC-016	RAD21	c.1606G>C	p.D536H	EX12	5.8%	NM_006265.2
HC-016	PTCH1	c.1444G>C	p.A482P	EX10	15.3%	NM_000264.3
HC-016	ATM	c.2107A>T	p.N703Y	EX13	10.1%	NM_000051.3
HC-016	DICER1	c.2167G>T	p.E723*	EX15	16.4%	NM_030621.3
HC-016	IGF1R	c.1770G>C	p.E590D	EX8	9.5%	NM_000875.3
HC-016	TP53	c.467G>C	p.R156P	EX5	13.6%	NM_000546.5
HC-016	BRCA1	c.3553G>A	p.E1185K	EX10	8.2%	NM_007294.3
HC-016	BRCA1	c.3196G>C	p.E1066Q	EX10	8.6%	NM_007294.3
HC-016	BCOR	c.4802A>G	p.Y1601C	EX13	17.3%	NM_001123385.1
HC-016	TAF1	c.3825G>A	p.M1275I	EX24	6.8%	NM_004606.3
HC-017	ARID1A	c.1626_1629delGCAG	p.Q542Hfs*76	EX3	23.9%	NM_006015.4
HC-017	EPS15	c.1468A>T	p.S490C	EX15	13.6%	NM_001981.2
HC-017	FMN2	c.2980G>A	p.G994R	EX5	11.2%	NM_020066.4
HC-017	NFE2L2	c.1442T>A	p.F481Y	EX5E	59.9%	NM_006164.4
HC-017	PIK3CA	c.1633G>A	p.E545K	EX10	21.4%	NM_006218.2
HC-017	FAT1	c.10909G>T	p.E3637*	EX19	33.9%	NM_005245.3

HC-017	PRDM1	c.308G>T	p.S103I	EX3	22.2%	NM_001198.3
HC-017	EPHB6	c.865G>T	p.E289*	EX7	18.1%	NM_004445.3
HC-017	PTPRD	c.5037G>C	p.M1679I	EX41	8.4%	NM_002839.3
HC-017	PTPRD	c.4292C>G	p.S1431C	EX37	3.5%	NM_002839.3
HC-017	NOTCH1	c.1333A>C	p.T445P	EX8	14.7%	NM_017617.3
HC-017	FLT1	c.3814G>A	p.D1272N	EX29	11.6%	NM_002019.4
HC-017	DICER1	c.5173C>T	p.R1725W	EX25	13.9%	NM_030621.3
HC-017	SOCS1	c.109G>T	p.A37S	EX2E	36.4%	NM_003745.1
HC-017	TP53	c.919+1G>A	.	IVS8	14.0%	NM_000546.5
HC-017	TP53	c.538G>T	p.E180*	EX5	28.6%	NM_000546.5
HC-017	SMARCA4	c.4636-1G>A	.	IVS32	12.8%	NM_003072.3
HC-017	CYP2A13	c.1454G>A	p.R485Q	EX9E	37.4%	NM_000766.4
HC-017	CIC	c.904G>C	p.E302Q	EX6	12.5%	NM_015125.3
HC-017	BCOR	c.3692G>T	p.R1231L	EX8	42.9%	NM_001123385.1
HC-017	BTK	c.1461G>T	p.R487S	EX15	61.3%	NM_000061.2
HC-018	HDAC1	c.901G>A	p.G301S	EX9	9.3%	NM_004964.2
HC-018	NOTCH2	c.2491C>G	p.Q831E	EX16	1.5%	NM_024408.3
HC-018	FH	c.445A>C	p.T149P	EX4	6.5%	NM_000143.3
HC-018	ALK	c.268T>C	p.S90P	EX1	7.6%	NM_004304.4
HC-018	PMS1	c.1870G>T	p.A624S	EX10	14.6%	NM_000534.4
HC-018	ERBB4	c.2719G>A	p.G907R	EX22	13.4%	NM_005235.2
HC-018	EPHA3	c.1208C>A	p.T403N	EX5	14.2%	NM_005233.5
HC-018	CBLB	c.1459G>T	p.A487S	EX11	29.2%	NM_170662.3
HC-018	PRKCI	c.725G>A	p.S242N	EX9	8.5%	NM_002740.5
HC-018	HIST1H1C	c.460_471delACACCGAAGAAA	p.T154_K157del	EX1E	4.1%	NM_005319.3

HC-018	ABCA13	c.13608G>C	p.L4536F	EX51	14.3%	NM_152701.3
HC-018	FGFR1	c.233G>T	p.R78L	EX3	15.2%	NM_023110.2
HC-018	CDKN2A	c.260G[3>2]	p.E88Rfs*58	EX2	18.0%	NM_000077.4
HC-018	ROBO3	c.4096A>T	p.S1366C	EX27	13.3%	NM_022370.3
HC-018	USP8	c.2003A>G	p.Y668C	EX15	8.4%	NM_001128611.1
HC-018	TP53	c.524G>A	p.R175H	EX5	18.2%	NM_000546.5
HC-018	NF1	c.3975-1G>A	.	IVS29	9.0%	NM_000267.3
HC-018	NF1	c.7908-2A>G	.	IVS53	18.5%	NM_000267.3
HC-018	PHF6	c.676G>A	p.G226R	EX7	14.6%	NM_001015877.1
HC-019	NRAS	c.35G>T	p.G12V	EX2	20.3%	NM_002524.4
HC-019	ELF3	c.281G>T	p.R94L	EX3	2.2%	NM_004433.4
HC-019	EPAS1	c.1960G>A	p.V654I	EX12	1.6%	NM_001430.4
HC-019	ERCC3	c.2294G>A	p.R765Q	EX15E	31.9%	NM_000122.1
HC-019	LRP1B	c.7688G>A	p.R2563H	EX47	18.2%	NM_018557.2
HC-019	PMS1	c.2755C>T	p.R919C	EX13E	14.6%	NM_000534.4
HC-019	BARD1	c.1518_1519delTGinsCA	p.V507M	EX6	70.5%	NM_000465.2
HC-019	MYD88	c.794T>C	p.L265P	EX5E	17.0%	NM_002468.4
HC-019	EPHB1	c.2293C>G	p.L765V	EX12	21.0%	NM_004441.4
HC-019	EPHA5	c.2810G>A	p.R937H	EX16	13.1%	NM_004439.5
HC-019	EPHA5	c.797C>A	p.S266Y	EX3	19.5%	NM_004439.5
HC-019	IL7R	c.1184A>C	p.K395T	EX8E	18.9%	NM_002185.3
HC-019	RICTOR	c.11T>C	p.I4T	EX1	19.1%	NM_152756.3
HC-019	MAP3K1	c.152G>A	p.G51D	EX1	14.1%	NM_005921.1
HC-019	MSH3	c.3181A>G	p.R1061G	EX23	30.4%	NM_002439.4
HC-019	TLX3	c.706G>A	p.A236T	EX3E	35.3%	NM_021025.2
HC-019	NSD1	c.3067C>T	p.R1023*	EX5	23.5%	NM_022455.4

HC-019	NOTCH4	c.813_815delAGAinsGGG	p.D272G	EX5	9.6%	NM_004557.3
HC-019	CCND3	c.826C>T	p.Q276*	EX5E	19.2%	NM_001760.3
HC-019	PRDM1	c.1633G>T	p.E545*	EX5	27.1%	NM_001198.3
HC-019	ARID1B	c.553G>A	p.E185K	EX1	29.3%	NM_020732.3
HC-019	ARID1B	c.1627A>G	p.S543G	EX2	21.3%	NM_020732.3
HC-019	EGFR	c.2316_2317insTACAACCCC	p.P772_H773insYNP	EX20	7.7%	NM_005228.3
HC-019	EGFR	c.2317C>T	p.H773Y	EX20	15.6%	NM_005228.3
HC-019	MET	c.3028+799A>G	.	IVS14	18.8%	NM_000245.2
HC-019	EPHB6	c.734C>T	p.T245M	EX7	4.6%	NM_004445.3
HC-019	TYRP1	c.785C>T	p.T262M	EX4	13.3%	NM_000550.2
HC-019	BRD3	c.207C>G	p.N69K	EX2	2.3%	NM_007371.3
HC-019	RET	c.2043G>T	p.Q681H	EX11	7.4%	NM_020975.4
HC-019	CDH23	c.9859G>A	p.G3287S	EX70E	14.2%	NM_022124.5
HC-019	ATM	c.95G>T	p.R32L	EX3	28.8%	NM_000051.3
HC-019	H3F3C	c.241G>A	p.D81N	EX1E	29.0%	NM_001013699.2
HC-019	TBX3	c.52C>T	p.H18Y	EX1	23.1%	NM_016569.3
HC-019	POLE	c.3614C>T	p.P1205L	EX30	27.7%	NM_006231.2
HC-019	POLE	c.2089C>G	p.P697A	EX19	1.5%	NM_006231.2
HC-019	CYP1A1	c.1364G>A	p.R455Q	EX7E	1.7%	NM_000499.3
HC-019	PALB2	c.1492G>T	p.D498Y	EX4	2.1%	NM_024675.3
HC-019	ZFHX3	c.10518CGG[5>3]	p.G3507[6>4]	EX10E	13.3%	NM_006885.3
HC-019	FANCA	c.1607C>T	p.S536L	EX17	20.2%	NM_000135.2
HC-019	TP53	c.614A>T	p.Y205F	EX6	5.8%	NM_000546.5
HC-019	NCOR1	c.5656G>A	p.A1886T	EX37	20.3%	NM_006311.3

HC-019	NCOR1	c.1703C>T	p.T568I	EX16	29.5%	NM_006311.3
HC-019	BRCA1	c.3662A>C	p.E1221A	EX10	17.9%	NM_007294.3
HC-019	RAD51C	c.635G>A	p.R212H	EX4	29.0%	NM_058216.1
HC-019	TCF3	c.1564A>C	p.K522Q	EX16	25.0%	NM_001136139.2
HC-019	NOTCH3	c.625G>A	p.G209R	EX4	14.5%	NM_000435.2
HC-019	GNAS	c.718G>A	p.D240N	EX9	19.3%	NM_000516.4
HC-020	EPHA5	c.1373T>A	p.V458E	EX5	29.6%	NM_004439.5
HC-020	FAT1	c.5714A>T	p.D1905V	EX10	55.8%	NM_005245.3
HC-020	PIK3R1	c.1746-2A>T	.	IVS13	31.8%	NM_181523.2
HC-020	EGFR	c.2369C>T	p.T790M	EX20	4.7%	NM_005228.3
HC-020	EGFR	c.2573T>G	p.L858R	EX21	47.9%	NM_005228.3
HC-020	EPHB6	c.950G>T	p.C317F	EX8	16.1%	NM_004445.3
HC-020	RAD21	c.1080G>C	p.L360F	EX9	5.2%	NM_006265.2
HC-020	CDH23	c.9445G>A	p.E3149K	EX67	19.1%	NM_022124.5
HC-020	PTEN	c.940G>T	p.E314*	EX8	52.9%	NM_000314.4
HC-020	MLL	c.1211A>G	p.K404R	EX3	33.9%	NM_001197104.1
HC-020	ROBO3	c.473C>A	p.S158*	EX2	4.3%	NM_022370.3
HC-020	RB1	c.288G[2>1]	p.E97Nfs*14	EX3	60.3%	NM_000321.2
HC-020	HSP90AA1	c.1087A>G	p.K363E	EX6	7.8%	NM_001017963.2
HC-020	IGF1R	c.151A>G	p.N51D	EX2	52.7%	NM_000875.3
HC-020	FANCA	c.155G>C	p.R52P	EX2	6.6%	NM_000135.2
HC-020	TP53	c.503A>C	p.H168P	EX5	53.5%	NM_000546.5
HC-020	MED12	c.4764_4765insAAGCGTG	p.L1589Kfs*14	EX35	11.2%	NM_005120.2
HC-020	EPHA2	c.232G>T	p.D78Y	EX3	18.8%	NM_004431.3
HC-020	MSH2	c.842C>T	p.S281L	EX5	6.1%	NM_000251.2

HC-020	CTNNB1	c.110C>T	p.S37F	EX3	22.6%	NM_001904.3
HC-020	PIK3CA	c.2908G>A	p.E970K	EX20	19.2%	NM_006218.2
HC-021	PSMB5	c.625G>C	p.E209Q	EX3E	86.0%	NM_002797.3
HC-021	TP53	c.659A>G	p.Y220C	EX6	84.6%	NM_000546.5
HC-021	KEAP1	c.493G>C	p.D165H	EX2	86.4%	NM_203500.1
HC-021	NOTCH3	c.4616T>A	p.L1539Q	EX25	83.3%	NM_000435.2
HC-021	EP300	c.5189C>T	p.S1730F	EX31E	44.2%	NM_001429.3
HC-021	PTCH1	c.2032A>T	p.T678S	EX14	51.8%	NM_000264.3
HC-021	NOTCH1	c.1038_1039delCGinsTT	p.G347C	EX6	49.2%	NM_017617.3
HC-021	MYO3A	c.3079G>T	p.G1027C	EX27	39.4%	NM_017433.4
HC-021	FAS	c.847C>T	p.Q283*	EX9E	28.5%	NM_000043.4
HC-021	BRCA2	c.4297G[3>2]	p.N1435Ifs*13	EX11	22.9%	NM_000059.3
HC-021	IRS2	c.3434G>A	p.R1145H	EX1	26.1%	NM_003749.2
HC-021	SPEN	c.941C>G	p.A314G	EX4	57.2%	NM_015001.2
HC-021	EPHA2	c.607G>T	p.E203*	EX3	30.1%	NM_004431.3
HC-021	NRXN1	c.438C>G	p.D146E	EX2	21.1%	NM_001135659.1
HC-021	AFF3	c.1870G>C	p.G624R	EX14	30.7%	NM_001025108.1
HC-021	LRP1B	c.6167G>T	p.W2056L	EX39	35.7%	NM_018557.2
HC-021	EPHA5	c.2183_2184delTGinsAT	p.M728N	EX12	50.7%	NM_004439.5
HC-021	FAT1	c.7201delG	p.E2401Sfs*9	EX10	71.0%	NM_005245.3
HC-021	CDH18	c.2063G>T	p.R688L	EX13E	39.8%	NM_004934.3
HC-021	CSF1R	c.1209G>T	p.E403D	EX9	81.9%	NM_005211.3
HC-021	FGFR4	c.1292C>G	p.S431C	EX10	85.4%	NM_213647.1
HC-021	FLT4	c.4063G>T	p.V1355L	EX30E	82.0%	NM_182925.4
HC-021	DDR1	c.1391C>G	p.S464C	EX13	42.4%	NM_001954.4
HC-021	ROS1	c.6811G>A	p.G2271R	EX43E	16.7%	NM_002944.2

HC-021	ROS1	c.4016C>A	p.A1339E	EX25	18.0%	NM_002944.2
HC-021	ARID1B	c.5382G>T	p.K1794N	EX20E	18.5%	NM_020732.3
HC-021	PIK3CG	c.1305C>G	p.C435W	EX2	45.6%	NM_002649.2
HC-021	MLL3	c.14594G>C	p.G4865A	EX58	86.0%	NM_170606.2
HC-021	MLL3	c.8382A[9>10]	p.E2798Gfs*11	EX38	52.5%	NM_170606.2
HC-021	MLL3	c.8140G>A	p.D2714N	EX38	87.4%	NM_170606.2
HC-021	MLL3	c.8005G>A	p.E2669K	EX38	86.8%	NM_170606.2
HC-021	ZFPM2	c.1199C>A	p.S400Y	EX8E	28.2%	NM_012082.3
HC-021	ANGPT1	c.619G>T	p.E207*	EX4	26.4%	NM_001146.3
HC-022	MTOR	c.5395G>A	p.E1799K	EX39	19.4%	NM_004958.3
HC-022	FCGR3A	c.701G>A	p.R234Q	EX6E	18.1%	NM_001127593.1
HC-022	ERCC3	c.1756C>G	p.Q586E	EX11	5.5%	NM_000122.1
HC-022	LRP1B	c.12157G>C	p.E4053Q	EX79	4.3%	NM_018557.2
HC-022	HDAC4	c.1759G>C	p.E587Q	EX13	6.1%	NM_006037.3
HC-022	SETD2	c.4560_4578delTCTTA ATCGTCTTCTCATG	p.C1520*fs*1	EX4	5.7%	NM_014159.6
HC-022	EPHA3	c.2183G>C	p.R728P	EX13	5.6%	NM_005233.5
HC-022	CLDN18	c.201C>G	p.F67L	EX1	25.6%	NM_016369.3
HC-022	PIK3CB	c.3103G>C	p.E1035Q	EX22E	3.2%	NM_006219.2
HC-022	FBXW7	c.916C>T	p.Q306*	EX6	12.5%	NM_033632.3
HC-022	FAT1	c.9803C>G	p.S3268*	EX14	7.6%	NM_005245.3
HC-022	HIST1H1C	c.585_586delCAinsGC	p.K196Q	EX1E	13.3%	NM_005319.3
HC-022	HIST1H2BO	c.167C>T	p.S56L	EX1E	26.1%	NM_003527.4
HC-022	ARID1B	c.6662G>A	p.R2221Q	EX20E	10.3%	NM_020732.3
HC-022	EGFR	c.2131G>A	p.E711K	EX18	6.4%	NM_005228.3
HC-022	PIK3CG	c.2314G>C	p.E772Q	EX5	3.9%	NM_002649.2

HC-022	MLL3	c.12955G>A	p.E4319K	EX52	3.5%	NM_170606.2
HC-022	ARID2	c.2218C>T	p.Q740*	EX15	19.2%	NM_152641.2
HC-022	BRCA2	c.5101C>T	p.Q1701*	EX11	5.6%	NM_000059.3
HC-022	IRS2	c.785C>T	p.S262L	EX1	23.1%	NM_003749.2
HC-022	ZFHX3	c.7032C>G	p.I2344M	EX9	9.5%	NM_006885.3
HC-022	TP53	c.839G>C	p.R280T	EX8	28.0%	NM_000546.5
HC-022	RAD51D	c.811G>C	p.V271L	EX9	18.4%	NM_002878.3
HC-022	SMAD4	c.1509G>A	p.M503I	EX12E	6.1%	NM_005359.5
HC-022	BCL2	c.345G>A	p.M115I	EX2	25.5%	NM_000633.2
HC-022	SMARCA4	c.1985C>T	p.S662L	EX13	6.8%	NM_003072.3
HC-022	CIC	c.173C>A	p.A58D	EX2	3.7%	NM_015125.3
HC-023	USH2A	c.4719G>T	p.Q1573H	EX22	2.9%	NM_206933.2
HC-023	MSH2	c.2170A>G	p.T724A	EX13	11.6%	NM_000251.2
HC-023	MSH6	c.467C>G	p.S156*	EX3	9.6%	NM_000179.2
HC-023	RAF1	c.332G>T	p.R111L	EX4	12.5%	NM_002880.3
HC-023	INPP4B	c.1470C>A	p.S490R	EX17	9.8%	NM_001101669.1
HC-023	PDGFRB	c.1912+2T>C	.	IVS13	11.6%	NM_002609.3
HC-023	CUX1	c.2805C>A	p.Y935*	EX18	1.2%	NM_181552.3
HC-023	KEL	c.400G>A	p.E134K	EX4	3.5%	NM_000420.2
HC-023	MLL3	c.13286A>C	p.H4429P	EX52	2.5%	NM_170606.2
HC-023	MLL3	c.13104G[4>3]	p.T4370Hfs*10	EX52	4.8%	NM_170606.2
HC-023	ANKRD30A	c.1561C>A	p.Q521K	EX13	2.0%	NM_052997.2
HC-023	FGFR2	c.2390T[6>7]	p.S799Ffs*22	EX18E	9.6%	NM_000141.4
HC-023	WT1	c.777G>T	p.Q259H	EX3	1.5%	NM_024426.4
HC-023	WT1	c.326C>T	p.A109V	EX1	2.3%	NM_024426.4
HC-023	MEN1	c.472G>T	p.A158S	EX3	4.1%	NM_130799.2

HC-023	C11orf30	c.1423G>T	p.A475S	EX10	19.6%	NM_020193.3
HC-023	ROBO3	c.1068G>T	p.Q356H	EX7	2.2%	NM_022370.3
HC-023	PTPRO	c.1660T>A	p.Y554N	EX9	16.8%	NM_030667.2
HC-023	KRAS	c.34G>T	p.G12C	EX2	21.1%	NM_033360.2
HC-023	OR11G2	c.838_839delGGinsTT	p.G280L	EX1E	7.5%	NM_001005503.1
HC-023	SMAD3	c.604delG	p.A202Qfs*39	EX4	17.3%	NM_005902.3
HC-023	NTRK3	c.1718_1719insA	p.L574Pfs*25	EX16	2.9%	NM_001012338.2
HC-023	IGF1R	c.2013G>T	p.R671S	EX10	15.5%	NM_000875.3
HC-023	TP53	c.535C>A	p.H179N	EX5	19.5%	NM_000546.5
HC-023	NF1	c.7474C>T	p.Q2492*	EX50	7.1%	NM_000267.3
HC-023	BRIP1	c.2496T>A	p.C832*	EX18	3.1%	NM_032043.2
HC-024	ARID1A	c.6819A>T	p.Q2273H	EX20E	11.8%	NM_006015.4
HC-024	CDC73	c.1274A>G	p.Y425C	EX14	9.6%	NM_024529.4
HC-024	LRP1B	c.11771C>A	p.T3924K	EX77	6.3%	NM_018557.2
HC-024	LRP1B	c.5310C>G	p.I1770M	EX32	15.4%	NM_018557.2
HC-024	LRP1B	c.2869G>T	p.D957Y	EX18	10.5%	NM_018557.2
HC-024	SF3B1	c.2324G>T	p.R775L	EX16	16.1%	NM_012433.2
HC-024	GATA2	c.710G>T	p.G237V	EX3	9.2%	NM_032638.4
HC-024	FOXL2	c.373G>C	p.G125R	EX1E	7.7%	NM_023067.3
HC-024	EPHA5	c.3103G>A	p.V1035M	EX18E	16.2%	NM_004439.5
HC-024	BRAF	c.1790T>A	p.L597Q	EX15	46.6%	NM_004333.4
HC-024	SNTG1	c.589T[2>1]	p.L197*fs*1	EX11	12.1%	NM_018967.2
HC-024	PREX2	c.2368+2T>C	.	IVS21	6.9%	NM_024870.2
HC-024	PTPRD	c.2536C>A	p.P846T	EX28	8.5%	NM_002839.3
HC-024	PTPRD	c.841G>T	p.D281Y	EX20	6.9%	NM_002839.3

HC-024	CDH23	c.2953_2953+1delGGinsTA	.	EX25-IVS25	8.1%	NM_022124.5
HC-024	CDH23	c.3745C>A	p.L1249M	EX32	10.5%	NM_022124.5
HC-024	MLL	c.2566G>T	p.E856*	EX3	30.5%	NM_001197104.1
HC-024	FLT3	c.1698C>A	p.Y566*	EX13	12.0%	NM_004119.2
HC-024	TP53	c.840A>T	p.R280S	EX8	21.1%	NM_000546.5
HC-024	SERPINB4	c.764A>C	p.Q255P	EX7	9.5%	NM_002974.2
HC-024	BTK	c.49A>G	p.K17E	EX2	18.1%	NM_000061.2
HC-025	LRP1B	c.11440G>A	p.D3814N	EX75	41.9%	NM_018557.2
HC-025	NFE2L2	c.239C>A	p.T80K	EX2	52.6%	NM_006164.4
HC-025	FANCD2	c.1906G>A	p.A636T	EX21	35.0%	NM_033084.3
HC-025	ATR	c.6969C>G	p.I2323M	EX41	8.5%	NM_001184.3
HC-025	FAT2	c.7618C>A	p.L2540M	EX9	16.7%	NM_001447.2
HC-025	ARID1B	c.1608T>G	p.H536Q	EX2	23.6%	NM_020732.3
HC-025	MLL3	c.9220G>C	p.A3074P	EX38	1.8%	NM_170606.2
HC-025	RUNX1T1	c.835C>T	p.R279*	EX6	17.1%	NM_175635.2
HC-025	PTPRD	c.5681A>T	p.Q1894L	EX46E	38.1%	NM_002839.3
HC-025	CDKN2A	c.116_118delACGinsTCC	p.N39_A40delinsIP	EX1	38.5%	NM_000077.4
HC-025	ANKRD30A	c.1566G[2>1]	p.D523Mfs*13	EX13	25.1%	NM_052997.2
HC-025	FGFR2	c.731A>G	p.Y244C	EX6	13.4%	NM_000141.4
HC-025	EXT2	c.34C>T	p.P12S	EX2	25.9%	NM_207122.1
HC-025	IFNG	c.467A>T	p.Q156L	EX4E	28.5%	NM_000619.2
HC-025	POLE	c.1735C>T	p.R579C	EX16	8.2%	NM_006231.2
HC-025	ACIN1	c.816_830delAGAAGAGGAGGAGGA	p.E270[12>7]	EX6	9.1%	NM_014977.3

HC-025	BCL11B	c.2625G>T	p.K875N	EX4E	16.6%	NM_138576.2
HC-025	TP53	c.168_193delAGACCCAGGTCCAGATGAAGCTCCCA	p.D57Nfs*83	EX4	20.7%	NM_000546.5
HC-025	SOX9	c.1013_1014insT	p.K338Nfs*240	EX3E	9.7%	NM_000346.3
HC-025	STK11	c.587G>T	p.G196V	EX4	47.9%	NM_000455.4
HC-025	NOTCH3	c.2935G>T	p.A979S	EX18	48.7%	NM_000435.2
HC-026	EPHA2	c.1850A>T	p.K617M	EX10	9.8%	NM_004431.3
HC-026	FCGR2B	c.840G>T	p.E280D	EX7	6.5%	NM_004001.4
HC-026	DDR2	c.346C>A	p.P116T	EX5	3.3%	NM_006182.2
HC-026	SETD2	c.2939C>G	p.S980C	EX3	1.3%	NM_014159.6
HC-026	PIK3CA	c.1351_1352delGGinsAA	p.G451K	EX8	5.1%	NM_006218.2
HC-026	PIK3CA	c.1360G>A	p.D454N	EX8	6.4%	NM_006218.2
HC-026	SOX2	c.844G>A	p.E282K	EX1E	1.0%	NM_003106.3
HC-026	FAT1	c.11650_11651delGGinsTT	p.G3884L	EX22	23.0%	NM_005245.3
HC-026	FAT2	c.9521C>T	p.P3174L	EX13	24.1%	NM_001447.2
HC-026	FGFR1	c.2203G>A	p.D735N	EX17	4.1%	NM_023110.2
HC-026	CDKN2A	c.62C[3>2]	p.R22Gfs*4	EX1	36.4%	NM_000077.4
HC-026	CCND2	c.850G>T	p.V284L	EX5E	23.7%	NM_001759.3
HC-026	KRAS	c.182A>T	p.Q61L	EX3	19.9%	NM_033360.2
HC-026	FLT3	c.244G>A	p.E82K	EX3	27.2%	NM_004119.2
HC-026	FANCM	c.5075C>G	p.P1692R	EX20	54.3%	NM_020937.2
HC-026	TSC2	c.4616C>G	p.S1539*	EX36	27.1%	NM_000548.3
HC-026	CDH1	c.1366G>T	p.V456L	EX10	7.8%	NM_004360.3

HC-026	TP53	c.994-1_1004delGATCCGTGGGCG	.	IVS9-EX10	16.8%	NM_000546.5
HC-026	TP53	c.146AT[2>1]	p.I50*fs*1	EX4	18.7%	NM_000546.5
HC-026	TP53	c.145G>A	p.D49N	EX4	20.5%	NM_000546.5
HC-026	CDK12	c.2675A>G	p.Y892C	EX8	9.5%	NM_016507.2
HC-026	SOX9	c.926C>T	p.T309M	EX3E	2.3%	NM_000346.3
HC-027	FLG	c.8529T>A	p.N2843K	EX3E	3.9%	NM_002016.1
HC-027	NTRK1	c.1945C>T	p.R649W	EX15	9.9%	NM_002529.3
HC-027	TNN	c.1994C>T	p.P665L	EX9	15.7%	NM_022093.1
HC-027	DNMT3A	c.2183G>T	p.G728V	EX19	42.7%	NM_022552.4
HC-027	BAZ2B	c.1790A>T	p.D597V	EX9	35.4%	NM_013450.2
HC-027	STAG1	c.604A>C	p.T202P	EX7	9.8%	NM_005862.2
HC-027	DAXX	c.386G>T	p.R129L	EX3	11.7%	NM_001141970.1
HC-027	HGF	c.967G>T	p.G323*	EX8	37.0%	NM_000601.4
HC-027	PDCD1LG2	c.205C>A	p.H69N	EX3	39.7%	NM_025239.3
HC-027	PTPRD	c.2272G>C	p.E758Q	EX25	44.0%	NM_002839.3
HC-027	PTPRD	c.1371G>T	p.M457I	EX21	39.5%	NM_002839.3
HC-027	TLR4	c.2362C>A	p.L788I	EX3E	27.6%	NM_138554.4
HC-027	CCND2	c.592C>T	p.P198S	EX4	45.3%	NM_001759.3
HC-027	FLT3	c.2441C>G	p.A814G	EX20	13.8%	NM_004119.2
HC-027	ERCC5	c.3G>T	p.0?	EX1	18.3%	NM_000123.3
HC-027	TP53	c.581T>G	p.L194R	EX6	59.4%	NM_000546.5
HC-027	RNF43	c.1783G>T	p.D595Y	EX9	35.7%	NM_017763.4
HC-027	BRD4	c.1400C>T	p.A467V	EX8	10.2%	NM_058243.2
HC-027	EP300	c.257G>T	p.R86L	EX2	24.4%	NM_001429.3

HC-028	NOTCH2	c.2333G>A	p.G778E	EX14	47.6%	NM_024408.3
HC-028	NOTCH2	c.685C>A	p.P229T	EX4	5.0%	NM_024408.3
HC-028	NTRK1	c.2079G>T	p.W693C	EX16	27.7%	NM_002529.3
HC-028	FH	c.1295A>G	p.E432G	EX9	27.5%	NM_000143.3
HC-028	FH	c.1068G>T	p.L356F	EX7	36.6%	NM_000143.3
HC-028	NRXN1	c.451A>C	p.S151R	EX2	16.5%	NM_001135659.1
HC-028	RHOA	c.571C>T	p.L191F	EX5E	47.6%	NM_001664.2
HC-028	EPHA3	c.2820_2821delTGinsGT	p.C940_D941delinsWY	EX16	44.0%	NM_005233.5
HC-028	ZMAT3	c.581G>C	p.R194P	EX5	4.0%	NM_022470.3
HC-028	PIK3CA	c.1535G>C	p.G512A	EX9	2.1%	NM_006218.2
HC-028	EPHA5	c.1790G>A	p.S597N	EX8	21.1%	NM_004439.5
HC-028	FAT1	c.3818_3820delACGinsGCT	p.H1273_V1274delinsRF	EX5	44.6%	NM_005245.3
HC-028	PIK3CG	c.550C>T	p.R184C	EX2	32.1%	NM_002649.2
HC-028	BRAF	c.1396G>A	p.G466R	EX11	30.3%	NM_004333.4
HC-028	EPHB6	c.2152G>T	p.G718C	EX15	32.6%	NM_004445.3
HC-028	CSMD1	c.8611A>C	p.T2871P	EX56	27.2%	NM_033225.5
HC-028	CDKN2A	c.108delG	p.L37Cfs*16	EX1	46.7%	NM_000077.4
HC-028	TSC1	c.2332C>T	p.Q778*	EX18	32.5%	NM_000368.4
HC-028	GATA3	c.783_784delGGinsTT	p.R261_E262delinsS*	EX4	26.9%	NM_002051.2
HC-028	MRE11A	c.1193T>G	p.F398C	EX11	9.3%	NM_005591.3
HC-028	MLL	c.911G>A	p.G304E	EX3	6.4%	NM_001197104.1
HC-028	MLL	c.11005A>C	p.K3669Q	EX30	45.8%	NM_001197104.1
HC-028	CCND2	c.856G>T	p.D286Y	EX5E	33.0%	NM_001759.3
HC-028	ARID2	c.4392C[3>2]	p.P1465Qfs*3	EX15	8.2%	NM_152641.2
HC-028	MLL2	c.4844delG	p.R1615Qfs*107	EX19	34.4%	NM_003482.3

HC-028	MLH3	c.379G>A	p.G127R	EX2	33.7%	NM_001040108.1
HC-028	TSC2	c.1687G>A	p.A563T	EX16	6.9%	NM_000548.3
HC-028	ZFHX3	c.7706C>G	p.S2569C	EX9	8.7%	NM_006885.3
HC-028	TP53	c.536A>G	p.H179R	EX5	50.1%	NM_000546.5
HC-028	BRIP1	c.1985C>T	p.A662V	EX14	5.3%	NM_032043.2
HC-028	RBM10	c.2870C>T	p.T957I	EX24E	1.7%	NM_001204468.1
HC-028	AFF2	c.82A>G	p.R28G	EX2	66.2%	NM_002025.3
HC-029	MTOR	c.4222C>T	p.P1408S	EX28	1.6%	NM_004958.3
HC-029	PAX7	c.1244C>T	p.S415L	EX8	2.2%	NM_001135254.1
HC-029	NTRK1	c.2249G>T	p.R750L	EX17E	5.9%	NM_002529.3
HC-029	ABL2	c.2180delT	p.L727Pfs*30	EX12E	6.2%	NM_007314.3
HC-029	FH	c.1303G>T	p.V435L	EX9	4.7%	NM_000143.3
HC-029	TRIM58	c.561G>C	p.E187D	EX3	1.7%	NM_015431.3
HC-029	XPO1	c.544T>C	p.S182P	EX7	1.6%	NM_003400.3
HC-029	CTNNA2	c.870C>A	p.D290E	EX7	8.2%	NM_004389.3
HC-029	LRP1B	c.13510C>T	p.H4504Y	EX89	1.6%	NM_018557.2
HC-029	LRP1B	c.8322C>A	p.C2774*	EX52	4.1%	NM_018557.2
HC-029	IDH1	c.746G>T	p.R249M	EX7	5.1%	NM_005896.2
HC-029	CPS1	c.3250G>A	p.D1084N	EX26	3.7%	NM_001875.4
HC-029	CUL3	c.2275G>A	p.E759K	EX16E	5.6%	NM_003590.4
HC-029	CUL3	c.2254G>C	p.E752Q	EX16E	5.7%	NM_003590.4
HC-029	CTNNB1	c.448A>G	p.T150A	EX4	8.9%	NM_001904.3
HC-029	FOXL2	c.799C>T	p.P267S	EX1E	6.8%	NM_023067.3
HC-029	PIK3CA	c.1295A>T	p.Y432F	EX8	7.0%	NM_006218.2
HC-029	PDGFRA	c.1892-1G>T	.	IVS13	4.8%	NM_006206.4
HC-029	FAT1	c.10885G>T	p.V3629L	EX19	7.4%	NM_005245.3

HC-029	PRDM1	c.1447C>T	p.H483Y	EX5	6.3%	NM_001198.3
HC-029	SMO	c.923C>G	p.S308C	EX5	1.3%	NM_005631.4
HC-029	FGFR1	c.1854+1G>A	.	IVS13	1.0%	NM_023110.2
HC-029	PTPRD	c.5536G>C	p.A1846P	EX45	3.8%	NM_002839.3
HC-029	MAML2	c.2981A>G	p.Y994C	EX5E	4.0%	NM_032427.1
HC-029	ETV6	c.1174G>C	p.E392Q	EX7	5.7%	NM_001987.4
HC-029	KRAS	c.35G>T	p.G12V	EX2	7.3%	NM_033360.2
HC-029	ARID2	c.2674G>T	p.G892W	EX15	7.1%	NM_152641.2
HC-029	MLL2	c.13133A>G	p.D4378G	EX39	4.7%	NM_003482.3
HC-029	ERBB3	c.2755G>A	p.E919K	EX23	3.9%	NM_001982.3
HC-029	RAD51B	c.466G>T	p.A156S	EX6	5.5%	NM_133509.3
HC-029	B2M	c.3G>A	p.0?	EX1	6.2%	NM_004048.2
HC-029	NTRK3	c.2038C>A	p.L680M	EX17	4.4%	NM_001012338.2
HC-029	NTRK3	c.1951C>G	p.L651V	EX17	4.7%	NM_001012338.2
HC-029	TP53	c.743G>T	p.R248L	EX7	7.3%	NM_000546.5
HC-029	TP53	c.5A>G	p.E2G	EX2	7.6%	NM_000546.5
HC-029	NCOR1	c.2143G>A	p.E715K	EX19	7.7%	NM_006311.3
HC-029	RPTOR	c.3415A>G	p.M1139V	EX29	1.0%	NM_020761.2
HC-029	SMAD4	c.90AG[3>2]	p.S32*fs*1	EX2	1.4%	NM_005359.5
HC-029	MAP2K2	c.418G>C	p.D140H	EX3	1.2%	NM_030662.3
HC-029	BRD4	c.2181G>C	p.K727N	EX12	1.7%	NM_058243.2
HC-029	RUNX1	c.160G>A	p.E54K	EX4	7.9%	NM_001754.4
HC-029	KDM6A	c.1551G>T	p.Q517H	EX16	9.8%	NM_021140.2
HC-030	NF1	c.2325G>T	p.E775D	EX19	22.7%	NM_001042492.2
HC-030	POM121L12	c.424G>T	p.A142S	EX1	21.8%	NM_182595.3
HC-030	TP53	c.809T>G	p.F270C	EX8	21.3%	NM_000546.5

HC-030	FAT1	c.6538C>T	p.P2180S	EX10	17.2%	NM_005245.3
HC-030	BCL2L1	c.454G>T	p.V152L	EX2	16.0%	NM_138578.1
HC-030	WT1	c.677C>A	p.P226H	EX2	11.6%	NM_024426.4
HC-030	SLX4	c.5302C>T	p.Q1768*	EX15	10.5%	NM_032444.2
HC-030	OR6F1	c.708A>C	p.K236N	EX1	10.1%	NM_001005286.1
HC-030	SH3PXD2A	c.2150G>C	p.G717A	EX14	9.5%	NM_014631.2
HC-030	CTCF	c.370G>C	p.V124L	EX3	8.0%	NM_006565.3
HC-030	SLX4	c.4162C>A	p.P1388T	EX12	7.5%	NM_032444.2
HC-030	HCN1	c.2466C[4>3]	p.G824Efs*52	EX8	6.7%	NM_021072.3
HC-030	PCK1	c.885G>T	p.M295I	EX6	6.1%	NM_002591.3
HC-030	CDK6	c.177C>G	p.I59M	EX2	5.2%	NM_001145306.1
HC-030	ABCB1	c.1948G>T	p.A650S	EX17	3.9%	NM_000927.4
HC-030	CLP1	c.937_940delTATC	p.Y313Pfs*11	EX3	3.7%	NM_006831.2
HC-030	ACIN1	c.3547C>T	p.R1183C	EX17	3.4%	NM_014977.3
HC-030	EPHB6	c.1776A>T	p.R592S	EX12	3.4%	NM_004445.3
HC-030	FAT2	c.5294G>A	p.G1765D	EX9	1.1%	NM_001447.2
HC-031	ARID1A	c.5542G[7>6]	p.D1850Tfs*33	EX20	18.3%	NM_006015.4
HC-031	TNN	c.1951G>A	p.V651M	EX9	14.1%	NM_022093.1
HC-031	CDC73	c.32ACA[2>1]	p.N12del	EX1	5.8%	NM_024529.4
HC-031	AKT3	c.1394G>A	p.R465Q	EX13	3.5%	NM_005465.4
HC-031	MSH6	c.3254C[8>7]	p.F1088Sfs*2	EX5	13.6%	NM_000179.2
HC-031	TOP2B	c.1116A[6>5]	p.N374Tfs*24	EX10	5.8%	NM_001068.2
HC-031	MLH1	c.890A[3>2]	p.I298Sfs*69	EX11	28.7%	NM_000249.3
HC-031	CTNNB1	c.133_135delTCT	p.S45del	EX3	28.0%	NM_001904.3
HC-031	PBRM1	c.829A[7>6]	p.I279Yfs*4	EX9	9.0%	NM_018313.4
HC-031	SOX2	c.954A>C	p.*318Cfs*27	EX1	10.0%	NM_003106.3

HC-031	PDGFRA	c.17C>T	p.P6L	EX2	18.0%	NM_006206.4
HC-031	KIT	c.2683G>A	p.A895T	EX19	1.3%	NM_000222.2
HC-031	EPHA5	c.1636G>A	p.A546T	EX7	18.8%	NM_004439.5
HC-031	EPHA5	c.619A[5>4]	p.K208Rfs*60	EX3	18.8%	NM_004439.5
HC-031	MSH3	c.1141A[8>7]	p.K383Rfs*32	EX7	19.6%	NM_002439.4
HC-031	RAD50	c.2157A[9>8]	p.K722Rfs*14	EX13	20.0%	NM_005732.3
HC-031	NSD1	c.6595C>T	p.R2199C	EX23	1.7%	NM_022455.4
HC-031	ESR1	c.406C>T	p.P136S	EX2	1.0%	NM_001122740.1
HC-031	IKZF1	c.224G>T	p.G75V	EX4	9.1%	NM_006060.4
HC-031	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	15.7%	NM_005228.3
HC-031	EGFR	c.2369C>T	p.T790M	EX20	17.1%	NM_005228.3
HC-031	MLL3	c.4690G>A	p.G1564S	EX32	14.1%	NM_170606.2
HC-031	NTRK2	c.2105A>G	p.E702G	EX19	21.5%	NM_006180.3
HC-031	FANCC	c.1419G>T	p.Q473H	EX14	2.8%	NM_000136.2
HC-031	CCND1	c.827AGG[5>4]	p.E272[9>8]	EX5	10.6%	NM_053056.2
HC-031	FAT3	c.12697C>T	p.R4233C	EX23	9.8%	NM_001008781.2
HC-031	MLL	c.7685T>C	p.I2562T	EX27	10.9%	NM_001197104.1
HC-031	NTM	c.740C>T	p.A247V	EX5	19.2%	NM_001144058.1
HC-031	KDM5A	c.3092G>A	p.R1031H	EX21	3.9%	NM_001042603.1
HC-031	C1S	c.836A[7>6]	p.K281Rfs*39	EX7	16.6%	NM_001734.3
HC-031	MLL2	c.1934C[7>6]	p.P647Hfs*283	EX10	14.5%	NM_003482.3
HC-031	FLT1	c.482C>T	p.T161M	EX4	26.7%	NM_002019.4
HC-031	NTRK3	c.1468A>C	p.T490P	EX14	6.2%	NM_001012338.2
HC-031	BLM	c.1626C>A	p.D542E	EX7	18.4%	NM_000057.2
HC-031	TSC2	c.3710C>T	p.A1237V	EX31	5.2%	NM_000548.3

HC-031	SLX4	c.848C>T	p.A283V	EX4	10.5%	NM_032444.2
HC-031	ZFHX3	c.2792G>A	p.G931D	EX3	21.3%	NM_006885.3
HC-031	MAP2K4	c.488A>G	p.Q163R	EX4	9.6%	NM_003010.2
HC-031	CDK12	c.2704C>T	p.R902*	EX8	19.6%	NM_016507.2
HC-031	STAT3	c.1844AAG[2>1]	p.E616del	EX20	17.4%	NM_139276.2
HC-031	ITGB3	c.1477C>A	p.L493M	EX10	2.8%	NM_000212.2
HC-031	ANKRD30B	c.3452T>C	p.L1151P	EX36	13.4%	NM_001145029.1
HC-031	STK11	c.837C[6>5]	p.P281Rfs*6	EX6	6.5%	NM_000455.4
HC-031	BRD4	c.2282C>A	p.P761H	EX13	2.7%	NM_058243.2
HC-031	CIC	c.4039A>G	p.N1347D	EX16	8.5%	NM_015125.3
HC-031	BCL3	c.1219C[6>5]	p.R409Gfs*73	EX9	3.1%	NM_005178.4
HC-031	TOP1	c.1300C>T	p.R434*	EX13	1.1%	NM_003286.2
HC-031	PDGFB	c.698C>T	p.T233M	EX6	8.2%	NM_002608.2
HC-031	ARAF	c.106C>T	p.R36W	EX3	3.9%	NM_001654.4
HC-031	TFE3	c.1427C>T	p.T476M	EX10	8.9%	NM_006521.4
HC-031	ATRX	c.5968TCT[3>2]	p.S1990[3>2]	EX26	3.6%	NM_000489.3
HC-031	ATRX	c.4276C>T	p.R1426*	EX14	6.7%	NM_000489.3
HC-031	BCORL1	c.5036C[7>6]	p.P1681Qfs*20	EX12	15.4%	NM_021946.4
HC-032	ERBB4	c.3378G>T	p.Q1126H	EX27	9.8%	NM_005235.2
HC-032	CUL3	c.587A>T	p.E196V	EX5	11.2%	NM_003590.4
HC-032	EPHA5	c.2765G>T	p.R922M	EX16	14.4%	NM_004439.5
HC-032	INPP4B	c.1505C>T	p.P502L	EX17	9.4%	NM_001101669.1
HC-032	PMS2	c.856G>A	p.D286N	EX8	15.7%	NM_000535.5
HC-032	PTCH1	c.2707A>T	p.T903S	EX17	17.9%	NM_000264.3
HC-032	GALNT12	c.1009G>A	p.G337R	EX5	11.2%	NM_024642.4
HC-032	NOTCH1	c.5512A>G	p.T1838A	EX30	14.5%	NM_017617.3

HC-032	FGF4	c.332C[3>2]	p.R112Afs*15	EX1	8.4%	NM_002007.2
HC-032	KRAS	c.182A>T	p.Q61L	EX3	18.3%	NM_033360.2
HC-032	MLL2	c.5542G>T	p.D1848Y	EX25	18.0%	NM_003482.3
HC-032	TBX3	c.571C>A	p.P191T	EX2	9.2%	NM_016569.3
HC-032	ZFP36L1	c.623A>T	p.H208L	EX3E	16.9%	NM_001244701.1
HC-032	B2M	c.137_138delAT	p.Y46Cfs*10	EX2	11.0%	NM_004048.2
HC-032	TP53	c.211C[6>7]	p.V73Rfs*76	EX4	17.8%	NM_000546.5
HC-032	SERPINB3	c.557G[3>2]	p.E187Rfs*26	EX6	9.1%	NM_006919.2
HC-032	PCK1	c.244C>A	p.P82T	EX3	19.4%	NM_002591.3
HC-032	PCK1	c.1077T>A	p.N359K	EX7	21.7%	NM_002591.3
HC-032	EP300	c.6879C>A	p.H2293Q	EX31E	21.4%	NM_001429.3
HC-032	RBM10	c.1888+1G>T	.	IVS15	36.9%	NM_001204468.1
HC-033	ARID1A	c.5385G>T	p.K1795N	EX20E	11.1%	NM_006015.4
HC-033	DPYD	c.2814G>C	p.L938F	EX22	13.1%	NM_000110.3
HC-033	RNASEL	c.1144G>T	p.G382W	EX2	33.8%	NM_021133.3
HC-033	HMCN1	c.15033C>A	p.D5011E	EX97	13.7%	NM_031935.2
HC-033	EPHA4	c.404G>A	p.R135H	EX3	14.7%	NM_004438.3
HC-033	MITF	c.993G>T	p.L331F	EX8	28.0%	NM_198159.2
HC-033	EPHA3	c.229A>G	p.S77G	EX3	12.2%	NM_005233.5
HC-033	EPHA3	c.2854A>T	p.K952*	EX17E	5.5%	NM_005233.5
HC-033	EBF1	c.1525T>A	p.S509T	EX14	28.9%	NM_024007.3
HC-033	NOTCH4	c.208_216delAACGCCCAG	p.N70_Q72del	EX3	15.8%	NM_004557.3
HC-033	ESR1	c.251C>A	p.S84Y	EX2	42.6%	NM_001122740.1
HC-033	ESR1	c.337_338delCCinsAA	p.P113K	EX2	13.9%	NM_001122740.1
HC-033	ARID1B	c.2048G>T	p.G683V	EX6	23.6%	NM_020732.3

HC-033	CARD11	c.623A>T	p.Y208F	EX5	28.9%	NM_032415.4
HC-033	BBS9	c.545G>C	p.G182A	EX6	25.6%	NM_198428.2
HC-033	CDK13	c.1026C>G	p.S342R	EX1	15.2%	NM_003718.4
HC-033	EGFR	c.812A>G	p.N271S	EX7	21.0%	NM_005228.3
HC-033	GUSB	c.260G>A	p.S87N	EX2	6.9%	NM_000181.3
HC-033	RINT1	c.2256G>T	p.Q752H	EX15E	31.8%	NM_021930.4
HC-033	MET	c.3029-1129G>T	.	IVS14	24.5%	NM_000245.2
HC-033	MYC	c.686G>T	p.S229I	EX2	28.8%	NM_002467.4
HC-033	RECQL4	c.233G[5>6]	p.P80Afs*57	EX4	15.7%	NM_004260.3
HC-033	PTPRD	c.2574A[4>3]	p.K859Nfs*50	EX28	28.3%	NM_002839.3
HC-033	TGFBR1	c.1081G>A	p.A361T	EX6	32.9%	NM_004612.2
HC-033	PTGS1	c.1692G>C	p.K564N	EX11E	19.8%	NM_000962.3
HC-033	TSC1	c.2468A>T	p.H823L	EX19	48.3%	NM_000368.4
HC-033	NOTCH1	c.2846G>T	p.C949F	EX18	9.3%	NM_017617.3
HC-033	RET	c.688G>T	p.D230Y	EX4	11.3%	NM_020975.4
HC-033	CDH23	c.7450G>A	p.V2484I	EX53	11.4%	NM_022124.5
HC-033	EXT2	c.1412G>T	p.R471L	EX9	29.0%	NM_207122.1
HC-033	FGF4	c.541C>G	p.L181V	EX3E	7.4%	NM_002007.2
HC-033	WNK1	c.1255G>T	p.E419*	EX4	8.6%	NM_213655.4
HC-033	CCND2	c.126_127delCTinsAA	p.Y43N	EX1	6.8%	NM_001759.3
HC-033	FGF6	c.328C>A	p.H110N	EX1	9.1%	NM_020996.1
HC-033	COL2A1	c.4174C>G	p.H1392D	EX53	10.4%	NM_001844.4
HC-033	ACVR1B	c.680G>T	p.R227M	EX4	10.2%	NM_020328.3
HC-033	MDM2	c.526delGinsCA	p.E176Qfs*5	EX8	5.6%	NM_002392.4
HC-033	BRCA2	c.898G>T	p.V300L	EX10	20.5%	NM_000059.3
HC-033	IRS2	c.1235G>A	p.R412H	EX1	15.7%	NM_003749.2

HC-033	ING1	c.466C>T	p.P156S	EX2E	14.4%	NM_198217.2
HC-033	GRIN2A	c.683T>A	p.L228*	EX3	22.0%	NM_001134407.1
HC-033	ZFHX3	c.7127C>A	p.T2376K	EX9	23.7%	NM_006885.3
HC-033	TP53	c.742C>T	p.R248W	EX7	47.9%	NM_000546.5
HC-033	HOXB13	c.487C>A	p.L163M	EX1	16.6%	NM_006361.5
HC-033	SERPINB3	c.631C>A	p.Q211K	EX7	14.9%	NM_006919.2
HC-033	KEAP1	c.1427G>A	p.G476E	EX4	46.0%	NM_203500.1
HC-033	SMARCA4	c.717C[3>4]	p.P242Sfs*45	EX4	42.4%	NM_003072.3
HC-033	POLD1	c.385G>T	p.G129W	EX4	15.2%	NM_002691.3
HC-033	ASXL1	c.4414G>T	p.V1472L	EX13E	24.3%	NM_015338.5
HC-034	EXT2	c.583G>T	p.G195C	EX3	49.0%	NM_207122.1
HC-034	ARID2	c.1494_1495delCCinsTA	p.P499T	EX11	7.9%	NM_152641.2
HC-034	ARID2	c.1498_1498+30delGGTTAGTGTTTTCACATATTCTTTTTCAGTG	.	EX11-IVS11	8.5%	NM_152641.2
HC-034	IRS2	c.1018C>T	p.R340C	EX1	3.6%	NM_003749.2
HC-034	B2M	c.5C>G	p.S2C	EX1	11.7%	NM_004048.2
HC-034	GRIN2A	c.4276G>T	p.E1426*	EX13E	48.3%	NM_001134407.1
HC-034	TP53	c.467G>C	p.R156P	EX5	52.9%	NM_000546.5
HC-034	NF1	c.2850G[2>1]	p.V951Ffs*3	EX21	52.6%	NM_000267.3
HC-034	HOXB13	c.213_214delGGinsAT	p.G72W	EX1	13.7%	NM_006361.5
HC-034	SMARCA4	c.4519_4533delTTCAAGAAGATAAAG	p.F1507_K1511del	EX31	55.7%	NM_003072.3
HC-034	POLD1	c.2089G>C	p.A697P	EX17	24.5%	NM_002691.3
HC-034	AR	c.148C>T	p.P50S	EX1	47.4%	NM_000044.3
HC-034	HGF	c.1005C>A	p.H335Q	EX8	30.0%	NM_000601.4

HC-034	XRCC2	c.790A>T	p.S264C	EX3E	30.5%	NM_005431.1
HC-034	MSR1	c.355A>C	p.S119R	EX4	29.2%	NM_138715.2
HC-034	GALNT12	c.352C>G	p.P118A	EX1	21.4%	NM_024642.4
HC-034	TLL2	c.1351A>G	p.I451V	EX11	39.3%	NM_012465.3
HC-034	OR6F1	c.733C>A	p.L245I	EX1E	6.4%	NM_001005286.1
HC-034	LRP1B	c.13030G>T	p.E4344*	EX85	25.8%	NM_018557.2
HC-034	LRP1B	c.12086C>A	p.P4029H	EX78	21.9%	NM_018557.2
HC-034	ERBB4	c.959T>C	p.I320T	EX8	23.2%	NM_005235.2
HC-034	FOXL2	c.901G>A	p.A301T	EX1E	2.1%	NM_023067.3
HC-034	FGFR4	c.1582G>A	p.G528S	EX12	2.3%	NM_213647.1
HC-034	CDK13	c.3935A>G	p.Q1312R	EX14E	30.5%	NM_003718.4
HC-034	POM121L12	c.461C>T	p.P154L	EX1E	29.3%	NM_182595.3
HC-035	LRP1B	c.8047G>T	p.E2683*	EX50	14.9%	NM_018557.2
HC-035	ERBB4	c.2700G>T	p.Q900H	EX22	6.8%	NM_005235.2
HC-035	SLIT2	c.1163G>T	p.R388L	EX13	9.6%	NM_004787.1
HC-035	PMS2	c.1669G>T	p.D557Y	EX11	10.6%	NM_000535.5
HC-035	RECQL4	c.1094G>A	p.R365Q	EX5	6.3%	NM_004260.3
HC-035	EGFL7	c.185G>A	p.C62Y	EX5	6.0%	NM_016215.4
HC-035	FAT3	c.12667C>G	p.Q4223E	EX23	6.6%	NM_001008781.2
HC-035	CBL	c.967C>G	p.P323A	EX6	5.9%	NM_005188.3
HC-035	ROBO3	c.2045G>T	p.G682V	EX13	18.8%	NM_022370.3
HC-035	KRAS	c.34G>T	p.G12C	EX2	24.5%	NM_033360.2
HC-035	MLL2	c.6173C>T	p.A2058V	EX29	1.7%	NM_003482.3
HC-035	WSCD2	c.515G>T	p.G172V	EX4	15.8%	NM_014653.2
HC-035	TBX3	c.2137G>T	p.E713*	EX8E	13.6%	NM_016569.3
HC-035	TBX3	c.1067C>G	p.A356G	EX6	6.1%	NM_016569.3

HC-035	ERCC5	c.400C>G	p.L134V	EX4	6.7%	NM_000123.3
HC-035	PDILT	c.1546G>T	p.V516L	EX12E	9.6%	NM_174924.1
HC-035	CTCF	c.1207+1G>A	.	IVS6	5.1%	NM_006565.3
HC-035	CTCF	c.1806G>A	p.M602I	EX10	13.8%	NM_006565.3
HC-035	TP53	c.560-2A>T	.	IVS5	16.4%	NM_000546.5
HC-035	BRCA1	c.5193+1G>T	.	IVS18	17.5%	NM_007294.3
HC-035	NOTCH3	c.3749G>A	p.C1250Y	EX23	6.7%	NM_000435.2
HC-035	U2AF1	c.101C>T	p.S34F	EX2	6.4%	NM_006758.2
HC-035	MAPK1	c.604T>C	p.S202P	EX4	7.9%	NM_002745.4
HC-035	ARAF	c.764G>A	p.R255Q	EX9	7.7%	NM_001654.4
HC-036	HDAC1	c.50G>T	p.G17V	EX2	4.3%	NM_004964.2
HC-036	MPL	c.1297C>T	p.Q433*	EX8	10.7%	NM_005373.2
HC-036	JAK1	c.2450G>A	p.C817Y	EX18	1.2%	NM_002227.2
HC-036	NTRK1	c.79A>G	p.I27V	EX1	8.0%	NM_002529.3
HC-036	PRRX1	c.669C>A	p.S223R	EX4E	8.8%	NM_022716.2
HC-036	ABL2	c.331C>T	p.L111F	EX3	3.7%	NM_007314.3
HC-036	CDC73	c.1204G>A	p.E402K	EX14	1.0%	NM_024529.4
HC-036	ASPM	c.1579G>T	p.E527*	EX3	3.7%	NM_018136.4
HC-036	LRP1B	c.4313G>C	p.R1438T	EX26	6.9%	NM_018557.2
HC-036	HSPD1	c.22T>G	p.F8V	EX2	9.8%	NM_199440.1
HC-036	BAP1	c.37G[2>1]	p.G13Afs*59	EX2	17.5%	NM_004656.2
HC-036	SLIT2	c.4100G>T	p.C1367F	EX35	12.5%	NM_004787.1
HC-036	TET2	c.2312G>C	p.R771T	EX3	2.3%	NM_001127208.2
HC-036	FAT1	c.5205G>T	p.L1735F	EX10	4.3%	NM_005245.3
HC-036	APC	c.6594G>C	p.L2198F	EX16E	4.4%	NM_000038.5
HC-036	ARID1B	c.1612C>T	p.Q538*	EX2	7.8%	NM_020732.3

HC-036	IKZF1	c.223G>T	p.G75W	EX4	1.2%	NM_006060.4
HC-036	EGFR	c.2156G>C	p.G719A	EX18	24.3%	NM_005228.3
HC-036	EGFR	c.2582T>A	p.L861Q	EX21	23.6%	NM_005228.3
HC-036	EPHB6	c.1009C>A	p.R337S	EX8	1.9%	NM_004445.3
HC-036	FAM135B	c.4144G>A	p.A1382T	EX20E	4.5%	NM_015912.3
HC-036	CDKN2A	c.200G>T	p.G67V	EX2	13.0%	NM_000077.4
HC-036	PTCH1	c.2315G>C	p.R772T	EX15	4.1%	NM_000264.3
HC-036	WT1	c.947A>T	p.K316M	EX4	8.5%	NM_024426.4
HC-036	ATM	c.3595G>A	p.E1199K	EX25	4.3%	NM_000051.3
HC-036	ABCC11	c.1576G>T	p.E526*	EX11	8.8%	NM_032583.3
HC-036	FANCA	c.3741G>C	p.K1247N	EX37	3.1%	NM_000135.2
HC-036	TP53	c.973G>T	p.G325*	EX9	14.4%	NM_000546.5
HC-036	TP53	c.524G>A	p.R175H	EX5	1.0%	NM_000546.5
HC-036	ERBB2	c.2982G>C	p.L994F	EX25	4.5%	NM_004448.2
HC-036	SETBP1	c.1685A>G	p.Y562C	EX4	8.9%	NM_015559.2
HC-036	CCNE1	c.790G>A	p.E264K	EX9	9.2%	NM_001238.2
HC-036	POLD1	c.2383G>C	p.E795Q	EX19	4.7%	NM_002691.3
HC-036	EP300	c.7234G>C	p.D2412H	EX31E	1.3%	NM_001429.3
HC-036	IL1RAPL1	c.1031A>C	p.H344P	EX8	19.6%	NM_014271.3
HC-036	STAG2	c.2111C>G	p.S704*	EX22	8.2%	NM_001042749.1
HC-037	EPHA2	c.286A>T	p.I96F	EX3	17.9%	NM_004431.3
HC-037	ALK	c.1529G>A	p.R510Q	EX7	13.4%	NM_004304.4
HC-037	LRP1B	c.10924A>T	p.K3642*	EX71	8.9%	NM_018557.2
HC-037	LRP1B	c.7753G>C	p.D2585H	EX47	9.4%	NM_018557.2
HC-037	ERBB4	c.2270C>A	p.T757N	EX19	9.6%	NM_005235.2
HC-037	ERBB4	c.742-1_742delGGinsTT	.	IVS6-EX7	12.8%	NM_005235.2

HC-037	BARD1	c.410G>T	p.G137V	EX4	9.0%	NM_000465.2
HC-037	EPHA3	c.2275G>A	p.V759M	EX13	14.2%	NM_005233.5
HC-037	TBL1XR1	c.286CAA[2>1]	p.Q96[2>1]	EX5	10.9%	NM_024665.4
HC-037	TBL1XR1	c.255T>A	p.D85E	EX5	13.3%	NM_024665.4
HC-037	TET2	c.2144A>T	p.N715I	EX3	14.9%	NM_001127208.2
HC-037	RICTOR	c.4076T>C	p.L1359P	EX31	15.6%	NM_152756.3
HC-037	APC	c.3815C>A	p.S1272*	EX16E	17.0%	NM_000038.5
HC-037	HGF	c.1513A>G	p.I505V	EX13	11.1%	NM_000601.4
HC-037	JAK2	c.3314G>T	p.C1105F	EX25E	7.4%	NM_004972.3
HC-037	RET	c.1140C>A	p.D380E	EX6	14.9%	NM_020975.4
HC-037	RET	c.1999C[2>1]	p.P667Hfs*8	EX11	14.2%	NM_020975.4
HC-037	CDH23	c.448C[3>2]	p.I151Sfs*4	EX7	13.1%	NM_022124.5
HC-037	MLL2	c.16533C>A	p.D5511E	EX54E	16.5%	NM_003482.3
HC-037	MLL2	c.15811G>C	p.V5271L	EX49	15.5%	NM_003482.3
HC-037	WSCD2	c.544G>T	p.G182C	EX4	14.9%	NM_014653.2
HC-037	TBX3	c.2008C>A	p.L670M	EX8E	15.1%	NM_016569.3
HC-037	POLE	c.4582G>A	p.A1528T	EX36	13.9%	NM_006231.2
HC-037	NTRK3	c.1640G>T	p.G547V	EX15	15.1%	NM_001012338.2
HC-037	GRIN2A	c.632A>T	p.E211V	EX3	14.7%	NM_001134407.1
HC-037	TP53	c.830G>T	p.C277F	EX8	17.3%	NM_000546.5
HC-037	MYH10	c.241C>T	p.P81S	EX2	16.3%	NM_001256012.1
HC-037	SERPINB4	c.178G>C	p.D60H	EX3	17.9%	NM_002974.2
HC-037	SMARCA4	c.3572A>T	p.H1191L	EX26	17.0%	NM_003072.3
HC-037	TAF1	c.3551G>T	p.R1184L	EX23	27.2%	NM_004606.3
HC-037	BTK	c.1428C>A	p.Y476*	EX15	31.7%	NM_000061.2
HC-038	ABL2	c.1777G>A	p.E593K	EX11	2.2%	NM_007314.3

HC-038	IKBKE	c.163G>C	p.E55Q	EX4	30.5%	NM_014002.3
HC-038	ALK	c.277C>G	p.L93V	EX1	2.8%	NM_004304.4
HC-038	LRP1B	c.12226T>G	p.L4076V	EX80	2.7%	NM_018557.2
HC-038	NFE2L2	c.85G>C	p.D29H	EX2	14.4%	NM_006164.4
HC-038	EPHB1	c.2491C>A	p.Q831K	EX13	3.8%	NM_004441.4
HC-038	FAT1	c.12446A>G	p.Y4149C	EX25	31.3%	NM_005245.3
HC-038	IL6ST	c.2526G>C	p.E842D	EX17E	3.0%	NM_002184.3
HC-038	FAT2	c.8239G>C	p.G2747R	EX9	5.5%	NM_001447.2
HC-038	ROS1	c.2408G>T	p.W803L	EX16	18.8%	NM_002944.2
HC-038	PARK2	c.290G>T	p.R97L	EX3	23.3%	NM_004562.2
HC-038	EGFR	c.1800G>A	p.M600I	EX15	2.2%	NM_005228.3
HC-038	GRM3	c.2548G>T	p.G850W	EX5	12.1%	NM_000840.2
HC-038	PIK3CG	c.1793G>T	p.W598L	EX2	17.8%	NM_002649.2
HC-038	POT1	c.1067C>A	p.A356D	EX13	2.4%	NM_015450.2
HC-038	CDKN2A	c.202G>C	p.A68P	EX2	32.2%	NM_000077.4
HC-038	TSC1	c.2182G>T	p.A728S	EX17	25.2%	NM_000368.4
HC-038	INPPL1	c.2618G>T	p.R873L	EX23	6.8%	NM_001567.3
HC-038	MLL2	c.11116C>G	p.L3706V	EX39	6.1%	NM_003482.3
HC-038	MLL2	c.4702G>T	p.A1568S	EX18	4.1%	NM_003482.3
HC-038	IRS2	c.3595G>A	p.E1199K	EX1	6.3%	NM_003749.2
HC-038	DICER1	c.1631G>A	p.R544Q	EX11	11.3%	NM_030621.3
HC-038	CREBBP	c.605C>A	p.S202*	EX2	1.5%	NM_004380.2
HC-038	PDILT	c.1688T>C	p.V563A	EX12E	4.5%	NM_174924.1
HC-038	TP53	c.820G>T	p.V274F	EX8	21.9%	NM_000546.5
HC-038	TP53	c.214_215delCCinsG	p.P72Afs*51	EX4	17.8%	NM_000546.5
HC-038	TP53	c.209C>T	p.A70V	EX4	19.7%	NM_000546.5

HC-038	AURKB	c.955G>T	p.A319S	EX9E	21.5%	NM_004217.3
HC-038	KEAP1	c.965C>T	p.P322L	EX3	18.5%	NM_203500.1
HC-038	CIC	c.4600C>G	p.P1534A	EX20E	15.5%	NM_015125.3
HC-038	KDM6A	c.3341C>G	p.S1114*	EX23	18.1%	NM_021140.2
HC-038	KDM5C	c.994C>T	p.R332*	EX8	10.8%	NM_004187.3
HC-038	STAG2	c.2974C>T	p.H992Y	EX29	42.7%	NM_001042749.1
HC-039	LRP1B	c.3119T>C	p.I1040T	EX20	2.2%	NM_018557.2
HC-039	LRP1B	c.683delG	p.S228Tfs*19	EX6	36.6%	NM_018557.2
HC-039	BARD1	c.829G>A	p.E277K	EX4	3.1%	NM_000465.2
HC-039	MITF	c.818C>T	p.P273L	EX6	3.2%	NM_198159.2
HC-039	EPHA3	c.182A>T	p.H61L	EX3	33.6%	NM_005233.5
HC-039	RICTOR	c.4424T>G	p.L1475R	EX34	3.3%	NM_152756.3
HC-039	APC	c.2160G[3>2]	p.G721Efs*6	EX16E	54.2%	NM_000038.5
HC-039	CSF1R	c.2189C>T	p.S730F	EX16	7.1%	NM_005211.3
HC-039	PDGFRB	c.2281G>A	p.V761I	EX16	3.1%	NM_002609.3
HC-039	NOTCH4	c.271C>A	p.P91T	EX3	13.8%	NM_004557.3
HC-039	DAXX	c.922G>T	p.A308S	EX3	23.4%	NM_001141970.1
HC-039	CARD11	c.1387G[4>3]	p.D464Mfs*37	EX10	16.2%	NM_032415.4
HC-039	MLL3	c.10601A>T	p.Q3534L	EX43	24.0%	NM_170606.2
HC-039	PTPRD	c.2807A>T	p.Q936L	EX28	26.4%	NM_002839.3
HC-039	ATM	c.4032G[2>1]	p.V1345Wfs*4	EX27	57.5%	NM_000051.3
HC-039	NTRK3	c.2482G>T	p.G828W	EX20E	36.8%	NM_001012338.2
HC-039	CYLD	c.980G>T	p.G327V	EX6	42.7%	NM_001042355.1
HC-039	TOP2A	c.4543G>A	p.A1515T	EX35E	40.1%	NM_001067.3
HC-039	RNF43	c.1849A>G	p.R617G	EX9	5.0%	NM_017763.4
HC-039	ANKRD30B	c.3274G>T	p.A1092S	EX36E	37.5%	NM_001145029.1

HC-039	SERPINB4	c.418C>T	p.P140S	EX5	30.4%	NM_002974.2
HC-039	CRLF2	c.464C>A	p.P155H	EX4	12.3%	NM_022148.2
HC-039	ATRX	c.686T>G	p.L229W	EX9	69.2%	NM_000489.3
HC-040	JUN	c.623C>T	p.P208L	EX1E	4.8%	NM_002228.3
HC-040	RNASEL	c.820A[4>3]	p.T275Qfs*11	EX2	3.8%	NM_021133.3
HC-040	MSH6	c.3118T>G	p.F1040V	EX4	8.3%	NM_000179.2
HC-040	LRP1B	c.12241T>A	p.F4081I	EX80	6.6%	NM_018557.2
HC-040	LRP1B	c.6652C>A	p.P2218T	EX41	4.5%	NM_018557.2
HC-040	FGFR3	c.709A>T	p.I237F	EX6	8.1%	NM_000142.4
HC-040	FAT1	c.5600T>A	p.V1867E	EX10	8.8%	NM_005245.3
HC-040	FAT1	c.571C>T	p.R191*	EX2	4.1%	NM_005245.3
HC-040	NOTCH4	c.5336C>T	p.A1779V	EX30E	6.4%	NM_004557.3
HC-040	ROS1	c.2039C>A	p.A680D	EX14	6.8%	NM_002944.2
HC-040	SOX17	c.398C>G	p.P133R	EX2E	10.5%	NM_022454.3
HC-040	NOTCH1	c.2524G[4>3]	p.E843Sfs*33	EX16	7.6%	NM_017617.3
HC-040	BRCA2	c.2410G>C	p.E804Q	EX11	8.0%	NM_000059.3
HC-040	RB1	c.1848A>T	p.K616N	EX19	7.3%	NM_000321.2
HC-040	SLX4	c.4551A>C	p.E1517D	EX12	9.2%	NM_032444.2
HC-040	TP53	c.1006G>T	p.E336*	EX10	7.3%	NM_000546.5
HC-040	TP53	c.610G>T	p.E204*	EX6	10.5%	NM_000546.5
HC-040	PER1	c.2527C>G	p.R843G	EX19	9.9%	NM_002616.2
HC-040	NF1	c.4943T>A	p.F1648Y	EX36	8.1%	NM_000267.3
HC-040	NF1	c.7675G>T	p.E2559*	EX51	5.1%	NM_000267.3
HC-040	CDK12	c.4339A>C	p.T1447P	EX14E	7.4%	NM_016507.2
HC-040	CHEK2	c.1367C>T	p.S456L	EX12	9.0%	NM_007194.3
HC-041	NTRK3	c.1934G>T	p.R645L	EX17	15.4%	NM_001012338.2

HC-041	NTRK3	c.1169C>T	p.T390I	EX10	6.4%	NM_001012338.2
HC-041	TSC2	c.1584G[2>1]	p.D529Tfs*6	EX15	30.9%	NM_000548.3
HC-041	TSC2	c.2893G>C	p.E965Q	EX26	5.1%	NM_000548.3
HC-041	TSC2	c.4933T[3>2]	p.F1645Lfs*27	EX38	8.4%	NM_000548.3
HC-041	SNX29	c.968C>G	p.S323*	EX8	6.8%	NM_032167.3
HC-041	TP53	c.993G>C	p.Q331H	EX9	24.0%	NM_000546.5
HC-041	TP53	c.398T>G	p.M133R	EX5	27.5%	NM_000546.5
HC-041	NF1	c.5414A>T	p.H1805L	EX37	4.3%	NM_000267.3
HC-041	STAT3	c.715G>T	p.E239*	EX8	9.0%	NM_139276.2
HC-041	BRIP1	c.562G>C	p.D188H	EX6	1.0%	NM_032043.2
HC-041	ANKRD30B	c.3439C>A	p.Q1147K	EX36E	4.7%	NM_001145029.1
HC-041	SETBP1	c.4408G>T	p.D1470Y	EX6E	25.7%	NM_015559.2
HC-041	DOT1L	c.1225_1226delCGinsTT	p.R409F	EX14	15.0%	NM_032482.2
HC-041	MAP2K2	c.222G>T	p.R74S	EX2	26.7%	NM_030662.3
HC-041	JAK3	c.550C>A	p.L184M	EX5	4.1%	NM_000215.3
HC-041	PLCB1	c.1081G>T	p.E361*	EX11	32.3%	NM_015192.2
HC-041	TOP1	c.1746G>T	p.E582D	EX17	30.8%	NM_003286.2
HC-041	PCK1	c.1186_1186+1delGGinsTT	.	EX7-IVS7	15.9%	NM_002591.3
HC-041	MN1	c.1534C>A	p.L512M	EX1	36.8%	NM_002430.2
HC-041	CHEK2	c.1426A>G	p.T476A	EX13	34.1%	NM_007194.3
HC-041	BCOR	c.4428+1G>T	.	IVS10	22.0%	NM_001123385.1
HC-041	BCOR	c.3934G>C	p.A1312P	EX9	21.8%	NM_001123385.1
HC-041	RBM10	c.2312G>T	p.R771I	EX19	3.1%	NM_001204468.1
HC-041	ARAF	c.990_991delTGinsAT	p.H330_G331delinsQC	EX10	3.0%	NM_001654.4
HC-041	TFE3	c.522G>T	p.R174S	EX3	21.3%	NM_006521.4

HC-041	FAM123B	c.1973_2003delCCTTAGGCCCATCAGTGATGGGCCTGGCAGC	p.P658Qfs*51	EX2E	1.1%	NM_152424.3
HC-041	FAM123B	c.1654G>T	p.G552W	EX2E	20.9%	NM_152424.3
HC-041	FAM123B	c.701C[4>5]	p.G236Wfs*16	EX2E	16.3%	NM_152424.3
HC-041	FAM123B	c.698_700delATGinsGTT	p.D233_A234delinsGS	EX2E	17.1%	NM_152424.3
HC-041	AR	c.1597G>T	p.G533*	EX1	19.9%	NM_000044.3
HC-041	MED12	c.1690C>A	p.P564T	EX12	24.6%	NM_005120.2
HC-041	ATRX	c.5359G>T	p.G1787C	EX21	3.8%	NM_000489.3
HC-041	STAG2	c.3757G>A	p.D1253N	EX34	3.1%	NM_001042749.1
HC-041	NOTCH1	c.1094G>A	p.R365H	EX6	13.1%	NM_017617.3
HC-041	GATA3	c.1178C>T	p.P393L	EX6E	3.8%	NM_002051.2
HC-041	RET	c.1079G>T	p.R360L	EX6	16.5%	NM_020975.4
HC-041	RET	c.1373C>A	p.A458D	EX7	15.9%	NM_020975.4
HC-041	CYP2C8	c.481G>T	p.A161S	EX3	4.2%	NM_000770.3
HC-041	FGF4	c.512C>A	p.S171Y	EX3E	13.9%	NM_002007.2
HC-041	MAML2	c.2898G>T	p.W966C	EX5E	3.4%	NM_032427.1
HC-041	RB1	c.380G>T	p.S127I	EX3	33.3%	NM_000321.2
HC-041	EPHB2	c.740G>A	p.W247*	EX3	1.2%	NM_017449.3
HC-041	ARID1A	c.2456C>T	p.P819L	EX8	1.1%	NM_006015.4
HC-041	HDAC1	c.626G>A	p.G209E	EX6	22.1%	NM_004964.2
HC-041	MYCL1	c.1011G>T	p.Q337H	EX3E	29.5%	NM_001033082.2
HC-041	PTCH2	c.1681C>T	p.R561C	EX13	4.0%	NM_001166292.1
HC-041	CDKN2C	c.358G>T	p.E120*	EX2E	5.0%	NM_078626.2
HC-041	LRRC7	c.26G>T	p.G9V	EX1	12.2%	NM_020794.2

HC-041	TBX15	c.1264C>A	p.L422I	EX8E	3.6%	NM_152380.2
HC-041	NTRK1	c.1808C>A	p.S603Y	EX15	31.3%	NM_002529.3
HC-041	FCGR3A	c.9G>T	p.Q3H	EX2	35.2%	NM_001127593.1
HC-041	PIK3C2B	c.66A>C	p.K22N	EX3	32.5%	NM_002646.3
HC-041	USH2A	c.4657C>A	p.P1553T	EX22	28.7%	NM_206933.2
HC-041	FMN2	c.2881G>A	p.G961R	EX5	2.4%	NM_020066.4
HC-041	EPAS1	c.989G>A	p.R330H	EX8	1.1%	NM_001430.4
HC-041	BCL11A	c.1004G>T	p.R335L	EX4	4.1%	NM_018014.3
HC-041	LRP1B	c.9004G>T	p.D3002Y	EX56	12.1%	NM_018557.2
HC-041	BARD1	c.443G>A	p.S148N	EX4	5.1%	NM_000465.2
HC-041	PAX3	c.1085G>T	p.G362V	EX7	26.2%	NM_181457.3
HC-041	VHL	c.614G>T	p.R205L	EX3E	24.0%	NM_000551.3
HC-041	SETD2	c.7018C>T	p.H2340Y	EX16	4.3%	NM_014159.6
HC-041	SETD2	c.2623G>T	p.G875W	EX3	22.1%	NM_014159.6
HC-041	CADM2	c.529G>T	p.E177*	EX5	3.6%	NM_153184.3
HC-041	EPHA3	c.2648G>T	p.R883L	EX15	20.9%	NM_005233.5
HC-041	FOXL2	c.9_10delCAinsAG	p.S4G	EX1E	20.8%	NM_023067.3
HC-041	MAML3	c.1672C>T	p.Q558*	EX2	25.5%	NM_018717.4
HC-041	FAT1	c.3939G>T	p.R1313S	EX5	29.1%	NM_005245.3
HC-041	TERT	c.-58-u66C>T	.	.	23.7%	NM_198253.2
HC-041	PDGFRB	c.1075G>C	p.D359H	EX7	13.3%	NM_002609.3
HC-041	FAT2	c.6221C>A	p.P2074H	EX9	4.6%	NM_001447.2
HC-041	FLT4	c.1382G>T	p.R461L	EX10	13.1%	NM_182925.4
HC-041	FLT4	c.745G>T	p.V249F	EX6	19.2%	NM_182925.4
HC-041	FLT4	c.253G>T	p.E85*	EX3	17.5%	NM_182925.4
HC-041	NOTCH4	c.2776C>A	p.L926M	EX18	23.6%	NM_004557.3

HC-041	ROS1	c.6048T>A	p.C2016*	EX38	22.4%	NM_002944.2
HC-041	HGF	c.1812C>A	p.C604*	EX16	4.4%	NM_000601.4
HC-041	ABCB1	c.1466G>T	p.R489L	EX14	6.0%	NM_000927.4
HC-041	PIK3CG	c.59G>T	p.R20L	EX2	21.8%	NM_002649.2
HC-041	PIK3CG	c.2564G[3>2]	p.E856Rfs*21	EX7	6.5%	NM_002649.2
HC-041	EPHB6	c.2253G>T	p.M751I	EX15	5.8%	NM_004445.3
HC-041	MLL3	c.3991G>T	p.V1331F	EX26	13.9%	NM_170606.2
HC-041	MLL3	c.1049C>T	p.P350L	EX8	1.9%	NM_170606.2
HC-041	NBN	c.1776G>T	p.R592S	EX11	20.2%	NM_002485.4
HC-041	CSMD3	c.11043G>C	p.M3681I	EX71E	4.2%	NM_198123.1
HC-041	RAD21	c.1013G>C	p.R338T	EX9	23.8%	NM_006265.2
HC-041	CDKN2A	c.183GCT[4>3]	p.L62[4>3]	EX2	3.7%	NM_000077.4
HC-041	PAX5	c.298G>T	p.A100S	EX3	3.3%	NM_016734.1
HC-042	IL10	c.320C>A	p.A107E	EX3	4.7%	NM_000572.2
HC-042	HDAC4	c.1379G>T	p.R460L	EX12	8.9%	NM_006037.3
HC-042	CTNNB1	c.94G>T	p.D32Y	EX3	10.4%	NM_001904.3
HC-042	EPHA5	c.1759G>T	p.A587S	EX8	9.8%	NM_004439.5
HC-042	FAT2	c.8507T>C	p.L2836P	EX9	9.6%	NM_001447.2
HC-042	EEF1A1	c.130A>G	p.K44E	EX2	6.3%	NM_001402.5
HC-042	CDK6	c.706G>A	p.G236R	EX7	4.8%	NM_001145306.1
HC-042	BRAF	c.1406G>C	p.G469A	EX11	8.2%	NM_004333.4
HC-042	EPHB6	c.1119_1120delCCinsAG	p.Q374E	EX9	7.9%	NM_004445.3
HC-042	SDHD	c.23G>C	p.S8T	EX1	9.4%	NM_003002.2
HC-042	ACVR1B	c.1457A>G	p.K486R	EX9	9.8%	NM_020328.3
HC-042	IRS2	c.2433G>T	p.K811N	EX1	9.5%	NM_003749.2

HC-042	FOXA1	c.1004T>A	p.L335Q	EX2E	32.6%	NM_004496.3
HC-042	MAX	c.79C>T	p.H27Y	EX3	5.7%	NM_002382.4
HC-042	DICER1	c.1471A>G	p.N491D	EX10	10.2%	NM_030621.3
HC-042	TCL1A	c.188C[5>4]	p.T65Pfs*3	EX2	8.8%	NM_021966.2
HC-042	NLRC3	c.340G[5>6]	p.G116Rfs*108	EX5	8.5%	NM_178844.2
HC-042	TP53	c.920-1G>A	.	IVS8	10.8%	NM_000546.5
HC-042	CIC	c.3175+2T>G	.	IVS13	9.6%	NM_015125.3
HC-042	TOP1	c.947G>T	p.R316L	EX11	9.1%	NM_003286.2
HC-042	RBM10	c.2442_2443delGGinsTT	p.E815*	EX20	16.8%	NM_001204468.1
HC-042	ATRX	c.3742G>T	p.E1248*	EX10	16.9%	NM_000489.3
HC-043	DPYD	c.587G>T	p.G196V	EX6	5.6%	NM_000110.3
HC-043	FCGR2B	c.255C>A	p.F85L	EX3	4.4%	NM_004001.4
HC-043	TRIM58	c.584A>T	p.Q195L	EX3	6.3%	NM_015431.3
HC-043	ALK	c.1789G>T	p.V597L	EX9	4.3%	NM_004304.4
HC-043	LRP1B	c.9764G>T	p.W3255L	EX61	3.2%	NM_018557.2
HC-043	ERBB4	c.3672C>A	p.N1224K	EX28E	3.2%	NM_005235.2
HC-043	HDAC4	c.639G>T	p.Q213H	EX7	4.1%	NM_006037.3
HC-043	FANCD2	c.1992C>A	p.F664L	EX22	2.1%	NM_033084.3
HC-043	PDGFRA	c.2449C>A	p.R817S	EX18	4.6%	NM_006206.4
HC-043	RICTOR	c.5055G>A	p.M1685I	EX38E	3.5%	NM_152756.3
HC-043	PDGFRB	c.376G>T	p.G126C	EX4	3.7%	NM_002609.3
HC-043	BRD2	c.1246G>T	p.A416S	EX7	3.6%	NM_001199455.1
HC-043	EPHA7	c.2545A>G	p.I849V	EX15	5.5%	NM_004440.3
HC-043	ESR1	c.878C>A	p.P293Q	EX5	5.0%	NM_001122740.1
HC-043	HOXA9	c.611G>T	p.R204L	EX2E	3.0%	NM_152739.3
HC-043	PIK3CG	c.1988T>C	p.L663S	EX2	2.1%	NM_002649.2

HC-043	MET	c.3029-1010A>G	.	IVS14	3.3%	NM_000245.2
HC-043	MLL3	c.5093G>C	p.R1698T	EX35	4.4%	NM_170606.2
HC-043	PTPRD	c.2614G>C	p.E872Q	EX28	1.7%	NM_002839.3
HC-043	CDKN2A	c.188_189delTGinsCT	p.L63P	EX2	3.4%	NM_000077.4
HC-043	PTCH1	c.2945G>T	p.R982L	EX18	2.0%	NM_000264.3
HC-043	CDH23	c.7021C>A	p.P2341T	EX50	4.9%	NM_022124.5
HC-043	ATM	c.6335G>T	p.C2112F	EX43	3.8%	NM_000051.3
HC-043	ROBO3	c.423C>A	p.Y141*	EX2	6.1%	NM_022370.3
HC-043	FGF23	c.541G>A	p.A181T	EX3E	4.9%	NM_020638.2
HC-043	NTRK3	c.670G>A	p.G224S	EX8	3.5%	NM_001012338.2
HC-043	CREBBP	c.1472C>T	p.P491L	EX6	5.3%	NM_004380.2
HC-043	ABCC11	c.3273C>G	p.F1091L	EX24	4.2%	NM_032583.3
HC-043	TP53	c.473G>T	p.R158L	EX5	4.8%	NM_000546.5
HC-043	NF1	c.3712G>T	p.E1238*	EX28	4.2%	NM_000267.3
HC-043	RNF43	c.445G>T	p.E149*	EX4	3.6%	NM_017763.4
HC-043	RAD51C	c.59C>T	p.S20F	EX1	4.9%	NM_058216.1
HC-043	AXIN2	c.1976G>T	p.R659L	EX8	6.0%	NM_004655.3
HC-043	SMAD2	c.255G>C	p.W85C	EX3	4.9%	NM_001003652.3
HC-043	SERPINB3	c.934G>C	p.A312P	EX8E	3.5%	NM_006919.2
HC-043	SRC	c.1111G>C	p.A371P	EX11	5.5%	NM_198291.1
HC-043	PCK1	c.678A>T	p.R226S	EX5	4.7%	NM_002591.3
HC-043	ARAF	c.955_956delGGinsTT	p.G319F	EX10	7.7%	NM_001654.4
HC-043	AR	c.170T>A	p.L57Q	EX1	82.6%	NM_000044.3
HC-043	FMR1	c.1460G>T	p.G487V	EX14	7.5%	NM_002024.5
HC-044	FCGR1A	c.577G>T	p.V193L	EX5	16.7%	NM_000566.3
HC-044	LRP1B	c.9902C>T	p.P3301L	EX62	9.1%	NM_018557.2

HC-044	IKZF2	c.1276T>G	p.L426V	EX8E	8.1%	NM_016260.2
HC-044	IKZF2	c.1264G>T	p.G422*	EX8E	19.4%	NM_016260.2
HC-044	SLIT2	c.1162C>T	p.R388W	EX13	7.7%	NM_004787.1
HC-044	APC	c.3104A>T	p.Q1035L	EX16E	19.2%	NM_000038.5
HC-044	NSD1	c.5513T>A	p.L1838H	EX17	8.7%	NM_022455.4
HC-044	HIST1H2BJ	c.154G>A	p.D52N	EX1E	10.2%	NM_021058.3
HC-044	VEGFA	c.156C[2>1]	p.H53Ifs*28	EX3	17.8%	NM_001171623.1
HC-044	ABL1	c.1967C>A	p.P656Q	EX11E	10.7%	NM_005157.4
HC-044	CDH23	c.5820G>T	p.R1940S	EX44	11.5%	NM_022124.5
HC-044	SUFU	c.52C>A	p.P18T	EX1	11.9%	NM_016169.3
HC-044	ARID2	c.1023G>T	p.E341D	EX8	19.0%	NM_152641.2
HC-044	FLT3	c.1513G>T	p.E505*	EX12	21.8%	NM_004119.2
HC-044	FLT1	c.3351G>A	p.M1117I	EX25	21.3%	NM_002019.4
HC-044	TP53	c.396G>T	p.K132N	EX5	20.6%	NM_000546.5
HC-044	BRCA1	c.2717A>T	p.K906M	EX10	15.7%	NM_007294.3
HC-044	ITGB3	c.1567C>A	p.Q523K	EX10	9.4%	NM_000212.2
HC-044	NOTCH3	c.5509C>T	p.R1837C	EX30	16.9%	NM_000435.2
HC-044	NOTCH3	c.2618G>T	p.C873F	EX17	32.6%	NM_000435.2
HC-044	CHD6	c.793G>C	p.V265L	EX5	17.7%	NM_032221.3
HC-044	ZIC3	c.1006G>T	p.G336W	EX1	23.3%	NM_003413.3
HC-045	NOTCH2	c.2972G>C	p.C991S	EX18	9.4%	NM_024408.3
HC-045	MSH6	c.188C>G	p.S63C	EX1	16.3%	NM_000179.2
HC-045	IDH1	c.1051G>C	p.E351Q	EX9	19.0%	NM_005896.2
HC-045	RAF1	c.655G>C	p.E219Q	EX6	15.9%	NM_002880.3
HC-045	CTNNB1	c.110C>G	p.S37C	EX3	18.1%	NM_001904.3
HC-045	SLIT2	c.1258C>T	p.R420W	EX13	5.8%	NM_004787.1

HC-045	MAP3K1	c.2203G>C	p.D735H	EX13	12.8%	NM_005921.1
HC-045	ESR1	c.1718C>G	p.S573C	EX9E	5.3%	NM_001122740.1
HC-045	EGFR	c.2300_2308dupCCAGCGTGG	p.A767_V769dup	EX20	11.8%	NM_005228.3
HC-045	MLL3	c.2267G>A	p.G756E	EX14	11.0%	NM_170606.2
HC-045	NTRK2	c.196G>C	p.E66Q	EX4	22.6%	NM_006180.3
HC-045	ABL1	c.1916G>A	p.R639Q	EX11E	10.0%	NM_005157.4
HC-045	BRD3	c.64C[8>7]	p.P24Rfs*24	EX2	10.3%	NM_007371.3
HC-045	TBX3	c.1768C>G	p.Q590E	EX7	9.6%	NM_016569.3
HC-045	ERCC5	c.2909G>T	p.R970I	EX14	12.9%	NM_000123.3
HC-045	MLH3	c.3962C>G	p.S1321C	EX9	4.2%	NM_001040108.1
HC-045	SLX4	c.2848G>C	p.E950Q	EX12	3.2%	NM_032444.2
HC-045	TP53	c.833C>G	p.P278R	EX8	64.3%	NM_000546.5
HC-045	EIF1AX	c.52G>A	p.E18K	EX2	3.3%	NM_001412.3
HC-046	TP53	c.434T>C	p.L145P	EX5	15.8%	NM_000546.5
HC-046	MLL	c.10189G>A	p.D3397N	EX27	15.5%	NM_001197104.1
HC-046	PPM1D	c.1141A>C	p.N381H	EX5	15.5%	NM_003620.3
HC-046	KEAP1	c.1462G>C	p.E488Q	EX4	15.4%	NM_203500.1
HC-046	MTOR	c.7532G>T	p.R2511L	EX57	15.3%	NM_004958.3
HC-046	SMARCA4	c.3695_3696delGCinsTA	p.G1232V	EX26	14.4%	NM_003072.3
HC-046	PDILT	c.1585G>C	p.G529R	EX12	14.3%	NM_174924.1
HC-046	ATP1A1	c.992A>G	p.N331S	EX8	12.8%	NM_001160233.1
HC-046	PCK1	c.228G>A	p.W76*	EX3	12.3%	NM_002591.3
HC-046	PDGFRA	c.932-1G>A	.	IVS6	12.0%	NM_006206.4
HC-046	NTRK3	c.1060C>A	p.Q354K	EX10	11.8%	NM_001012338.2
HC-046	KDR	c.3081G>T	p.R1027S	EX23	11.5%	NM_002253.2

HC-046	EPHA5	c.16C>A	p.P6T	EX1	10.4%	NM_004439.5
HC-046	ABCC11	c.1011G>T	p.Q337H	EX8	7.2%	NM_032583.3
HC-046	ABCC11	c.3322G>C	p.V1108L	EX24	7.1%	NM_032583.3
HC-046	ZFHX3	c.6466C>T	p.Q2156*	EX9	6.6%	NM_006885.3
HC-046	IDH1	c.791G>C	p.G264A	EX7	6.5%	NM_005896.2
HC-046	EPPK1	c.7031C>T	p.A2344V	EX1	3.8%	NM_031308.1
HC-046	DDX3X	c.1554delG	p.L518Ffs*18	EX14	3.5%	NM_001356.3
HC-046	CIC	c.3829C>T	p.R1277C	EX16	2.0%	NM_015125.3
HC-046	BRAF	c.1204C>G	p.P402A	EX10	1.8%	NM_004333.4
HC-047	KRAS	c.35G>T	p.G12V	EX2	79.8%	NM_033360.2
HC-047	HNF1A	c.1353C>A	p.S451R	EX7	12.9%	NM_000545.5
HC-047	MAX	c.439G>T	p.E147*	EX5E	40.3%	NM_002382.4
HC-047	NTRK3	c.152G>A	p.G51E	EX3	34.9%	NM_001012338.2
HC-047	AXIN1	c.1057C>T	p.R353C	EX4	29.9%	NM_003502.3
HC-047	ABCC11	c.1515G[4>3]	p.M507*fs*1	EX11	15.1%	NM_032583.3
HC-047	PKD1L2	c.4898G>T	p.R1633L	EX29	15.7%	NM_052892.3
HC-047	TP53	c.489_500delCAAGCAGTCACA	p.Y163*	EX5	25.2%	NM_000546.5
HC-047	TP53	c.313G>T	p.G105C	EX4	39.7%	NM_000546.5
HC-047	RBM10	c.1149delGinsTT	p.A384Cfs*62	EX10	50.5%	NM_001204468.1
HC-047	KDM5C	c.1586G>T	p.G529V	EX12	59.2%	NM_004187.3
HC-047	EPHB1	c.2111C>A	p.A704E	EX11	36.1%	NM_004441.4
HC-047	SI	c.3149T>A	p.I1050N	EX27	21.1%	NM_001041.3
HC-047	INPP4B	c.136+1G>T	.	IVS5	14.5%	NM_001101669.1
HC-047	TERT	c.-58-u164G>C	.	.	34.6%	NM_198253.2
HC-047	MSH3	c.1867A>T	p.R623W	EX13	30.2%	NM_002439.4

HC-047	PIK3CG	c.826G>T	p.G276C	EX2	26.8%	NM_002649.2
HC-047	RUNX1T1	c.763C>A	p.P255T	EX6	24.0%	NM_175635.2
HC-047	ARID1A	c.1459C>T	p.Q487*	EX3	35.8%	NM_006015.4
HC-047	NOTCH2	c.1579C[2>1]	p.P527Qfs*16	EX10	34.5%	NM_024408.3
HC-047	MNDA	c.718G>T	p.V240L	EX5	22.6%	NM_002432.1
HC-047	CNTNAP5	c.3895G>T	p.E1299*	EX24E	14.9%	NM_130773.2
HC-047	LRP1B	c.9485G>C	p.G3162A	EX60	13.5%	NM_018557.2
HC-047	EPHA3	c.1889-1G>A	.	IVS10	36.9%	NM_005233.5
HC-048	ARID1A	c.5832C[3>2]	p.P1945Qfs*11	EX20E	10.9%	NM_006015.4
HC-048	SRD5A2	c.680G>A	p.R227Q	EX4	50.4%	NM_000348.3
HC-048	SRSF7	c.314G>C	p.R105T	EX3	1.2%	NM_001031684.2
HC-048	MSH6	c.391G>C	p.V131L	EX2	4.4%	NM_000179.2
HC-048	AFF3	c.1856_1862delCCTCAGCinsG	p.T619_A621delinsS	EX14	39.3%	NM_001025108.1
HC-048	IDH1	c.591C>G	p.F197L	EX6	4.0%	NM_005896.2
HC-048	ERBB4	c.1196C>T	p.T399I	EX10	1.6%	NM_005235.2
HC-048	BARD1	c.1518_1519delTGinsCA	p.V507M	EX6	48.8%	NM_000465.2
HC-048	MST1R	c.764C>T	p.T255M	EX1	43.1%	NM_002447.2
HC-048	EPHA3	c.2170G>T	p.V724L	EX13	11.0%	NM_005233.5
HC-048	MAP3K1	c.351_352delGAinsCT	p.S118C	EX1	53.0%	NM_005921.1
HC-048	NSD1	c.5107G>T	p.E1703*	EX14	3.6%	NM_022455.4
HC-048	ROS1	c.4709C>G	p.S1570*	EX29	2.7%	NM_002944.2
HC-048	MET	c.1661G>A	p.G554E	EX5	39.9%	NM_000245.2
HC-048	PTCH1	c.3056A>C	p.E1019A	EX18	8.5%	NM_000264.3
HC-048	TLR4	c.2467C>A	p.P823T	EX3E	44.4%	NM_138554.4
HC-048	CDH23	c.5986G>A	p.A1996T	EX46	43.8%	NM_022124.5

HC-048	PTEN	c.814C>A	p.H272N	EX8	3.9%	NM_000314.4
HC-048	SUFU	c.83C>T	p.S28L	EX1	2.0%	NM_016169.3
HC-048	MYOD1	c.143C>T	p.P48L	EX1	14.6%	NM_002478.4
HC-048	MLL2	c.2134G>C	p.E712Q	EX10	3.2%	NM_003482.3
HC-048	MLL2	c.2026G>C	p.E676Q	EX10	2.7%	NM_003482.3
HC-048	FLT3	c.1273G>A	p.A425T	EX10	41.0%	NM_004119.2
HC-048	PALB2	c.1955G>A	p.S652N	EX5	47.8%	NM_024675.3
HC-048	TP53	c.827_833delCCTGTCC	p.A276Vfs*67	EX8	10.7%	NM_000546.5
HC-048	PDGFB	c.614A>G	p.Q205R	EX6	42.6%	NM_002608.2
HC-048	EP300	c.2240C>T	p.P747L	EX12	38.4%	NM_001429.3
HC-049	YY1AP1	c.1200C>G	p.I400M	EX8	3.3%	NM_001198903.1
HC-049	NRXN1	c.466G>T	p.G156W	EX2	14.9%	NM_001135659.1
HC-049	CTNNA2	c.1024C>A	p.L342I	EX7	6.5%	NM_004389.3
HC-049	LRP1B	c.13472G>T	p.G4491V	EX89	11.9%	NM_018557.2
HC-049	LRP1B	c.10516G>A	p.D3506N	EX67	8.4%	NM_018557.2
HC-049	LRP1B	c.1228G>T	p.G410C	EX8	12.6%	NM_018557.2
HC-049	EPHA3	c.94C>A	p.L32I	EX2	1.2%	NM_005233.5
HC-049	SLIT2	c.4073G>T	p.C1358F	EX35	5.4%	NM_004787.1
HC-049	TERT	c.23G>C	p.R8P	EX1	5.8%	NM_198253.2
HC-049	TERT	c.-58-u66C>T	.	.	32.8%	NM_198253.2
HC-049	CDH18	c.2180C>T	p.P727L	EX13E	3.6%	NM_004934.3
HC-049	PIK3R1	c.1915C>G	p.R639G	EX15	14.1%	NM_181523.2
HC-049	FANCE	c.1034G>C	p.C345S	EX5	16.5%	NM_021922.2
HC-049	IMPG1	c.236A>C	p.K79T	EX2	3.7%	NM_001563.2
HC-049	ESR1	c.339dupG	p.P114Afs*43	EX2	6.7%	NM_001122740.1
HC-049	PARK2	c.1082G>T	p.G361V	EX9	18.0%	NM_004562.2

HC-049	PARK2	c.568A>G	p.N190D	EX5	20.5%	NM_004562.2
HC-049	SMO	c.1797_1799delCGTinsA	p.V600Gfs*6	EX10	4.8%	NM_005631.4
HC-049	BRAF	c.735A>T	p.L245F	EX6	20.1%	NM_004333.4
HC-049	PTPRD	c.3441G>C	p.L1147F	EX31	12.0%	NM_002839.3
HC-049	PTPRD	c.1208C>A	p.P403H	EX21	15.1%	NM_002839.3
HC-049	WT1	c.796C>A	p.P266T	EX3	12.9%	NM_024426.4
HC-049	OR4A15	c.438G>T	p.M146I	EX1E	14.7%	NM_001005275.1
HC-049	OR4A15	c.496C>A	p.R166S	EX1E	12.9%	NM_001005275.1
HC-049	NAV3	c.1370G>C	p.S457T	EX8	13.4%	NM_014903.4
HC-049	NAV3	c.1744C>A	p.P582T	EX8	9.1%	NM_014903.4
HC-049	SLX4	c.3386C>T	p.S1129L	EX12	5.9%	NM_032444.2
HC-049	SLX4	c.451C>G	p.P151A	EX2	5.5%	NM_032444.2
HC-049	GRIN2A	c.2210A>G	p.Y737C	EX11	4.7%	NM_001134407.1
HC-049	TP53	c.614A>T	p.Y205F	EX6	11.1%	NM_000546.5
HC-049	NF1	c.2055_2076delCAAACTAGAAGTGGCCCTGTAC	p.K686Cfs*55	EX18	9.9%	NM_000267.3
HC-049	NF1	c.6158dupT	p.M2053Ifs*4	EX41	7.5%	NM_000267.3
HC-049	NF1	c.6239C>A	p.P2080H	EX41	4.4%	NM_000267.3
HC-049	PPM1D	c.1656A[3>2]	p.N553Mfs*3	EX6E	3.9%	NM_003620.3
HC-049	PPM1D	c.1666A>C	p.S556R	EX6E	4.3%	NM_003620.3
HC-049	H3F3B	c.213G>T	p.L71F	EX3	4.4%	NM_005324.3
HC-049	STAG2	c.2147T>C	p.L716S	EX22	16.2%	NM_001042749.1
HC-050	EPHA2	c.118G>T	p.E40*	EX2	40.0%	NM_004431.3
HC-050	LRP1B	c.11483G>T	p.R3828L	EX75	37.2%	NM_018557.2
HC-050	IDH1	c.19G>T	p.G7C	EX3	36.0%	NM_005896.2

HC-050	FAT1	c.2809C>T	p.R937*	EX2	37.9%	NM_005245.3
HC-050	ARID1B	c.1415G>T	p.G472V	EX1	42.4%	NM_020732.3
HC-050	ARID1B	c.4141G>T	p.G1381W	EX18	40.8%	NM_020732.3
HC-050	RAD54B	c.679T>C	p.C227R	EX5	35.2%	NM_012415.3
HC-050	RET	c.2170T>A	p.L724M	EX12	39.0%	NM_020975.4
HC-050	SUFU	c.215G>T	p.S72I	EX2	40.5%	NM_016169.3
HC-050	ATM	c.3993G>C	p.Q1331H	EX26	38.8%	NM_000051.3
HC-050	NAV3	c.1177G>T	p.A393S	EX8	39.3%	NM_014903.4
HC-050	HNF1A	c.671C>A	p.P224H	EX3	39.2%	NM_000545.5
HC-050	RB1	c.265-1G>T	.	IVS2	40.5%	NM_000321.2
HC-050	RB1	c.1695+1G>A	.	IVS17	37.5%	NM_000321.2
HC-050	IRS2	c.113delG	p.R38Pfs*55	EX1	37.4%	NM_003749.2
HC-050	BLM	c.3621_3622insT	p.V1208Cfs*9	EX19	37.7%	NM_000057.2
HC-050	IGF1R	c.3526G>T	p.V1176L	EX19	39.6%	NM_000875.3
HC-050	ABCC11	c.223C>T	p.R75C	EX3	39.7%	NM_032583.3
HC-050	TP53	c.665C>T	p.P222L	EX6	36.7%	NM_000546.5
HC-050	TP53	c.535C>T	p.H179Y	EX5	39.0%	NM_000546.5
HC-050	TP53	c.166G>T	p.E56*	EX4	37.7%	NM_000546.5
HC-050	CRLF2	c.764G>T	p.W255L	EX6E	67.8%	NM_022148.2
HC-050	SERPINA7	c.331G>T	p.G111C	EX2	79.5%	NM_000354.5
HC-051	TP73	c.28G>A	p.D10N	EX2	40.2%	NM_005427.3
HC-051	MTOR	c.4109G>T	p.G1370V	EX28	45.4%	NM_004958.3
HC-051	NOTCH2	c.7198C>T	p.R2400*	EX34E	4.2%	NM_024408.3
HC-051	CD5L	c.206C>A	p.A69D	EX3	64.7%	NM_005894.2
HC-051	FCGR2A	c.31G>T	p.V11L	EX1	39.2%	NM_021642.3

HC-051	RYR2	c.6852_6854delCTAinsTTC	p.Y2285S	EX45	8.0%	NM_001035.2
HC-051	RYR2	c.6857C>T	p.P2286L	EX45	10.3%	NM_001035.2
HC-051	ACTG2	c.494C>T	p.P165L	EX6	60.4%	NM_001615.3
HC-051	LRP1B	c.11854C>A	p.H3952N	EX77	42.6%	NM_018557.2
HC-051	LRP1B	c.10067G>T	p.R3356I	EX64	37.9%	NM_018557.2
HC-051	LRP1B	c.2555G>T	p.C852F	EX16	36.2%	NM_018557.2
HC-051	STAT1	c.1829G>C	p.G610A	EX21	41.5%	NM_007315.3
HC-051	TGFBR2	c.1336A>G	p.T446A	EX6	2.0%	NM_001024847.2
HC-051	SETD2	c.6760G>A	p.V2254I	EX15	1.1%	NM_014159.6
HC-051	EPHA3	c.2378C>A	p.P793Q	EX14	66.1%	NM_005233.5
HC-051	HCLS1	c.826C>A	p.P276T	EX10	29.5%	NM_005335.4
HC-051	PDGFRA	c.2439+1G>T	.	IVS17	60.1%	NM_006206.4
HC-051	EPHA5	c.2921T>G	p.L974R	EX17	11.5%	NM_004439.5
HC-051	FBXW7	c.1550G>A	p.G517E	EX10	84.5%	NM_033632.3
HC-051	CSF1R	c.497G>T	p.R166M	EX4	44.7%	NM_005211.3
HC-051	FAT2	c.12994G>A	p.E4332K	EX23E	20.0%	NM_001447.2
HC-051	FAT2	c.4812C>G	p.N1604K	EX9	21.3%	NM_001447.2
HC-051	NSD1	c.1835G>T	p.S612I	EX5	16.6%	NM_022455.4
HC-051	IFNGR1	c.653_655delAAG	p.E218del	EX5	64.0%	NM_000416.2
HC-051	IFNGR1	c.85+2T>A	.	IVS1	5.3%	NM_000416.2
HC-051	PMS2	c.-87-u83T>C	.	.	30.3%	NM_000535.5
HC-051	POT1	c.1802C>T	p.P601L	EX19E	24.2%	NM_015450.2
HC-051	XRCC2	c.506A>T	p.Q169L	EX3E	57.7%	NM_005431.1
HC-051	PREX2	c.2593C>A	p.Q865K	EX23	40.1%	NM_024870.2
HC-051	EPPK1	c.6991G>A	p.V2331I	EX1E	5.0%	NM_031308.1

HC-051	PAX5	c.901A>G	p.I301V	EX7	57.7%	NM_016734.1
HC-051	FGFR2	c.1430C>T	p.P477L	EX10	24.5%	NM_000141.4
HC-051	MS4A1	c.597delC	p.F200Lfs*8	EX7	1.0%	NM_152866.2
HC-051	MLL2	c.5442G>T	p.R1814S	EX23	46.5%	NM_003482.3
HC-051	CREBBP	c.4634G>C	p.W1545S	EX28	87.0%	NM_004380.2
HC-051	ABCC11	c.2895G>T	p.M965I	EX21	40.0%	NM_032583.3
HC-051	TP53	c.818G>C	p.R273P	EX8	88.4%	NM_000546.5
HC-051	AURKB	c.79C>T	p.R27*	EX3	1.2%	NM_004217.3
HC-051	TAF15	c.1507G>C	p.G503R	EX15	53.9%	NM_139215.2
HC-051	ANKRD30B	c.3425C>G	p.S1142C	EX36E	63.4%	NM_001145029.1
HC-051	SERPINB3	c.423A>T	p.E141D	EX5	32.3%	NM_006919.2
HC-051	SMARCA4	c.2470A>T	p.K824*	EX17	89.9%	NM_003072.3
HC-051	AXL	c.2310G>T	p.Q770H	EX19	67.3%	NM_021913.3
HC-051	CRLF2	c.421C>A	p.L141M	EX4	33.0%	NM_022148.2
HC-052	C1QA	c.61G>T	p.V21L	EX2	8.1%	NM_015991.2
HC-052	JAK1	c.3128G>C	p.S1043T	EX22	3.8%	NM_002227.2
HC-052	LRP1B	c.7093C>A	p.P2365T	EX43	7.7%	NM_018557.2
HC-052	LRP1B	c.4208G>A	p.R1403H	EX26	11.3%	NM_018557.2
HC-052	LRP1B	c.206-1G>T	.	IVS2	6.7%	NM_018557.2
HC-052	KDR	c.3397C>T	p.P1133S	EX25	19.7%	NM_002253.2
HC-052	EPHA5	c.1585G>T	p.G529C	EX7	17.0%	NM_004439.5
HC-052	PIK3CG	c.1004A>T	p.Y335F	EX2	11.9%	NM_002649.2
HC-052	PIK3CG	c.1658A>T	p.K553M	EX2	8.6%	NM_002649.2
HC-052	FLNC	c.37G>T	p.G13C	EX1	5.6%	NM_001458.4
HC-052	MLL3	c.14362G>A	p.A4788T	EX56	4.7%	NM_170606.2
HC-052	TUSC3	c.391G>T	p.V131L	EX3	6.7%	NM_006765.3

HC-052	CDKN2A	c.392G>C	p.R131P	EX2	5.7%	NM_000077.4
HC-052	RET	c.1079G>A	p.R360Q	EX6	6.8%	NM_020975.4
HC-052	PTEN	c.622G[2>1]	p.G208Afs*13	EX6	8.0%	NM_000314.4
HC-052	HSPA8	c.1323G>T	p.Q441H	EX6	8.7%	NM_006597.4
HC-052	MLL2	c.401-1G>T	.	IVS3	7.7%	NM_003482.3
HC-052	AXIN1	c.1672G>T	p.A558S	EX6	7.3%	NM_003502.3
HC-052	TSC2	c.1959A>T	p.R653S	EX19	6.5%	NM_000548.3
HC-052	SLX4	c.1805C>T	p.P602L	EX8	3.6%	NM_032444.2
HC-052	GRIN2A	c.3397C>T	p.P1133S	EX13E	3.3%	NM_001134407.1
HC-052	TP53	c.96+1G>T	.	IVS3	16.1%	NM_000546.5
HC-052	CDK12	c.3052G>C	p.D1018H	EX11	9.7%	NM_016507.2
HC-052	ERBB2	c.56G>T	p.G19V	EX1	4.1%	NM_004448.2
HC-052	ITGB3	c.1571G>A	p.R524Q	EX10	6.3%	NM_000212.2
HC-052	SOX9	c.1349C>A	p.S450Y	EX3E	3.9%	NM_000346.3
HC-052	STK11	c.533A>C	p.K178T	EX4	6.9%	NM_000455.4
HC-052	STK11	c.536C>A	p.P179Q	EX4	7.0%	NM_000455.4
HC-052	SMARCA4	c.4717G>T	p.E1573*	EX33	9.1%	NM_003072.3
HC-052	AXL	c.2609C>A	p.P870H	EX20E	22.6%	NM_021913.3
HC-052	ASXL1	c.3902G>T	p.G1301V	EX13E	13.5%	NM_015338.5
HC-052	RBM10	c.995A>T	p.Q332L	EX9	13.9%	NM_001204468.1
HC-052	ATRX	c.3454G>T	p.G1152C	EX9	10.2%	NM_000489.3
HC-053	ARID1A	c.5875C[4>3]	p.H1960Tfs*55	EX20E	17.8%	NM_006015.4
HC-053	NRAS	c.494A>G	p.Q165R	EX5	8.0%	NM_002524.4
HC-053	MCL1	c.305C>T	p.T102I	EX1	11.2%	NM_021960.4
HC-053	LRP1B	c.12385T>A	p.Y4129N	EX81	25.6%	NM_018557.2
HC-053	LRP1B	c.5816G>T	p.R1939I	EX36	18.0%	NM_018557.2

HC-053	MITF	c.1298A>T	p.H433L	EX10E	25.1%	NM_198159.2
HC-053	EPHA3	c.2623G>A	p.V875I	EX15	18.6%	NM_005233.5
HC-053	CSF1R	c.2065C>A	p.P689T	EX15	25.1%	NM_005211.3
HC-053	CDKN2A	c.250G>T	p.D84Y	EX2	34.1%	NM_000077.4
HC-053	PAX5	c.377A>G	p.N126S	EX3	34.1%	NM_016734.1
HC-053	CDKN1B	c.117A>C	p.E39D	EX1	22.9%	NM_004064.3
HC-053	WSCD2	c.529G>C	p.A177P	EX4	9.9%	NM_014653.2
HC-053	ZFP36L1	c.577G>T	p.E193*	EX3E	20.0%	NM_001244701.1
HC-053	TP53	c.440T[2>3]	p.D148*fs*1	EX5	31.1%	NM_000546.5
HC-053	CDK12	c.3296G>T	p.G1099V	EX12	13.3%	NM_016507.2
HC-053	SMAD2	c.68G>T	p.G23V	EX2	6.8%	NM_001003652.3
HC-053	RUNX1	c.122C>T	p.T41M	EX4	9.5%	NM_001754.4
HC-053	KDM5C	c.2385G>T	p.R795S	EX17	18.3%	NM_004187.3
HC-054	ZFPM2	c.1039G>T	p.V347L	EX8E	32.5%	NM_012082.3
HC-054	RET	c.3198C>A	p.D1066E	EX20E	8.8%	NM_020975.4
HC-054	OR5L2	c.172C>A	p.P58T	EX1E	47.4%	NM_001004739.1
HC-054	CBL	c.1211G>A	p.C404Y	EX8	2.0%	NM_005188.3
HC-054	KRAS	c.34G>A	p.G12S	EX2	84.1%	NM_033360.2
HC-054	NAV3	c.1092C>A	p.D364E	EX8	72.3%	NM_014903.4
HC-054	FANCM	c.2003-1_2003delGGinsTT	.	IVS11-EX12	11.8%	NM_020937.2
HC-054	AXIN1	c.895G>T	p.E299*	EX3	20.6%	NM_003502.3
HC-054	ZFHX3	c.133G>A	p.E45K	EX2	53.6%	NM_006885.3
HC-054	TP53	c.673-1G>T	.	IVS6	58.3%	NM_000546.5
HC-054	RAD51D	c.716_717delGGinsTT	p.R239L	EX8	18.1%	NM_002878.3
HC-054	NOTCH3	c.6289G>T	p.V2097F	EX33E	28.0%	NM_000435.2

HC-054	RUNX1	c.157A>T	p.S53C	EX4	29.8%	NM_001754.4
HC-054	EP300	c.3291G>C	p.M1097I	EX18	33.3%	NM_001429.3
HC-054	RBM10	c.2763G[3>2]	p.G922Afs*29	EX23	53.6%	NM_001204468.1
HC-054	CCNB3	c.2199G>T	p.E733D	EX5	53.7%	NM_033031.2
HC-054	AFF2	c.83G>A	p.R28K	EX2	50.0%	NM_002025.3
HC-054	PDGFRA	c.277G>T	p.A93S	EX3	20.4%	NM_006206.4
HC-054	INPP4B	c.1116T>G	p.H372Q	EX15	40.4%	NM_001101669.1
HC-054	TERT	c.-58-u92C>A	.	.	63.9%	NM_198253.2
HC-054	PRKAA1	c.1142A>T	p.H381L	EX8	36.4%	NM_206907.3
HC-054	DDR1	c.86-2A>T	.	IVS4	21.3%	NM_001954.4
HC-054	MAGI2	c.2974G>T	p.V992L	EX17	49.0%	NM_012301.3
HC-054	HGF	c.835C>G	p.R279G	EX7	30.7%	NM_000601.4
HC-054	SMO	c.2240C>G	p.P747R	EX12E	39.1%	NM_005631.4
HC-054	EPHB2	c.2716G>T	p.D906Y	EX15	21.3%	NM_017449.3
HC-054	MYD88	c.368-1_369delGAGinsTAT	.	IVS1-EX2	37.0%	NM_002468.4
HC-055	TAL1	c.823G>T	p.A275S	EX4E	21.2%	NM_003189.2
HC-055	FUBP1	c.61G>A	p.G21S	EX1	20.8%	NM_003902.3
HC-055	DHX9	c.3560G>T	p.G1187V	EX28E	48.7%	NM_001357.4
HC-055	LRP1B	c.3994C>T	p.H1332Y	EX25	16.0%	NM_018557.2
HC-055	LRP1B	c.2623G>C	p.D875H	EX16	16.1%	NM_018557.2
HC-055	FANCD2	c.4025G>T	p.C1342F	EX41	18.8%	NM_033084.3
HC-055	PDGFRA	c.2411G>T	p.R804L	EX17	21.2%	NM_006206.4
HC-055	PDGFRA	c.2536G>T	p.D846Y	EX18	19.6%	NM_006206.4
HC-055	EPHA5	c.1358G>A	p.G453E	EX5	19.2%	NM_004439.5
HC-055	IL6ST	c.527G>A	p.R176H	EX6	19.8%	NM_002184.3

HC-055	APC	c.3169G>T	p.E1057*	EX16E	19.5%	NM_000038.5
HC-055	APC	c.3250G>A	p.D1084N	EX16E	19.4%	NM_000038.5
HC-055	APC	c.3341G>A	p.R1114Q	EX16E	18.5%	NM_000038.5
HC-055	FAT2	c.8172C>A	p.Y2724*	EX9	20.4%	NM_001447.2
HC-055	DDR1	c.1715G>T	p.R572L	EX14	20.4%	NM_001954.4
HC-055	BRAF	c.1801A>G	p.K601E	EX15	34.1%	NM_004333.4
HC-055	EPHA1	c.171A>G	p.I57M	EX3	18.2%	NM_005232.4
HC-055	CDH23	c.9836C>A	p.P3279H	EX70E	20.7%	NM_022124.5
HC-055	RB1	c.393C>G	p.F131L	EX4	18.7%	NM_000321.2
HC-055	DICER1	c.745C>T	p.Q249*	EX8	17.0%	NM_030621.3
HC-055	AKT1	c.967G>A	p.D323N	EX11	17.5%	NM_001014431.1
HC-055	NTRK3	c.661G>A	p.V221I	EX8	19.0%	NM_001012338.2
HC-055	NTRK3	c.428C>T	p.S143L	EX6	21.2%	NM_001012338.2
HC-055	IGF1R	c.204G>T	p.E68D	EX2	20.8%	NM_000875.3
HC-055	TP53	c.839G>T	p.R280I	EX8	23.0%	NM_000546.5
HC-055	CDK12	c.2768G>T	p.G923V	EX8	20.4%	NM_016507.2
HC-055	STK11	c.180C>A	p.Y60*	EX1	23.8%	NM_000455.4
HC-055	KEAP1	c.1439G>T	p.G480V	EX4	25.8%	NM_203500.1
HC-055	AKT2	c.336G>T	p.Q112H	EX5	19.3%	NM_001626.4
HC-055	RUNX1	c.59-1G>C	.	IVS2	17.5%	NM_001754.4
HC-056	JAK1	c.1531G>T	p.G511C	EX11	32.4%	NM_002227.2
HC-056	LRP1B	c.12454G>C	p.A4152P	EX81	28.1%	NM_018557.2
HC-056	LRP1B	c.391A>G	p.M131V	EX4	16.7%	NM_018557.2
HC-056	NFE2L2	c.100C>G	p.R34G	EX2	33.5%	NM_006164.4
HC-056	ATR	c.2311A[10>11]	p.I774Nfs*3	EX10	18.8%	NM_001184.3
HC-056	FAT1	c.4360C>A	p.P1454T	EX8	36.2%	NM_005245.3

HC-056	FAT2	c.707T>G	p.F236C	EX1	40.7%	NM_001447.2
HC-056	TLX3	c.704A>C	p.Q235P	EX3E	6.6%	NM_021025.2
HC-056	PPP1R17	c.139G>T	p.G47*	EX3	21.5%	NM_006658.4
HC-056	JAK2	c.472C>T	p.R158W	EX6	1.0%	NM_004972.3
HC-056	PDCD1LG2	c.710T>C	p.I237T	EX5	27.6%	NM_025239.3
HC-056	NOTCH1	c.6058G>A	p.D2020N	EX32	48.9%	NM_017617.3
HC-056	MS4A1	c.617T>C	p.L206P	EX7	24.6%	NM_152866.2
HC-056	GLI1	c.290C>T	p.T97M	EX4	26.5%	NM_005269.2
HC-056	IFNG	c.158T>A	p.L53*	EX2	27.8%	NM_000619.2
HC-056	RB1	c.1333C>T	p.R445*	EX14	53.1%	NM_000321.2
HC-056	NTRK3	c.382C>T	p.H128Y	EX5	13.8%	NM_001012338.2
HC-056	TP53	c.376-1G>T	.	IVS4	39.8%	NM_000546.5
HC-056	NCOR1	c.2434G>T	p.D812Y	EX20	2.9%	NM_006311.3
HC-056	ASXL1	c.3796C>G	p.L1266V	EX13E	26.9%	NM_015338.5
HC-056	BTK	c.337G>A	p.V113I	EX5	20.6%	NM_000061.2
HC-057	SPEN	c.910G>A	p.D304N	EX4	16.8%	NM_015001.2
HC-057	ARID1A	c.3947C>A	p.S1316*	EX16	23.3%	NM_006015.4
HC-057	NCSTN	c.1970G>T	p.R657L	EX16	13.1%	NM_015331.2
HC-057	ABL2	c.3392G>A	p.R1131H	EX12E	33.6%	NM_007314.3
HC-057	MSH6	c.927_929delTCTinsCCC	p.L310P	EX4	20.2%	NM_000179.2
HC-057	LRP1B	c.10781G>T	p.C3594F	EX70	28.6%	NM_018557.2
HC-057	LRP1B	c.7193A>T	p.H2398L	EX43	16.0%	NM_018557.2
HC-057	LRP1B	c.5302G>T	p.E1768*	EX32	18.9%	NM_018557.2
HC-057	FAT2	c.4565C>G	p.T1522R	EX7	43.7%	NM_001447.2
HC-057	FLT4	c.1378T>A	p.W460R	EX10	37.9%	NM_182925.4

HC-057	ARID1B	c.1535G>T	p.R512I	EX1	23.4%	NM_020732.3
HC-057	PIK3CG	c.2096T>A	p.L699*	EX4	19.3%	NM_002649.2
HC-057	POT1	c.432G>T	p.M144I	EX8	15.2%	NM_015450.2
HC-057	MLL3	c.6361A>G	p.T2121A	EX36	17.1%	NM_170606.2
HC-057	SGCZ	c.94G>T	p.E32*	EX2	32.2%	NM_139167.2
HC-057	GATA3	c.469C>A	p.P157T	EX3	53.9%	NM_002051.2
HC-057	ATM	c.3930G>T	p.Q1310H	EX26	26.3%	NM_000051.3
HC-057	MLL	c.1984G>C	p.G662R	EX3	14.6%	NM_001197104.1
HC-057	KRAS	c.40G>A	p.V14I	EX2	50.9%	NM_033360.2
HC-057	CBFB	c.400-2A>T	.	IVS4	30.1%	NM_022845.2
HC-057	NF1	c.2645C>T	p.S882F	EX21	28.9%	NM_000267.3
HC-057	STAT3	c.272A>T	p.Q91L	EX3	24.6%	NM_139276.2
HC-057	U2AF1	c.101C>T	p.S34F	EX2	11.3%	NM_006758.2
HC-057	MED12	c.729G>A	p.M243I	EX5	43.9%	NM_005120.2
HC-057	BTK	c.1771T>C	p.Y591H	EX18	41.8%	NM_000061.2
HC-058	HDAC1	c.1231G>C	p.D411H	EX12	1.2%	NM_004964.2
HC-058	NOTCH2	c.6081G>T	p.K2027N	EX34E	32.0%	NM_024408.3
HC-058	FAM5C	c.1274C>A	p.S425*	EX8E	36.1%	NM_199051.1
HC-058	AKT3	c.280_281delGAinsTT	p.E94L	EX3	29.6%	NM_005465.4
HC-058	ALK	c.2148C>G	p.S716R	EX12	69.8%	NM_004304.4
HC-058	MSH6	c.670G>A	p.E224K	EX4	9.9%	NM_000179.2
HC-058	MSH6	c.676G>A	p.E226K	EX4	9.9%	NM_000179.2
HC-058	MSH6	c.691G>T	p.V231L	EX4	10.8%	NM_000179.2
HC-058	MSH6	c.899G>A	p.R300Q	EX4	14.0%	NM_000179.2
HC-058	MSH6	c.3625C>G	p.L1209V	EX7	22.3%	NM_000179.2
HC-058	LRP1B	c.6305C>A	p.A2102E	EX40	65.4%	NM_018557.2

HC-058	LRP1B	c.883C>G	p.R295G	EX7	17.7%	NM_018557.2
HC-058	ATR	c.6391A>G	p.N2131D	EX38	15.8%	NM_001184.3
HC-058	PDGFRA	c.1286G>T	p.G429V	EX9	17.9%	NM_006206.4
HC-058	FAT1	c.9283C>T	p.L3095F	EX13	29.3%	NM_005245.3
HC-058	FAT2	c.9583C>A	p.P3195T	EX13	27.4%	NM_001447.2
HC-058	FAT2	c.4087C>A	p.P1363T	EX5	1.2%	NM_001447.2
HC-058	NOTCH4	c.3457G>T	p.G1153W	EX21	25.4%	NM_004557.3
HC-058	ESR1	c.1097-2A>T	.	IVS5	27.0%	NM_001122740.1
HC-058	PMS2	c.-87-u37G>A	.	.	44.7%	NM_000535.5
HC-058	HDAC9	c.3053G>T	p.R1018M	EX25	41.7%	NM_178423.1
HC-058	EPHB6	c.2626C>A	p.Q876K	EX18	22.6%	NM_004445.3
HC-058	TSC1	c.109C>T	p.R37C	EX4	13.2%	NM_000368.4
HC-058	NOTCH1	c.7199C>A	p.A2400E	EX34E	1.8%	NM_017617.3
HC-058	NOTCH1	c.3112G>T	p.D1038Y	EX19	19.0%	NM_017617.3
HC-058	CDH23	c.2587+1G>T	.	IVS23	23.4%	NM_022124.5
HC-058	FGFR2	c.2414A>T	p.Y805F	EX18E	19.0%	NM_000141.4
HC-058	OR4C6	c.257A>G	p.K86R	EX1E	40.4%	NM_001004704.1
HC-058	ZBTB16	c.770C>G	p.P257R	EX2	19.6%	NM_006006.4
HC-058	CBL	c.1535G>A	p.S512N	EX10	43.1%	NM_005188.3
HC-058	FLI1	c.1250G>T	p.G417V	EX9E	26.8%	NM_002017.4
HC-058	ASCL4	c.29G>T	p.R10L	EX1E	16.4%	NM_203436.2
HC-058	DTX1	c.416G>A	p.W139*	EX2	16.7%	NM_004416.2
HC-058	PABPC3	c.58C>G	p.P20A	EX1E	26.2%	NM_030979.2
HC-058	FLT1	c.3720+2T>C	.	IVS28	22.3%	NM_002019.4
HC-058	BRCA2	c.5673_5674delAGinsTT	p.G1892C	EX11	37.7%	NM_000059.3
HC-058	DICER1	c.301A>T	p.N101Y	EX4	19.2%	NM_030621.3

HC-058	TP53	c.815T>A	p.V272E	EX8	1.2%	NM_000546.5
HC-058	TP53	c.743G>T	p.R248L	EX7	68.7%	NM_000546.5
HC-058	KEAP1	c.1872T[2>1]	p.*625Efs*47	EX6E	62.8%	NM_203500.1
HC-058	KEAP1	c.701_702delGGinsTT	p.R234L	EX3	18.2%	NM_203500.1
HC-058	SMARCA4	c.3478G>T	p.G1160W	EX25	62.6%	NM_003072.3
HC-058	CEBPA	c.107G>T	p.G36V	EX1E	29.8%	NM_004364.3
HC-058	AXL	c.1073C>A	p.A358E	EX8	16.8%	NM_021913.3
HC-058	POLD1	c.2243G>T	p.S748I	EX18	34.9%	NM_002691.3
HC-058	BCOR	c.3130T>A	p.C1044S	EX6	1.9%	NM_001123385.1
HC-058	AR	c.2079C>G	p.N693K	EX4	1.7%	NM_000044.3
HC-058	MED12	c.5245G>A	p.E1749K	EX37	1.0%	NM_005120.2
HC-059	BARD1	c.1518_1519delTGinsCA	p.V507M	EX6	33.5%	NM_000465.2
HC-059	MLH1	c.2101C>A	p.Q701K	EX18	24.1%	NM_000249.3
HC-059	AFF3	c.1856_1862delCCTCAGCinsG	p.T619_A621delinsS	EX14	20.8%	NM_001025108.1
HC-059	ALK	c.4208C>T	p.P1403L	EX29E	20.3%	NM_004304.4
HC-059	FAT2	c.3703G>A	p.V1235I	EX4	17.9%	NM_001447.2
HC-059	APC	c.1685C>T	p.T562M	EX14	17.6%	NM_000038.5
HC-059	RAD51C	c.1051G>A	p.V351I	EX9E	17.5%	NM_058216.1
HC-059	NOTCH4	c.813_815delAGAinsGGG	p.D272G	EX5	16.9%	NM_004557.3
HC-059	FAT2	c.8368G>A	p.V2790I	EX9	16.8%	NM_001447.2
HC-059	FANCA	c.4225C>T	p.R1409W	EX42	16.4%	NM_000135.2
HC-059	SETD2	c.590C>T	p.A197V	EX3	15.7%	NM_014159.6
HC-059	ARAP3	c.1412G>A	p.R471Q	EX10	13.2%	NM_022481.5
HC-059	CDH23	c.1282G>A	p.D428N	EX13	13.0%	NM_022124.5

HC-059	MSH2	c.1255C>A	p.Q419K	EX7	12.8%	NM_000251.2
HC-059	MLL3	c.2222T>C	p.M741T	EX14	12.6%	NM_170606.2
HC-059	JAK2	c.1214C>T	p.S405L	EX9	12.1%	NM_004972.3
HC-059	EPHA2	c.2671G>A	p.V891M	EX16	10.2%	NM_004431.3
HC-059	CBR1	c.245G>C	p.G82A	EX1	9.9%	NM_001757.2
HC-059	EPHA7	c.2545A>G	p.I849V	EX15	9.8%	NM_004440.3
HC-059	CYP1A1	c.1364G>A	p.R455Q	EX7E	6.7%	NM_000499.3
HC-059	MSH3	c.3181A>G	p.R1061G	EX23	6.1%	NM_002439.4
HC-059	ARID1A	c.5311C>T	p.P1771S	EX20E	5.5%	NM_006015.4
HC-059	MYCN	c.1073C>T	p.P358L	EX3E	4.9%	NM_005378.4
HC-059	ABL1	c.2951C>T	p.T984M	EX11E	4.8%	NM_005157.4
HC-059	MITF	c.1444G>A	p.D482N	EX10E	3.5%	NM_198159.2
HC-060	CD5L	c.364G>T	p.A122S	EX3	44.5%	NM_005894.2
HC-060	TMEM127	c.425C[2>1]	p.V143Sfs*164	EX4E	48.4%	NM_017849.3
HC-060	NR1I2	c.239G>T	p.R80L	EX3	40.8%	NM_003889.3
HC-060	HCLS1	c.855G>T	p.M285I	EX10	43.2%	NM_005335.4
HC-060	SI	c.3194T>A	p.V1065E	EX27	42.4%	NM_001041.3
HC-060	EPHA5	c.1899_1900insCA	p.K634Qfs*15	EX10	23.0%	NM_004439.5
HC-060	FAT1	c.8737G>T	p.D2913Y	EX10	79.0%	NM_005245.3
HC-060	FGFR4	c.1651G>T	p.E551*	EX13	55.5%	NM_213647.1
HC-060	FLT4	c.3769G>T	p.E1257*	EX28	55.5%	NM_182925.4
HC-060	NOTCH4	c.2588G>T	p.G863V	EX17	54.8%	NM_004557.3
HC-060	CARD11	c.2123A>T	p.E708V	EX16	64.9%	NM_032415.4
HC-060	PMS2	c.1469T>A	p.V490E	EX11	63.2%	NM_000535.5
HC-060	CNOT4	c.1994C>T	p.P665L	EX12E	21.8%	NM_001190850.1
HC-060	MLL3	c.2816C>G	p.S939C	EX17	19.4%	NM_170606.2

HC-060	CD274	c.-14-1G>T	.	IVS1	24.9%	NM_014143.3
HC-060	TSC1	c.281G>C	p.G94A	EX5	56.7%	NM_000368.4
HC-060	BRD3	c.701C>A	p.P234Q	EX5	1.9%	NM_007371.3
HC-060	NOTCH1	c.1028C>G	p.A343G	EX6	56.6%	NM_017617.3
HC-060	ATM	c.1180G>T	p.E394*	EX9	40.6%	NM_000051.3
HC-060	RB1	c.252G[2>1]	p.D85Mfs*26	EX2	61.0%	NM_000321.2
HC-060	OR11G2	c.920G>T	p.G307V	EX1E	45.3%	NM_001005503.1
HC-060	ABCC11	c.4078G>T	p.E1360*	EX30E	42.7%	NM_032583.3
HC-060	TP53	c.437G[3>2]	p.V147Lfs*23	EX5	75.5%	NM_000546.5
HC-060	TOP1	c.1849C>A	p.L617I	EX18	25.9%	NM_003286.2
HC-061	ARID1A	c.2922_2926delGTTAA	p.K974Nfs*31	EX10	9.9%	NM_006015.4
HC-061	NTRK1	c.2054G>T	p.G685V	EX16	25.1%	NM_002529.3
HC-061	LRP1B	c.8285C>G	p.A2762G	EX52	31.2%	NM_018557.2
HC-061	EPHA3	c.2509G>C	p.V837L	EX15	29.3%	NM_005233.5
HC-061	KDR	c.3775G>C	p.D1259H	EX29	44.6%	NM_002253.2
HC-061	APC	c.305_306dupCT	p.V103Lfs*23	EX4	16.8%	NM_000038.5
HC-061	APC	c.4651A[3>2]	p.E1552Rfs*13	EX16E	9.7%	NM_000038.5
HC-061	HIST1H3F	c.292G>A	p.E98K	EX1E	12.8%	NM_021018.2
HC-061	BRD2	c.1750_1751delCC	p.P584*fs*1	EX9	5.5%	NM_001199455.1
HC-061	EPHB6	c.1911C>A	p.S637R	EX13	26.1%	NM_004445.3
HC-061	PTPRD	c.5176G>C	p.E1726Q	EX42	27.4%	NM_002839.3
HC-061	PTEN	c.389G>A	p.R130Q	EX5	7.0%	NM_000314.4
HC-061	FLT3	c.1030A>G	p.I344V	EX8	28.9%	NM_004119.2
HC-061	SLX4	c.2489C>A	p.A830E	EX12	14.5%	NM_032444.2
HC-061	STK11	c.465-1G>C	.	IVS3	45.1%	NM_000455.4
HC-061	KEAP1	c.1574A>G	p.Y525C	EX5	34.8%	NM_203500.1

HC-061	KEAP1	c.1520G>A	p.R507Q	EX4	9.4%	NM_203500.1
HC-061	AMOT	c.457C>T	p.R153C	EX6	16.8%	NM_133265.2
HC-062	DDR2	c.960C>A	p.F320L	EX9	13.9%	NM_006182.2
HC-062	DDR2	c.1598C>A	p.T533K	EX13	3.1%	NM_006182.2
HC-062	UGT1A1	c.751G>A	p.A251T	EX1	12.1%	NM_000463.2
HC-062	SETD2	c.6376G>C	p.E2126Q	EX15	15.2%	NM_014159.6
HC-062	EPHA3	c.1366T>A	p.S456T	EX6	13.8%	NM_005233.5
HC-062	GLI3	c.2284G>A	p.A762T	EX14	10.8%	NM_000168.5
HC-062	FZD1	c.1295G>T	p.G432V	EX1E	10.8%	NM_003505.1
HC-062	EPHB6	c.2123G>A	p.G708D	EX15	10.8%	NM_004445.3
HC-062	RECQL4	c.1822C>T	p.H608Y	EX11	8.4%	NM_004260.3
HC-062	KRAS	c.35G>T	p.G12V	EX2	28.8%	NM_033360.2
HC-062	FLT1	c.697C>A	p.Q233K	EX6	6.1%	NM_002019.4
HC-062	TSHR	c.446C>A	p.S149Y	EX5	14.0%	NM_000369.2
HC-062	SLX4	c.4119C>G	p.F1373L	EX12	3.5%	NM_032444.2
HC-062	TP53	c.955A>T	p.K319*	EX9	15.0%	NM_000546.5
HC-062	SERPINB3	c.43C>A	p.L15M	EX2	15.0%	NM_006919.2
HC-062	MKL1	c.662A>T	p.Q221L	EX10	12.6%	NM_020831.3
HC-062	FAM123B	c.407delC	p.A136Vfs*34	EX2E	21.3%	NM_152424.3
HC-062	AR	c.2201A>G	p.Q734R	EX5	20.9%	NM_000044.3
HC-063	LRP1B	c.11988C>A	p.Y3996*	EX78	4.4%	NM_018557.2
HC-063	ERBB4	c.3244A>T	p.R1082*	EX27	10.4%	NM_005235.2
HC-063	PIK3CA	c.1624G>A	p.E542K	EX10	4.6%	NM_006218.2
HC-063	SOX2	c.505G>A	p.G169S	EX1E	5.8%	NM_003106.3
HC-063	CSF1R	c.873G>C	p.M291I	EX6	13.1%	NM_005211.3
HC-063	NSD1	c.6658G>A	p.E2220K	EX23E	6.6%	NM_022455.4

HC-063	IMPG1	c.224C>T	p.P75L	EX2	4.5%	NM_001563.2
HC-063	MET	c.3409C>T	p.P1137S	EX17	13.1%	NM_000245.2
HC-063	MLL3	c.12175C>T	p.P4059S	EX48	6.0%	NM_170606.2
HC-063	MS4A1	c.76G>T	p.G26C	EX3	9.3%	NM_152866.2
HC-063	KDM5A	c.4201G>A	p.A1401T	EX25	5.7%	NM_001042603.1
HC-063	KRAS	c.38G>A	p.G13D	EX2	11.5%	NM_033360.2
HC-063	TCL1A	c.256T>A	p.S86T	EX2	16.5%	NM_021966.2
HC-063	CREBBP	c.2500A>T	p.N834Y	EX14	14.0%	NM_004380.2
HC-063	TP53	c.818G>T	p.R273L	EX8	13.0%	NM_000546.5
HC-063	RARA	c.1217T>C	p.M406T	EX9E	12.6%	NM_000964.3
HC-063	KEAP1	c.1180G>T	p.D394Y	EX3	15.0%	NM_203500.1
HC-063	U2AF1	c.427G>A	p.E143K	EX6	6.1%	NM_006758.2
HC-063	ATRX	c.2053G>T	p.V685F	EX9	19.2%	NM_000489.3
HC-064	ERBB2	c.2956T>A	p.F986I	EX24	35.0%	NM_004448.2
HC-064	POLD1	c.105G>T	p.E35D	EX2	37.4%	NM_002691.3
HC-064	FAM123B	c.2208T[4>3]	p.F737Lfs*31	EX2E	36.4%	NM_152424.3
HC-064	MED12	c.955G>A	p.V319I	EX7	28.5%	NM_005120.2
HC-064	ATRX	c.2954G>T	p.S985I	EX9	3.0%	NM_000489.3
HC-064	RB1	c.1684G>C	p.A562P	EX17	32.8%	NM_000321.2
HC-064	XRCC3	c.862T>C	p.W288R	EX10E	35.8%	NM_001100119.1
HC-064	CREBBP	c.4506G>T	p.W1502C	EX27	4.3%	NM_004380.2
HC-064	CREBBP	c.1123G>T	p.G375*	EX4	30.6%	NM_004380.2
HC-064	TP53	c.818G>C	p.R273P	EX8	34.9%	NM_000546.5
HC-064	TP53	c.218_219delTG	p.V73Gfs*75	EX4	26.0%	NM_000546.5
HC-064	MPL	c.1893T>A	p.Y631*	EX12E	36.0%	NM_005373.2
HC-064	NOTCH2	c.2767_2768delGGinsTT	p.G923L	EX18	29.4%	NM_024408.3

HC-064	NCSTN	c.1844A>T	p.D615V	EX16	33.0%	NM_015331.2
HC-064	ALK	c.2266G>C	p.G756R	EX13	38.5%	NM_004304.4
HC-064	LRP1B	c.12961C>G	p.Q4321E	EX84	31.4%	NM_018557.2
HC-064	LRP1B	c.11446G>C	p.A3816P	EX75	34.7%	NM_018557.2
HC-064	KIT	c.2712G>T	p.K904N	EX20	34.0%	NM_000222.2
HC-064	RICTOR	c.4402C>T	p.L1468F	EX34	33.2%	NM_152756.3
HC-064	ARID1B	c.1285A>G	p.M429V	EX1	34.9%	NM_020732.3
HC-064	PMS2	c.-87-u130G>T	.	.	36.7%	NM_000535.5
HC-064	HOXA11	c.190G>T	p.E64*	EX1	31.4%	NM_005523.5
HC-064	PIK3CG	c.1085G>A	p.R362K	EX2	34.8%	NM_002649.2
HC-064	NOTCH1	c.3838G[2>1]	p.G1280Afs*165	EX23	33.3%	NM_017617.3
HC-064	DRGX	c.631G>T	p.V211L	EX6E	33.1%	NM_001080520.1
HC-064	ZBTB16	c.781G>C	p.E261Q	EX2	32.8%	NM_006006.4
HC-064	MLL2	c.9793C>T	p.Q3265*	EX34	20.3%	NM_003482.3
HC-064	BRCA2	c.3536G>T	p.S1179I	EX11	36.5%	NM_000059.3
HC-064	RB1	c.861+1G>T	.	IVS8	29.2%	NM_000321.2
HC-065	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.7%	NM_003921.4
HC-065	NTRK1	c.2057G>A	p.R686H	EX16	9.9%	NM_002529.3
HC-065	AKT3	c.780C>A	p.D260E	EX8	4.2%	NM_005465.4
HC-065	OR2T4	c.956C>A	p.P319H	EX1E	4.4%	NM_001004696.1
HC-065	EPCAM	c.858+2T>C	.	IVS7	11.3%	NM_002354.2
HC-065	ZNF638	c.1516C>T	p.R506C	EX5	1.6%	NM_001252612.1
HC-065	LRP1B	c.11752G>A	p.E3918K	EX77	13.9%	NM_018557.2
HC-065	LRP1B	c.5728T>C	p.S1910P	EX35	14.5%	NM_018557.2
HC-065	LRP1B	c.2964C>A	p.D988E	EX19	10.7%	NM_018557.2
HC-065	MITF	c.167G>A	p.R56H	EX2	1.4%	NM_198159.2

HC-065	SLC34A2	c.1980G>T	p.K660N	EX13E	6.8%	NM_006424.2
HC-065	FAT1	c.2141C>T	p.P714L	EX2	13.5%	NM_005245.3
HC-065	MSH3	c.1141A[8>7]	p.K383Rfs*32	EX7	18.1%	NM_002439.4
HC-065	RSPO3	c.448G>A	p.V150I	EX4	14.9%	NM_032784.3
HC-065	CARD11	c.1852TCC[5>4]	p.S618[5>4]	EX15	1.2%	NM_032415.4
HC-065	HGF	c.68C>T	p.P23L	EX1	1.3%	NM_000601.4
HC-065	NBN	c.721G>A	p.A241T	EX7	4.6%	NM_002485.4
HC-065	ZFPM2	c.1189A>G	p.M397V	EX8E	1.5%	NM_012082.3
HC-065	CDKN2A	c.172C>T	p.R58*	EX2	40.5%	NM_000077.4
HC-065	POLE	c.1150C>T	p.Q384*	EX12	13.2%	NM_006231.2
HC-065	RB1	c.707A>G	p.K236R	EX7	35.2%	NM_000321.2
HC-065	SMAD3	c.934G>A	p.A312T	EX7	24.6%	NM_005902.3
HC-065	ZFHX3	c.1584A>T	p.Q528H	EX2	27.3%	NM_006885.3
HC-065	FANCA	c.344G>T	p.G115V	EX4	4.6%	NM_000135.2
HC-065	TP53	c.733G>T	p.G245C	EX7	37.8%	NM_000546.5
HC-065	FLCN	c.221C>A	p.P74Q	EX4	18.9%	NM_144997.5
HC-065	TAF15	c.1380_1403delCGGCGGCTATGGTGGGGACAGAGG	p.G454_G461[4>3]	EX15	28.1%	NM_139215.2
HC-065	JAK3	c.805G>T	p.G269W	EX6	7.0%	NM_000215.3
HC-065	CIC	c.623T>C	p.M208T	EX5	13.9%	NM_015125.3
HC-065	POLD1	c.13C>T	p.R5W	EX2	12.8%	NM_002691.3
HC-065	EP300	c.4402A[7>6]	p.M1470Cfs*26	EX27	13.2%	NM_001429.3
HC-066	TP73	c.1334T>A	p.L445Q	EX11	10.3%	NM_005427.3
HC-066	ASTN1	c.1249_1250delCCinsTA	p.P417Y	EX6	3.2%	NM_004319.1
HC-066	ABL2	c.2409G>T	p.R803S	EX12E	24.9%	NM_007314.3

HC-066	PARP1	c.533C>G	p.A178G	EX4	14.6%	NM_001618.3
HC-066	ALK	c.1100C>A	p.P367H	EX4	9.5%	NM_004304.4
HC-066	LRP1B	c.9694G>T	p.G3232W	EX61	10.1%	NM_018557.2
HC-066	LRP1B	c.9448_9449delTGinsCT	p.C3150L	EX60	3.4%	NM_018557.2
HC-066	LRP1B	c.2339C>A	p.P780H	EX14	4.7%	NM_018557.2
HC-066	ERBB4	c.884-1G>C	.	IVS7	12.0%	NM_005235.2
HC-066	PDCD1	c.388C>A	p.P130T	EX2	11.2%	NM_005018.2
HC-066	EPHA5	c.2298+2T>C	.	IVS13	10.2%	NM_004439.5
HC-066	HCN1	c.2513G>T	p.R838L	EX8E	10.9%	NM_021072.3
HC-066	PIK3R1	c.349G>T	p.D117Y	EX3	5.2%	NM_181523.2
HC-066	FAT2	c.3439C>T	p.Q1147*	EX2	10.4%	NM_001447.2
HC-066	TLX3	c.802C>G	p.L268V	EX3E	3.0%	NM_021025.2
HC-066	FGFR4	c.1501G>T	p.A501S	EX11	9.9%	NM_213647.1
HC-066	EGFR	c.731G>T	p.R244L	EX6	4.6%	NM_005228.3
HC-066	HGF	c.1720C>A	p.P574T	EX15	9.6%	NM_000601.4
HC-066	ABCB1	c.1273C>A	p.L425M	EX13	10.0%	NM_000927.4
HC-066	EMID2	c.215C>T	p.S72L	EX2	4.1%	NM_133457.2
HC-066	RELN	c.908C>A	p.P303H	EX10	3.4%	NM_005045.3
HC-066	POT1	c.282G>C	p.Q94H	EX8	8.5%	NM_015450.2
HC-066	KEL	c.329G>T	p.R110M	EX4	5.4%	NM_000420.2
HC-066	FAM131B	c.746T>A	p.L249H	EX7E	4.3%	NM_001031690.2
HC-066	MLL3	c.2414G>A	p.S805N	EX14	1.8%	NM_170606.2
HC-066	GATA3	c.707C>A	p.P236H	EX3	1.6%	NM_002051.2
HC-066	KDM5A	c.2595_2613delGGATG AAACCCCAGATTCT	p.M865Ifs*7	EX19	4.5%	NM_001042603.1
HC-066	KRAS	c.34_35delGGinsTT	p.G12F	EX2	9.8%	NM_033360.2

HC-066	CNTN1	c.2650T>A	p.C884S	EX21	2.5%	NM_001843.3
HC-066	ASCL4	c.47C>A	p.S16*	EX1E	5.6%	NM_203436.2
HC-066	TBX3	c.653G>T	p.G218V	EX2	3.5%	NM_016569.3
HC-066	FLT1	c.2063C>A	p.P688H	EX14	9.8%	NM_002019.4
HC-066	IRS2	c.2653G>T	p.G885C	EX1	12.3%	NM_003749.2
HC-066	IRS2	c.2044A>T	p.S682C	EX1	4.1%	NM_003749.2
HC-066	WDR90	c.4379G>T	p.R1460L	EX35	12.6%	NM_145294.4
HC-066	CBFB	c.121C>T	p.Q41*	EX2	2.1%	NM_022845.2
HC-066	ZFHX3	c.376G>T	p.V126L	EX2	11.3%	NM_006885.3
HC-066	HOXB13	c.844G>T	p.A282S	EX2E	5.7%	NM_006361.5
HC-066	SRSF2	c.550A>T	p.R184W	EX2E	7.6%	NM_003016.4
HC-066	RPTOR	c.3043G>T	p.D1015Y	EX26	5.6%	NM_020761.2
HC-066	SERPINB3	c.323T>A	p.F108Y	EX4	10.0%	NM_006919.2
HC-066	MAP2K2	c.1070G>T	p.R357L	EX10	10.2%	NM_030662.3
HC-066	BBC3	c.733C>T	p.L245F	EX4E	4.9%	NM_001127240.2
HC-066	BCOR	c.1632C[3>2]	p.P545Rfs*44	EX4	1.3%	NM_001123385.1
HC-066	KDM6A	c.1690G>T	p.G564W	EX16	11.8%	NM_021140.2
HC-066	RBM10	c.2416G>T	p.E806*	EX20	9.9%	NM_001204468.1
HC-066	RBM10	c.2909_2910delCCinsAA	p.S970*	EX24E	3.1%	NM_001204468.1
HC-066	FAM123B	c.1374T>G	p.S458R	EX2E	11.2%	NM_152424.3
HC-066	AR	c.1330G>T	p.G444C	EX1	2.5%	NM_000044.3
HC-066	MED12	c.4791C>G	p.D1597E	EX35	1.9%	NM_005120.2
HC-066	ATRX	c.6820G>T	p.A2274S	EX31	11.0%	NM_000489.3
HC-066	ATRX	c.3086C>A	p.P1029H	EX9	11.2%	NM_000489.3
HC-067	DNAH6	c.2299C>T	p.P767S	EX15	17.3%	NM_001370.1

HC-067	LRP1B	c.13213_13215delCAGinsAAA	p.Q4405K	EX86	10.2%	NM_018557.2
HC-067	ERBB4	c.3241T>C	p.Y1081H	EX27	11.6%	NM_005235.2
HC-067	CTNNB1	c.110C>T	p.S37F	EX3	18.2%	NM_001904.3
HC-067	RHOA	c.404A>G	p.K135R	EX4	1.5%	NM_001664.2
HC-067	EPHA5	c.952A>T	p.S318C	EX4	14.8%	NM_004439.5
HC-067	FAT2	c.11547C>G	p.D3849E	EX20	16.1%	NM_001447.2
HC-067	CARD11	c.2960C>T	p.T987M	EX22	18.9%	NM_032415.4
HC-067	GRM3	c.2088C>G	p.I696M	EX4	11.1%	NM_000840.2
HC-067	MLL3	c.2496G>C	p.K832N	EX14	1.4%	NM_170606.2
HC-067	FANCG	c.1363A>T	p.T455S	EX10	17.7%	NM_004629.1
HC-067	NOTCH1	c.1255+1G>A	.	IVS7	18.5%	NM_017617.3
HC-067	CDH23	c.7145G>T	p.R2382L	EX51	18.0%	NM_022124.5
HC-067	RAD52	c.538C>T	p.R180C	EX7	1.0%	NM_134424.2
HC-067	RB1	c.2242G>T	p.E748*	EX22	27.7%	NM_000321.2
HC-067	CYP19A1	c.1255G>T	p.A419S	EX10	6.1%	NM_031226.2
HC-067	ZFHX3	c.2180G>T	p.R727L	EX2	15.6%	NM_006885.3
HC-067	ZFHX3	c.404A>T	p.Y135F	EX2	12.9%	NM_006885.3
HC-067	FANCA	c.2316+1G>C	.	IVS25	12.9%	NM_000135.2
HC-067	TP53	c.673-2A>T	.	IVS6	29.1%	NM_000546.5
HC-067	KEAP1	c.450GT[3>1]	p.C151Sfs*5	EX2	24.9%	NM_203500.1
NC-001	BCL9	c.2953G>A	p.G985R	EX9	51.9%	NM_004326.2
NC-001	MCL1	c.974_976delAAG	p.E325del	EX3E	44.6%	NM_021960.4
NC-001	EPHB1	c.1598C>T	p.S533L	EX8	19.9%	NM_004441.4
NC-001	MSH3	c.3000+1G>A	.	IVS21	64.9%	NM_002439.4
NC-001	CDH23	c.1324G>T	p.G442C	EX14	30.3%	NM_022124.5

NC-001	MLL2	c.4419-1G>T	.	IVS15	67.9%	NM_003482.3
NC-001	ERCC5	c.1009delG	p.A337Lfs*10	EX8	2.0%	NM_000123.3
NC-001	CREBBP	c.6460G>T	p.V2154L	EX31E	50.8%	NM_004380.2
NC-001	TP53	c.1027G>T	p.E343*	EX10	70.4%	NM_000546.5
NC-001	KEAP1	c.1409G>T	p.R470L	EX4	68.3%	NM_203500.1
NC-002	TGFBR2	c.1348A>G	p.M450V	EX6	7.5%	NM_001024847.2
NC-002	MS4A1	c.605T>A	p.F202Y	EX7	6.3%	NM_152866.2
NC-002	TP53	c.734G>A	p.G245D	EX7	7.5%	NM_000546.5
NC-002	BTK	c.1138C>T	p.Q380*	EX13	6.3%	NM_000061.2
NC-003	LRP1B	c.9243+1G>T	.	IVS58	6.3%	NM_018557.2
NC-003	LRP1B	c.8132G>A	p.R2711H	EX50	1.1%	NM_018557.2
NC-003	SETD2	c.4586_4586+10delGGTAAGTAAAT	.	EX4-IVS4	2.5%	NM_014159.6
NC-003	CDKN2A	c.250G>A	p.D84N	EX2	1.1%	NM_000077.4
NC-003	IGF1R	c.2156G>A	p.R719H	EX10	1.0%	NM_000875.3
NC-003	TP53	c.402_416delinsAT	p.F134Lfs*2	EX5	7.3%	NM_000546.5
NC-004	FAT2	c.3215G>T	p.R1072L	EX1	2.3%	NM_001447.2
NC-004	BRAF	c.1781A>G	p.D594G	EX15	2.9%	NM_004333.4
NC-004	KRAS	c.35G>T	p.G12V	EX2	3.9%	NM_033360.2
NC-005	FANCM	c.5777T>G	p.I1926S	EX22	11.6%	NM_020937.2
NC-005	GRIN2A	c.541A>G	p.R181G	EX3	58.6%	NM_001134407.1
NC-005	TP53	c.672_672+1delGGinsTT	.	EX6-IVS6	61.6%	NM_000546.5
NC-005	NF2	c.1446+1G>T	.	IVS13	69.2%	NM_000268.3
NC-005	KDM5C	c.3572G>T	p.G1191V	EX23	74.0%	NM_004187.3
NC-005	MED12	c.1324G>C	p.D442H	EX9	72.6%	NM_005120.2
NC-005	EPHB1	c.2395C>T	p.R799C	EX13	5.1%	NM_004441.4

NC-005	CDH18	c.2194T>C	p.Y732H	EX13E	29.7%	NM_004934.3
NC-005	RAD52	c.989A>T	p.E330V	EX11	52.2%	NM_134424.2
NC-005	ARID2	c.498A>T	p.L166F	EX5	45.1%	NM_152641.2
NC-005	MLL2	c.1133G>T	p.G378V	EX9	28.4%	NM_003482.3
NC-005	TMEM132D	c.617C>G	p.P206R	EX2	38.5%	NM_133448.2
NC-005	IKBKE	c.1592G>T	p.R531L	EX15	36.8%	NM_014002.3
NC-005	CASP8	c.635G>T	p.G212V	EX4	38.8%	NM_001080125.1
NC-006	TP53	c.842A>T	p.D281V	EX8	35.4%	NM_000546.5
NC-007	EGFR	c.2300_2308dupCCAGCGTGG	p.A767_V769dup	EX20	46.8%	NM_005228.3
NC-007	PTEN	c.112C>G	p.P38A	EX2	17.5%	NM_000314.4
NC-007	PTEN	c.388C>G	p.R130G	EX5	24.7%	NM_000314.4
NC-007	NF1	c.2863G>A	p.D955N	EX22	7.9%	NM_000267.3
NC-008	PIK3CA	c.3012G>A	p.M1004I	EX21E	11.3%	NM_006218.2
NC-008	PIK3CA	c.3019G>C	p.G1007R	EX21E	11.3%	NM_006218.2
NC-008	KIT	c.1793G>C	p.G598A	EX12	11.6%	NM_000222.2
NC-008	EGFR	c.2369C>T	p.T790M	EX20	11.5%	NM_005228.3
NC-008	EGFR	c.2573T>G	p.L858R	EX21	11.0%	NM_005228.3
NC-008	CDK8	c.236T>A	p.I79N	EX3	10.7%	NM_001260.1
NC-008	HOXB13	c.352_353delGAinsTT	p.E118L	EX1	8.9%	NM_006361.5
NC-009	KDR	c.3991G>A	p.E1331K	EX30E	7.5%	NM_002253.2
NC-009	EGFR	c.2217_2234dupAATTCCCGTCGCTATCAA	p.I740_K745dup	EX19	12.5%	NM_005228.3
NC-009	MLL3	c.2011G>C	p.E671Q	EX14	2.5%	NM_170606.2
NC-009	EXT1	c.414C>G	p.I138M	EX1	2.3%	NM_000127.2
NC-009	SMAD2	c.830delT	p.I277Kfs*6	EX8	5.5%	NM_001003652.3

NC-009	ASXL1	c.626C>T	p.S209F	EX8	2.2%	NM_015338.5
NC-010	PARP1	c.599C>G	p.P200R	EX4	9.4%	NM_001618.3
NC-010	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	17.7%	NM_005228.3
NC-010	TP53	c.484A>T	p.I162F	EX5	25.1%	NM_000546.5
NC-011	CADM2	c.651G[2>1]	p.V218*fs*1	EX5	21.3%	NM_153184.3
NC-011	EPHA3	c.1385A>T	p.H462L	EX6	17.8%	NM_005233.5
NC-011	EPHA5	c.1681C>A	p.P561T	EX7	19.3%	NM_004439.5
NC-011	APC	c.7886C>A	p.T2629N	EX16E	37.0%	NM_000038.5
NC-011	FLT4	c.1344C>A	p.Y448*	EX10	40.8%	NM_182925.4
NC-011	FLT4	c.223A>T	p.S75C	EX3	37.3%	NM_182925.4
NC-011	C8orf34	c.949G>T	p.E317*	EX7	37.1%	NM_052958.2
NC-011	CDKN2A	c.326_329delCCTG	p.A109Gfs*36	EX2	56.9%	NM_000077.4
NC-011	GATA3	c.739T>G	p.F247V	EX3	47.9%	NM_002051.2
NC-011	ABCC11	c.200C>G	p.A67G	EX3	48.1%	NM_032583.3
NC-011	CDK12	c.656G>A	p.R219K	EX1	25.7%	NM_016507.2
NC-011	CYP2D6	c.463G>C	p.E155Q	EX3	13.4%	NM_000106.5
NC-012	CDKN2C	c.90C>A	p.N30K	EX1	1.8%	NM_078626.2
NC-012	TGFBR2	c.1658G>A	p.R553H	EX8E	2.5%	NM_001024847.2
NC-012	CTNNB1	c.110C>T	p.S37F	EX3	3.1%	NM_001904.3
NC-012	ATR	c.3806A>G	p.Q1269R	EX20	2.5%	NM_001184.3
NC-012	HIST1H2AG	c.310G>A	p.A104T	EX1E	1.9%	NM_021064.4
NC-012	DDR1	c.637_638delTC	p.S213Hfs*3	EX8	1.1%	NM_001954.4
NC-012	CDKN1A	c.251G>A	p.R84Q	EX3	3.1%	NM_078467.2
NC-012	EGFR	c.2237_2251delAATTAAGAGAAGCAA	p.E746_T751delinsA	EX19	10.9%	NM_005228.3

NC-012	MET	c.3029-798G>A	.	IVS14	5.0%	NM_000245.2
NC-012	CDH23	c.7560G>C	p.E2520D	EX54	3.9%	NM_022124.5
NC-012	ARID2	c.5488G>C	p.D1830H	EX21E	4.0%	NM_152641.2
NC-012	DICER1	c.1188A>C	p.E396D	EX9	3.5%	NM_030621.3
NC-012	TP53	c.526T>G	p.C176G	EX5	8.6%	NM_000546.5
NC-012	MAP2K2	c.578G>A	p.R193Q	EX5	3.6%	NM_030662.3
NC-013	LRP1B	c.5482G>A	p.D1828N	EX33	1.2%	NM_018557.2
NC-013	LRP1B	c.3082G>A	p.D1028N	EX20	29.4%	NM_018557.2
NC-013	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	72.4%	NM_005228.3
NC-013	TSC2	c.1258G>A	p.E420K	EX13	1.2%	NM_000548.3
NC-013	TP53	c.817C>T	p.R273C	EX8	45.2%	NM_000546.5
NC-014	TGFBR2	c.1411G>A	p.D471N	EX6	7.2%	NM_001024847.2
NC-014	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	11.3%	NM_005228.3
NC-015	EGFR	c.2156_2157delGCinsCT	p.G719A	EX18	5.1%	NM_005228.3
NC-015	EGFR	c.2582T>G	p.L861R	EX21	6.2%	NM_005228.3
NC-015	RAD51	c.188T>G	p.I63S	EX3	3.3%	NM_002875.4
NC-015	TP53	c.316_336delAGCTACGGTTTCCGTCTGGGC	p.S106_G112del	EX4	3.8%	NM_000546.5
NC-015	KEAP1	c.410T>C	p.I137T	EX2	1.6%	NM_203500.1
NC-016	MTOR	c.853G>T	p.E285*	EX7	22.1%	NM_004958.3
NC-016	PIK3C2B	c.180G>A	p.W60*	EX3	19.0%	NM_002646.3
NC-016	RHOA	c.268G>C	p.D90H	EX3	30.7%	NM_001664.2
NC-016	RHOA	c.226G>C	p.D76H	EX3	32.3%	NM_001664.2
NC-016	EPHB1	c.2608C>T	p.R870W	EX14	10.8%	NM_004441.4

NC-016	PIK3CA	c.1624G>A	p.E542K	EX10	50.9%	NM_006218.2
NC-016	IFNGR1	c.402C>G	p.I134M	EX4	12.5%	NM_000416.2
NC-016	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	64.5%	NM_005228.3
NC-016	EGFR	c.2369C>T	p.T790M	EX20	60.9%	NM_005228.3
NC-016	PTPRD	c.3414_3416delAGG	p.K1138_G1139delinsN	EX31	23.6%	NM_002839.3
NC-016	RB1	c.22A>T	p.K8*	EX1	66.9%	NM_000321.2
NC-016	TP53	c.452C>G	p.P151R	EX5	83.5%	NM_000546.5
NC-016	CEBPA	c.496G>A	p.E166K	EX1E	24.4%	NM_004364.3
NC-016	TOP1	c.1422G>C	p.Q474H	EX14	19.2%	NM_003286.2
NC-017	LRP1B	c.9628C>T	p.P3210S	EX61	4.5%	NM_018557.2
NC-017	CUL3	c.130A>T	p.I44F	EX2	16.3%	NM_003590.4
NC-017	PBRM1	c.3589G>T	p.E1197*	EX23	3.9%	NM_018313.4
NC-017	PBRM1	c.3481G>C	p.D1161H	EX23	5.4%	NM_018313.4
NC-017	PIK3CB	c.1645C>T	p.Q549*	EX11	1.3%	NM_006219.2
NC-017	RICTOR	c.830G>A	p.R277K	EX10	5.8%	NM_152756.3
NC-017	FAT2	c.2989C>G	p.L997V	EX1	6.4%	NM_001447.2
NC-017	FLNC	c.142G>C	p.E48Q	EX1	1.6%	NM_001458.4
NC-017	RUNX1T1	c.781C>T	p.Q261*	EX6	2.2%	NM_175635.2
NC-017	BCL2A1	c.203G>A	p.R68K	EX1	1.5%	NM_001114735.1
NC-017	CIITA	c.1530C>G	p.F510L	EX11	5.4%	NM_000246.3
NC-017	TP53	c.658T>A	p.Y220N	EX6	11.5%	NM_000546.5
NC-017	ELAC2	c.625C>G	p.P209A	EX7	11.0%	NM_018127.6
NC-017	NCOR1	c.2173G>C	p.D725H	EX19	2.6%	NM_006311.3
NC-017	RPS6KB1	c.1298G>A	p.R433Q	EX14	20.5%	NM_003161.2
NC-017	ERG	c.58G>C	p.E20Q	EX2	1.0%	NM_182918.3

NC-017	PAK3	c.568G>C	p.V190L	EX9	10.4%	NM_002578.3
NC-018	TERT	c.-58-u66C>T	.	.	18.6%	NM_198253.2
NC-018	HOXA3	c.371C>T	p.S124F	EX3	14.8%	NM_153631.2
NC-018	MET	c.3028+292C>G	.	IVS14	5.8%	NM_000245.2
NC-018	TSC1	c.2612C>G	p.S871*	EX20	18.7%	NM_000368.4
NC-018	ATM	c.7535C>T	p.P2512L	EX51	11.0%	NM_000051.3
NC-018	ZFHX3	c.1957C>T	p.R653C	EX2	8.3%	NM_006885.3
NC-018	TP53	c.993+1G>A	.	IVS9	18.0%	NM_000546.5
NC-018	KEAP1	c.1708G>C	p.G570R	EX5	17.3%	NM_203500.1
NC-018	STAG2	c.1018-3_1018-2delTA	.	IVS11	2.0%	NM_001042749.1
NC-019	PMS2	c.-87-u287G>A	.	.	3.1%	NM_000535.5
NC-019	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	13.8%	NM_005228.3
NC-019	AKAP9	c.1169C>T	p.S390F	EX8	4.2%	NM_005751.4
NC-019	TTF1	c.2176G>A	p.E726K	EX7	4.0%	NM_007344.3
NC-019	PLK1	c.643C>G	p.P215A	EX3	3.8%	NM_005030.3
NC-019	TP53	c.920-2A>G	.	IVS8	8.2%	NM_000546.5
NC-019	CYP2D6	c.265G>A	p.E89K	EX2	2.9%	NM_000106.5
NC-020	LRRC7	c.112C[2>1]	p.P38Qfs*11	EX1	17.9%	NM_020794.2
NC-020	FAT1	c.12100G>T	p.G4034*	EX22	23.6%	NM_005245.3
NC-020	CARD11	c.812G>C	p.R271P	EX6	12.9%	NM_032415.4
NC-020	PMS2	c.-87-u95G>A	.	.	4.8%	NM_000535.5
NC-020	NTRK2	c.2494G>T	p.V832F	EX21E	16.5%	NM_006180.3
NC-020	OR4A15	c.497G>T	p.R166L	EX1E	9.9%	NM_001005275.1
NC-020	KRAS	c.34G>T	p.G12C	EX2	25.6%	NM_033360.2
NC-020	POLE	c.3866G>A	p.R1289H	EX31	5.8%	NM_006231.2

NC-020	ACIN1	c.1097C>T	p.P366L	EX6	7.7%	NM_014977.3
NC-020	GRIN2A	c.2747A>C	p.D916A	EX13E	12.8%	NM_001134407.1
NC-020	GRIN2A	c.1552C>A	p.R518S	EX7	11.7%	NM_001134407.1
NC-020	TP53	c.758C>T	p.T253I	EX7	4.9%	NM_000546.5
NC-020	TP53	c.423C>G	p.C141W	EX5	11.9%	NM_000546.5
NC-020	SOX9	c.1420C>A	p.R474S	EX3E	17.6%	NM_000346.3
NC-020	NCAM2	c.1562C>A	p.S521Y	EX12	13.1%	NM_004540.3
NC-021	CDH23	c.8500G>A	p.V2834I	EX59	3.3%	NM_022124.5
NC-022	DNMT3A	c.1122+2_1122+16delT GAGTGTCCCTGCTG	.	IVS9	1.5%	NM_022552.4
NC-022	ERBB4	c.1214A>G	p.Q405R	EX11	2.2%	NM_005235.2
NC-022	CYLD	c.1273A>G	p.N425D	EX8	1.3%	NM_001042355.1
NC-022	ERG	c.1109G>A	p.R370H	EX10E	3.0%	NM_182918.3
NC-023	NOTCH2	c.5179C>T	p.R1727C	EX28	13.3%	NM_024408.3
NC-023	NOTCH2	c.3961G>A	p.V1321M	EX24	25.3%	NM_024408.3
NC-023	NTRK1	c.254G>A	p.R85H	EX2	37.5%	NM_002529.3
NC-023	LRP1B	c.7798G>A	p.D2600N	EX48	36.9%	NM_018557.2
NC-023	LRP1B	c.5381A>T	p.D1794V	EX33	35.5%	NM_018557.2
NC-023	CASP8	c.205A>T	p.I69F	EX2	77.5%	NM_001080125.1
NC-023	FLT4	c.2559C>A	p.Y853*	EX18	74.8%	NM_182925.4
NC-023	CDKN2A	c.79G>T	p.E27*	EX1	78.3%	NM_000077.4
NC-023	MLL2	c.3373C>G	p.L1125V	EX11	29.9%	NM_003482.3
NC-023	SLX4	c.4403G>A	p.R1468H	EX12	14.3%	NM_032444.2
NC-023	TP53	c.707A>G	p.Y236C	EX7	57.9%	NM_000546.5
NC-025	SOX2	c.418G>T	p.A140S	EX1E	10.9%	NM_003106.3
NC-025	FAT2	c.11117C>A	p.S3706*	EX18	14.1%	NM_001447.2

NC-025	ROS1	c.3212A>C	p.K1071T	EX21	4.2%	NM_002944.2
NC-025	MET	c.3028+1G>A	.	IVS14	29.5%	NM_000245.2
NC-025	H3F3C	c.188G[2>1]	p.K64Sfs*8	EX1E	7.5%	NM_001013699.2
NC-025	RB1	c.1981C>T	p.R661W	EX20	16.9%	NM_000321.2
NC-025	CREBBP	c.5327_5342delTCCAGTCGCTGGTGCA	p.I1776Tfs*18	EX31E	4.4%	NM_004380.2
NC-025	TP53	c.993G>T	p.Q331H	EX9	16.4%	NM_000546.5
NC-025	EP300	c.4564_4582delCAGGAGGAAGAAGAGAGAA	p.Q1522Nfs*13	EX28	1.0%	NM_001429.3
NC-026	MAP2K4	c.950T>A	p.L317Q	EX9	31.3%	NM_003010.2
NC-026	TP53	c.331_341delCTGGGCTTCTT	p.L111Afs*34	EX4	21.8%	NM_000546.5
NC-026	CDKN2A	c.266G>T	p.G89V	EX2	6.8%	NM_000077.4
NC-026	ERRFI1	c.982A>T	p.S328C	EX4	2.3%	NM_018948.3
NC-027	USH2A	c.4725G>T	p.K1575N	EX22	3.8%	NM_206933.2
NC-027	CTNNA2	c.1012G>A	p.V338M	EX7	24.8%	NM_004389.3
NC-027	CASP8	c.62C>T	p.A21V	EX1	19.3%	NM_001080125.1
NC-027	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	35.9%	NM_005228.3
NC-027	SUFU	c.562G>A	p.V188M	EX4	1.0%	NM_016169.3
NC-027	CCND1	c.461C>T	p.A154V	EX3	1.1%	NM_053056.2
NC-027	SLX4	c.929G>C	p.R310P	EX4	15.5%	NM_032444.2
NC-028	OR6F1	c.778G>A	p.V260I	EX1E	5.9%	NM_001005286.1
NC-028	FAT1	c.1897G>A	p.G633S	EX2	1.8%	NM_005245.3
NC-028	EGFR	c.2573T>G	p.L858R	EX21	16.3%	NM_005228.3
NC-028	MLL2	c.3113C>T	p.P1038L	EX11	2.2%	NM_003482.3

NC-028	ASXL1	c.1838C>T	p.T613I	EX13E	15.8%	NM_015338.5
NC-028	RBM10	c.2626C>T	p.Q876*	EX22	21.7%	NM_001204468.1
NC-028	ATRX	c.3819G>T	p.K1273N	EX11	9.3%	NM_000489.3
NC-028	BCORL1	c.2728A>G	p.I910V	EX3	13.1%	NM_021946.4
NC-029	OR2T4	c.901G>C	p.E301Q	EX1E	21.7%	NM_001004696.1
NC-029	EGFR	c.2573T>G	p.L858R	EX21	13.9%	NM_005228.3
NC-029	RBM10	c.2464C>T	p.Q822*	EX20	17.2%	NM_001204468.1
NC-030	CDKN2C	c.4G>A	p.A2T	EX1	6.4%	NM_078626.2
NC-030	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	11.7%	NM_005228.3
NC-030	PALB2	c.224A>G	p.K75R	EX4	10.3%	NM_024675.3
NC-030	RPTOR	c.370G>C	p.D124H	EX4	12.5%	NM_020761.2
NC-030	SMARCA4	c.16C>G	p.P6A	EX2	1.3%	NM_003072.3
NC-031	MITF	c.1213G>T	p.G405C	EX10E	22.0%	NM_198159.2
NC-031	STK11	c.320A>T	p.H107L	EX2	21.4%	NM_000455.4
NC-031	CDH23	c.2445C>G	p.Y815*	EX23	19.6%	NM_022124.5
NC-031	KRAS	c.38G>A	p.G13D	EX2	18.5%	NM_033360.2
NC-031	ABL2	c.2224G[5>4]	p.G743Vfs*14	EX12E	17.0%	NM_007314.3
NC-031	USH2A	c.4658C>A	p.P1553H	EX22	14.6%	NM_206933.2
NC-031	ZNF521	c.412C>A	p.Q138K	EX4	27.6%	NM_015461.2
NC-031	NTRK3	c.1015G>C	p.G339R	EX10	25.0%	NM_001012338.2
NC-031	FAT2	c.10117C>A	p.P3373T	EX15	24.6%	NM_001447.2
NC-031	KEAP1	c.556G>T	p.G186C	EX2	23.9%	NM_203500.1
NC-032	MTOR	c.1692G>T	p.Q564H	EX11	2.8%	NM_004958.3
NC-032	PDGFRA	c.1723G>A	p.V575M	EX12	4.8%	NM_006206.4
NC-032	KDR	c.3305G>A	p.G1102D	EX25	5.2%	NM_002253.2

NC-032	EPHA5	c.1350G>T	p.L450F	EX5	6.3%	NM_004439.5
NC-032	CSF1R	c.1669G>A	p.E557K	EX12	2.5%	NM_005211.3
NC-032	EGFR	c.1561dupA	p.R521Kfs*25	EX13	2.9%	NM_005228.3
NC-032	EGFR	c.2335_2336delGGinsTT	p.G779F	EX20	69.2%	NM_005228.3
NC-032	FOXA1	c.247_249delGCCinsACT	p.A83T	EX2E	2.4%	NM_004496.3
NC-032	SLX4	c.41T>C	p.L14S	EX2	2.7%	NM_032444.2
NC-032	MAF	c.1082C>G	p.S361W	EX1E	3.1%	NM_001031804.2
NC-032	TP53	c.1045G>T	p.E349*	EX10	6.3%	NM_000546.5
NC-032	CHEK2	c.5_20delCTCGGGAGTCGGATGT	p.S2Lfs*54	EX2	1.6%	NM_007194.3
NC-032	RBM10	c.1213C>T	p.Q405*	EX10	5.5%	NM_001204468.1
NC-032	ATRX	c.5567-1G>T	.	IVS22	4.8%	NM_000489.3
NC-033	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	27.5%	NM_005228.3
NC-033	SLX4	c.4630A>T	p.T1544S	EX12	1.4%	NM_032444.2
NC-033	FANCA	c.59G>T	p.R20M	EX1	7.4%	NM_000135.2
NC-033	TP53	c.747G>T	p.R249S	EX7	13.2%	NM_000546.5
NC-034	ABL1	c.2932C>G	p.P978A	EX11E	14.0%	NM_005157.4
NC-034	TP53	c.831T>G	p.C277W	EX8	40.2%	NM_000546.5
NC-035	HDAC1	c.686G>A	p.R229Q	EX7	3.8%	NM_004964.2
NC-035	SLC34A2	c.2018_2019delAGinsGC	p.E673G	EX13E	24.8%	NM_006424.2
NC-035	EGFR	c.2573T>G	p.L858R	EX21	44.8%	NM_005228.3
NC-035	TP53	c.559+1G>A	.	IVS5	28.0%	NM_000546.5
NC-035	KDM5C	c.902G>A	p.S301N	EX7	1.0%	NM_004187.3

NC-036	MET	c.3019_3028+15delTTTCCAGAAGGTATATTTCAGTTTA	.	EX14-IVS14	3.0%	NM_000245.2
NC-036	CDKN2A	c.231TC[2>1]	p.L78Hfs*41	EX2	3.2%	NM_000077.4
NC-036	RBM10	c.2437G>T	p.E813*	EX20	4.6%	NM_001204468.1
NC-037	LRP1B	c.12736G>C	p.E4246Q	EX83	1.8%	NM_018557.2
NC-037	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	15.8%	NM_005228.3
NC-037	MED12	c.4772A>G	p.N1591S	EX35	22.6%	NM_005120.2
NC-038	PDK1	c.1051C[2>1]	p.P351Lfs*23	EX9	14.9%	NM_002610.3
NC-038	FLT4	c.253G>A	p.E85K	EX3	12.9%	NM_182925.4
NC-038	ATM	c.1009C>T	p.R337C	EX8	25.8%	NM_000051.3
NC-038	ABCC11	c.817G>C	p.E273Q	EX7	5.2%	NM_032583.3
NC-038	TP53	c.734G>A	p.G245D	EX7	37.6%	NM_000546.5
NC-039	ARID1A	c.6556_6557delGC	p.A2186Sfs*38	EX20E	1.6%	NM_006015.4
NC-039	ASTN1	c.1133G>A	p.R378Q	EX6	1.2%	NM_004319.1
NC-039	MYCN	c.846_848delGGAinsTGG	p.E283G	EX3E	1.1%	NM_005378.4
NC-039	MYCN	c.852delG	p.K284Nfs*35	EX3E	1.0%	NM_005378.4
NC-039	LRP1B	c.2298G>C	p.L766F	EX14	3.1%	NM_018557.2
NC-039	EPHB1	c.924C>A	p.Y308*	EX4	5.1%	NM_004441.4
NC-039	EPHA5	c.2975G>T	p.S992I	EX17	5.9%	NM_004439.5
NC-039	ALB	c.1580A>G	p.N527S	EX12	5.2%	NM_000477.5
NC-039	FAT2	c.4267A>G	p.T1423A	EX6	7.6%	NM_001447.2
NC-039	DDR1	c.331G>A	p.G111S	EX6	3.3%	NM_001954.4
NC-039	ARID1B	c.4525G>T	p.E1509*	EX18	6.7%	NM_020732.3

NC-039	MET	c.3979C>T	p.R1327C	EX21E	3.6%	NM_000245.2
NC-039	BRAF	c.1695T>G	p.D565E	EX14	6.7%	NM_004333.4
NC-039	EPHB6	c.1748-1G>T	.	IVS11	6.9%	NM_004445.3
NC-039	ATM	c.8170C>A	p.Q2724K	EX56	10.1%	NM_000051.3
NC-039	KRAS	c.37G>T	p.G13C	EX2	21.6%	NM_033360.2
NC-039	WSCD2	c.649C>G	p.R217G	EX4	7.4%	NM_014653.2
NC-039	TBX3	c.1923C>A	p.S641R	EX8E	1.0%	NM_016569.3
NC-039	CREBBP	c.7222A>T	p.M2408L	EX31E	7.5%	NM_004380.2
NC-039	TP53	c.541C>T	p.R181C	EX5	1.2%	NM_000546.5
NC-040	TGFBR2	c.305G>T	p.C102F	EX3	3.0%	NM_001024847.2
NC-040	PBRM1	c.4242C[2>1]	p.H1415Ifs*17	EX27	3.5%	NM_018313.4
NC-040	PBRM1	c.3520_3522delCCAinsTCT	p.P1174S	EX23	2.2%	NM_018313.4
NC-040	CADM2	c.585C>G	p.D195E	EX5	2.4%	NM_153184.3
NC-040	FBXW7	c.1387A>C	p.T463P	EX9	5.7%	NM_033632.3
NC-040	CDH18	c.2201C>A	p.S734Y	EX13E	4.0%	NM_004934.3
NC-040	CDKN2A	c.322G>T	p.D108Y	EX2	4.6%	NM_000077.4
NC-040	GALNT12	c.1691G>T	p.R564L	EX10E	2.2%	NM_024642.4
NC-040	NTRK3	c.698G>A	p.G233D	EX8	1.8%	NM_001012338.2
NC-040	SLX4	c.5072A>G	p.N1691S	EX14	1.4%	NM_032444.2
NC-040	TP53	c.404G>A	p.C135Y	EX5	3.6%	NM_000546.5
NC-041	FANCA	c.1006+1G>T	.	IVS11	17.2%	NM_000135.2
NC-042	DDR2	c.440C>A	p.P147H	EX6	4.0%	NM_006182.2
NC-042	DAXX	c.1241C>T	p.S414F	EX4	37.5%	NM_001141970.1
NC-042	ARID1B	c.521C>A	p.P174Q	EX1	37.5%	NM_020732.3
NC-042	BRAF	c.407C>T	p.S136L	EX3	26.3%	NM_004333.4

NC-042	WRN	c.2957T>C	p.L986P	EX24	37.6%	NM_000553.4
NC-042	TBX3	c.1297C>T	p.P433S	EX7	26.2%	NM_016569.3
NC-042	HNF1A	c.1536C>A	p.Y512*	EX8	26.8%	NM_000545.5
NC-042	RB1	c.2052C[2>1]	p.Q685Sfs*11	EX20	62.8%	NM_000321.2
NC-042	GRIN2A	c.3947G[3>2]	p.E1317Nfs*80	EX13E	34.6%	NM_001134407.1
NC-042	TP53	c.527G>T	p.C176F	EX5	61.9%	NM_000546.5
NC-042	NF1	c.1132G>T	p.D378Y	EX10	36.8%	NM_000267.3
NC-042	NF1	c.2875C>T	p.Q959*	EX22	35.1%	NM_000267.3
NC-043	NOTCH2	c.4351G>A	p.D1451N	EX25	2.0%	NM_024408.3
NC-043	PMS1	c.898G>C	p.D300H	EX8	3.8%	NM_000534.4
NC-043	EPHA5	c.351G>T	p.W117C	EX3	1.3%	NM_004439.5
NC-043	TET2	c.2713G>A	p.D905N	EX3	1.9%	NM_001127208.2
NC-043	TERT	c.-58-u66C>T	.	.	1.8%	NM_198253.2
NC-043	BRD2	c.1480G>C	p.E494Q	EX8	1.5%	NM_001199455.1
NC-043	EMID2	c.205C>G	p.Q69E	EX2	6.4%	NM_133457.2
NC-043	RB1	c.2449G>T	p.E817*	EX23	3.4%	NM_000321.2
NC-043	NTRK3	c.133T>C	p.C45R	EX3	3.6%	NM_001012338.2
NC-043	CREBBP	c.358A>T	p.K120*	EX2	2.2%	NM_004380.2
NC-043	TP53	c.202G>T	p.E68*	EX4	4.6%	NM_000546.5
NC-043	STK11	c.703A>T	p.K235*	EX5	3.1%	NM_000455.4
NC-043	NF2	c.407_415delAGGCTTCTG	p.E136_S138del	EX4	1.2%	NM_000268.3
NC-043	EP300	c.5626C>T	p.Q1876*	EX31	1.3%	NM_001429.3
NC-043	CRLF2	c.323C>A	p.T108N	EX3	2.5%	NM_022148.2
NC-044	ABL2	c.2767C>T	p.L923F	EX12E	13.6%	NM_007314.3
NC-044	MSH6	c.1988C>A	p.T663N	EX4	10.8%	NM_000179.2

NC-044	TET2	c.2682_2686dupAGTTC	p.L896Qfs*27	EX3	14.0%	NM_001127208.2
NC-044	TET2	c.3654C[2>1]	p.H1219Tfs*7	EX6	21.2%	NM_001127208.2
NC-044	SDHA	c.1000G>A	p.A334T	EX8	15.4%	NM_004168.2
NC-044	ABCB1	c.1140_1141delGAinsTG	p.K380_S381delinsNG	EX12	13.0%	NM_000927.4
NC-044	CYLD	c.2077G>T	p.V693L	EX13	4.4%	NM_001042355.1
NC-044	CYLD	c.2150A[7>8]	p.N719Kfs*2	EX14	15.1%	NM_001042355.1
NC-044	TP53	c.422G>T	p.C141F	EX5	7.3%	NM_000546.5
NC-044	P4HB	c.1135G>C	p.D379H	EX8	2.1%	NM_000918.3
NC-044	ATRX	c.3944-13_3950delTTCCTTCATTTAGAAGCAAA	.	IVS11-EX12	4.5%	NM_000489.3
NC-045	ATR	c.2099C>G	p.S700C	EX10	1.6%	NM_001184.3
NC-045	ARID1B	c.6100C>T	p.Q2034*	EX20E	7.8%	NM_020732.3
NC-045	EGFR	c.2573T>G	p.L858R	EX21	21.7%	NM_005228.3
NC-045	CNOT4	c.1943G>A	p.S648N	EX12E	1.2%	NM_001190850.1
NC-045	TGFBR1	c.764G>A	p.R255H	EX4	3.5%	NM_004612.2
NC-045	TP53	c.641A>G	p.H214R	EX6	10.1%	NM_000546.5
NC-046	EGFR	c.2238_2256delATTAAGAGAAGCAACATCTinsGCAA	p.L747_S752delinsQ	EX19	15.0%	NM_005228.3
NC-046	RINT1	c.604C>T	p.Q202*	EX5	1.1%	NM_021930.4
NC-046	TSC1	c.2847_2848delGG	p.E949Dfs*10	EX22	13.5%	NM_000368.4
NC-046	TSC1	c.586C>T	p.P196S	EX7	3.5%	NM_000368.4
NC-046	HNF1B	c.1167_1184delGGACCCAGGCCACAATCT	p.D390_L395del	EX5	10.3%	NM_000458.2

NC-046	RAD51C	c.376G>T	p.A126S	EX2	9.5%	NM_058216.1
NC-046	CEBPA	c.980G>T	p.R327L	EX1E	1.4%	NM_004364.3
NC-046	FLT4	c.2405G>T	p.R802M	EX16	1.5%	NM_182925.4
NC-046	PRDM16	c.2777C>A	p.P926H	EX11	1.2%	NM_022114.3
NC-046	PIK3CA	c.1633G>A	p.E545K	EX10	2.9%	NM_006218.2
NC-047	ZMAT3	c.694A>G	p.I232V	EX6E	2.0%	NM_022470.3
NC-047	EGFR	c.2573T>G	p.L858R	EX21	17.9%	NM_005228.3
NC-047	TP53	c.461G>T	p.G154V	EX5	20.4%	NM_000546.5
NC-048	NTRK1	c.2201C>A	p.T734K	EX16	36.3%	NM_002529.3
NC-048	HOXA11	c.246C>A	p.C82*	EX1	38.6%	NM_005523.5
NC-048	KRAS	c.34G>T	p.G12C	EX2	91.6%	NM_033360.2
NC-048	GRIN2A	c.1983A>T	p.Q661H	EX9	4.7%	NM_001134407.1
NC-048	FANCA	c.1226-1G>A	.	IVS13	38.7%	NM_000135.2
NC-048	STK11	c.454C>T	p.Q152*	EX3	75.1%	NM_000455.4
NC-049	HSD3B1	c.466C>A	p.P156T	EX4E	53.1%	NM_000862.2
NC-049	LRP1B	c.9603G>A	p.M3201I	EX60	22.7%	NM_018557.2
NC-049	MAP3K1	c.998G>A	p.S333N	EX4	27.0%	NM_005921.1
NC-049	ARID1B	c.6680T>C	p.I2227T	EX20E	1.8%	NM_020732.3
NC-049	EGFR	c.2155G>A	p.G719S	EX18	40.3%	NM_005228.3
NC-049	EGFR	c.2303G>T	p.S768I	EX20	41.5%	NM_005228.3
NC-049	BNC2	c.568_598delCTGGACCGTCTCTTCAGCGTCCTGAAGCAAG	p.L190Rfs*61	EX5	32.5%	NM_017637.5
NC-049	NTRK3	c.2243C>A	p.T748N	EX19	84.8%	NM_001012338.2
NC-049	TP53	c.797G>A	p.G266E	EX8	76.8%	NM_000546.5
NC-050	ARID1A	c.814G[4>3]	p.A273Pfs*90	EX1	4.9%	NM_006015.4

NC-050	SMO	c.385G>A	p.V129I	EX2	5.5%	NM_005631.4
NC-051	IL6	c.66G>T	p.L22F	EX2	1.1%	NM_000600.3
NC-051	EGFR	c.2573T>G	p.L858R	EX21	13.9%	NM_005228.3
NC-051	WT1	c.956C>T	p.A319V	EX5	7.4%	NM_024426.4
NC-051	GRIN2A	c.4357G>A	p.V1453M	EX13E	1.3%	NM_001134407.1
NC-051	TP53	c.310C>T	p.Q104*	EX4	7.5%	NM_000546.5
NC-052	EGFR	c.2573T>G	p.L858R	EX21	4.8%	NM_005228.3
NC-052	TP53	c.670G>T	p.E224*	EX6	4.7%	NM_000546.5
NC-053	EGFR	c.2237_2255delAATTAAGAGAAGCAACATCinsT	p.E746_S752delinsV	EX19	18.5%	NM_005228.3
NC-054	DNMT3A	c.2323-2A>C	.	IVS19	1.8%	NM_022552.4
NC-054	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	2.6%	NM_005228.3
NC-054	TP53	c.493C>T	p.Q165*	EX5	2.2%	NM_000546.5
NC-055	CTNNA2	c.973G>A	p.D325N	EX7	14.0%	NM_004389.3
NC-055	PAX5	c.350G>A	p.R117Q	EX3	14.9%	NM_016734.1
NC-055	TP53	c.800G>A	p.R267Q	EX8	18.4%	NM_000546.5
NC-056	TP53	c.581T[2>1]	p.I195Sfs*52	EX6	45.3%	NM_000546.5
NC-056	EGFR	c.2573T>G	p.L858R	EX21	17.4%	NM_005228.3
NC-056	ABCC11	c.2753G>A	p.R918Q	EX21	8.7%	NM_032583.3
NC-056	ERCC1	c.125C>A	p.S42Y	EX3	2.8%	NM_001983.3
NC-057	FH	c.32C>G	p.S11W	EX1	15.3%	NM_000143.3
NC-057	RHOA	c.41G>C	p.G14A	EX2	1.1%	NM_001664.2
NC-057	RHOA	c.40G>A	p.G14R	EX2	3.7%	NM_001664.2
NC-057	PIK3CA	c.1624G>A	p.E542K	EX10	19.5%	NM_006218.2

NC-057	FAT2	c.6325T>A	p.F2109I	EX9	1.4%	NM_001447.2
NC-057	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	58.1%	NM_005228.3
NC-057	MLL	c.5095G>T	p.E1699*	EX16	24.4%	NM_001197104.1
NC-057	H3F3C	c.253C>A	p.Q85K	EX1E	24.9%	NM_001013699.2
NC-057	FANCM	c.5606C>T	p.S1869F	EX21	2.8%	NM_020937.2
NC-057	CREBBP	c.3227C>T	p.S1076F	EX16	60.4%	NM_004380.2
NC-057	BRCA1	c.3789G>C	p.L1263F	EX10	1.0%	NM_007294.3
NC-057	BRCA1	c.2722G>C	p.E908Q	EX10	1.0%	NM_007294.3
NC-057	MN1	c.1463C>T	p.P488L	EX1	5.8%	NM_002430.2
NC-057	EP300	c.5626C>G	p.Q1876E	EX31E	1.0%	NM_001429.3
NC-058	ROBO2	c.224C>T	p.T75M	EX3	12.3%	NM_001128929.2
NC-058	PIK3CA	c.3129G>A	p.M1043I	EX21E	14.3%	NM_006218.2
NC-058	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	10.5%	NM_005228.3
NC-058	STAT3	c.1340A>C	p.H447P	EX15	13.0%	NM_139276.2
NC-058	PPP2R1A	c.470G>T	p.R157L	EX4	3.2%	NM_014225.5
NC-059	SETD2	c.2185G>T	p.E729*	EX3	22.7%	NM_014159.6
NC-059	MLL	c.9556G>T	p.G3186C	EX27	1.0%	NM_001197104.1
NC-060	EPHB2	c.1970C>T	p.S657L	EX11	14.9%	NM_017449.3
NC-060	CTNNB1	c.110C>T	p.S37F	EX3	14.8%	NM_001904.3
NC-060	EPHB1	c.1862T>C	p.I621T	EX10	15.8%	NM_004441.4
NC-060	EGFR	c.2239_2256delTTAAGAGAAGCAACATCT	p.L747_S752del	EX19	13.2%	NM_005228.3
NC-060	TP53	c.524G>A	p.R175H	EX5	22.0%	NM_000546.5
NC-061	SF3B1	c.14C>G	p.A5G	EX1	36.1%	NM_012433.2

NC-061	ARID2	c.3814C>T	p.R1272*	EX15	39.1%	NM_152641.2
NC-061	TP53	c.499C>T	p.Q167*	EX5	30.4%	NM_000546.5
NC-061	NF1	c.1466A>G	p.Y489C	EX13	30.8%	NM_000267.3
NC-061	STK11	c.755_768delTGTACCCCTTCGAA	p.L252Rfs*9	EX6	21.3%	NM_000455.4
NC-062	FCGR2A	c.433T>A	p.W145R	EX4	22.7%	NM_021642.3
NC-062	TP53	c.451C>A	p.P151T	EX5	20.5%	NM_000546.5
NC-062	FAT1	c.11483-2A>T	.	IVS20	20.3%	NM_005245.3
NC-062	PIK3CG	c.1169G>T	p.G390V	EX2	17.8%	NM_002649.2
NC-062	PCK1	c.1814C>G	p.P605R	EX10	15.7%	NM_002591.3
NC-062	KIT	c.2822A>G	p.N941S	EX21	15.6%	NM_000222.2
NC-062	TP53	c.659A>G	p.Y220C	EX6	11.5%	NM_000546.5
NC-062	ERBB4	c.803A>G	p.Y268C	EX7	5.3%	NM_005235.2
NC-063	MTOR	c.1043C>T	p.S348F	EX7	54.9%	NM_004958.3
NC-063	AFF3	c.1912G>A	p.A638T	EX14	12.5%	NM_001025108.1
NC-063	EGFR	c.2573T>G	p.L858R	EX21	89.7%	NM_005228.3
NC-063	ABCC11	c.2146C>A	p.H716N	EX16	2.7%	NM_032583.3
NC-063	TP53	c.785G>T	p.G262V	EX8	76.8%	NM_000546.5
NC-064	LRP1B	c.13097G>A	p.G4366E	EX85	1.6%	NM_018557.2
NC-064	PIK3CG	c.938C>A	p.P313Q	EX2	20.7%	NM_002649.2
NC-064	CDKN2A	c.250G>A	p.D84N	EX2	2.4%	NM_000077.4
NC-064	NOTCH1	c.3319C>T	p.R1107*	EX20	1.1%	NM_017617.3
NC-064	TBX3	c.1606G>T	p.A536S	EX7	17.1%	NM_016569.3
NC-064	TP53	c.709A>G	p.M237V	EX7	22.2%	NM_000546.5
NC-064	AXL	c.1828C>T	p.R610*	EX16	20.9%	NM_021913.3
NC-065	MAP3K1	c.3455A>C	p.E1152A	EX14	5.7%	NM_005921.1

NC-065	EGFR	c.828G>T	p.Q276H	EX7	1.8%	NM_005228.3
NC-065	EGFR	c.2573T>G	p.L858R	EX21	51.9%	NM_005228.3
NC-065	EGR3	c.1042C>T	p.R348C	EX2E	1.2%	NM_004430.2
NC-065	TP53	c.469G>T	p.V157F	EX5	11.9%	NM_000546.5
NC-066	ADAM29	c.2265G>A	p.M755I	EX5E	7.5%	NM_014269.4
NC-066	DDR1	c.1416C>G	p.I472M	EX13	4.3%	NM_001954.4
NC-066	HSP90AB1	c.1942G>C	p.D648H	EX11	5.5%	NM_007355.2
NC-066	MET	c.2888-42_2888-3delATAGCCGTCTTTAACAAGCTCTTTCTTTCTCTCTGTTTTA	.	IVS13	4.7%	NM_000245.2
NC-066	MLH3	c.3073G>A	p.E1025K	EX2	2.6%	NM_001040108.1
NC-067	EPHA2	c.1120G>A	p.G374R	EX5	8.5%	NM_004431.3
NC-067	CHD1L	c.2575A>T	p.I859F	EX22	8.1%	NM_004284.4
NC-067	ALK	c.2426G>A	p.R809K	EX14	4.2%	NM_004304.4
NC-067	PIK3CA	c.1633G>A	p.E545K	EX10	2.1%	NM_006218.2
NC-067	INPP4B	c.2687G>C	p.R896T	EX26E	3.9%	NM_001101669.1
NC-067	CDKN1A	c.251G>A	p.R84Q	EX3	2.2%	NM_078467.2
NC-067	ARID1B	c.3828G>T	p.E1276D	EX15	2.7%	NM_020732.3
NC-067	MAD1L1	c.1920G>C	p.Q640H	EX18	2.9%	NM_003550.2
NC-067	PIK3CG	c.1960G>A	p.D654N	EX2	5.8%	NM_002649.2
NC-067	ARID2	c.2588C>T	p.S863L	EX15	3.4%	NM_152641.2
NC-067	TP53	c.569C>T	p.P190L	EX6	12.9%	NM_000546.5
NC-067	NF1	c.7411C>T	p.Q2471*	EX50	19.7%	NM_000267.3
NC-067	PIK3R2	c.46C>T	p.R16C	EX2	1.7%	NM_005027.2
NC-067	SMARCB1	c.656C>T	p.S219L	EX6	2.6%	NM_003073.3

NC-068	IKZF1	c.1064C>T	p.A355V	EX8E	17.4%	NM_006060.4
NC-068	PTPRD	c.5722G>T	p.D1908Y	EX46E	40.3%	NM_002839.3
NC-068	NTRK2	c.2350C>A	p.Q784K	EX21E	39.6%	NM_006180.3
NC-068	TP53	c.733G>C	p.G245R	EX7	71.8%	NM_000546.5
NC-068	MAP2K4	c.1136G>T	p.C379F	EX11E	70.1%	NM_003010.2
NC-068	NOTCH1	c.3724G>T	p.G1242C	EX23	20.5%	NM_017617.3
NC-068	MLL2	c.7411C>T	p.R2471*	EX31	52.0%	NM_003482.3
NC-068	ZFHX3	c.8774C[4>3]	p.P2926Rfs*28	EX9	66.6%	NM_006885.3
NC-069	EPHA2	c.1608G[2>1]	p.V537*fs*1	EX8	21.5%	NM_004431.3
NC-069	ARID1A	c.596A>T	p.Q199L	EX1	1.1%	NM_006015.4
NC-069	MYCN	c.1170G>T	p.E390D	EX3E	31.1%	NM_005378.4
NC-069	ALK	c.2041_2041+1delGGinsTC	.	EX11-IVS11	26.7%	NM_004304.4
NC-069	ERBB4	c.3553A>T	p.N1185Y	EX28E	1.1%	NM_005235.2
NC-069	KIT	c.2777A>G	p.K926R	EX20	17.0%	NM_000222.2
NC-069	KDR	c.1796C>A	p.P599H	EX13	20.9%	NM_002253.2
NC-069	FAT1	c.11662T>G	p.Y3888D	EX22	27.1%	NM_005245.3
NC-069	APC	c.4661A[6>7]	p.T1556Nfs*3	EX16E	13.7%	NM_000038.5
NC-069	APC	c.4729G>T	p.E1577*	EX16E	28.6%	NM_000038.5
NC-069	NOTCH4	c.5693G>C	p.R1898P	EX30E	27.5%	NM_004557.3
NC-069	RECQL4	c.1760C>T	p.A587V	EX11	1.0%	NM_004260.3
NC-069	CDKN2A	c.143C>T	p.P48L	EX1	47.2%	NM_000077.4
NC-069	MLL2	c.415delC	p.H139Tfs*69	EX4	29.3%	NM_003482.3
NC-069	TMEM132D	c.730G>C	p.A244P	EX2	17.5%	NM_133448.2
NC-069	SLX4	c.2514C>A	p.D838E	EX12	28.0%	NM_032444.2
NC-069	TP53	c.542G>C	p.R181P	EX5	39.6%	NM_000546.5

NC-069	PIK3R2	c.1909_1911delAGTinsTGC	p.S637C	EX15	29.6%	NM_005027.2
NC-069	CCNE1	c.905C>T	p.S302L	EX10	2.9%	NM_001238.2
NC-070	ELF3	c.127A>G	p.T43A	EX2	1.2%	NM_004433.4
NC-070	CTNNB1	c.94G>T	p.D32Y	EX3	10.4%	NM_001904.3
NC-070	EPHA5	c.3028G>T	p.V1010L	EX18E	4.5%	NM_004439.5
NC-070	EPHA5	c.2755C>T	p.R919*	EX16	1.3%	NM_004439.5
NC-070	HCN1	c.2512C>A	p.R838S	EX8E	8.7%	NM_021072.3
NC-070	NSD1	c.3910C>T	p.Q1304*	EX6	1.3%	NM_022455.4
NC-070	PARK2	c.669_670delAGinsT	p.V224*fs*1	EX6	1.5%	NM_004562.2
NC-070	GUSB	c.274C>G	p.L92V	EX2	1.2%	NM_000181.3
NC-070	BRAF	c.1406G>C	p.G469A	EX11	13.6%	NM_004333.4
NC-070	TBX3	c.1714G[4>5]	p.A573Gfs*119	EX7	4.1%	NM_016569.3
NC-070	RB1	c.1270_1271dupTA	p.I425Tfs*33	EX13	9.2%	NM_000321.2
NC-070	TSHR	c.656A>G	p.D219G	EX8	5.8%	NM_000369.2
NC-070	TP53	c.832C>T	p.P278S	EX8	10.2%	NM_000546.5
NC-070	CRNKL1	c.331_333delCAAinsAAT	p.Q111N	EX2	7.6%	NM_016652.4
NC-070	EP300	c.6797A>T	p.Q2266L	EX31E	6.3%	NM_001429.3
NC-070	AR	c.130G>C	p.A44P	EX1	1.6%	NM_000044.3
NC-071	EGFR	c.2573T>G	p.L858R	EX21	10.3%	NM_005228.3
NC-072	MTOR	c.3509G>T	p.R1170L	EX23	3.8%	NM_004958.3
NC-072	ARID1A	c.5685G[4>3]	p.P1898Hfs*25	EX20E	3.7%	NM_006015.4
NC-072	ARID1A	c.5689C>T	p.P1897S	EX20E	3.8%	NM_006015.4
NC-072	CDH18	c.2069A>G	p.D690G	EX13E	4.3%	NM_004934.3
NC-072	CARD11	c.3389A>T	p.E1130V	EX25E	3.5%	NM_032415.4

NC-072	EGFR	c.2303_2305delGCGinsTCT	p.S768_V769delinsIL	EX20	8.8%	NM_005228.3
NC-072	PTPRD	c.2595G>T	p.M865I	EX28	3.7%	NM_002839.3
NC-072	RET	c.3235A>T	p.R1079*	EX20E	3.4%	NM_020975.4
NC-072	OR4C6	c.220G>C	p.V74L	EX1E	4.9%	NM_001004704.1
NC-072	TP53	c.473G>T	p.R158L	EX5	4.0%	NM_000546.5
NC-073	CTNNB1	c.110C>T	p.S37F	EX3	15.7%	NM_001904.3
NC-073	FAT1	c.4567G>C	p.E1523Q	EX8	22.6%	NM_005245.3
NC-073	ERBB2IP	c.2752C>G	p.L918V	EX21	2.1%	NM_001253699.1
NC-073	EGFR	c.2573T>G	p.L858R	EX21	21.8%	NM_005228.3
NC-073	HGF	c.742G>A	p.E248K	EX6	16.7%	NM_000601.4
NC-073	SUFU	c.360G>C	p.L120F	EX3	1.4%	NM_016169.3
NC-073	MAX	c.146C>G	p.S49*	EX3	3.0%	NM_002382.4
NC-073	NTRK3	c.2248G>C	p.E750Q	EX19	1.8%	NM_001012338.2
NC-073	SMAD4	c.725C>G	p.S242*	EX6	21.2%	NM_005359.5
NC-073	AKT2	c.377C>T	p.S126F	EX5	1.0%	NM_001626.4
NC-073	MED12	c.5023G>A	p.E1675K	EX36	17.4%	NM_005120.2
NC-074	LRP1B	c.3214C>G	p.R1072G	EX21	54.1%	NM_018557.2
NC-074	EPHA3	c.311G>C	p.R104P	EX3	35.6%	NM_005233.5
NC-074	POLQ	c.4164T>A	p.D1388E	EX16	20.9%	NM_199420.3
NC-074	NSD1	c.396dupT	p.N133*fs*1	EX2	3.4%	NM_022455.4
NC-074	SYNE1	c.7715G>T	p.G2572V	EX51	23.2%	NM_033071.3
NC-074	ARID1B	c.1010G>T	p.G337V	EX1	28.4%	NM_020732.3
NC-074	EGFR	c.3603_3606delGCCA	p.P1202Kfs*13	EX28E	2.5%	NM_005228.3
NC-074	HGF	c.2087G>A	p.G696E	EX18E	18.4%	NM_000601.4
NC-074	CDKN2A	c.159G>T	p.M53I	EX2	54.6%	NM_000077.4

NC-074	NOTCH1	c.6171G>T	p.Q2057H	EX33	24.0%	NM_017617.3
NC-074	NAV3	c.1234A>C	p.K412Q	EX8	27.4%	NM_014903.4
NC-074	PALB2	c.2617A>C	p.S873R	EX7	29.5%	NM_024675.3
NC-074	TP53	c.920-2A>T	.	IVS8	31.4%	NM_000546.5
NC-074	TP53	c.221C[4>3]	p.P75Lfs*48	EX4	32.1%	NM_000546.5
NC-074	CD33	c.1011G>C	p.E337D	EX7E	32.0%	NM_001772.3
NC-074	U2AF1	c.692C>T	p.S231L	EX8E	1.1%	NM_006758.2
NC-075	NOTCH2	c.7097C>G	p.A2366G	EX34E	18.7%	NM_024408.3
NC-075	NOTCH2	c.6599C>G	p.S2200C	EX34E	17.2%	NM_024408.3
NC-075	NOTCH2	c.6236C>G	p.A2079G	EX34E	18.2%	NM_024408.3
NC-075	KRAS	c.35G>T	p.G12V	EX2	33.0%	NM_033360.2
NC-075	STK11	c.502C>T	p.H168Y	EX4	23.8%	NM_000455.4
NC-075	KEAP1	c.1075C>T	p.Q359*	EX3	23.2%	NM_203500.1
NC-076	SPTA1	c.2671C>T	p.R891*	EX19	22.2%	NM_003126.2
NC-076	EGFR	c.2156G>C	p.G719A	EX18	24.2%	NM_005228.3
NC-076	EGFR	c.2582T>G	p.L861R	EX21	27.1%	NM_005228.3
NC-076	CBL	c.2036+1G>A	.	IVS12	11.2%	NM_005188.3
NC-076	TP53	c.637C>T	p.R213*	EX6	15.4%	NM_000546.5
NC-077	TP53	c.475G>C	p.A159P	EX5	31.3%	NM_000546.5
NC-077	CREBBP	c.659G>A	p.R220K	EX2	13.7%	NM_004380.2
NC-077	KDM2B	c.31G>A	p.E11K	EX1	13.2%	NM_032590.4
NC-077	TRRAP	c.2035C>T	p.P679S	EX18	13.1%	NM_001244580.1
NC-077	FBXW7	c.1447C>T	p.L483F	EX10	12.3%	NM_033632.3
NC-077	CDH23	c.3868C>A	p.P1290T	EX32	11.9%	NM_022124.5
NC-077	GRIN2A	c.4329G>T	p.R1443S	EX13	11.1%	NM_001134407.1
NC-077	EPHB6	c.858C>A	p.C286*	EX7	10.9%	NM_004445.3

NC-077	MLL2	c.6110-1G>A	.	IVS28	10.9%	NM_003482.3
NC-077	ESR1	c.172G>A	p.A58T	EX2	10.8%	NM_001122740.1
NC-077	EPAS1	c.1348G>A	p.E450K	EX10	10.6%	NM_001430.4
NC-077	ATP12A	c.1789A>G	p.M597V	EX13	10.3%	NM_001185085.1
NC-077	NTRK3	c.549C>A	p.N183K	EX7	10.2%	NM_001012338.2
NC-077	RB1	c.1416T[4>3]	p.F473Lfs*5	EX15	9.4%	NM_000321.2
NC-077	POT1	c.753G>T	p.M251I	EX10	9.3%	NM_015450.2
NC-077	PDGFRA	c.1321C>T	p.P441S	EX9	9.0%	NM_006206.4
NC-078	EGFR	c.2156G>C	p.G719A	EX18	8.9%	NM_005228.3
NC-078	EGFR	c.2240T>C	p.L747S	EX19	8.7%	NM_005228.3
NC-078	TP53	c.488A>G	p.Y163C	EX5	5.5%	NM_000546.5
NC-078	FOXL2	c.647C>T	p.A216V	EX1	4.0%	NM_023067.3
NC-078	ARID2	c.3820G>T	p.G1274*	EX15	2.7%	NM_152641.2
NC-078	RAD51C	c.640C>G	p.R214G	EX4	2.6%	NM_058216.1
NC-078	FAT1	c.5619T>A	p.N1873K	EX10	2.4%	NM_005245.3
NC-079	SPTA1	c.6627G>A	p.M2209I	EX48	2.0%	NM_003126.2
NC-079	HIST1H1C	c.516G>C	p.K172N	EX1E	1.1%	NM_005319.3
NC-079	TP53	c.518T>C	p.V173A	EX5	41.1%	NM_000546.5
NC-079	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	18.0%	NM_004448.2
NC-079	RUNX1	c.968-2A>T	.	IVS8	1.4%	NM_001754.4
NC-080	MUTYH	c.1606C>G	p.H536D	EX16E	6.3%	NM_001128425.1
NC-080	LRP1B	c.13024A>T	p.S4342C	EX85	14.9%	NM_018557.2
NC-080	LRP1B	c.2230_2231delCTinsAA	p.L744K	EX14	20.5%	NM_018557.2
NC-080	TGFBR2	c.326G>T	p.C109F	EX3	15.3%	NM_001024847.2
NC-080	FGFR3	c.1196G>A	p.R399H	EX9	1.9%	NM_000142.4

NC-080	INPP4B	c.826G>T	p.D276Y	EX12	14.0%	NM_001101669.1
NC-080	DICER1	c.1673C>T	p.S558F	EX11	8.0%	NM_030621.3
NC-080	CTCF	c.1016G>T	p.R339L	EX5	13.6%	NM_006565.3
NC-080	PLCG2	c.1861C>G	p.H621D	EX18	12.1%	NM_002661.3
NC-080	TP53	c.733G>T	p.G245C	EX7	44.5%	NM_000546.5
NC-080	NF1	c.6756G>C	p.K2252N	EX44	52.8%	NM_000267.3
NC-080	ASXL1	c.2374G>T	p.G792C	EX13E	13.2%	NM_015338.5
NC-080	EP300	c.5570C>T	p.T1857I	EX31E	31.1%	NM_001429.3
NC-081	TTL	c.601_603delATCinsGTT	p.I201V	EX4	17.2%	NM_153712.4
NC-081	INPP4B	c.890G>T	p.R297L	EX13	29.3%	NM_001101669.1
NC-081	MLL2	c.10074delT	p.S3358Rfs*34	EX34	28.9%	NM_003482.3
NC-081	ZFHX3	c.247G>T	p.E83*	EX2	21.3%	NM_006885.3
NC-081	TP53	c.646G>A	p.V216M	EX6	40.1%	NM_000546.5
NC-083	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	13.9%	NM_005228.3
NC-083	TP53	c.742C>T	p.R248W	EX7	32.6%	NM_000546.5
NC-084	ZFP36L2	c.428G>T	p.G143V	EX2E	22.0%	NM_006887.4
NC-084	PDK1	c.121G>T	p.G41C	EX1	21.6%	NM_002610.3
NC-084	FAT1	c.12466G>T	p.E4156*	EX25	27.8%	NM_005245.3
NC-084	PIK3CG	c.2483T>C	p.I828T	EX6	21.3%	NM_002649.2
NC-084	XRCC2	c.215G>T	p.G72V	EX3E	19.9%	NM_005431.1
NC-084	GAB2	c.130G>C	p.D44H	EX2	17.9%	NM_080491.2
NC-084	ERBB3	c.2636C>T	p.A879V	EX22	11.9%	NM_001982.3
NC-084	TP53	c.376-1G>T	.	IVS4	38.2%	NM_000546.5
NC-084	KEAP1	c.880G>T	p.D294Y	EX3	27.5%	NM_203500.1

NC-084	PCK1	c.1291A>T	p.I431F	EX8	20.6%	NM_002591.3
NC-085	MLL3	c.2516G>T	p.R839I	EX14	1.3%	NM_170606.2
NC-085	GRIN2A	c.626C>T	p.S209F	EX3	1.3%	NM_001134407.1
NC-085	TP53	c.783-1_792delGTGGTAATCTA	.	IVS7-EX8	9.5%	NM_000546.5
NC-085	EPHA5	c.2532G>T	p.W844C	EX15	4.8%	NM_004439.5
NC-085	PIK3R1	c.246C>G	p.I82M	EX2	1.4%	NM_181523.2
NC-085	FLT4	c.1798G>A	p.D600N	EX13	1.4%	NM_182925.4
NC-085	NOTCH4	c.5654A>G	p.D1885G	EX30E	1.3%	NM_004557.3
NC-085	EGFR	c.2573T>G	p.L858R	EX21	78.0%	NM_005228.3
NC-086	MLL	c.4704C>G	p.F1568L	EX14	5.3%	NM_001197104.1
NC-086	KRAS	c.35G>T	p.G12V	EX2	12.9%	NM_033360.2
NC-086	AXIN1	c.2061C>A	p.H687Q	EX8	1.1%	NM_003502.3
NC-087	DDR1	c.1489G>T	p.A497S	EX13	29.0%	NM_001954.4
NC-087	PIK3CG	c.1957G>T	p.D653Y	EX2	1.8%	NM_002649.2
NC-087	CDKN2A	c.83_100delTGCGGGCGCTGCTGGAGG	p.V28_E33del	EX1	28.7%	NM_000077.4
NC-087	ATM	c.154G>C	p.G52R	EX3	11.9%	NM_000051.3
NC-087	C1S	c.728G>T	p.G243V	EX7	4.3%	NM_001734.3
NC-087	TP53	c.1009C>T	p.R337C	EX10	71.5%	NM_000546.5
NC-088	INHBA	c.482T>A	p.V161D	EX3E	10.5%	NM_002192.2
NC-088	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	68.0%	NM_005228.3
NC-088	ACVR1B	c.1567G>A	p.A523T	EX10E	12.0%	NM_020328.3
NC-088	BRCA2	c.6884G>A	p.R2295K	EX12	3.9%	NM_000059.3

NC-088	TP53	c.526T>C	p.C176R	EX5	41.8%	NM_000546.5
NC-089	ARID1A	c.2499C[4>3]	p.M835Wfs*24	EX8	40.4%	NM_006015.4
NC-089	ERBB4	c.308G>T	p.R103L	EX3	28.9%	NM_005235.2
NC-089	CUL3	c.730G>T	p.E244*	EX6	12.4%	NM_003590.4
NC-089	MSH3	c.914G>T	p.G305V	EX6	27.0%	NM_002439.4
NC-089	FAT2	c.6434C>A	p.A2145D	EX9	33.4%	NM_001447.2
NC-089	HOXA9	c.719C>T	p.A240V	EX2E	25.1%	NM_152739.3
NC-089	ELMO1	c.1462G>A	p.V488I	EX17	29.8%	NM_001206482.1
NC-089	CDK13	c.989G>T	p.R330M	EX1	27.7%	NM_003718.4
NC-089	JAK2	c.2020G>T	p.V674L	EX16	39.7%	NM_004972.3
NC-089	PTEN	c.165-2A>G	.	IVS2	37.5%	NM_000314.4
NC-089	MLL2	c.13637G[3>4]	p.A4547Gfs*28	EX40	26.4%	NM_003482.3
NC-089	DICER1	c.5425G>C	p.G1809R	EX26	4.4%	NM_030621.3
NC-089	BCL2A1	c.307C>G	p.L103V	EX1	16.0%	NM_001114735.1
NC-089	TP53	c.469G>T	p.V157F	EX5	60.0%	NM_000546.5
NC-089	KEAP1	c.134C>T	p.S45F	EX2	29.2%	NM_203500.1
NC-090	NOTCH2	c.1373A>G	p.N458S	EX8	14.2%	NM_024408.3
NC-090	PIK3CA	c.1636C>A	p.Q546K	EX10	1.7%	NM_006218.2
NC-090	TET2	c.1381C>T	p.Q461*	EX3	3.8%	NM_001127208.2
NC-090	FAT1	c.4820G>A	p.G1607E	EX10	9.0%	NM_005245.3
NC-090	EGFR	c.2573T>G	p.L858R	EX21	32.5%	NM_005228.3
NC-090	TSHR	c.1523C>T	p.S508L	EX10E	6.7%	NM_000369.2
NC-090	PLCG1	c.1778G>T	p.G593V	EX16	3.0%	NM_002660.2
NC-091	FAT2	c.309C>A	p.N103K	EX1	10.8%	NM_001447.2
NC-091	EGFR	c.2573T>G	p.L858R	EX21	61.2%	NM_005228.3
NC-091	TP53	c.426TG[2>3]	p.Q144Cfs*27	EX5	10.1%	NM_000546.5

NC-092	MTOR	c.3843_3844delGGinsTT	p.E1282*	EX26	15.9%	NM_004958.3
NC-092	DDR2	c.903_904delGGinsCT	p.E301_V302delinsDL	EX9	17.3%	NM_006182.2
NC-092	LRP1B	c.7688G>T	p.R2563L	EX47	8.7%	NM_018557.2
NC-092	LRP1B	c.1522A>T	p.N508Y	EX10	11.6%	NM_018557.2
NC-092	RAF1	c.779C>A	p.T260K	EX7	51.4%	NM_002880.3
NC-092	ROS1	c.4355T>C	p.V1452A	EX27	2.2%	NM_002944.2
NC-092	HNF1A	c.1827C>A	p.H609Q	EX10E	1.4%	NM_000545.5
NC-092	IRS2	c.197C>T	p.S66L	EX1	1.4%	NM_003749.2
NC-092	DICER1	c.5701A[3>4]	p.S1902Ifs*14	EX28E	12.4%	NM_030621.3
NC-092	CREBBP	c.6334C>T	p.Q2112*	EX31E	23.1%	NM_004380.2
NC-092	CREBBP	c.1723A>G	p.S575G	EX8	1.6%	NM_004380.2
NC-092	ZFHX3	c.223G>T	p.A75S	EX2	36.6%	NM_006885.3
NC-092	TP53	c.796G>A	p.G266R	EX8	31.8%	NM_000546.5
NC-092	TP53	c.263C[5>4]	p.S90Pfs*33	EX4	9.9%	NM_000546.5
NC-092	SMARCA4	c.935C[5>6]	p.A314Rfs*73	EX6	32.4%	NM_003072.3
NC-092	ERG	c.293A>G	p.D98G	EX3	1.3%	NM_182918.3
NC-092	CRLF2	c.382T>C	p.S128P	EX4	1.7%	NM_022148.2
NC-092	AR	c.2265C>A	p.F755L	EX5	17.8%	NM_000044.3
NC-093	EGFR	c.2573T>G	p.L858R	EX21	12.3%	NM_005228.3
NC-093	RBM10	c.2308G>T	p.E770*	EX19	14.4%	NM_001204468.1
NC-094	EPHA2	c.445G>T	p.E149*	EX3	9.4%	NM_004431.3
NC-094	ARID1A	c.3635_3638delAGCC	p.Q1212Pfs*3	EX14	8.2%	NM_006015.4
NC-094	EPHB4	c.2492A>G	p.N831S	EX15	9.0%	NM_004444.4
NC-094	MLL3	c.9203dupA	p.Q3069Afs*18	EX38	8.7%	NM_170606.2
NC-094	OR5L2	c.127C>A	p.L43M	EX1E	4.1%	NM_001004739.1
NC-094	RBM10	c.2863-2A>G	.	IVS23	11.0%	NM_001204468.1

NC-095	NFE2L2	c.239C>A	p.T80K	EX2	59.3%	NM_006164.4
NC-095	BRD2	c.911G>A	p.G304E	EX6	1.4%	NM_001199455.1
NC-095	ARID2	c.4984G>C	p.V1662L	EX17	1.4%	NM_152641.2
NC-095	FLT3	c.2565G>T	p.M855I	EX21	45.9%	NM_004119.2
NC-095	RB1	c.152A[3>2]	p.T52Qfs*13	EX2	48.6%	NM_000321.2
NC-095	TP53	c.898C[5>4]	p.P301Qfs*44	EX8	57.3%	NM_000546.5
NC-095	RBM10	c.1213C>G	p.Q405E	EX10	33.2%	NM_001204468.1
NC-095	RBM10	c.1221C>G	p.N407K	EX10	33.7%	NM_001204468.1
NC-096	MDM4	c.861dupT	p.K288*fs*1	EX10	11.7%	NM_002393.4
NC-096	LRP1B	c.10203C>G	p.F3401L	EX65	24.5%	NM_018557.2
NC-096	RAD50	c.2745G[2>1]	p.E916Kfs*14	EX17	32.0%	NM_005732.3
NC-096	ABL1	c.118C>G	p.Q40E	EX2	18.2%	NM_005157.4
NC-096	RET	c.3148C>T	p.R1050*	EX19	14.7%	NM_020975.4
NC-096	GAB2	c.647G>C	p.R216T	EX4	14.5%	NM_080491.2
NC-096	ARID2	c.430C>T	p.Q144*	EX5	38.9%	NM_152641.2
NC-096	TP53	c.301A[4>3]	p.T102Pfs*21	EX4	43.4%	NM_000546.5
NC-096	KEAP1	c.884C[3>2]	p.R296Afs*21	EX3	37.5%	NM_203500.1
NC-096	JAK3	c.629G>A	p.R210Q	EX6	13.7%	NM_000215.3
NC-097	LRP1B	c.1786G>T	p.D596Y	EX11	18.6%	NM_018557.2
NC-097	HOXD13	c.544G>A	p.E182K	EX1	10.2%	NM_000523.3
NC-097	HCLS1	c.1015G>A	p.E339K	EX12	16.5%	NM_005335.4
NC-097	KALRN	c.2438G>A	p.R813H	EX14	15.2%	NM_001024660.3
NC-097	PIK3CA	c.1624G>A	p.E542K	EX10	13.5%	NM_006218.2
NC-097	PDGFRA	c.2907C>A	p.F969L	EX22	20.4%	NM_006206.4
NC-097	TNFAIP3	c.793G>A	p.D265N	EX5	2.3%	NM_006290.3
NC-097	ABCC2	c.1032-1G>A	.	IVS8	19.9%	NM_000392.3

NC-097	CCND1	c.475G>A	p.D159N	EX3	3.4%	NM_053056.2
NC-097	FGF3	c.450G>T	p.E150D	EX3E	20.5%	NM_005247.2
NC-097	ARID2	c.5237G>A	p.R1746K	EX19	5.1%	NM_152641.2
NC-097	TBX3	c.254C>A	p.A85E	EX1	40.3%	NM_016569.3
NC-097	FOXA1	c.1415C>A	p.S472Y	EX2E	19.6%	NM_004496.3
NC-097	TP53	c.673-2A>G	.	IVS6	23.9%	NM_000546.5
NC-097	SRC	c.712G>A	p.D238N	EX9	19.8%	NM_198291.1
NC-098	CTNNB1	c.110_139delCTGGTGCCACTACCACAGCTCCTTCTCTGA	p.S37_S47delinsC	EX3	1.3%	NM_001904.3
NC-098	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	15.9%	NM_005228.3
NC-098	TGFBR1	c.190A[3>2]	p.V65Lfs*8	EX2	1.6%	NM_004612.2
NC-099	MLL3	c.11770G>A	p.E3924K	EX45	17.5%	NM_170606.2
NC-099	MLL	c.8078C>T	p.S2693F	EX27	11.0%	NM_001197104.1
NC-100	ACVR1B	c.1126G>A	p.D376N	EX7	26.3%	NM_020328.3
NC-100	TP53	c.586C>T	p.R196*	EX6	19.8%	NM_000546.5
NC-100	MAP2K4	c.782C>A	p.T261K	EX7	16.4%	NM_003010.2
NC-100	TGFBR2	c.1629_1630insC	p.E544Rfs*22	EX8E	17.8%	NM_001024847.2
NC-100	SETD2	c.3647_3669delCTTGGCAACAGACCACTTTCCAAinsT	p.S1216Lfs*13	EX3	6.8%	NM_014159.6
NC-100	RICTOR	c.3305T>A	p.L1102H	EX31	15.5%	NM_152756.3
NC-100	CSF1R	c.2466G>A	p.M822I	EX19	7.6%	NM_005211.3
NC-101	TNFRSF14	c.124T>A	p.C42S	EX2	1.2%	NM_003820.2
NC-101	MUTYH	c.674C>G	p.S225C	EX8	8.9%	NM_001128425.1

NC-101	DDR2	c.1715G>T	p.G572V	EX13	8.4%	NM_006182.2
NC-101	AKT3	c.172A>C	p.K58Q	EX2	11.4%	NM_005465.4
NC-101	FANCL	c.425A>T	p.D142V	EX6	19.5%	NM_001114636.1
NC-101	AFF3	c.1912G>A	p.A638T	EX14	18.5%	NM_001025108.1
NC-101	NCK1	c.904G>A	p.E302K	EX3	29.1%	NM_006153.4
NC-101	ATR	c.6058G>A	p.A2020T	EX35	20.2%	NM_001184.3
NC-101	FBXW7	c.2033C>G	p.S678*	EX12E	32.5%	NM_033632.3
NC-101	ABCB1	c.1889C>A	p.T630K	EX17	26.9%	NM_000927.4
NC-101	FAM131B	c.867G[5>4]	p.V291*fs*1	EX7E	17.7%	NM_001031690.2
NC-101	CDKN2A	c.47dupT	p.A17Gfs*27	EX1	29.0%	NM_000077.4
NC-101	TUBB3	c.829G>T	p.V277L	EX4E	20.7%	NM_001197181.1
NC-101	TP53	c.581T>G	p.L194R	EX6	37.9%	NM_000546.5
NC-102	ARHGAP29	c.2456A>G	p.H819R	EX20	7.6%	NM_004815.3
NC-102	PIK3CA	c.3073A>G	p.T1025A	EX21E	1.8%	NM_006218.2
NC-102	CDK13	c.1436C>T	p.A479V	EX2	12.7%	NM_003718.4
NC-102	EGFR	c.2572C>A	p.L858M	EX21	22.1%	NM_005228.3
NC-102	EGFR	c.2582T>A	p.L861Q	EX21	21.6%	NM_005228.3
NC-102	RBM10	c.1030C>T	p.Q344*	EX9	7.3%	NM_001204468.1
NC-102	KDM5C	c.2277G>A	p.M759I	EX16	1.0%	NM_004187.3
NC-102	BTK	c.1472A>T	p.H491L	EX15	10.8%	NM_000061.2
NC-103	NTRK1	c.2326G>T	p.D776Y	EX17E	9.8%	NM_002529.3
NC-103	LRP1B	c.9185C>G	p.S3062C	EX58	1.9%	NM_018557.2
NC-103	LRP1B	c.7269G>T	p.W2423C	EX44	1.7%	NM_018557.2
NC-103	SETD2	c.2893G>A	p.E965K	EX3	10.8%	NM_014159.6
NC-103	KIT	c.1901G>A	p.R634Q	EX13	12.0%	NM_000222.2
NC-103	HIST1H1C	c.549G>T	p.K183N	EX1E	7.1%	NM_005319.3

NC-103	HIST1H3F	c.292G>C	p.E98Q	EX1E	7.9%	NM_021018.2
NC-103	WNK1	c.1243_1245delATG	p.M415del	EX4	8.2%	NM_213655.4
NC-103	BRCA2	c.2476G>C	p.E826Q	EX11	10.6%	NM_000059.3
NC-103	TP53	c.730G>A	p.G244S	EX7	33.7%	NM_000546.5
NC-103	EP300	c.5356A>G	p.I1786V	EX31E	1.0%	NM_001429.3
NC-104	FAM5C	c.1329G[3>2]	p.G444Efs*7	EX8E	41.8%	NM_199051.1
NC-104	LRP1B	c.5915A>T	p.H1972L	EX37	15.4%	NM_018557.2
NC-104	PIK3CA	c.1633G>A	p.E545K	EX10	9.7%	NM_006218.2
NC-104	MLL3	c.13903G>C	p.D4635H	EX53	35.5%	NM_170606.2
NC-104	PDCD1LG2	c.208C>A	p.R70S	EX3	40.1%	NM_025239.3
NC-104	MS4A1	c.573+2T>G	.	IVS6	26.5%	NM_152866.2
NC-104	PALB2	c.1660G>A	p.E554K	EX4	19.9%	NM_024675.3
NC-104	TP53	c.848G>C	p.R283P	EX8	28.3%	NM_000546.5
NC-104	AR	c.1759G>T	p.A587S	EX2	37.1%	NM_000044.3
NC-105	ATRX	c.4136C>G	p.S1379*	EX13	5.5%	NM_000489.3
NC-105	EGFR	c.2239_2248delinsC	p.L747_A750delinsP	EX19	13.9%	NM_005228.3
NC-105	APC	c.949T>G	p.S317A	EX10	17.5%	NM_000038.5
NC-105	TP53	c.743G>A	p.R248Q	EX7	22.2%	NM_000546.5
NC-106	CTNNB1	c.98C>G	p.S33C	EX3	45.5%	NM_001904.3
NC-106	FAT1	c.127G>T	p.V43L	EX2	28.5%	NM_005245.3
NC-106	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	36.8%	NM_005228.3
NC-106	EGFR	c.2369C>T	p.T790M	EX20	20.2%	NM_005228.3
NC-106	BRAF	c.122C>T	p.P41L	EX1	2.0%	NM_004333.4
NC-106	CDKN2A	c.238C>T	p.R80*	EX2	49.3%	NM_000077.4
NC-106	PABPC3	c.127T>C	p.C43R	EX1E	13.4%	NM_030979.2

NC-106	GRIN2A	c.1723G>C	p.V575L	EX8	17.4%	NM_001134407.1
NC-106	TP53	c.718A>T	p.S240C	EX7	46.6%	NM_000546.5
NC-107	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.8%	NM_003921.4
NC-107	VHL	c.556G>A	p.E186K	EX3E	19.8%	NM_000551.3
NC-107	EGFR	c.2369C>T	p.T790M	EX20	11.0%	NM_005228.3
NC-107	EGFR	c.2573T>G	p.L858R	EX21	24.4%	NM_005228.3
NC-108	PIK3CA	c.3140A>G	p.H1047R	EX21E	6.6%	NM_006218.2
NC-108	PIK3CA	c.3143A>G	p.H1048R	EX21E	2.9%	NM_006218.2
NC-108	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	22.0%	NM_005228.3
NC-108	SMAD4	c.1145A>G	p.H382R	EX10	13.4%	NM_005359.5
NC-109	ERBB4	c.265G>A	p.V89M	EX3	54.7%	NM_005235.2
NC-109	IKZF1	c.1318G>A	p.A440T	EX8E	2.3%	NM_006060.4
NC-109	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	49.6%	NM_005228.3
NC-109	GRM3	c.1054C>T	p.R352W	EX3	9.2%	NM_000840.2
NC-109	CDH23	c.5806C>T	p.R1936C	EX44	27.0%	NM_022124.5
NC-109	TP53	c.319T>G	p.Y107D	EX4	55.1%	NM_000546.5
NC-109	RNF43	c.656G>T	p.R219L	EX6	54.5%	NM_017763.4
NC-109	SERPINB3	c.874A>G	p.S292G	EX8E	3.0%	NM_006919.2
NC-109	CYP2D6	c.961A>G	p.M321V	EX6	2.3%	NM_000106.5
NC-110	MSH2	c.507A>G	p.I169M	EX3	27.6%	NM_000251.2
NC-110	EGFR	c.2369C>T	p.T790M	EX20	34.7%	NM_005228.3
NC-110	EGFR	c.2573T>G	p.L858R	EX21	32.2%	NM_005228.3
NC-110	MDM2	c.451G>C	p.E151Q	EX7	7.6%	NM_002392.4
NC-110	GRIN2A	c.3499A>G	p.M1167V	EX13E	4.0%	NM_001134407.1

NC-110	TP53	c.715A>G	p.N239D	EX7	41.4%	NM_000546.5
NC-111	ARID1A	c.3743C>G	p.S1248*	EX15	1.4%	NM_006015.4
NC-111	SF3B1	c.2203A>G	p.I735V	EX15	8.8%	NM_012433.2
NC-111	EPHA3	c.1521C>A	p.F507L	EX7	8.0%	NM_005233.5
NC-111	KALRN	c.2422G>A	p.E808K	EX14	7.1%	NM_001024660.3
NC-111	DICER1	c.172C>T	p.H58Y	EX4	8.5%	NM_030621.3
NC-111	RPS6KB1	c.1478C>T	p.S493L	EX15E	3.6%	NM_003161.2
NC-111	ANKRD30B	c.3384G>T	p.M1128I	EX36E	17.5%	NM_001145029.1
NC-111	RBM10	c.2668dupT	p.Y890Lfs*35	EX22	23.1%	NM_001204468.1
NC-112	RICTOR	c.1483_1499delGACCACATTATTCAGAA	p.D495Sfs*22	EX17	3.9%	NM_152756.3
NC-112	EGFR	c.2573T>G	p.L858R	EX21	22.9%	NM_005228.3
NC-112	TSC1	c.1952G>T	p.R651I	EX15	15.0%	NM_000368.4
NC-112	ERCC5	c.2743A[9>10]	p.L918Ifs*12	EX13	3.1%	NM_000123.3
NC-112	RBM10	c.2698_2711delAGGAGGAAGTACGG	p.R901Hfs*19	EX22	11.7%	NM_001204468.1
NC-113	CDA	c.208G>A	p.A70T	EX2	12.2%	NM_001785.2
NC-113	MNDA	c.613A>T	p.N205Y	EX5	26.3%	NM_002432.1
NC-113	LRP1B	c.12571G>A	p.G4191R	EX82	8.8%	NM_018557.2
NC-113	IDH1	c.850G>T	p.G284W	EX7	8.7%	NM_005896.2
NC-113	FAT1	c.12415G>T	p.G4139W	EX25	10.5%	NM_005245.3
NC-113	RAD50	c.2230G>A	p.E744K	EX14	2.6%	NM_005732.3
NC-113	EGFR	c.2573T>G	p.L858R	EX21	18.2%	NM_005228.3
NC-113	PTEN	c.828T>A	p.N276K	EX8	14.2%	NM_000314.4
NC-113	CCND2	c.112C>A	p.L38I	EX1	14.4%	NM_001759.3
NC-113	MLL2	c.14446G>A	p.E4816K	EX46	1.5%	NM_003482.3

NC-113	IRS2	c.1748G>T	p.R583L	EX1	13.1%	NM_003749.2
NC-113	TP53	c.743G>T	p.R248L	EX7	26.7%	NM_000546.5
NC-113	RARA	c.110C>A	p.P37Q	EX2	30.8%	NM_000964.3
NC-113	BRD4	c.2315_2316delAGinsTT	p.Q772L	EX13	8.9%	NM_058243.2
NC-113	ASXL1	c.2277C>G	p.C759W	EX13E	9.9%	NM_015338.5
NC-114	KRAS	c.34G>T	p.G12C	EX2	29.7%	NM_033360.2
NC-114	SMAD2	c.1261G>A	p.G421R	EX10	1.2%	NM_001003652.3
NC-115	PTEN	c.457_464delGATTTCTA	p.D153Wfs*24	EX5	9.5%	NM_000314.4
NC-115	KRAS	c.35G>C	p.G12A	EX2	23.7%	NM_033360.2
NC-115	TP53	c.527G>T	p.C176F	EX5	13.9%	NM_000546.5
NC-115	RNF43	c.1285G>C	p.A429P	EX9	2.2%	NM_017763.4
NC-115	FGFR3	c.1951A>G	p.T651A	EX14	3.7%	NM_000142.4
NC-116	DDR2	c.2002C>T	p.R668C	EX15	5.2%	NM_006182.2
NC-116	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	27.7%	NM_005228.3
NC-116	GRIN2A	c.3065G>A	p.R1022H	EX13E	14.9%	NM_001134407.1
NC-116	TP53	c.370T>C	p.C124R	EX4	47.8%	NM_000546.5
NC-117	LRP1B	c.4258G>T	p.D1420Y	EX26	4.2%	NM_018557.2
NC-117	PBRM1	c.2941G>T	p.E981*	EX19	29.5%	NM_018313.4
NC-117	INPP4B	c.2052_2053insC	p.G685Rfs*11	EX21	8.0%	NM_001101669.1
NC-117	EXT2	c.149T>C	p.I50T	EX2	4.2%	NM_207122.1
NC-117	MLL2	c.13039C>T	p.Q4347*	EX39	38.7%	NM_003482.3
NC-117	CDH11	c.1141C>T	p.P381S	EX8	16.2%	NM_001797.2
NC-117	USP6	c.2158G>T	p.E720*	EX19	8.6%	NM_004505.2
NC-117	TP53	c.476C>T	p.A159V	EX5	28.0%	NM_000546.5

NC-117	ATRX	c.825C>A	p.D275E	EX9	4.7%	NM_000489.3
NC-118	MTOR	c.6644C>A	p.S2215Y	EX47	8.1%	NM_004958.3
NC-118	CCDC168	c.17744A>G	p.E5915G	EX4E	6.1%	NM_001146197.1
NC-118	FANCA	c.67G>A	p.A23T	EX1	8.4%	NM_000135.2
NC-119	AKT3	c.1048G>C	p.D350H	EX10	4.6%	NM_005465.4
NC-119	EPHA3	c.999C>G	p.I333M	EX5	1.3%	NM_005233.5
NC-119	PDGFRA	c.394G>A	p.G132R	EX4	1.8%	NM_006206.4
NC-119	EGFR	c.2573T>G	p.L858R	EX21	19.8%	NM_005228.3
NC-119	MRE11A	c.574A>T	p.M192L	EX7	1.4%	NM_005591.3
NC-119	TP53	c.548C>G	p.S183*	EX5	11.2%	NM_000546.5
NC-119	BCL2L1	c.499G>A	p.A167T	EX2	1.7%	NM_138578.1
NC-120	LRP1B	c.12200A>G	p.Q4067R	EX79	16.0%	NM_018557.2
NC-120	LRP1B	c.10878G>T	p.M3626I	EX71	30.9%	NM_018557.2
NC-120	LRP1B	c.1032C>A	p.D344E	EX8	3.3%	NM_018557.2
NC-120	NCOA2	c.4268G>T	p.G1423V	EX21	10.1%	NM_006540.2
NC-120	NBN	c.2160A>C	p.E720D	EX14	11.0%	NM_002485.4
NC-120	TP53	c.833C>T	p.P278L	EX8	60.4%	NM_000546.5
NC-120	BRCA1	c.3343G>C	p.E1115Q	EX10	15.9%	NM_007294.3
NC-121	KRAS	c.35G>A	p.G12D	EX2	4.1%	NM_033360.2
NC-121	STK11	c.465-1G>T	.	IVS3	8.4%	NM_000455.4
NC-121	NF2	c.847T>C	p.F283L	EX9	2.6%	NM_000268.3
NC-121	NF2	c.863C>G	p.S288*	EX9	2.8%	NM_000268.3
NC-122	OR6F1	c.790A>T	p.I264F	EX1E	7.8%	NM_001005286.1
NC-122	XPO1	c.1798G>T	p.V600F	EX16	1.0%	NM_003400.3
NC-122	ROBO1	c.4678G[3>2]	p.G1562Dfs*61	EX29	10.8%	NM_002941.3
NC-122	PDGFRA	c.1942_1943dupAT	p.M648Ifs*2	EX14	9.3%	NM_006206.4

NC-122	FAT2	c.8053A>C	p.K2685Q	EX9	7.9%	NM_001447.2
NC-122	EGFR	c.2573T>G	p.L858R	EX21	80.9%	NM_005228.3
NC-122	KRTAP5-5	c.158_159delCGinsGA	p.A53G	EX1E	15.3%	NM_001001480.2
NC-122	CDK8	c.1163C>A	p.P388Q	EX12	1.1%	NM_001260.1
NC-122	BRCA1	c.3535A>C	p.K1179Q	EX10	8.4%	NM_007294.3
NC-122	TOP1	c.1868A>G	p.N623S	EX18	9.9%	NM_003286.2
NC-122	EP300	c.3950A>G	p.E1317G	EX24	17.3%	NM_001429.3
NC-122	STAG2	c.265A[4>3]	p.M90Wfs*10	EX5	7.1%	NM_001042749.1
NC-123	LRP1B	c.5326G>T	p.E1776*	EX32	3.4%	NM_018557.2
NC-123	TP53	c.855G[2>1]	p.E286Kfs*59	EX8	10.5%	NM_000546.5
NC-123	NF1	c.3712G>T	p.E1238*	EX28	26.2%	NM_000267.3
NC-123	KDM6A	c.655-1G>C	.	IVS8	29.1%	NM_021140.2
NC-124	BARD1	c.1930_1931delGT	p.V644Mfs*2	EX10	13.4%	NM_000465.2
NC-124	EGFR	c.2573T>G	p.L858R	EX21	15.3%	NM_005228.3
NC-124	TP53	c.524G>A	p.R175H	EX5	15.7%	NM_000546.5
NC-125	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	15.3%	NM_005228.3
NC-125	TP53	c.797G>A	p.G266E	EX8	6.5%	NM_000546.5
NC-126	VHL	c.273C>A	p.F91L	EX1	28.0%	NM_000551.3
NC-126	FAT2	c.12809A>T	p.E4270V	EX23E	1.1%	NM_001447.2
NC-126	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	43.2%	NM_005228.3
NC-126	EGFR	c.2996G>A	p.R999H	EX25	2.2%	NM_005228.3
NC-126	TP53	c.989T>G	p.L330R	EX9	38.3%	NM_000546.5
NC-127	SETD2	c.826G>A	p.D276N	EX3	9.1%	NM_014159.6

NC-127	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	18.3%	NM_005228.3
NC-128	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	7.4%	NM_005228.3
NC-128	TP53	c.742C>T	p.R248W	EX7	34.3%	NM_000546.5
NC-128	IGLL5	c.535T>C	p.Y179H	EX3E	26.7%	NM_001178126.1
NC-129	FMN2	c.2935C>A	p.P979T	EX5	9.7%	NM_020066.4
NC-129	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	26.5%	NM_005228.3
NC-129	CDKN2B	c.118C>T	p.P40S	EX1	13.7%	NM_004936.3
NC-129	ARID2	c.3329G>A	p.G1110E	EX15	12.6%	NM_152641.2
NC-129	TP53	c.711G>C	p.M237I	EX7	44.1%	NM_000546.5
NC-130	CDKN2C	c.44G[6>7]	p.D17Gfs*7	EX1	5.4%	NM_078626.2
NC-130	CTNNB1	c.134C>T	p.S45F	EX3	22.2%	NM_001904.3
NC-130	PBRM1	c.2882G>C	p.G961A	EX19	15.6%	NM_018313.4
NC-130	PBRM1	c.1169_1175delATGACACinsGT	p.Y390Cfs*3	EX12	9.8%	NM_018313.4
NC-130	PBRM1	c.790G>T	p.E264*	EX8	7.0%	NM_018313.4
NC-130	FGFR4	c.636G>C	p.E212D	EX6	6.0%	NM_213647.1
NC-130	HECW1	c.778G>A	p.V260M	EX8	4.6%	NM_015052.3
NC-130	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	11.0%	NM_005228.3
NC-130	MLH3	c.2141C>G	p.S714C	EX2	10.0%	NM_001040108.1
NC-130	TP53	c.375+1G>C	.	IVS4	23.4%	NM_000546.5
NC-130	BRD4	c.3818G>A	p.R1273Q	EX19	14.2%	NM_058243.2
NC-131	LRP1B	c.440C>T	p.T147I	EX4	2.5%	NM_018557.2

NC-131	NFE2L2	c.230A>G	p.D77G	EX2	6.9%	NM_006164.4
NC-131	FANCD2	c.2839G>T	p.D947Y	EX29	6.5%	NM_033084.3
NC-131	RAD50	c.113A>T	p.N38I	EX1	5.4%	NM_005732.3
NC-131	HIST1H3B	c.118C>A	p.H40N	EX1E	6.5%	NM_003537.3
NC-131	EPHB6	c.2577A>T	p.E859D	EX17	5.6%	NM_004445.3
NC-131	WT1	c.329_330delCCinsAT	p.P110H	EX1	5.4%	NM_024426.4
NC-131	OR5L2	c.79C>A	p.L27I	EX1E	7.4%	NM_001004739.1
NC-131	ZFHX3	c.8746G>C	p.E2916Q	EX9	6.6%	NM_006885.3
NC-131	TP53	c.484A>T	p.I162F	EX5	2.9%	NM_000546.5
NC-131	STK11	c.322A>T	p.K108*	EX2	9.5%	NM_000455.4
NC-131	STAG2	c.2846A>G	p.K949R	EX28	10.5%	NM_001042749.1
NC-132	NOTCH2	c.4135G>A	p.A1379T	EX25	13.5%	NM_024408.3
NC-132	CDC73	c.1184A>G	p.Q395R	EX14	30.7%	NM_024529.4
NC-132	ERCC3	c.694A>T	p.T232S	EX6	20.7%	NM_000122.1
NC-132	IDH1	c.871A>G	p.M291V	EX8	1.9%	NM_005896.2
NC-132	SEMA6A	c.118G>A	p.V40M	EX3	11.8%	NM_020796.3
NC-132	KEL	c.257G>T	p.R86L	EX4	11.9%	NM_000420.2
NC-132	CDKN2A	c.172C>T	p.R58*	EX2	26.4%	NM_000077.4
NC-132	ABL1	c.1994G>T	p.G665V	EX11E	18.7%	NM_005157.4
NC-132	KRAS	c.35G>C	p.G12A	EX2	33.6%	NM_033360.2
NC-132	SMAD4	c.1096C>T	p.Q366*	EX9	2.5%	NM_005359.5
NC-132	SMAD4	c.1450_1451dupCT	p.S485Cfs*20	EX12E	21.2%	NM_005359.5
NC-132	CIC	c.93TG[2>1]	p.V32Gfs*18	EX2	2.5%	NM_015125.3
NC-132	ERG	c.1310C>G	p.A437G	EX10E	13.0%	NM_182918.3
NC-133	KRAS	c.183A>C	p.Q61H	EX3	45.6%	NM_033360.2
NC-133	KDR	c.337G>T	p.V113F	EX3	35.8%	NM_002253.2

NC-133	ARID1A	c.6458G>T	p.R2153L	EX20	29.2%	NM_006015.4
NC-133	MSH3	c.3182G>T	p.R1061I	EX23	26.8%	NM_002439.4
NC-133	MYCN	c.803A>T	p.D268V	EX3	26.4%	NM_005378.4
NC-133	RPS6KB1	c.1370G>T	p.W457L	EX15	20.2%	NM_003161.2
NC-133	SETD2	c.3266G>T	p.R1089L	EX3	15.5%	NM_014159.6
NC-133	GRIN2A	c.4146C[4>3]	p.S1384Rfs*13	EX13	14.9%	NM_001134407.1
NC-133	WT1	c.174_175delCCinsAA	p.S58_R59delinsRS	EX1	14.8%	NM_024426.4
NC-133	NUP210	c.3370G>T	p.A1124S	EX25	14.6%	NM_024923.2
NC-133	MLL3	c.7_8delTCinsGA	p.S3E	EX1	8.4%	NM_170606.2
NC-134	EGFR	c.2500G>T	p.V834L	EX21	37.6%	NM_005228.3
NC-134	EGFR	c.2573T>G	p.L858R	EX21	43.0%	NM_005228.3
NC-134	HGF	c.1147TG[2>1]	p.C383*fs*1	EX9	1.9%	NM_000601.4
NC-134	HRAS	c.518C>T	p.P173L	EX5E	2.3%	NM_001130442.1
NC-134	ARID2	c.2816delA	p.Y939Lfs*24	EX15	12.4%	NM_152641.2
NC-134	TP53	c.583A>T	p.I195F	EX6	14.5%	NM_000546.5
NC-134	SMAD4	c.1059C>G	p.Y353*	EX9	2.4%	NM_005359.5
NC-134	RBM10	c.1443+2T>C	.	IVS12	20.1%	NM_001204468.1
NC-134	AR	c.40C>A	p.P14T	EX1	8.6%	NM_000044.3
NC-134	CDKN2C	c.40G>T	p.A14S	EX1	7.2%	NM_078626.2
NC-134	KDR	c.2315C>T	p.A772V	EX16	1.6%	NM_002253.2
NC-134	FBXW7	c.935G>T	p.R312I	EX6	6.8%	NM_033632.3
NC-134	DDR1	c.404G>T	p.R135L	EX6	8.5%	NM_001954.4
NC-134	ICK	c.955C>T	p.P319S	EX10	1.6%	NM_016513.4
NC-134	PARK2	c.449G>T	p.C150F	EX4	5.5%	NM_004562.2
NC-135	BRCA2	c.5198C>G	p.S1733C	EX11	18.4%	NM_000059.3
NC-135	TP53	c.560-2A>C	.	IVS5	20.5%	NM_000546.5

NC-135	CDK12	c.3863G>T	p.S1288I	EX14E	9.1%	NM_016507.2
NC-135	TAF1	c.3536C>T	p.S1179F	EX23	21.6%	NM_004606.3
NC-136	RET	c.3152C>T	p.A1051V	EX19	22.0%	NM_020975.4
NC-137	ALK	c.1414+1G>A	.	IVS6	1.3%	NM_004304.4
NC-137	EGFR	c.2573T>G	p.L858R	EX21	21.0%	NM_005228.3
NC-137	COL5A1	c.4867G>A	p.E1623K	EX62	2.9%	NM_000093.3
NC-137	RBM10	c.2495A>C	p.Q832P	EX20	13.9%	NM_001204468.1
NC-138	DNMT3A	c.2440G>A	p.E814K	EX21	3.9%	NM_022552.4
NC-138	ROBO3	c.4088G>A	p.R1363Q	EX27	6.7%	NM_022370.3
NC-138	POLE	c.3659dupT	p.P1221Afs*134	EX30	18.3%	NM_006231.2
NC-139	ECT2L	c.1158A>T	p.E386D	EX10	16.4%	NM_001077706.2
NC-139	PABPC1	c.394T>G	p.C132G	EX3	12.6%	NM_002568.3
NC-139	TP53	c.403T>C	p.C135R	EX5	41.3%	NM_000546.5
NC-139	NF1	c.5535C[3>2]	p.P1846Rfs*14	EX37	7.5%	NM_000267.3
NC-139	KEAP1	c.958C>G	p.R320G	EX3	19.8%	NM_203500.1
NC-139	DNAJB1	c.124GAG[2>1]	p.E42[2>1]	EX1	9.7%	NM_006145.1
NC-139	PRX	c.1838T>A	p.V613E	EX7E	14.0%	NM_181882.2
NC-139	KDM6A	c.929C>G	p.S310C	EX11	35.2%	NM_021140.2
NC-140	CTNNB1	c.98C>T	p.S33F	EX3	27.2%	NM_001904.3
NC-140	FAT1	c.4724C>T	p.A1575V	EX9	26.4%	NM_005245.3
NC-140	POM121L12	c.622C>T	p.R208W	EX1E	33.0%	NM_182595.3
NC-140	EGFR	c.2573T>G	p.L858R	EX21	36.1%	NM_005228.3
NC-140	TP53	c.495_498delGTCA	p.Q165Hfs*4	EX5	47.9%	NM_000546.5
NC-140	BCL2L1	c.41C>G	p.S14C	EX2	12.8%	NM_138578.1
NC-140	SRC	c.1138G>A	p.V380M	EX12	11.7%	NM_198291.1
NC-141	ATR	c.5620G>A	p.D1874N	EX33	5.2%	NM_001184.3

NC-141	CHEK2	c.886G>C	p.D296H	EX8	19.0%	NM_007194.3
NC-142	SETD2	c.1163G>T	p.R388L	EX3	54.5%	NM_014159.6
NC-142	PDGFRB	c.473T>A	p.V158E	EX4	1.6%	NM_002609.3
NC-142	DDR1	c.1935_1936delAAinsCG	p.N646D	EX16	1.2%	NM_001954.4
NC-142	DAXX	c.1076-1G>T	.	IVS3	33.0%	NM_001141970.1
NC-142	CDKN2A	c.251A>G	p.D84G	EX2	54.8%	NM_000077.4
NC-142	TAF1L	c.4369C>T	p.L1457F	EX1E	4.1%	NM_153809.2
NC-142	BRCA2	c.2809C>T	p.Q937*	EX11	33.4%	NM_000059.3
NC-142	BRCA2	c.3907G>T	p.G1303C	EX11	32.2%	NM_000059.3
NC-142	MAP2K1	c.722C>T	p.S241F	EX7	2.0%	NM_002755.3
NC-142	TP53	c.880G>T	p.E294*	EX8	32.4%	NM_000546.5
NC-142	HOXB13	c.4G>T	p.E2*	EX1	37.2%	NM_006361.5
NC-142	ACTG1	c.108_110delGCGinsCT	p.R37Sfs*29	EX2	23.6%	NM_001614.3
NC-142	PSG2	c.805G>A	p.A269T	EX4	34.7%	NM_031246.3
NC-144	TRIM58	c.589G>C	p.E197Q	EX3	7.7%	NM_015431.3
NC-144	CRIPAK	c.710G>T	p.G237V	EX1E	10.5%	NM_175918.3
NC-144	MAD1L1	c.1869G>C	p.Q623H	EX18	5.5%	NM_003550.2
NC-144	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	18.3%	NM_005228.3
NC-144	PIK3CG	c.2943G>T	p.E981D	EX10	8.4%	NM_002649.2
NC-144	NOS3	c.917C>T	p.P306L	EX8	7.3%	NM_000603.4
NC-145	TET2	c.1765A>G	p.I589V	EX3	8.0%	NM_001127208.2
NC-145	TET2	c.1772A>C	p.Q591P	EX3	8.3%	NM_001127208.2
NC-145	NSD1	c.2954C>G	p.S985C	EX5	4.3%	NM_022455.4
NC-145	SMO	c.1445G>T	p.R482L	EX8	7.4%	NM_005631.4

NC-145	MLL3	c.4430A>G	p.N1477S	EX29	7.0%	NM_170606.2
NC-145	FGFR2	c.2218T>G	p.W740G	EX17	3.9%	NM_000141.4
NC-145	KRAS	c.35G>T	p.G12V	EX2	13.6%	NM_033360.2
NC-145	ZFHX3	c.10561_10563delGGCinsAGT	p.G3521S	EX10E	3.5%	NM_006885.3
NC-145	ZFHX3	c.2335G>T	p.A779S	EX2	14.1%	NM_006885.3
NC-145	STK11	c.179dupA	p.Y60*fs*1	EX1	9.6%	NM_000455.4
NC-145	PCK1	c.1319-2A>C	.	IVS8	3.8%	NM_002591.3
NC-145	KDM6A	c.518T>G	p.L173R	EX6	15.7%	NM_021140.2
NC-146	NRXN1	c.493G>A	p.A165T	EX2	12.6%	NM_001135659.1
NC-146	RAD50	c.906G>C	p.E302D	EX7	19.9%	NM_005732.3
NC-146	FAT2	c.10946G>A	p.R3649Q	EX18	25.5%	NM_001447.2
NC-146	HIST1H3B	c.138TG[2>1]	p.V47Gfs*51	EX1E	25.7%	NM_003537.3
NC-146	EGFR	c.2573T>G	p.L858R	EX21	24.4%	NM_005228.3
NC-146	TP53	c.574C>T	p.Q192*	EX6	11.6%	NM_000546.5
NC-146	ERBB2	c.929C>T	p.S310F	EX8	23.9%	NM_004448.2
NC-147	ALK	c.3604G>A	p.G1202R	EX23	26.7%	NM_004304.4
NC-147	LZTS1	c.977G>A	p.R326H	EX2	7.1%	NM_021020.2
NC-147	RBM10	c.496G>A	p.D166N	EX4	23.5%	NM_001204468.1
NC-148	CTNNB1	c.1967C>T	p.A656V	EX13	10.6%	NM_001904.3
NC-148	HOXA3	c.430C>A	p.P144T	EX3	33.5%	NM_153631.2
NC-148	EGFR	c.2271G>C	p.K757N	EX19	78.2%	NM_005228.3
NC-148	EGFR	c.2573T>G	p.L858R	EX21	78.1%	NM_005228.3
NC-148	POT1	c.417G>T	p.W139C	EX8	10.0%	NM_015450.2
NC-148	WT1	c.1460C>A	p.P487Q	EX10E	22.0%	NM_024426.4
NC-148	TP53	c.658T>C	p.Y220H	EX6	30.1%	NM_000546.5

NC-149	FAT1	c.2596G>C	p.D866H	EX2	2.3%	NM_005245.3
NC-149	HIST1H2BK	c.148C>T	p.H50Y	EX1	3.8%	NM_080593.2
NC-149	PIM1	c.137G>A	p.S46N	EX2	1.4%	NM_002648.3
NC-149	ARID1B	c.521C>T	p.P174L	EX1	6.0%	NM_020732.3
NC-149	CARD11	c.2020G>A	p.D674N	EX16	18.5%	NM_032415.4
NC-149	EGFR	c.2573T>G	p.L858R	EX21	15.6%	NM_005228.3
NC-149	GRM3	c.617G>A	p.R206H	EX3	1.0%	NM_000840.2
NC-149	RSPO2	c.450G>A	p.W150*	EX5	2.1%	NM_178565.4
NC-149	GRIN2A	c.3236A>G	p.N1079S	EX13E	1.6%	NM_001134407.1
NC-149	CYLD	c.2847G>A	p.M949I	EX18E	1.7%	NM_001042355.1
NC-149	TP53	c.817C>T	p.R273C	EX8	17.8%	NM_000546.5
NC-149	ERBB2	c.929C>T	p.S310F	EX8	18.2%	NM_004448.2
NC-149	KEAP1	c.1104C>A	p.C368*	EX3	5.4%	NM_203500.1
NC-150	XPO1	c.3112A>G	p.R1038G	EX25E	11.1%	NM_003400.3
NC-150	EGFR	c.2317_2322dupCACGTG	p.H773_V774dup	EX20	24.5%	NM_005228.3
NC-150	MDM2	c.844_858delTATCAAGTTACTGTGinsACC	p.Y282_V286delinsT	EX10	47.6%	NM_002392.4
NC-150	HOXB13	c.799C>T	p.R267C	EX2E	10.0%	NM_006361.5
NC-150	RPTOR	c.3571C>T	p.R1191C	EX30	9.6%	NM_020761.2
NC-151	EGFR	c.2238_2248delATTAAGAGAAGinsGC	p.L747_A750delinsP	EX19	2.7%	NM_005228.3
NC-151	SPOP	c.374T>G	p.F125C	EX5	5.4%	NM_001007228.1
NC-152	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	51.4%	NM_005228.3
NC-152	PABPC1	c.394T>G	p.C132G	EX3	24.9%	NM_002568.3

NC-152	PTEN	c.518G>A	p.R173H	EX6	40.7%	NM_000314.4
NC-152	TP53	c.864delT	p.L289Sfs*56	EX8	54.9%	NM_000546.5
NC-153	DDR2	c.313C>T	p.R105C	EX5	28.4%	NM_006182.2
NC-153	KDR	c.835A>G	p.T279A	EX7	8.5%	NM_002253.2
NC-153	MLL	c.1454A>G	p.D485G	EX3	33.8%	NM_001197104.1
NC-153	ATRX	c.4276C>T	p.R1426*	EX14	25.9%	NM_000489.3
NC-154	OR2T4	c.943_944delCCinsAA	p.P315K	EX1E	7.7%	NM_001004696.1
NC-154	CUL3	c.1708G>T	p.E570*	EX13	3.1%	NM_003590.4
NC-154	EGFR	c.2573T>G	p.L858R	EX21	9.7%	NM_005228.3
NC-154	TP53	c.814G>T	p.V272L	EX8	6.8%	NM_000546.5
NC-154	FAM123B	c.887G>T	p.G296V	EX2E	4.3%	NM_152424.3
NC-155	EGFR	c.2239_2251delTTAAGAGAAGCAAinsC	p.L747_T751delinsP	EX19	29.5%	NM_005228.3
NC-156	EPHA2	c.1072G>A	p.E358K	EX5	11.0%	NM_004431.3
NC-156	ARID1B	c.986C>G	p.A329G	EX1	12.6%	NM_020732.3
NC-156	EGFR	c.2573T>G	p.L858R	EX21	22.7%	NM_005228.3
NC-156	TP53	c.783-4_786delGTAGTGGT	.	IVS7-EX8	24.0%	NM_000546.5
NC-156	ERBB2	c.3365C>G	p.S1122C	EX26	2.5%	NM_004448.2
NC-156	CYP2D6	c.1398C>A	p.F466L	EX9E	4.7%	NM_000106.5
NC-156	PHF6	c.1039C>T	p.R347*	EX10	10.3%	NM_001015877.1
NC-157	ELMO1	c.1591C>T	p.R531C	EX17	7.0%	NM_001206482.1
NC-157	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	31.6%	NM_005228.3
NC-157	EGFR	c.2369C>T	p.T790M	EX20	9.1%	NM_005228.3
NC-157	TP53	c.165delT	p.E56Kfs*67	EX4	75.7%	NM_000546.5

NC-157	NF1	c.2510G>C	p.W837S	EX21	1.9%	NM_000267.3
NC-157	MAP2K2	c.898C>A	p.P300T	EX7	2.0%	NM_030662.3
NC-158	DDR2	c.2378C>T	p.S793L	EX17	6.2%	NM_006182.2
NC-158	DNMT3A	c.751A>T	p.T251S	EX7	7.1%	NM_022552.4
NC-158	EPCAM	c.409G>C	p.E137Q	EX3	3.5%	NM_002354.2
NC-158	LRP1B	c.10790G>T	p.R3597L	EX70	14.0%	NM_018557.2
NC-158	LRP1B	c.3068G>C	p.W1023S	EX20	8.3%	NM_018557.2
NC-158	RHOH	c.68G>T	p.R23L	EX3E	12.3%	NM_004310.3
NC-158	CDK13	c.3877G>A	p.D1293N	EX14E	3.0%	NM_003718.4
NC-158	GRM3	c.1214A>C	p.H405P	EX3	11.4%	NM_000840.2
NC-158	PIK3CG	c.948C>A	p.D316E	EX2	11.1%	NM_002649.2
NC-158	MLL3	c.8500G>A	p.E2834K	EX38	11.6%	NM_170606.2
NC-158	CDKN2A	c.115A[2>1]	p.N39Tfs*14	EX1	22.4%	NM_000077.4
NC-158	NOTCH1	c.3207G>T	p.K1069N	EX20	5.2%	NM_017617.3
NC-158	ACIN1	c.1183G>A	p.D395N	EX6	7.1%	NM_014977.3
NC-158	NTRK3	c.811G>A	p.V271M	EX9	12.1%	NM_001012338.2
NC-158	TP53	c.730G>A	p.G244S	EX7	21.7%	NM_000546.5
NC-158	BRCA1	c.782A>G	p.Y261C	EX10	16.0%	NM_007294.3
NC-158	SMARCA4	c.561C>A	p.Y187*	EX4	14.0%	NM_003072.3
NC-159	ARID1A	c.692T>C	p.L231P	EX1	8.9%	NM_006015.4
NC-159	EGFR	c.2499G>C	p.L833F	EX21	26.2%	NM_005228.3
NC-159	EGFR	c.2582T>A	p.L861Q	EX21	27.1%	NM_005228.3
NC-159	SEMA3A	c.2073G>T	p.M691I	EX17E	13.1%	NM_006080.2
NC-159	RB1	c.1338C>G	p.Y446*	EX14	15.7%	NM_000321.2

NC-159	TP53	c.944_967delCTCCCCAGCCAAAGAAGAAACCACinsG	p.S315Cfs*14	EX9	3.9%	NM_000546.5
NC-159	MED12	c.2266G>A	p.V756I	EX16	5.1%	NM_005120.2
NC-159	BTK	c.125A>G	p.Y42C	EX2	31.4%	NM_000061.2
NC-160	EGFR	c.2237_2257delAATTAAGAGAAGCAACATCTCinsTCT	p.E746_P753delinsVS	EX19	8.3%	NM_005228.3
NC-160	PRKDC	c.8262G>T	p.E2754D	EX60	9.5%	NM_006904.6
NC-161	ERRFI1	c.528_529insCT	p.S177Lfs*8	EX4	34.0%	NM_018948.3
NC-161	MAP3K13	c.284C>T	p.T95M	EX2	3.8%	NM_004721.4
NC-161	PARK2	c.1231A>G	p.I411V	EX11	20.3%	NM_004562.2
NC-161	GRM3	c.2250A>T	p.L750F	EX4	25.6%	NM_000840.2
NC-161	TP53	c.434T>G	p.L145R	EX5	39.6%	NM_000546.5
NC-161	KEAP1	c.703G>C	p.D235H	EX3	35.4%	NM_203500.1
NC-162	OR2T4	c.914T>C	p.M305T	EX1E	67.7%	NM_001004696.1
NC-162	LRP1B	c.1553-2A>C	.	IVS10	30.2%	NM_018557.2
NC-162	PDGFRA	c.340G[2>1]	p.G114Afs*13	EX3	87.0%	NM_006206.4
NC-162	FBXW7	c.731G>A	p.W244*	EX5	88.8%	NM_033632.3
NC-162	RICTOR	c.19G>T	p.G7C	EX1	48.0%	NM_152756.3
NC-162	MSH3	c.2297C>T	p.T766I	EX16	36.8%	NM_002439.4
NC-162	RB1	c.2047_2048delCT	p.L683Ffs*8	EX20	91.3%	NM_000321.2
NC-162	FANCM	c.3682T>G	p.F1228V	EX14	45.9%	NM_020937.2
NC-162	SMAD3	c.837G>T	p.R279S	EX6	28.4%	NM_005902.3
NC-162	TP53	c.488A>G	p.Y163C	EX5	94.6%	NM_000546.5
NC-162	KEAP1	c.123G>T	p.E41D	EX2	49.6%	NM_203500.1

NC-163	AFF3	c.1907C>T	p.A636V	EX14	1.3%	NM_001025108.1
NC-163	EPHA3	c.2647C>T	p.R883W	EX15	3.6%	NM_005233.5
NC-163	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	9.3%	NM_005228.3
NC-163	EGFR	c.2369C>T	p.T790M	EX20	7.3%	NM_005228.3
NC-163	CDH11	c.1070A>C	p.K357T	EX8	1.0%	NM_001797.2
NC-163	ZFHX3	c.10005G>A	p.M3335I	EX10E	1.0%	NM_006885.3
NC-163	TP53	c.814G>T	p.V272L	EX8	4.2%	NM_000546.5
NC-163	RPTOR	c.551C>T	p.T184M	EX5	2.0%	NM_020761.2
NC-163	SERPINB3	c.899G>A	p.R300K	EX8E	1.0%	NM_006919.2
NC-164	FMN2	c.2837C>T	p.P946L	EX5	11.4%	NM_020066.4
NC-164	OR6F1	c.681G>T	p.R227S	EX1E	9.5%	NM_001005286.1
NC-164	LRP1B	c.5680C>A	p.L1894I	EX35	1.9%	NM_018557.2
NC-164	SEMA6A	c.116C>T	p.P39L	EX3	8.7%	NM_020796.3
NC-164	ARID1B	c.21_22delCGinsT	p.A8Rfs*62	EX1	7.5%	NM_020732.3
NC-164	MET	c.1466A>C	p.E489A	EX4	8.3%	NM_000245.2
NC-164	MS4A1	c.119C>A	p.P40H	EX3	7.5%	NM_152866.2
NC-164	TP53	c.396G>T	p.K132N	EX5	13.4%	NM_000546.5
NC-164	NF1	c.6755A>G	p.K2252R	EX44	7.9%	NM_000267.3
NC-164	NOTCH3	c.6197C>A	p.P2066H	EX33E	10.6%	NM_000435.2
NC-165	GNAS	c.303G>T	p.E101D	EX4	16.8%	NM_000516.4
NC-165	MAPK1	c.964G>A	p.E322K	EX7	11.6%	NM_002745.4
NC-165	LRP1B	c.13169G>T	p.S4390I	EX86	22.3%	NM_018557.2
NC-165	LRP1B	c.9905C>A	p.T3302N	EX62	19.6%	NM_018557.2
NC-165	TET2	c.558G>C	p.E186D	EX3	20.1%	NM_001127208.2
NC-165	FBXW7	c.275C>G	p.S92*	EX2	19.1%	NM_033632.3

NC-165	FAT1	c.6783G[3>2]	p.G2262Afs*11	EX10	31.1%	NM_005245.3
NC-165	NOTCH4	c.1415G>T	p.C472F	EX8	20.0%	NM_004557.3
NC-165	SHH	c.288G>T	p.R96S	EX1	22.3%	NM_000193.2
NC-165	CDKN2A	c.200G>T	p.G67V	EX2	27.7%	NM_000077.4
NC-165	CDH23	c.581A>T	p.D194V	EX7	20.2%	NM_022124.5
NC-165	CDK8	c.88G>T	p.G30C	EX1	16.5%	NM_001260.1
NC-165	CDK8	c.196G>C	p.E66Q	EX2	12.9%	NM_001260.1
NC-165	TP53	c.319T>G	p.Y107D	EX4	35.0%	NM_000546.5
NC-165	BCL2L1	c.76C>T	p.Q26*	EX2	12.7%	NM_138578.1
NC-166	SETD2	c.6622C>T	p.P2208S	EX15	4.3%	NM_014159.6
NC-166	MSH3	c.2846A>T	p.Q949L	EX21	20.1%	NM_002439.4
NC-166	EGFR	c.2573T>G	p.L858R	EX21	35.9%	NM_005228.3
NC-166	CCND2	c.854G>T	p.R285L	EX5E	55.3%	NM_001759.3
NC-166	FLT1	c.3835A>G	p.S1279G	EX30E	1.4%	NM_002019.4
NC-166	TP53	c.530C>G	p.P177R	EX5	68.8%	NM_000546.5
NC-166	BRIP1	c.1860G>A	p.M620I	EX13	1.9%	NM_032043.2
NC-166	ERG	c.800C>T	p.T267M	EX7	12.0%	NM_182918.3
NC-166	KDM5C	c.4209G>A	p.M1403I	EX25	44.3%	NM_004187.3
NC-167	FH	c.1343delT	p.L448Rfs*2	EX9	2.2%	NM_000143.3
NC-167	EGFR	c.2573T>G	p.L858R	EX21	6.7%	NM_005228.3
NC-167	NOTCH1	c.700C>T	p.R234C	EX4	2.1%	NM_017617.3
NC-167	TOP1	c.1587_1588delCCinsT	p.L530Sfs*44	EX15	2.4%	NM_003286.2
NC-167	RBM10	c.724G>T	p.E242*	EX6	7.0%	NM_001204468.1
NC-168	RANBP2	c.2166A>G	p.I722M	EX15	22.3%	NM_006267.4
NC-168	TP53	c.399_404dupGTTTTG	p.F134_C135insWF	EX5	20.0%	NM_000546.5
NC-169	ALK	c.392C>A	p.S131Y	EX1	8.6%	NM_004304.4

NC-169	LRP1B	c.1321C>T	p.R441*	EX9	2.5%	NM_018557.2
NC-169	CTNNB1	c.134C>T	p.S45F	EX3	5.0%	NM_001904.3
NC-169	FAT1	c.6054C[3>2]	p.P2019Qfs*7	EX10	3.1%	NM_005245.3
NC-169	NSD1	c.3935G>A	p.C1312Y	EX7	2.8%	NM_022455.4
NC-169	PTPRD	c.2584_2585delCGinsTT	p.R862F	EX28	15.3%	NM_002839.3
NC-169	ERBB3	c.2274dupT	p.H759Sfs*68	EX19	3.0%	NM_001982.3
NC-169	STK11	c.108_131delCCAGCCGCGCCGCAAGCGGGCCAA	p.Y36*	EX1	6.2%	NM_000455.4
NC-169	CEBPA	c.453_454delGGinsTT	p.A152S	EX1E	5.8%	NM_004364.3
NC-170	TP53	c.451C[5>4]	p.P152Rfs*18	EX5	23.3%	NM_000546.5
NC-170	AXL	c.1548G[3>2]	p.G517Afs*6	EX13	24.5%	NM_021913.3
NC-170	BCOR	c.1790A>G	p.H597R	EX4	29.1%	NM_001123385.1
NC-170	KDM6A	c.655-1G>T	.	IVS8	29.8%	NM_021140.2
NC-171	TGFBR2	c.1684C>T	p.R562C	EX8E	1.4%	NM_001024847.2
NC-171	EGFR	c.2311_2319dupAACCCCCAC	p.N771_H773dup	EX20	8.3%	NM_005228.3
NC-171	DOT1L	c.3891_3892dupCG	p.G1298Afs*30	EX27	6.7%	NM_032482.2
NC-172	IRF6	c.274G>C	p.E92Q	EX4	1.3%	NM_006147.3
NC-172	LRP1B	c.1747C>A	p.Q583K	EX11	11.1%	NM_018557.2
NC-172	BAP1	c.1538C>G	p.S513*	EX13	28.9%	NM_004656.2
NC-172	EPHA3	c.2570T>C	p.M857T	EX15	21.8%	NM_005233.5
NC-172	MLL3	c.4262C>G	p.S1421C	EX27	7.8%	NM_170606.2
NC-172	MLL	c.2273G>T	p.R758I	EX3	1.7%	NM_001197104.1
NC-172	ARID2	c.4711G>C	p.E1571Q	EX15	21.4%	NM_152641.2
NC-172	TP53	c.98C[5>4]	p.L35Cfs*9	EX4	26.7%	NM_000546.5

NC-172	STK11	c.46G>T	p.E16*	EX1	1.3%	NM_000455.4
NC-172	STK11	c.931A>T	p.K311*	EX8	1.4%	NM_000455.4
NC-173	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	6.2%	NM_005228.3
NC-173	OR4A15	c.523G>T	p.A175S	EX1E	2.2%	NM_001005275.1
NC-173	TP53	c.377A>G	p.Y126C	EX5	5.4%	NM_000546.5
NC-174	KDR	c.3100A>T	p.I1034F	EX23	3.2%	NM_002253.2
NC-174	EGFR	c.2300_2308dupCCAGCGTGG	p.A767_V769dup	EX20	11.9%	NM_005228.3
NC-174	EGFR	c.3276C>A	p.Y1092*	EX28E	2.0%	NM_005228.3
NC-174	NBN	c.1526C>T	p.S509F	EX11	4.9%	NM_002485.4
NC-174	JAK2	c.2762-1G>A	.	IVS20	3.4%	NM_004972.3
NC-174	EXT2	c.838G>A	p.V280M	EX5	12.8%	NM_207122.1
NC-174	CD22	c.832T>G	p.S278A	EX5	3.1%	NM_001771.3
NC-175	SPTA1	c.6725G>A	p.W2242*	EX48	38.1%	NM_003126.2
NC-175	ERBB4	c.569A>G	p.H190R	EX5	65.9%	NM_005235.2
NC-175	PAX3	c.1115C>A	p.P372H	EX7	65.4%	NM_181457.3
NC-175	HCLS1	c.591G>T	p.Q197H	EX8	21.4%	NM_005335.4
NC-175	KDR	c.3287G[3>2]	p.E1097Kfs*5	EX24	24.0%	NM_002253.2
NC-175	TET2	c.4894C>T	p.Q1632*	EX11	26.2%	NM_001127208.2
NC-175	TET2	c.5897G>C	p.R1966P	EX11	25.0%	NM_001127208.2
NC-175	FBXW7	c.1889_1895delTACAGTT	p.L630Sfs*6	EX12	34.3%	NM_033632.3
NC-175	IKZF1	c.686G>T	p.S229I	EX6	34.6%	NM_006060.4
NC-175	POT1	c.703G>T	p.V235F	EX10	35.2%	NM_015450.2
NC-175	CDKN2A	c.296G>A	p.R99Q	EX2	7.1%	NM_000077.4

NC-175	OR4A15	c.522G>T	p.L174F	EX1	36.2%	NM_001005275.1
NC-175	CNTN5	c.239T>A	p.I80N	EX4	21.2%	NM_014361.3
NC-175	TP53	c.726C>G	p.C242W	EX7	63.8%	NM_000546.5
NC-175	ZNF521	c.601C>A	p.P201T	EX4	40.2%	NM_015461.2
NC-175	KDM5C	c.1586G>T	p.G529V	EX12	75.3%	NM_004187.3
NC-176	EPHB2	c.242G>A	p.R81H	EX3	4.5%	NM_017449.3
NC-176	EGFR	c.2573T>G	p.L858R	EX21	8.6%	NM_005228.3
NC-176	EPHB6	c.1220G>A	p.C407Y	EX9	2.4%	NM_004445.3
NC-176	EPHB6	c.2220G>C	p.K740N	EX15	4.9%	NM_004445.3
NC-176	TP53	c.363TG[2>1]	p.V122Dfs*26	EX4	22.1%	NM_000546.5
NC-176	SERPINB3	c.1036G>T	p.A346S	EX8E	1.1%	NM_006919.2
NC-176	NF2	c.1012C>G	p.R338G	EX11	5.2%	NM_000268.3
NC-177	EGFR	c.2369C>T	p.T790M	EX20	48.4%	NM_005228.3
NC-177	EGFR	c.2573T>G	p.L858R	EX21	89.8%	NM_005228.3
NC-177	IFNG	c.389G>A	p.R130H	EX4E	1.9%	NM_000619.2
NC-177	TP53	c.827delCinsTGT	p.A276Vfs*70	EX8	42.6%	NM_000546.5
NC-177	CDK12	c.1019G>A	p.R340Q	EX1	11.8%	NM_016507.2
NC-177	MED12	c.4261G>C	p.E1421Q	EX31	33.2%	NM_005120.2
NC-178	TP53	c.96+1G>C	.	IVS3	30.5%	NM_000546.5
NC-178	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	26.0%	NM_005228.3
NC-178	LRP1B	c.12820A>T	p.S4274C	EX84	25.2%	NM_018557.2
NC-178	FGFR4	c.4C>T	p.R2W	EX2	9.5%	NM_213647.1
NC-179	BTLA	c.146T>A	p.L49*	EX2	14.4%	NM_181780.3
NC-179	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	54.5%	NM_005228.3

NC-179	EGFR	c.2369C>T	p.T790M	EX20	17.3%	NM_005228.3
NC-179	CDH23	c.6808C>T	p.R2270C	EX49	29.0%	NM_022124.5
NC-179	ROBO3	c.3886C>T	p.R1296W	EX26	14.2%	NM_022370.3
NC-179	TP53	c.844C>T	p.R282W	EX8	35.2%	NM_000546.5
NC-179	NOTCH3	c.479A>G	p.D160G	EX4	16.3%	NM_000435.2
NC-179	MED12	c.4728-1G>A	.	IVS34	30.2%	NM_005120.2
NC-180	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.3%	NM_003921.4
NC-180	EPHA3	c.1492A>T	p.S498C	EX7	3.0%	NM_005233.5
NC-180	PDGFRA	c.741G>T	p.W247C	EX5	3.6%	NM_006206.4
NC-180	EGFR	c.2582T>A	p.L861Q	EX21	22.6%	NM_005228.3
NC-180	NTRK3	c.506G>A	p.R169H	EX7	2.7%	NM_001012338.2
NC-180	MAF	c.544CAC[6>5]	p.H182[6>5]	EX1E	3.7%	NM_001031804.2
NC-181	EPCAM	c.773A>G	p.E258G	EX7	8.8%	NM_002354.2
NC-181	LRP1B	c.11012_11026delGAAATATATGTAGAG	p.G3671_R3675del	EX72	4.2%	NM_018557.2
NC-181	ERBB4	c.1631G>T	p.R544L	EX14	9.7%	NM_005235.2
NC-181	HDAC4	c.376G>A	p.E126K	EX5	8.3%	NM_006037.3
NC-181	EPHA3	c.1586G>C	p.S529T	EX7	17.6%	NM_005233.5
NC-181	IRF2	c.744_746delGCGinsACT	p.R249L	EX9E	9.2%	NM_002199.3
NC-181	BRAF	c.1799T>A	p.V600E	EX15	17.4%	NM_004333.4
NC-181	CHEK1	c.1234-1delG	.	IVS11	15.9%	NM_001274.5
NC-181	POLE	c.3652G>T	p.V1218L	EX30	13.0%	NM_006231.2
NC-181	FLT1	c.2561C>A	p.T854K	EX18	13.7%	NM_002019.4
NC-181	TP53	c.782+1G>T	.	IVS7	25.8%	NM_000546.5
NC-182	SDHB	c.52C>G	p.L18V	EX1	71.0%	NM_003000.2

NC-182	LRP1B	c.13361T>C	p.V4454A	EX88	3.9%	NM_018557.2
NC-182	KDR	c.3179T>A	p.V1060D	EX23	40.3%	NM_002253.2
NC-182	FAT1	c.7484_7517delACGAATATGAAGTGGAACTAGCTGAAAACGCTCC	p.N2495Tfs*6	EX10	22.0%	NM_005245.3
NC-182	TBX3	c.1394C>G	p.A465G	EX7	39.1%	NM_016569.3
NC-182	NTHL1	c.503A>G	p.D168G	EX3	40.3%	NM_002528.5
NC-182	CDH1	c.2245C>T	p.R749W	EX14	39.5%	NM_004360.3
NC-182	TP53	c.845G>C	p.R282P	EX8	83.4%	NM_000546.5
NC-182	NCOR1	c.2551G>T	p.E851*	EX20	1.2%	NM_006311.3
NC-182	PPM1D	c.1764G>T	p.K588N	EX6E	42.6%	NM_003620.3
NC-182	POLD1	c.425A>G	p.H142R	EX4	69.8%	NM_002691.3
NC-183	ATR	c.6686C>T	p.P2229L	EX39	16.5%	NM_001184.3
NC-183	FBXW7	c.1555T>C	p.Y519H	EX10	20.4%	NM_033632.3
NC-183	NF2	c.977G[3>2]	p.E327Rfs*19	EX10	23.9%	NM_000268.3
NC-183	EP300	c.1816G>A	p.E606K	EX9	25.2%	NM_001429.3
NC-185	SETD2	c.4503_4528delTACACCTCTTTCTAAAGATGAAAGAG	p.T1502Sfs*3	EX4	2.1%	NM_014159.6
NC-185	ATR	c.7817G>A	p.R2606Q	EX47E	2.5%	NM_001184.3
NC-185	KDM3B	c.3854A>G	p.N1285S	EX15	2.0%	NM_016604.3
NC-185	MLL2	c.16480ATC[4>3]	p.I5494[4>3]	EX53	1.4%	NM_003482.3
NC-185	TP53	c.524G>A	p.R175H	EX5	4.4%	NM_000546.5
NC-185	MYH9	c.1565C>T	p.P522L	EX14	3.3%	NM_002473.4
NC-186	EGFR	c.2573T>G	p.L858R	EX21	27.1%	NM_005228.3

NC-186	SMAD4	c.372T>G	p.D124E	EX3	1.7%	NM_005359.5
NC-186	SMAD4	c.392A>G	p.Y131C	EX3	1.7%	NM_005359.5
NC-186	STAG2	c.3284A>G	p.E1095G	EX31	8.0%	NM_001042749.1
NC-186	CTNNB1	c.110C>G	p.S37C	EX3	9.6%	NM_001904.3
NC-186	EGFR	c.2497T>G	p.L833V	EX21	4.2%	NM_005228.3
NC-187	PTEN	c.598T[3>4]	p.E201*fs*1	EX6	40.8%	NM_000314.4
NC-187	TP53	c.482C>A	p.A161D	EX5	51.6%	NM_000546.5
NC-187	EGFR	c.2239_2247delTTAAGAGAA	p.L747_E749del	EX19	26.7%	NM_005228.3
NC-187	EGFR	c.2260A>G	p.K754E	EX19	34.8%	NM_005228.3
NC-188	MLH1	c.398G>A	p.G133E	EX5	10.9%	NM_000249.3
NC-188	EPHA5	c.896A>G	p.N299S	EX3	13.9%	NM_004439.5
NC-188	CDKN2A	c.247C>T	p.H83Y	EX2	13.9%	NM_000077.4
NC-188	NOTCH1	c.4432G>T	p.D1478Y	EX25	10.3%	NM_017617.3
NC-188	ROCK1	c.1885G>T	p.A629S	EX16	13.5%	NM_005406.2
NC-188	ARAF	c.509C>T	p.A170V	EX6	11.9%	NM_001654.4
NC-189	CEBPA	c.22G>A	p.E8K	EX1E	30.8%	NM_004364.3
NC-189	MSH4	c.2374A>G	p.T792A	EX18	28.7%	NM_002440.3
NC-189	NTRK1	c.482G>C	p.R161P	EX5	29.2%	NM_002529.3
NC-189	TNN	c.1921G>T	p.D641Y	EX9	42.5%	NM_022093.1
NC-189	LRP1B	c.1796A>T	p.D599V	EX12	2.7%	NM_018557.2
NC-189	LAMA2	c.6820G>C	p.D2274H	EX48	27.6%	NM_000426.3
NC-189	PMS2	c.499C>T	p.P167S	EX5	13.3%	NM_000535.5
NC-189	IKZF1	c.220A>C	p.N74H	EX4	24.9%	NM_006060.4
NC-189	HGF	c.542G>C	p.R181P	EX5	11.6%	NM_000601.4
NC-189	ABCB1	c.2035G>C	p.D679H	EX17	1.9%	NM_000927.4

NC-189	NOTCH1	c.1862G>T	p.R621L	EX11	21.2%	NM_017617.3
NC-189	CDH23	c.2060-2A>T	.	IVS19	38.7%	NM_022124.5
NC-189	PTEN	c.640C>T	p.Q214*	EX7	35.6%	NM_000314.4
NC-189	SDHAF2	c.500G>C	p.*167Sfs*?	EX4E	14.3%	NM_017841.2
NC-189	MLL2	c.13289C>A	p.S4430*	EX39	24.5%	NM_003482.3
NC-189	ACIN1	c.1534T>A	p.Y512N	EX6	25.1%	NM_014977.3
NC-189	TP53	c.839G>C	p.R280T	EX8	20.6%	NM_000546.5
NC-189	TP53	c.743G[2>1]	p.R249Gfs*96	EX7	19.6%	NM_000546.5
NC-189	KEAP1	c.1808G>A	p.G603E	EX6E	31.2%	NM_203500.1
NC-190	ATR	c.5102C>G	p.S1701C	EX29	5.4%	NM_001184.3
NC-190	PIK3R1	c.1852C>T	p.H618Y	EX15	7.1%	NM_181523.2
NC-190	EGFR	c.2573T>G	p.L858R	EX21	80.1%	NM_005228.3
NC-190	ABL1	c.221C>G	p.A74G	EX2	9.8%	NM_005157.4
NC-190	LRP4	c.1933G>A	p.A645T	EX15	6.6%	NM_002334.3
NC-190	TP53	c.818G>A	p.R273H	EX8	20.5%	NM_000546.5
NC-190	PCK1	c.809T>G	p.I270R	EX6	2.8%	NM_002591.3
NC-190	ATRX	c.4916A>G	p.E1639G	EX18	16.8%	NM_000489.3
NC-191	LRP1B	c.9902C>T	p.P3301L	EX62	1.9%	NM_018557.2
NC-191	EGFR	c.2369C>T	p.T790M	EX20	52.1%	NM_005228.3
NC-191	EGFR	c.2573T>G	p.L858R	EX21	50.5%	NM_005228.3
NC-191	MAP2K4	c.205C>T	p.Q69*	EX2	17.4%	NM_003010.2
NC-191	AXIN2	c.2521C>T	p.R841W	EX11E	2.1%	NM_004655.3
NC-192	JAK1	c.1486A>C	p.K496Q	EX11	10.9%	NM_002227.2
NC-192	EGFR	c.2317_2319dupCAC	p.H773dup	EX20	13.2%	NM_005228.3
NC-193	NF2	c.100G>T	p.E34*	EX1	34.0%	NM_000268.3
NC-193	TP53	c.329G>T	p.R110L	EX4	28.6%	NM_000546.5

NC-193	FAT1	c.5765A>C	p.N1922T	EX10	16.4%	NM_005245.3
NC-193	PTPRD	c.1348G>T	p.G450*	EX21	16.0%	NM_002839.3
NC-193	KDM5A	c.4269C>A	p.S1423R	EX26	15.2%	NM_001042603.1
NC-193	MAGI2	c.2597-1G>T	.	IVS15	14.6%	NM_012301.3
NC-193	PIK3CG	c.3190G>A	p.A1064T	EX11	13.8%	NM_002649.2
NC-193	AXIN1	c.2526G>T	p.E842D	EX11	13.1%	NM_003502.3
NC-193	ERCC3	c.2277G>T	p.M759I	EX15	12.8%	NM_000122.1
NC-193	PMS2	c.1291G>T	p.E431*	EX11	12.2%	NM_000535.5
NC-193	LRP1B	c.3484G>C	p.D1162H	EX22	11.8%	NM_018557.2
NC-193	IKZF1	c.1473G>C	p.E491D	EX8	11.5%	NM_006060.4
NC-193	HCN1	c.2527C>G	p.R843G	EX8	10.1%	NM_021072.3
NC-193	LRP1B	c.13235T>A	p.V4412E	EX86	2.1%	NM_018557.2
NC-193	ARID1A	c.523G>T	p.G175*	EX1	2.0%	NM_006015.4
NC-193	FLCN	c.855G>C	p.Q285H	EX8	1.8%	NM_144997.5
NC-194	FLG	c.8617G>A	p.A2873T	EX3E	7.8%	NM_002016.1
NC-194	EPHA5	c.922G>T	p.G308W	EX4	8.4%	NM_004439.5
NC-194	TET2	c.3954+2T>A	.	IVS7	1.0%	NM_001127208.2
NC-194	FAT2	c.4279C>T	p.R1427C	EX6	1.2%	NM_001447.2
NC-194	EGFR	c.2311_2313dupAAC	p.N771dup	EX20	60.9%	NM_005228.3
NC-194	TP53	c.733G>A	p.G245S	EX7	19.5%	NM_000546.5
NC-195	NFE2L2	c.86A>G	p.D29G	EX2	13.2%	NM_006164.4
NC-195	FANCA	c.46G>A	p.G16R	EX1	10.2%	NM_000135.2
NC-195	ABCC11	c.1622G>C	p.G541A	EX12	9.6%	NM_032583.3
NC-195	LRRC7	c.91C>A	p.H31N	EX1	9.5%	NM_020794.2
NC-195	TP53	c.835G[3>2]	p.R280Efs*65	EX8	9.3%	NM_000546.5
NC-195	EXT2	c.583G>A	p.G195S	EX3	8.7%	NM_207122.1

NC-195	FMN2	c.2809C>G	p.L937V	EX5	8.4%	NM_020066.4
NC-195	POM121L12	c.455G>C	p.R152T	EX1	8.2%	NM_182595.3
NC-195	HGF	c.1750C>G	p.L584V	EX15	8.1%	NM_000601.4
NC-195	LRP1B	c.893A>T	p.Y298F	EX7	8.0%	NM_018557.2
NC-195	MLL	c.9268C>T	p.P3090S	EX27	7.8%	NM_001197104.1
NC-195	CASP8	c.128T>C	p.M43T	EX1	7.4%	NM_001080125.1
NC-195	HGF	c.941G>T	p.R314M	EX8	6.7%	NM_000601.4
NC-195	MLL2	c.8549delT	p.L2850Qfs*60	EX34	4.4%	NM_003482.3
NC-195	SIN3A	c.739C>T	p.P247S	EX5	4.0%	NM_001145358.1
NC-195	ZFHX3	c.6164C>G	p.P2055R	EX9	1.4%	NM_006885.3
NC-195	TET2	c.3716CT[2>1]	p.L1240Gfs*2	EX6	1.3%	NM_001127208.2
NC-196	MLL2	c.1677G[2>1]	p.E560Nfs*370	EX10	10.1%	NM_003482.3
NC-196	SMAD4	c.1567T>C	p.C523R	EX12E	13.1%	NM_005359.5
NC-197	PTCH2	c.3160G>A	p.A1054T	EX20	30.7%	NM_001166292.1
NC-197	UGT1A1	c.158G>A	p.R53K	EX1	12.2%	NM_000463.2
NC-197	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	55.3%	NM_005228.3
NC-197	EGFR	c.2369C>T	p.T790M	EX20	66.1%	NM_005228.3
NC-197	TP53	c.772G>A	p.E258K	EX7	53.5%	NM_000546.5
NC-197	RUNX1	c.1190A>G	p.Q397R	EX9E	2.2%	NM_001754.4
NC-198	TP53	c.722C>G	p.S241C	EX7	42.0%	NM_000546.5
NC-198	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	23.7%	NM_005228.3
NC-198	EGFR	c.2369C>T	p.T790M	EX20	7.6%	NM_005228.3
NC-198	NOTCH1	c.250G>T	p.D84Y	EX3	22.3%	NM_017617.3
NC-198	FLI1	c.1306G>A	p.V436I	EX9E	18.8%	NM_002017.4

NC-198	ERBB3	c.1398C>G	p.H466Q	EX12	20.3%	NM_001982.3
NC-199	RNASEL	c.1003G>C	p.D335H	EX2	12.4%	NM_021133.3
NC-199	PARP1	c.2347G>C	p.D783H	EX17	26.7%	NM_001618.3
NC-199	WWP1	c.686C>T	p.A229V	EX8	36.1%	NM_007013.3
NC-199	MLL2	c.8711C>T	p.P2904L	EX34	33.2%	NM_003482.3
NC-199	RB1	c.1388C>A	p.S463*	EX14	23.6%	NM_000321.2
NC-199	MAX	c.289C>T	p.Q97*	EX4	33.3%	NM_002382.4
NC-199	TP53	c.761TCA[2>1]	p.I254[2>1]	EX7	25.0%	NM_000546.5
NC-200	NOTCH2	c.4029G>C	p.Q1343H	EX25	11.1%	NM_024408.3
NC-200	HCN1	c.2464G>A	p.V822I	EX8E	20.5%	NM_021072.3
NC-200	ARID1B	c.1581G>C	p.Q527H	EX2	23.9%	NM_020732.3
NC-200	EGFR	c.376G>C	p.D126H	EX3	2.7%	NM_005228.3
NC-200	PTPRD	c.2486T>A	p.L829H	EX28	7.3%	NM_002839.3
NC-200	CDKN2A	c.355G>T	p.E119*	EX2	21.9%	NM_000077.4
NC-200	MLL2	c.13076C>G	p.S4359*	EX39	33.9%	NM_003482.3
NC-200	TSC2	c.4037C>T	p.S1346L	EX34	1.3%	NM_000548.3
NC-200	CTCF	c.274G>A	p.D92N	EX3	17.8%	NM_006565.3
NC-200	ZFHX3	c.9718G>A	p.V3240I	EX10E	3.2%	NM_006885.3
NC-200	TP53	c.1045G>T	p.E349*	EX10	40.8%	NM_000546.5
NC-200	KEAP1	c.1136G>T	p.G379V	EX3	30.6%	NM_203500.1
NC-200	ERCC1	c.1A>G	p.0?	EX2	6.8%	NM_001983.3
NC-200	MED12	c.4591G>A	p.E1531K	EX33	44.2%	NM_005120.2
NC-201	PIK3CA	c.1624G>A	p.E542K	EX10	10.6%	NM_006218.2
NC-201	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	34.0%	NM_005228.3
NC-201	FGFR2	c.1873C>T	p.R625*	EX14	2.8%	NM_000141.4

NC-201	TSHR	c.742C>A	p.H248N	EX9	1.0%	NM_000369.2
NC-201	PALB2	c.302A>G	p.D101G	EX4	11.6%	NM_024675.3
NC-201	TP53	c.455C>T	p.P152L	EX5	48.7%	NM_000546.5
NC-201	RUNX1	c.883_885delTCT	p.S295del	EX8	2.6%	NM_001754.4
NC-202	MSH2	c.1514T>G	p.L505W	EX10	9.3%	NM_000251.2
NC-202	CTNNB1	c.110C>G	p.S37C	EX3	11.0%	NM_001904.3
NC-202	EGFR	c.2239_2256delTTAAGAGAAGCAACATCT	p.L747_S752del	EX19	33.7%	NM_005228.3
NC-202	GRM3	c.1360G>T	p.V454F	EX4	6.6%	NM_000840.2
NC-202	GRM3	c.1384G>A	p.G462R	EX4	6.9%	NM_000840.2
NC-202	ARID2	c.3944A>G	p.E1315G	EX15	9.9%	NM_152641.2
NC-202	TFDP1	c.409G>A	p.E137K	EX6	1.3%	NM_007111.4
NC-202	FANCM	c.1125G>T	p.Q375H	EX6	14.5%	NM_020937.2
NC-202	TP53	c.451C>T	p.P151S	EX5	22.1%	NM_000546.5
NC-202	CHD6	c.754G>C	p.D252H	EX5	6.0%	NM_032221.3
NC-203	FLT4	c.1976G>A	p.R659H	EX13	7.7%	NM_182925.4
NC-203	PARK2	c.1187G>C	p.R396T	EX11	9.9%	NM_004562.2
NC-203	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	12.6%	NM_005228.3
NC-203	FANCM	c.1222G>A	p.D408N	EX7	7.1%	NM_020937.2
NC-203	BLM	c.2293G>A	p.V765I	EX10	2.0%	NM_000057.2
NC-203	TP53	c.310_340delCAGGGCAGCTACGGTTTCCGTCTGGGCTTCT	p.Q104Cfs*9	EX4	4.8%	NM_000546.5
NC-203	EP300	c.3042G>C	p.E1014D	EX16	9.1%	NM_001429.3
NC-204	EGFR	c.2303G>T	p.S768I	EX20	34.1%	NM_005228.3

NC-204	EGFR	c.2573T>G	p.L858R	EX21	32.2%	NM_005228.3
NC-204	PTCH1	c.4181G>A	p.R1394Q	EX23	2.1%	NM_000264.3
NC-204	RB1	c.763C>T	p.R255*	EX8	15.8%	NM_000321.2
NC-204	MAF	c.101A>G	p.K34R	EX1E	1.1%	NM_001031804.2
NC-204	TP53	c.578A>G	p.H193R	EX6	28.9%	NM_000546.5
NC-204	ASXL1	c.4562C>T	p.A1521V	EX13E	1.4%	NM_015338.5
NC-205	ARID1A	c.4711A[2>1]	p.N1571Tfs*41	EX18	7.0%	NM_006015.4
NC-205	ALK	c.574G>C	p.E192Q	EX1	9.0%	NM_004304.4
NC-205	NFE2L2	c.100C>G	p.R34G	EX2	10.1%	NM_006164.4
NC-205	KDR	c.1990C>T	p.R664C	EX14	1.0%	NM_002253.2
NC-205	FAT1	c.1420G>A	p.E474K	EX2	6.3%	NM_005245.3
NC-205	HIST1H4I	c.271C>G	p.L91V	EX1E	14.1%	NM_003495.2
NC-205	CDKN2A	c.57_58delCGinsA	p.A20Rfs*6	EX1	9.7%	NM_000077.4
NC-205	NOTCH1	c.4497C>A	p.Y1499*	EX25	7.6%	NM_017617.3
NC-205	TP53	c.743G>C	p.R248P	EX7	6.8%	NM_000546.5
NC-205	TP53	c.730G>A	p.G244S	EX7	6.2%	NM_000546.5
NC-205	KEAP1	c.1409G>A	p.R470H	EX4	9.5%	NM_203500.1
NC-206	ERBB4	c.296T>G	p.L99R	EX3	10.0%	NM_005235.2
NC-206	MET	c.1666T>A	p.W556R	EX5	11.0%	NM_000245.2
NC-206	BLM	c.128C>T	p.S43L	EX3	10.0%	NM_000057.2
NC-206	PALB2	c.2770C>T	p.P924S	EX8	12.6%	NM_024675.3
NC-206	TP53	c.602T>A	p.L201*	EX6	14.2%	NM_000546.5
NC-206	KEAP1	c.959G>A	p.R320Q	EX3	20.4%	NM_203500.1
NC-206	BCOR	c.1930G>T	p.E644*	EX4	21.3%	NM_001123385.1
NC-206	BCOR	c.1924C[2>1]	p.P642Qfs*27	EX4	21.4%	NM_001123385.1
NC-207	DNMT3A	c.1976G>C	p.R659P	EX17	27.9%	NM_022552.4

NC-207	SF3B1	c.2203A>T	p.I735F	EX15	24.4%	NM_012433.2
NC-207	POM121L12	c.489C[4>3]	p.A165Pfs*56	EX1E	23.3%	NM_182595.3
NC-207	CDKN2A	c.299C[2>1]	p.A102Rfs*44	EX2	53.5%	NM_000077.4
NC-207	NOTCH1	c.680G>C	p.C227S	EX4	19.6%	NM_017617.3
NC-207	SUFU	c.584_591delTTACCTTC	p.V195Afs*9	EX4	5.6%	NM_016169.3
NC-207	FGFR2	c.1124A>G	p.Y375C	EX9	3.0%	NM_000141.4
NC-207	MLL2	c.12166G>T	p.E4056*	EX39	2.3%	NM_003482.3
NC-207	TBX3	c.1902G>C	p.M634I	EX8E	21.0%	NM_016569.3
NC-207	NTRK3	c.1048G>T	p.V350L	EX10	22.0%	NM_001012338.2
NC-207	TP53	c.644G>A	p.S215N	EX6	33.1%	NM_000546.5
NC-207	EP300	c.4334A>G	p.D1445G	EX27	50.5%	NM_001429.3
NC-208	SETDB1	c.32A>T	p.D11V	EX2	7.1%	NM_001145415.1
NC-208	KDR	c.1106T>A	p.I369K	EX9	1.7%	NM_002253.2
NC-208	NOTCH4	c.4736A>G	p.D1579G	EX26	3.6%	NM_004557.3
NC-208	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	10.5%	NM_005228.3
NC-208	ABCC2	c.3585A>C	p.K1195N	EX25	2.1%	NM_000392.3
NC-208	BRCA2	c.8269G>C	p.E2757Q	EX18	1.7%	NM_000059.3
NC-208	TP53	c.404G>A	p.C135Y	EX5	7.1%	NM_000546.5
NC-208	SERPINB4	c.131G>T	p.G44V	EX2	3.9%	NM_002974.2
NC-208	CHEK2	c.1512A>T	p.E504D	EX14	6.8%	NM_007194.3
NC-208	XBP1	c.241AG[2>1]	p.R81Sfs*16	EX2	6.4%	NM_005080.3
NC-209	PIK3CA	c.3140A>G	p.H1047R	EX21E	3.2%	NM_006218.2
NC-209	ETV5	c.1429G>T	p.E477*	EX13E	9.3%	NM_004454.2
NC-209	RICTOR	c.839G>A	p.R280Q	EX10	1.1%	NM_152756.3

NC-209	SERPINB3	c.902C>A	p.T301N	EX8E	1.9%	NM_006919.2
NC-210	SETD2	c.179A>G	p.K60R	EX3	4.8%	NM_014159.6
NC-210	DDR1	c.404G>T	p.R135L	EX6	1.3%	NM_001954.4
NC-210	EGFR	c.2573T>G	p.L858R	EX21	12.9%	NM_005228.3
NC-210	GAB2	c.1862C>T	p.P621L	EX9	1.2%	NM_080491.2
NC-210	ERBB2	c.929C>T	p.S310F	EX8	12.1%	NM_004448.2
NC-211	MTOR	c.5979G>C	p.K1993N	EX43	1.1%	NM_004958.3
NC-211	DNMT3A	c.995G>A	p.G332E	EX8	2.6%	NM_022552.4
NC-211	PDCD1	c.394G>A	p.A132T	EX2	2.7%	NM_005018.2
NC-211	NOTCH4	c.4027C>G	p.P1343A	EX22	1.1%	NM_004557.3
NC-211	EGFR	c.2313_2314insAAT	p.N771dup	EX20	11.5%	NM_005228.3
NC-211	MYC	c.992G>A	p.R331Q	EX3E	1.3%	NM_002467.4
NC-211	EP300	c.5189C>T	p.S1730F	EX31E	2.3%	NM_001429.3
NC-212	EGFR	c.2573T>G	p.L858R	EX21	8.8%	NM_005228.3
NC-213	TET2	c.1859A>G	p.Y620C	EX3	2.5%	NM_001127208.2
NC-213	CSF1R	c.1483T>A	p.S495T	EX10	22.2%	NM_005211.3
NC-213	FAT2	c.3525C>A	p.N1175K	EX2	23.6%	NM_001447.2
NC-213	MET	c.3028G>C	p.D1010H	EX14	56.4%	NM_000245.2
NC-213	PLCG2	c.1735C>T	p.R579W	EX18	4.6%	NM_002661.3
NC-213	CIC	c.4277C>A	p.T1426N	EX18	1.1%	NM_015125.3
NC-213	EP300	c.1948A>G	p.T650A	EX10	1.2%	NM_001429.3
NC-213	KDM5C	c.4249C>T	p.H1417Y	EX25	11.3%	NM_004187.3
NC-214	MTOR	c.2285C>G	p.S762C	EX14	35.4%	NM_004958.3
NC-214	LRP1B	c.2052C>A	p.F684L	EX13	19.2%	NM_018557.2
NC-214	ATR	c.7160G>T	p.R2387I	EX42	20.7%	NM_001184.3
NC-214	CDKN2A	c.248A>C	p.H83P	EX2	43.4%	NM_000077.4

NC-214	CYLD	c.1780C>A	p.H594N	EX10	24.5%	NM_001042355.1
NC-214	TP53	c.746G>T	p.R249M	EX7	35.0%	NM_000546.5
NC-214	BRIP1	c.1471C>T	p.Q491*	EX10	23.3%	NM_032043.2
NC-214	ANKRD30B	c.3388C>A	p.L1130I	EX36E	19.7%	NM_001145029.1
NC-214	JAK3	c.2117C>G	p.A706G	EX16	28.3%	NM_000215.3
NC-214	CCNE1	c.43A>T	p.T15S	EX3	63.3%	NM_001238.2
NC-215	ZIC3	c.967_970delACGGinsCCT	p.T323Pfs*85	EX1	33.5%	NM_003413.3
NC-215	TP53	c.733G>T	p.G245C	EX7	28.0%	NM_000546.5
NC-215	POLE	c.3729G>T	p.Q1243H	EX30	24.9%	NM_006231.2
NC-215	KRAS	c.35G>A	p.G12D	EX2	16.3%	NM_033360.2
NC-215	PAX5	c.1073G>T	p.W358L	EX9	14.0%	NM_016734.1
NC-215	ERRFI1	c.322G>A	p.E108K	EX4	14.0%	NM_018948.3
NC-215	PRKAR1A	c.253C>T	p.P85S	EX3	9.3%	NM_212471.1
NC-215	ABL2	c.2432A>G	p.Q811R	EX12	8.8%	NM_007314.3
NC-215	EPHA3	c.1154G>C	p.R385P	EX5	7.1%	NM_005233.5
NC-215	LRP1B	c.8610C>A	p.D2870E	EX54	5.8%	NM_018557.2
NC-215	LRP1B	c.2753C>A	p.S918Y	EX17	5.2%	NM_018557.2
NC-215	LRP1B	c.9971G>A	p.C3324Y	EX63	2.7%	NM_018557.2
NC-215	ATR	c.326_327delGGinsTA	p.R109L	EX4	2.6%	NM_001184.3
NC-216	HDAC1	c.589T>C	p.S197P	EX6	17.0%	NM_004964.2
NC-216	FCGR3A	c.41-2A>G	.	IVS2	15.0%	NM_001127593.1
NC-216	PIK3R1	c.886A>C	p.T296P	EX7	16.2%	NM_181523.2
NC-216	EXT1	c.2000T>A	p.L667*	EX10	1.5%	NM_000127.2
NC-216	EXT1	c.1997A>C	p.K666T	EX10	1.5%	NM_000127.2
NC-216	MRE11A	c.430T>G	p.L144V	EX6	16.8%	NM_005591.3

NC-216	MYH11	c.4705A>T	p.K1569*	EX34	18.0%	NM_001040113.1
NC-216	TP53	c.757A>G	p.T253A	EX7	21.1%	NM_000546.5
NC-216	BRCA1	c.2257A>C	p.S753R	EX10	15.9%	NM_007294.3
NC-216	JAK3	c.1921A>G	p.K641E	EX15	19.0%	NM_000215.3
NC-216	CIC	c.1813A>C	p.S605R	EX10	1.4%	NM_015125.3
NC-216	ERG	c.21A>C	p.E7D	EX2	15.9%	NM_182918.3
NC-217	PDK1	c.1144G>T	p.G382W	EX10	4.3%	NM_002610.3
NC-217	RICTOR	c.4021A>T	p.M1341L	EX31	7.0%	NM_152756.3
NC-217	EGFR	c.2500G>C	p.V834L	EX21	44.4%	NM_005228.3
NC-217	EGFR	c.2573T>G	p.L858R	EX21	45.2%	NM_005228.3
NC-217	KIF5B	c.1967A>G	p.K656R	EX17	25.8%	NM_004521.2
NC-217	MLL2	c.1760A>T	p.E587V	EX10	22.3%	NM_003482.3
NC-217	CDK4	c.71G>T	p.R24L	EX2	5.9%	NM_000075.3
NC-217	CTCF	c.569delG	p.S190Ifs*32	EX3	30.2%	NM_006565.3
NC-217	TP53	c.474_475delCGinsAC	p.A159P	EX5	8.6%	NM_000546.5
NC-217	RNF43	c.1867G>A	p.A623T	EX9	32.1%	NM_017763.4
NC-218	HRAS	c.182A>G	p.Q61R	EX3	56.5%	NM_001130442.1
NC-219	FAT2	c.11154G>A	p.M3718I	EX18	5.9%	NM_001447.2
NC-219	GNA12	c.822G>A	p.M274I	EX4E	9.3%	NM_007353.2
NC-219	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	12.7%	NM_005228.3
NC-219	TP53	c.839G>C	p.R280T	EX8	35.7%	NM_000546.5
NC-219	PCK1	c.1491G>T	p.W497C	EX10E	2.4%	NM_002591.3
NC-220	KDR	c.3447G>C	p.Q1149H	EX26	3.9%	NM_002253.2
NC-220	OR5L2	c.200C>A	p.S67Y	EX1E	27.4%	NM_001004739.1
NC-220	RB1	c.1547G>A	p.W516*	EX17	84.8%	NM_000321.2

NC-220	TP53	c.811G>T	p.E271*	EX8	77.0%	NM_000546.5
NC-220	NOTCH3	c.1976A>G	p.N659S	EX13	42.8%	NM_000435.2
NC-221	PIK3CA	c.1633G>A	p.E545K	EX10	1.5%	NM_006218.2
NC-221	PDGFRB	c.1949C>T	p.S650L	EX14	3.6%	NM_002609.3
NC-221	EGFR	c.2573T>G	p.L858R	EX21	8.9%	NM_005228.3
NC-221	ABL1	c.602A>G	p.H201R	EX4	10.5%	NM_005157.4
NC-221	MAP2K1	c.167A>C	p.Q56P	EX2	1.4%	NM_002755.3
NC-221	TOP2A	c.740C>G	p.A247G	EX7	2.4%	NM_001067.3
NC-222	CTNNA2	c.1041C>G	p.S347R	EX7	3.5%	NM_004389.3
NC-222	PDGFRA	c.1714T>C	p.Y572H	EX12	3.3%	NM_006206.4
NC-222	NOTCH4	c.5378G>A	p.R1793Q	EX30E	2.9%	NM_004557.3
NC-222	ARID1B	c.220G>T	p.E74*	EX1	1.6%	NM_020732.3
NC-222	MET	c.2888-1G>A	.	IVS13	58.7%	NM_000245.2
NC-222	PREX2	c.1891G>A	p.E631K	EX18	4.8%	NM_024870.2
NC-222	CDKN2A	c.250G>A	p.D84N	EX2	3.8%	NM_000077.4
NC-222	TSC1	c.911A>G	p.Y304C	EX9	2.8%	NM_000368.4
NC-222	FLT1	c.2995C>G	p.L999V	EX22	2.4%	NM_002019.4
NC-222	ACIN1	c.260G>T	p.R87L	EX1	1.7%	NM_014977.3
NC-222	TP53	c.334_366delGGCTTCTTGCATTCTGGGACAGCCAAGTCTGTG	p.G112_V122del	EX4	1.6%	NM_000546.5
NC-223	SOX2	c.674_677delTGTC	p.M225Tfs*48	EX1E	17.9%	NM_003106.3
NC-223	MLL3	c.5230G>A	p.E1744K	EX35	16.3%	NM_170606.2
NC-223	HNF1A	c.1346T>A	p.I449N	EX7	17.7%	NM_000545.5
NC-223	POLE	c.4456C>T	p.H1486Y	EX35	35.6%	NM_006231.2
NC-223	FLT3	c.1043G>C	p.G348A	EX9	20.5%	NM_004119.2

NC-223	RB1	c.1030delC	p.Q344Rfs*5	EX10	41.7%	NM_000321.2
NC-223	TP53	c.313G>C	p.G105R	EX4	43.7%	NM_000546.5
NC-223	KEAP1	c.830C>T	p.T277M	EX3	44.2%	NM_203500.1
NC-223	NOTCH3	c.6233G>A	p.R2078Q	EX33E	47.4%	NM_000435.2
NC-223	MEF2B	c.922G>C	p.G308R	EX9E	21.3%	NM_001145785.1
NC-224	PIK3CA	c.1624G>A	p.E542K	EX10	15.6%	NM_006218.2
NC-224	PIK3CA	c.1633G>A	p.E545K	EX10	15.3%	NM_006218.2
NC-224	FAT1	c.12331G>A	p.A4111T	EX24	11.0%	NM_005245.3
NC-224	EPHB6	c.1238G>A	p.R413H	EX9	13.8%	NM_004445.3
NC-224	MLL3	c.8788_8789delTC	p.S2930Rfs*3	EX38	15.5%	NM_170606.2
NC-224	MLL2	c.9349G>A	p.E3117K	EX34	14.2%	NM_003482.3
NC-224	KEAP1	c.1568G>T	p.G523V	EX5	30.1%	NM_203500.1
NC-224	TMPRSS2	c.1567C>T	p.R523*	EX13	16.1%	NM_001135099.1
NC-225	ARID1A	c.1429C>G	p.H477D	EX3	3.6%	NM_006015.4
NC-225	PIK3CA	c.2176G>A	p.E726K	EX14	1.0%	NM_006218.2
NC-225	FAT1	c.12614T>A	p.M4205K	EX25	2.7%	NM_005245.3
NC-225	FAT2	c.859G>C	p.E287Q	EX1	1.1%	NM_001447.2
NC-225	ICK	c.985C>G	p.P329A	EX10	2.2%	NM_016513.4
NC-225	CARD11	c.79G>C	p.E27Q	EX3	3.6%	NM_032415.4
NC-225	CYP2C8	c.241G>A	p.E81K	EX2	4.1%	NM_000770.3
NC-225	ZFHX3	c.8398C>G	p.L2800V	EX9	2.9%	NM_006885.3
NC-225	JAK3	c.3205G>A	p.E1069K	EX23	1.0%	NM_000215.3
NC-226	NCSTN	c.1813G>T	p.V605F	EX16	22.7%	NM_015331.2
NC-226	FH	c.555+1G>T	.	IVS4	45.0%	NM_000143.3
NC-226	CUL3	c.1486-2A>T	.	IVS10	32.1%	NM_003590.4
NC-226	PBRM1	c.2620A>T	p.K874*	EX18	60.7%	NM_018313.4

NC-226	KDR	c.1264C>A	p.Q422K	EX10	38.3%	NM_002253.2
NC-226	ARID1B	c.3048G>A	p.M1016I	EX11	22.9%	NM_020732.3
NC-226	GIGYF1	c.661C>T	p.R221*	EX7	30.3%	NM_022574.4
NC-226	TP53	c.832C>A	p.P278T	EX8	50.3%	NM_000546.5
NC-227	SPEN	c.5212C>A	p.P1738T	EX11	2.7%	NM_015001.2
NC-227	NOTCH2	c.660C>G	p.S220R	EX4	3.5%	NM_024408.3
NC-227	EPHA3	c.1715C>A	p.S572*	EX9	11.8%	NM_005233.5
NC-227	FAT2	c.905C>A	p.A302D	EX1	2.6%	NM_001447.2
NC-227	EGFR	c.2582T>A	p.L861Q	EX21	16.1%	NM_005228.3
NC-227	BRAF	c.1694A>G	p.D565G	EX13	4.8%	NM_004333.4
NC-227	GRIN2A	c.364G>A	p.V122I	EX2	3.5%	NM_001134407.1
NC-227	TP53	c.638_654delGACATAGTGTGGTGGTG	p.R213Pfs*3	EX6	8.2%	NM_000546.5
NC-227	GATA1	c.38A>T	p.E13V	EX2	6.6%	NM_002049.3
NC-227	ATRX	c.2636_2637delCTinsTA	p.A879V	EX9	3.3%	NM_000489.3
NC-228	EGFR	c.2573T>G	p.L858R	EX21	68.9%	NM_005228.3
NC-228	MLL2	c.8485A>T	p.M2829L	EX34	7.6%	NM_003482.3
NC-228	ERBB3	c.1718G>T	p.C573F	EX15	7.8%	NM_001982.3
NC-228	ATRX	c.3458C>T	p.S1153L	EX9	4.2%	NM_000489.3
NC-228	PAK3	c.581G>T	p.R194I	EX9	5.4%	NM_002578.3
NC-229	PDK1	c.722A>G	p.D241G	EX6	11.2%	NM_002610.3
NC-229	FANCD2	c.709G>C	p.E237Q	EX10	5.4%	NM_033084.3
NC-229	FANCD2	c.886G>C	p.E296Q	EX11	4.2%	NM_033084.3
NC-229	FANCD2	c.898G>C	p.E300Q	EX12	6.6%	NM_033084.3
NC-229	CTNNB1	c.110C>T	p.S37F	EX3	5.1%	NM_001904.3
NC-229	PBRM1	c.422G>C	p.W141S	EX5	10.8%	NM_018313.4

NC-229	EPHA5	c.2197C>T	p.H733Y	EX12	5.5%	NM_004439.5
NC-229	RICTOR	c.4322A>T	p.D1441V	EX33	2.9%	NM_152756.3
NC-229	MDM2	c.887C>T	p.S296L	EX10	2.1%	NM_002392.4
NC-229	ZFP36L1	c.770C[3>2]	p.R258Gfs*44	EX3E	1.8%	NM_001244701.1
NC-229	EME2	c.517G>A	p.E173K	EX4	1.3%	NM_001257370.1
NC-229	STK11	c.807G[4>5]	p.S271Efs*14	EX6	11.9%	NM_000455.4
NC-229	SMARCA4	c.1534G>T	p.E512*	EX9	2.8%	NM_003072.3
NC-229	SMARCA4	c.4057G>T	p.E1353*	EX29	7.4%	NM_003072.3
NC-229	KDM5C	c.2768G[2>1]	p.Q924Rfs*11	EX19	23.5%	NM_004187.3
NC-230	HIST3H3	c.157C>T	p.R53C	EX1E	6.4%	NM_003493.2
NC-230	EPHA3	c.2609A>T	p.K870M	EX15	17.5%	NM_005233.5
NC-230	FAT2	c.5899C>T	p.Q1967*	EX9	1.3%	NM_001447.2
NC-230	ICK	c.1013A>C	p.H338P	EX10	9.1%	NM_016513.4
NC-230	EGFR	c.2573T>G	p.L858R	EX21	13.1%	NM_005228.3
NC-230	TP53	c.832_833delCCinsTT	p.P278F	EX8	16.0%	NM_000546.5
NC-230	RBM10	c.1867C>T	p.Q623*	EX15	31.0%	NM_001204468.1
NC-231	ASTN1	c.1207C>A	p.H403N	EX6	9.9%	NM_004319.1
NC-231	LRP1B	c.1211G>T	p.R404I	EX8	19.1%	NM_018557.2
NC-231	ERBB4	c.1805G>C	p.S602T	EX15	22.3%	NM_005235.2
NC-231	ROBO1	c.4688G>A	p.R1563H	EX29	17.3%	NM_002941.3
NC-231	HIST1H2AG	c.215G>T	p.R72L	EX1E	28.0%	NM_021064.4
NC-231	ESR1	c.163C>A	p.P55T	EX2	27.2%	NM_001122740.1
NC-231	MAGI2	c.1334A>G	p.E445G	EX9	6.0%	NM_012301.3
NC-231	HGF	c.320G>A	p.G107E	EX3	22.5%	NM_000601.4
NC-231	PTPRD	c.3146C>T	p.P1049L	EX29	27.7%	NM_002839.3
NC-231	PTPRD	c.647G>T	p.R216L	EX18	27.1%	NM_002839.3

NC-231	ABCC2	c.1082A>T	p.Y361F	EX9	23.6%	NM_000392.3
NC-231	KRAS	c.34G>T	p.G12C	EX2	37.3%	NM_033360.2
NC-231	TP53	c.524G>T	p.R175L	EX5	28.0%	NM_000546.5
NC-231	SERPINB3	c.562A[2>1]	p.K188Rfs*25	EX6	25.4%	NM_006919.2
NC-231	NOTCH3	c.3883G>T	p.E1295*	EX24	22.9%	NM_000435.2
NC-231	RBM10	c.1356G>C	p.R452S	EX12	31.9%	NM_001204468.1
NC-232	PIK3CA	c.1637A>T	p.Q546L	EX10	14.0%	NM_006218.2
NC-232	ACVR1B	c.251G>A	p.C84Y	EX2	1.5%	NM_020328.3
NC-232	TP53	c.473G>A	p.R158H	EX5	13.6%	NM_000546.5
NC-232	ERBB2	c.2331_2339dupGGGCTCCCC	p.G778_P780dup	EX20	10.4%	NM_004448.2
NC-233	LRP1B	c.6824C>A	p.A2275D	EX42	10.0%	NM_018557.2
NC-233	FGFR4	c.238C>T	p.R80W	EX3	2.1%	NM_213647.1
NC-233	PSMB1	c.401T>C	p.V134A	EX4	1.3%	NM_002793.3
NC-233	EGFR	c.2573T>G	p.L858R	EX21	27.7%	NM_005228.3
NC-234	FLT4	c.169C>T	p.L57F	EX3	13.2%	NM_182925.4
NC-234	RB1	c.1208A>C	p.Y403S	EX12	15.9%	NM_000321.2
NC-234	MET	c.2888-19_2888-13delinsAAA	.	IVS13	9.2%	NM_000245.2
NC-235	MAP2K4	c.475C>G	p.P159A	EX4	39.6%	NM_003010.2
NC-235	EGFR	c.2573T>G	p.L858R	EX21	21.0%	NM_005228.3
NC-235	TP53	c.832C>G	p.P278A	EX8	74.8%	NM_000546.5
NC-236	FOXP1	c.1661_1662delCCinsT	p.S554Ffs*45	EX15	31.8%	NM_001244814.1
NC-236	CADM2	c.649C>T	p.Q217*	EX5	27.1%	NM_153184.3
NC-236	OR5L2	c.121G>T	p.A41S	EX1E	26.3%	NM_001004739.1
NC-236	ASCL4	c.144G>A	p.W48*	EX1E	28.6%	NM_203436.2

NC-236	TP53	c.994-1G>A	.	IVS9	41.2%	NM_000546.5
NC-236	AR	c.1508G>T	p.W503L	EX1	39.5%	NM_000044.3
NC-237	HDAC4	c.3097C>T	p.R1033C	EX26	4.2%	NM_006037.3
NC-237	EGFR	c.2573T>G	p.L858R	EX21	17.1%	NM_005228.3
NC-237	SMAD3	c.751T>C	p.S251P	EX6	4.9%	NM_005902.3
NC-237	NTRK3	c.1724A>G	p.K575R	EX16	2.4%	NM_001012338.2
NC-237	TP53	c.916C>T	p.R306*	EX8	20.3%	NM_000546.5
NC-237	PPP2R1A	c.470G>A	p.R157Q	EX4	3.0%	NM_014225.5
NC-238	EPHA2	c.1429G>A	p.G477R	EX7	20.8%	NM_004431.3
NC-238	SDHB	c.213G>T	p.M71I	EX3	4.0%	NM_003000.2
NC-238	LRP1B	c.12926G>A	p.C4309Y	EX84	20.1%	NM_018557.2
NC-238	IDH1	c.695A>T	p.D232V	EX6	21.0%	NM_005896.2
NC-238	SETD2	c.6661C>G	p.P2221A	EX15	1.3%	NM_014159.6
NC-238	TP63	c.508G>A	p.D170N	EX4	74.5%	NM_003722.4
NC-238	RAC1	c.85C>A	p.P29T	EX2	8.2%	NM_018890.3
NC-238	RAC1	c.94delT	p.Y32Ifs*15	EX2	7.9%	NM_018890.3
NC-238	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	43.0%	NM_005228.3
NC-238	PCLO	c.8374A>T	p.T2792S	EX5	9.0%	NM_033026.5
NC-238	CDH23	c.4716G>C	p.K1572N	EX38	2.0%	NM_022124.5
NC-238	FLT1	c.1230A>T	p.K410N	EX9	22.7%	NM_002019.4
NC-238	TP53	c.993+2T>C	.	IVS9	43.9%	NM_000546.5
NC-238	PPM1D	c.23G>A	p.G8E	EX1	14.1%	NM_003620.3
NC-238	JAK3	c.1994_1999dupCCTTCA	p.F666_I667insTF	EX15	3.8%	NM_000215.3
NC-239	EPHB1	c.685G>A	p.A229T	EX3	20.0%	NM_004441.4

NC-239	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	43.2%	NM_005228.3
NC-239	MLL3	c.296A>T	p.D99V	EX3	11.9%	NM_170606.2
NC-239	CBL	c.2060C>T	p.P687L	EX13	16.5%	NM_005188.3
NC-239	TP53	c.637C>T	p.R213*	EX6	64.8%	NM_000546.5
NC-239	FAM123B	c.3G>A	p.0?	EX2E	2.3%	NM_152424.3
NC-240	FUBP1	c.338G>C	p.G113A	EX5	2.1%	NM_003902.3
NC-240	RET	c.2038G>A	p.A680T	EX11	5.4%	NM_020975.4
NC-240	TP53	c.770T>G	p.L257R	EX7	25.9%	NM_000546.5
NC-241	SF3B1	c.1862A>C	p.D621A	EX14	3.5%	NM_012433.2
NC-241	PDGFRB	c.3203A>G	p.D1068G	EX23E	2.9%	NM_002609.3
NC-241	MLL	c.8876G>T	p.G2959V	EX27	3.9%	NM_001197104.1
NC-243	EGFR	c.2573T>G	p.L858R	EX21	23.2%	NM_005228.3
NC-244	CTNNB1	c.94G>T	p.D32Y	EX3	24.3%	NM_001904.3
NC-244	MAP3K1	c.3260G>C	p.S1087T	EX14	24.2%	NM_005921.1
NC-244	MAGI2	c.2734G>A	p.A912T	EX16	8.2%	NM_012301.3
NC-245	NOTCH2	c.6190G>T	p.E2064*	EX34E	1.7%	NM_024408.3
NC-245	FCGR2A	c.230A>T	p.N77I	EX3	1.3%	NM_021642.3
NC-245	CASP8	c.1057G>T	p.E353*	EX8	3.4%	NM_001080125.1
NC-245	PIK3CA	c.320A>C	p.N107T	EX2	73.7%	NM_006218.2
NC-245	PIK3CA	c.1633G>A	p.E545K	EX10	1.0%	NM_006218.2
NC-245	FAT1	c.11122A>G	p.T3708A	EX19	3.7%	NM_005245.3
NC-245	RICTOR	c.5023G>C	p.E1675Q	EX37	1.2%	NM_152756.3
NC-245	MSH3	c.2120C>G	p.S707C	EX15	1.5%	NM_002439.4
NC-245	NOTCH4	c.5506G>A	p.E1836K	EX30E	4.0%	NM_004557.3
NC-245	DAXX	c.565C>G	p.Q189E	EX3	4.0%	NM_001141970.1

NC-245	IFNGR1	c.412G>T	p.E138*	EX4	10.1%	NM_000416.2
NC-245	EGFR	c.2573T>G	p.L858R	EX21	35.7%	NM_005228.3
NC-245	MET	c.3121G>A	p.D1041N	EX15	1.1%	NM_000245.2
NC-245	FGFR1	c.2410G>A	p.E804K	EX18E	5.6%	NM_023110.2
NC-245	PTPRD	c.1216G>A	p.E406K	EX21	6.6%	NM_002839.3
NC-245	TSC1	c.3177C>G	p.F1059L	EX23E	1.7%	NM_000368.4
NC-245	ERBB3	c.850G>A	p.G284R	EX7	1.1%	NM_001982.3
NC-245	RB1	c.1318G>T	p.E440*	EX13	9.9%	NM_000321.2
NC-245	RB1	c.2075_2076delAT	p.Y692*fs*1	EX20	21.5%	NM_000321.2
NC-245	HSP90AA1	c.462G>C	p.L154F	EX3	1.1%	NM_001017963.2
NC-245	TSC2	c.2674G>A	p.V892I	EX24	2.1%	NM_000548.3
NC-245	SLX4	c.1471C>T	p.L491F	EX7	8.5%	NM_032444.2
NC-245	TP53	c.1025G>A	p.R342Q	EX10	1.0%	NM_000546.5
NC-245	TP53	c.614A>G	p.Y205C	EX6	56.2%	NM_000546.5
NC-245	ASXL1	c.103C>G	p.L35V	EX2	3.9%	NM_015338.5
NC-245	NF2	c.1348G>C	p.E450Q	EX13	3.1%	NM_000268.3
NC-245	DDX3X	c.1585A>C	p.I529L	EX14	5.4%	NM_001356.3
NC-245	AR	c.1532G>A	p.R511K	EX1	2.6%	NM_000044.3
NC-245	TAF1	c.3569G>A	p.R1190H	EX23	6.3%	NM_004606.3
NC-246	LRP1B	c.290G>T	p.C97F	EX3	7.8%	NM_018557.2
NC-246	HCLS1	c.903G>C	p.E301D	EX10	7.6%	NM_005335.4
NC-246	INPP4B	c.596C>T	p.T199I	EX10	7.3%	NM_001101669.1
NC-246	NOTCH4	c.2889G>C	p.Q963H	EX19	13.7%	NM_004557.3
NC-246	MLL3	c.6188C>G	p.A2063G	EX36	10.3%	NM_170606.2
NC-246	CDKN2A	c.318delG	p.R107Afs*39	EX2	9.8%	NM_000077.4
NC-246	AKT1	c.49G>A	p.E17K	EX3	1.7%	NM_001014431.1

NC-246	TP53	c.818G>T	p.R273L	EX8	9.5%	NM_000546.5
NC-246	AURKB	c.-25-2A>T	.	IVS1	10.4%	NM_004217.3
NC-246	CDK12	c.3377_3378delAAinsCC	p.Q1126P	EX13	1.7%	NM_016507.2
NC-246	NOTCH3	c.2437G>T	p.E813*	EX16	9.4%	NM_000435.2
NC-247	CXCR4	c.1046T>C	p.F349S	EX2E	6.9%	NM_003467.2
NC-247	PBRM1	c.3716G>A	p.S1239N	EX24	7.9%	NM_018313.4
NC-247	PIK3CA	c.2176G>A	p.E726K	EX14	18.7%	NM_006218.2
NC-247	TRIO	c.1964G>A	p.R655Q	EX11	5.9%	NM_007118.2
NC-247	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	20.0%	NM_005228.3
NC-247	EGFR	c.2369C>T	p.T790M	EX20	7.2%	NM_005228.3
NC-247	PTPRD	c.4947+1G>A	.	IVS40	14.2%	NM_002839.3
NC-247	TP53	c.796G>A	p.G266R	EX8	17.9%	NM_000546.5
NC-248	APC	c.1270C>T	p.Q424*	EX10	10.9%	NM_000038.5
NC-248	EGFR	c.2573T>G	p.L858R	EX21	17.5%	NM_005228.3
NC-250	HSPD1	c.167G>A	p.G56E	EX2	16.0%	NM_199440.1
NC-250	CPS1	c.3177G>T	p.Q1059H	EX26	11.7%	NM_001875.4
NC-250	EPHA5	c.842A>T	p.E281V	EX3	23.1%	NM_004439.5
NC-250	TERT	c.-58-u66C>T	.	.	40.7%	NM_198253.2
NC-250	ARID1B	c.1379C>T	p.A460V	EX1	8.3%	NM_020732.3
NC-250	CDK13	c.247C>T	p.P83S	EX1	5.6%	NM_003718.4
NC-250	C8orf34	c.1012C>T	p.L338F	EX7	22.1%	NM_052958.2
NC-250	CDKN2A	c.159G>T	p.M53I	EX2	32.9%	NM_000077.4
NC-250	FLI1	c.1243T>G	p.F415V	EX9E	21.9%	NM_002017.4
NC-250	KRAS	c.182A>T	p.Q61L	EX3	33.7%	NM_033360.2

NC-250	NAV3	c.3049G>T	p.D1017Y	EX15	21.3%	NM_014903.4
NC-250	BRCA2	c.9086C>T	p.A3029V	EX23	11.2%	NM_000059.3
NC-250	TP53	c.840A>T	p.R280S	EX8	27.6%	NM_000546.5
NC-250	HOXB13	c.430C>G	p.L144V	EX1	26.9%	NM_006361.5
NC-250	SRSF2	c.190G>T	p.D64Y	EX1	19.0%	NM_003016.4
NC-251	RNASEL	c.274G>C	p.G92R	EX2	12.6%	NM_021133.3
NC-251	ALK	c.1546G>T	p.D516Y	EX7	13.8%	NM_004304.4
NC-251	NRXN1	c.564G>T	p.R188S	EX2	12.0%	NM_001135659.1
NC-251	LRP1B	c.13794G[2>1]	p.A4599Hfs*4	EX91E	11.4%	NM_018557.2
NC-251	PIK3CA	c.1624G>A	p.E542K	EX10	1.5%	NM_006218.2
NC-251	KIT	c.1704T>A	p.Y568*	EX11	2.2%	NM_000222.2
NC-251	OPCML	c.207C>A	p.Y69*	EX3	14.7%	NM_001012393.1
NC-251	KRAS	c.34G>T	p.G12C	EX2	14.8%	NM_033360.2
NC-251	PTPRB	c.204C>A	p.C68*	EX2	14.7%	NM_001109754.2
NC-251	NTHL1	c.816-2A>T	.	IVS5	14.8%	NM_002528.5
NC-251	STK11	c.734+1G>T	.	IVS5	13.6%	NM_000455.4
NC-252	GRIN2A	c.1492G>A	p.G498S	EX6	5.1%	NM_001134407.1
NC-252	ABCC11	c.1523C>T	p.T508I	EX11	12.9%	NM_032583.3
NC-252	TP53	c.844C>T	p.R282W	EX8	7.4%	NM_000546.5
NC-252	PTCH2	c.1142C>T	p.T381I	EX9	7.1%	NM_001166292.1
NC-252	APC	c.4661A[6>7]	p.T1556Nfs*3	EX16E	8.6%	NM_000038.5
NC-252	EGFR	c.2573T>G	p.L858R	EX21	16.2%	NM_005228.3
NC-253	LRRC7	c.55G>A	p.G19S	EX1	27.2%	NM_020794.2
NC-253	NOS3	c.859G>T	p.D287Y	EX8	47.7%	NM_000603.4
NC-253	TSC1	c.226A>G	p.I76V	EX5	1.4%	NM_000368.4
NC-253	ATM	c.5053A>G	p.T1685A	EX34	11.6%	NM_000051.3

NC-253	TP53	c.473G>T	p.R158L	EX5	39.7%	NM_000546.5
NC-253	AXL	c.1414G>C	p.V472L	EX11	9.8%	NM_021913.3
NC-253	RUNX1	c.1345C>A	p.Q449K	EX9E	10.2%	NM_001754.4
NC-253	MED12	c.3323G>A	p.C1108Y	EX23	3.0%	NM_005120.2
NC-254	HDAC4	c.1402G>A	p.A468T	EX12	16.9%	NM_006037.3
NC-254	PIK3CA	c.1035T>A	p.N345K	EX5	14.4%	NM_006218.2
NC-254	IMPG1	c.285T[2>1]	p.Y96Ifs*4	EX2	16.9%	NM_001563.2
NC-254	KRAS	c.34G>C	p.G12R	EX2	20.5%	NM_033360.2
NC-254	RNF43	c.1111C>T	p.R371*	EX9	5.2%	NM_017763.4
NC-254	RNF43	c.856C>T	p.R286W	EX8	16.2%	NM_017763.4
NC-254	SMAD4	c.697_716delCATAGTGAAGGACTGTTGCA	p.H233Dfs*24	EX6	12.1%	NM_005359.5
NC-254	GNAS	c.601C>T	p.R201C	EX8	17.6%	NM_000516.4
NC-254	RBM10	c.2703G>T	p.R901S	EX22	39.1%	NM_001204468.1
NC-255	CRIPAK	c.709G>A	p.G237R	EX1E	5.3%	NM_175918.3
NC-255	HGF	c.1878T>A	p.D626E	EX17	21.6%	NM_000601.4
NC-255	MET	c.3017_3028+1delCTTTTCCAGAAGGinsT	.	EX14-IVS14	27.7%	NM_000245.2
NC-255	NFKBIA	c.843AG[3>2]	p.S283*fs*1	EX5	8.2%	NM_020529.2
NC-255	TP53	c.711G>A	p.M237I	EX7	20.0%	NM_000546.5
NC-255	NF1	c.2991-18_2995delGTTTCTATGTCTATATAGGTATGinsT	.	IVS22-EX23	3.9%	NM_000267.3
NC-256	EGFR	c.2500G>T	p.V834L	EX21	35.4%	NM_005228.3
NC-256	EGFR	c.2573T>G	p.L858R	EX21	33.9%	NM_005228.3

NC-256	XRCC2	c.40C>T	p.L14F	EX2	3.6%	NM_005431.1
NC-256	TP53	c.395A>G	p.K132R	EX5	22.2%	NM_000546.5
NC-256	ERBB2	c.3458G>A	p.R1153Q	EX27E	1.1%	NM_004448.2
NC-257	NOTCH2	c.1336A>G	p.K446E	EX8	11.3%	NM_024408.3
NC-257	KIT	c.1207A>G	p.I403V	EX7	10.6%	NM_000222.2
NC-257	RICTOR	c.1174T>G	p.L392V	EX14	20.8%	NM_152756.3
NC-257	RICTOR	c.1152-3_1168delCAGGCCAGACCTCATGGATA	.	IVS13-EX14	13.9%	NM_152756.3
NC-257	EGFR	c.2573T>G	p.L858R	EX21	28.1%	NM_005228.3
NC-257	ATM	c.8566_8575delGTAGCTACTT	p.V2856Lfs*19	EX58	23.8%	NM_000051.3
NC-257	ARID2	c.2488C>T	p.Q830*	EX15	47.8%	NM_152641.2
NC-257	KDM5C	c.484_490delTATCCCT	p.Y162Mfs*70	EX4	26.4%	NM_004187.3
NC-258	APC	c.698_701dupAGCT	p.L235Afs*18	EX7	14.3%	NM_000038.5
NC-258	APC	c.1972G>T	p.E658*	EX16E	1.5%	NM_000038.5
NC-258	APC	c.2452A[2>1]	p.N818Tfs*2	EX16E	3.6%	NM_000038.5
NC-258	APC	c.2896dupA	p.S966Kfs*4	EX16E	1.3%	NM_000038.5
NC-258	APC	c.3837T[3>4]	p.L1280Ffs*5	EX16E	1.1%	NM_000038.5
NC-258	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	16.6%	NM_005228.3
NC-258	IGF1R	c.3874G>A	p.E1292K	EX21E	8.6%	NM_000875.3
NC-258	TP53	c.628_634delAACACTT	p.N210Ffs*35	EX6	6.0%	NM_000546.5
NC-258	SMAD4	c.779_780dupAC	p.H261Tfs*76	EX6	8.8%	NM_005359.5
NC-259	DNMT3A	c.919C>T	p.P307S	EX8	1.0%	NM_022552.4
NC-259	RAF1	c.349G>A	p.D117N	EX4	28.7%	NM_002880.3

NC-259	MLL3	c.5012G>A	p.W1671*	EX34	4.0%	NM_170606.2
NC-259	STK11	c.940C[2>1]	p.P314Lfs*22	EX8	37.7%	NM_000455.4
NC-259	SMARCA4	c.3702C>A	p.F1234L	EX26	36.0%	NM_003072.3
NC-259	TMPRSS2	c.311C>T	p.T104M	EX3	1.2%	NM_001135099.1
NC-259	RBM10	c.2413G>T	p.E805*	EX20	16.7%	NM_001204468.1
NC-260	GABRA6	c.1181C>T	p.A394V	EX9E	6.1%	NM_000811.2
NC-260	ATM	c.5170G>A	p.E1724K	EX34	1.3%	NM_000051.3
NC-260	TP53	c.919+2_919+12delTAAGCAAGCAG	.	IVS8	4.1%	NM_000546.5
NC-260	TP53	c.559+1G>T	.	IVS5	22.3%	NM_000546.5
NC-261	NTRK1	c.1169C>T	p.P390L	EX8	5.9%	NM_002529.3
NC-261	RANBP2	c.1069A>G	p.M357V	EX9	28.1%	NM_006267.4
NC-261	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	50.3%	NM_005228.3
NC-261	PIK3CG	c.115C>G	p.P39A	EX2	1.2%	NM_002649.2
NC-261	KRAS	c.182A>T	p.Q61L	EX3	1.5%	NM_033360.2
NC-261	TP53	c.484A>T	p.I162F	EX5	26.7%	NM_000546.5
NC-262	EGFR	c.2573T>G	p.L858R	EX21	37.3%	NM_005228.3
NC-262	ARID2	c.225G>C	p.E75D	EX3	35.2%	NM_152641.2
NC-263	FGFR4	c.2154-1G>C	.	IVS16	9.4%	NM_213647.1
NC-263	DDR1	c.1578G>C	p.Q526H	EX14	11.9%	NM_001954.4
NC-263	GLI3	c.2306C>A	p.P769Q	EX14	9.6%	NM_000168.5
NC-263	ADCY1	c.3158T>A	p.F1053Y	EX20E	9.3%	NM_021116.2
NC-263	HGF	c.1303C>A	p.L435M	EX11	8.8%	NM_000601.4
NC-263	SOX17	c.419G>T	p.R140L	EX2E	7.9%	NM_022454.3
NC-263	PTPRD	c.1398G>T	p.W466C	EX21	11.4%	NM_002839.3

NC-263	RET	c.664G>C	p.E222Q	EX4	1.2%	NM_020975.4
NC-263	CDH23	c.4499C>A	p.S1500Y	EX37	8.1%	NM_022124.5
NC-263	MRE11A	c.469A>G	p.M157V	EX6	9.8%	NM_005591.3
NC-263	ARID2	c.727G>A	p.D243N	EX7	8.0%	NM_152641.2
NC-263	TP53	c.686_687delGT	p.C229Yfs*10	EX7	21.4%	NM_000546.5
NC-263	NCOR1	c.1218G>T	p.M406I	EX12	3.6%	NM_006311.3
NC-263	ERBB2	c.2326_2327insTAT	p.G776delinsVC	EX20	24.3%	NM_004448.2
NC-263	JAK3	c.246C>A	p.F82L	EX3	1.6%	NM_000215.3
NC-263	MLL4	c.3286G>A	p.E1096K	EX8	1.1%	NM_014727.1
NC-263	TOP1	c.1402A>G	p.K468E	EX14	2.1%	NM_003286.2
NC-263	DDX3X	c.1570G>A	p.E524K	EX14	4.6%	NM_001356.3
NC-264	ARID1A	c.6491G>C	p.R2164P	EX20E	54.2%	NM_006015.4
NC-264	AFF3	c.1935C[6>5]	p.P647Rfs*24	EX14	27.4%	NM_001025108.1
NC-264	PIK3CA	c.278G>T	p.R93L	EX2	19.9%	NM_006218.2
NC-264	FAT1	c.8470G[5>4]	p.G2825Efs*4	EX10	45.2%	NM_005245.3
NC-264	CARD11	c.511G>A	p.V171M	EX5	15.6%	NM_032415.4
NC-264	ACTB	c.1004G>T	p.R335L	EX6E	32.8%	NM_001101.3
NC-264	POM121L12	c.542C>T	p.A181V	EX1E	14.1%	NM_182595.3
NC-264	CDKN2A	c.247C>T	p.H83Y	EX2	64.5%	NM_000077.4
NC-264	GNAQ	c.214A>T	p.K72*	EX2	38.4%	NM_002072.3
NC-264	MLL2	c.15327C>G	p.C5109W	EX48	43.2%	NM_003482.3
NC-264	FANCM	c.1211G>T	p.G404V	EX7	18.5%	NM_020937.2
NC-264	NTRK3	c.532G>T	p.G178W	EX7	36.9%	NM_001012338.2
NC-264	IGF1R	c.2682C>A	p.N894K	EX13	39.0%	NM_000875.3
NC-264	TP53	c.438G>A	p.W146*	EX5	50.9%	NM_000546.5
NC-265	MST1R	c.652A>G	p.I218V	EX1	1.3%	NM_002447.2

NC-265	TET2	c.2164A>G	p.K722E	EX3	3.6%	NM_001127208.2
NC-265	CDK13	c.451T>G	p.S151A	EX1	4.3%	NM_003718.4
NC-265	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	24.9%	NM_005228.3
NC-265	MLL3	c.3654G>C	p.Q1218H	EX23	1.4%	NM_170606.2
NC-265	APOBEC3B	c.970C>A	p.Q324K	EX6	3.9%	NM_004900.4
NC-266	TP53	c.646G>A	p.V216M	EX6	15.6%	NM_000546.5
NC-267	FMN2	c.2883_2915delGGCAGGCATACCCCTTCCTCCCCCTCTTCCCGG	p.L966_P976del	EX5	34.6%	NM_020066.4
NC-267	EGFR	c.2252_2275delCATCTCCGAAAGCCAACAAGGAAA	p.T751_E758del	EX19	19.5%	NM_005228.3
NC-267	EGFR	c.2276T>G	p.I759S	EX19	28.0%	NM_005228.3
NC-267	NTRK3	c.1191G>T	p.K397N	EX10	1.6%	NM_001012338.2
NC-267	MAF	c.544C>T	p.H182Y	EX1E	1.2%	NM_001031804.2
NC-267	TP53	c.742C>G	p.R248G	EX7	42.9%	NM_000546.5
NC-268	PTPRD	c.5430G>T	p.E1810D	EX44	14.6%	NM_002839.3
NC-268	IGF2	c.329G>T	p.R110M	EX4	8.9%	NM_001127598.1
NC-269	CYP1B1	c.1195A>G	p.I399V	EX3E	3.4%	NM_000104.3
NC-269	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	14.5%	NM_005228.3
NC-269	ZFHX3	c.3569C>T	p.P1190L	EX6	7.5%	NM_006885.3
NC-270	AKT3	c.250G>C	p.E84Q	EX3	10.4%	NM_005465.4
NC-270	TBL1XR1	c.410G>A	p.G137E	EX5	1.5%	NM_024665.4
NC-270	HIST1H2BK	c.145G>A	p.V49I	EX1	5.2%	NM_080593.2

NC-270	EGFR	c.2254_2277delTCTCCGAAAGCCAACAAGGAAATC	p.S752_I759del	EX19	50.3%	NM_005228.3
NC-270	FZD1	c.1305G>A	p.W435*	EX1E	20.2%	NM_003505.1
NC-270	JAK2	c.2521C>T	p.P841S	EX19	11.9%	NM_004972.3
NC-270	PTEN	c.388C>T	p.R130*	EX5	8.8%	NM_000314.4
NC-270	RB1	c.1505delC	p.T502Nfs*17	EX17	33.0%	NM_000321.2
NC-270	TP53	c.569C>T	p.P190L	EX6	50.1%	NM_000546.5
NC-271	FCGR2B	c.832C>G	p.P278A	EX7	8.9%	NM_004001.4
NC-271	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	65.8%	NM_005228.3
NC-271	RB1	c.1981C>T	p.R661W	EX20	26.4%	NM_000321.2
NC-271	SOCS1	c.445G>C	p.E149Q	EX2E	10.5%	NM_003745.1
NC-271	TP53	c.55T[4>3]	p.S20Qfs*24	EX2	14.9%	NM_000546.5
NC-272	ARID1A	c.3299T>G	p.L1100R	EX12	36.1%	NM_006015.4
NC-272	GNAS	c.601C>T	p.R201C	EX8	19.2%	NM_000516.4
NC-272	ARID4B	c.2416G>A	p.D806N	EX20	18.7%	NM_016374.5
NC-272	PIK3R1	c.1746-2A>G	.	IVS13	17.5%	NM_181523.2
NC-272	LZTS1	c.977G>A	p.R326H	EX2	16.4%	NM_021020.2
NC-272	SMAD4	c.687G[6>7]	p.S232Qfs*3	EX6	16.0%	NM_005359.5
NC-273	EPHB2	c.1532G>A	p.R511H	EX7	9.5%	NM_017449.3
NC-273	CSMD3	c.11089G>A	p.D3697N	EX71E	34.4%	NM_198123.1
NC-273	CSMD3	c.11047G>A	p.D3683N	EX71E	36.9%	NM_198123.1
NC-273	KRAS	c.35G>A	p.G12D	EX2	22.3%	NM_033360.2
NC-273	MLL2	c.14794C>T	p.P4932S	EX48	21.7%	NM_003482.3
NC-273	NTRK3	c.2236A>T	p.K746*	EX19	21.6%	NM_001012338.2

NC-273	STK11	c.465-2A>T	.	IVS3	29.4%	NM_000455.4
NC-274	CNTNAP5	c.3895G>T	p.E1299*	EX24E	2.8%	NM_130773.2
NC-274	CTNNB1	c.110C>T	p.S37F	EX3	1.6%	NM_001904.3
NC-274	ATR	c.1654G>T	p.E552*	EX7	2.3%	NM_001184.3
NC-274	PTPRD	c.3145C>T	p.P1049S	EX29	3.1%	NM_002839.3
NC-274	OR4A15	c.496C>G	p.R166G	EX1E	1.2%	NM_001005275.1
NC-274	NAV3	c.1886C>T	p.T629I	EX8	3.4%	NM_014903.4
NC-274	TP53	c.469G>T	p.V157F	EX5	3.6%	NM_000546.5
NC-274	MAP2K4	c.1033A>T	p.N345Y	EX9	3.0%	NM_003010.2
NC-274	ROCK1	c.1855C>T	p.H619Y	EX16	2.1%	NM_005406.2
NC-274	EP300	c.2197C>G	p.L733V	EX12	1.0%	NM_001429.3
NC-275	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	27.5%	NM_005228.3
NC-276	IL7R	c.590C>T	p.P197L	EX5	17.6%	NM_002185.3
NC-276	EGFR	c.2238_2251delATTAAGAGAAGCAAinsGC	p.L747_T751delinsP	EX19	15.3%	NM_005228.3
NC-276	RAD21	c.1303C>G	p.Q435E	EX10	6.4%	NM_006265.2
NC-276	TP53	c.972_988delTGGAGAATATTTCACCCinsA	p.D324Efs*16	EX9	7.1%	NM_000546.5
NC-276	POLD1	c.2446T>C	p.S816P	EX20	5.6%	NM_002691.3
NC-276	L3MBTL1	c.1031G>T	p.G344V	EX9	6.5%	NM_015478.6
NC-277	ARID1A	c.275_291delGCGGGCCCGGCGCGGAG	p.G92Afs*13	EX1	7.5%	NM_006015.4
NC-277	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	22.7%	NM_005228.3
NC-277	CDKN2A	c.262G>T	p.E88*	EX2	10.1%	NM_000077.4

NC-277	RET	c.1891G>A	p.D631N	EX11	8.3%	NM_020975.4
NC-277	TP53	c.824G>T	p.C275F	EX8	26.1%	NM_000546.5
NC-278	FUBP1	c.1728_1732delAGCTG	p.A577Tfs*3	EX18	2.9%	NM_003902.3
NC-278	FAM5C	c.1319C>A	p.P440H	EX8E	3.0%	NM_199051.1
NC-278	ESR1	c.1600G>A	p.V534M	EX9E	11.6%	NM_001122740.1
NC-278	DLC1	c.459C>G	p.I153M	EX2	25.8%	NM_182643.2
NC-278	FGFR1	c.1566G>C	p.E522D	EX12	25.0%	NM_023110.2
NC-278	FGFR1	c.1486G>A	p.E496K	EX11	26.7%	NM_023110.2
NC-278	FGFR1	c.1456G>C	p.E486Q	EX11	26.4%	NM_023110.2
NC-278	TGFBR1	c.722C>T	p.S241L	EX4	9.0%	NM_004612.2
NC-278	MLL2	c.2420C[6>5]	p.Q809Rfs*121	EX10	23.9%	NM_003482.3
NC-278	MDM2	c.530A>G	p.N177S	EX8	26.4%	NM_002392.4
NC-278	TBX3	c.838G>T	p.A280S	EX4	3.1%	NM_016569.3
NC-278	TP53	c.848G>C	p.R283P	EX8	35.4%	NM_000546.5
NC-278	XRCC1	c.518T>A	p.F173Y	EX6	21.8%	NM_006297.2
NC-278	EP300	c.2276C[2>1]	p.N760Tfs*16	EX13	14.4%	NM_001429.3
NC-279	SETD2	c.7258C>A	p.P2420T	EX18	9.3%	NM_014159.6
NC-279	EGFR	c.2573T>G	p.L858R	EX21	23.4%	NM_005228.3
NC-279	SLX4	c.4856C>T	p.P1619L	EX14	5.4%	NM_032444.2
NC-279	TP53	c.430C>T	p.Q144*	EX5	8.7%	NM_000546.5
NC-280	MSH3	c.454C>T	p.Q152*	EX3	21.6%	NM_002439.4
NC-280	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	27.2%	NM_005228.3
NC-280	WSCD2	c.542G>T	p.C181F	EX4	13.7%	NM_014653.2
NC-280	TP53	c.718A>T	p.S240C	EX7	34.3%	NM_000546.5
NC-280	CDK12	c.3737C>T	p.T1246I	EX13	19.3%	NM_016507.2

NC-280	TCF3	c.1513G>A	p.E505K	EX16	26.9%	NM_001136139.2
NC-280	RBM10	c.1033G>T	p.G345*	EX9	33.1%	NM_001204468.1
NC-280	BTK	c.862C>T	p.R288W	EX10	15.8%	NM_000061.2
NC-281	DNMT3A	c.1576T>C	p.Y526H	EX14	1.9%	NM_022552.4
NC-281	FAT2	c.8662T>C	p.S2888P	EX9	3.5%	NM_001447.2
NC-281	EGFR	c.2573T>G	p.L858R	EX21	66.5%	NM_005228.3
NC-281	EPHB6	c.2918G>A	p.G973D	EX19	1.7%	NM_004445.3
NC-281	IRS2	c.1475C>G	p.P492R	EX1	1.7%	NM_003749.2
NC-281	TP53	c.455C>T	p.P152L	EX5	5.6%	NM_000546.5
NC-281	FMR1	c.1378A>G	p.S460G	EX14	19.1%	NM_002024.5
NC-282	EGFR	c.2573T>G	p.L858R	EX21	21.6%	NM_005228.3
NC-282	TP53	c.743G>A	p.R248Q	EX7	9.2%	NM_000546.5
NC-283	SDHA	c.346G>A	p.E116K	EX4	3.6%	NM_004168.2
NC-283	CTNNA1	c.264G>T	p.E88D	EX3	3.9%	NM_001903.2
NC-283	HIST1H3B	c.292G>A	p.E98K	EX1E	6.6%	NM_003537.3
NC-283	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	10.9%	NM_005228.3
NC-283	TCEB1	c.316_317delGCinsTT	p.A106F	EX4E	5.7%	NM_005648.3
NC-283	C11orf30	c.1299A>T	p.Q433H	EX9	13.0%	NM_020193.3
NC-283	GLI1	c.863T>A	p.L288Q	EX8	4.6%	NM_005269.2
NC-283	FLCN	c.410G>A	p.R137H	EX6	4.7%	NM_144997.5
NC-283	RAD51C	c.966-2_966-1delAGinsTT	.	IVS7	4.2%	NM_058216.1
NC-284	NFKBIA	c.664C>A	p.H222N	EX5	5.5%	NM_020529.2
NC-284	AR	c.217_218insGGC	p.Q72_Q73insR	EX1	40.4%	NM_000044.3
NC-285	PDGFRA	c.878G>A	p.R293H	EX6	11.5%	NM_006206.4

NC-285	TET2	c.719T>C	p.I240T	EX3	36.7%	NM_001127208.2
NC-285	MAP3K1	c.29C>G	p.S10W	EX1	1.9%	NM_005921.1
NC-285	NSD1	c.5720T>C	p.I1907T	EX18	6.7%	NM_022455.4
NC-285	ARID1B	c.4381C>T	p.Q1461*	EX18	13.6%	NM_020732.3
NC-285	EGFR	c.2573T>G	p.L858R	EX21	44.8%	NM_005228.3
NC-285	TSC2	c.3509C>T	p.S1170L	EX30	16.7%	NM_000548.3
NC-285	NCOR1	c.6916G>A	p.E2306K	EX44	14.5%	NM_006311.3
NC-285	RBM10	c.152G>A	p.R51Q	EX2	25.0%	NM_001204468.1
NC-285	RBM10	c.1238T>A	p.I413N	EX10	49.1%	NM_001204468.1
NC-286	RAF1	c.1570C>G	p.P524A	EX15	1.2%	NM_002880.3
NC-286	APC	c.4149G>A	p.M1383I	EX16E	38.0%	NM_000038.5
NC-286	APC	c.4153A>G	p.S1385G	EX16E	38.9%	NM_000038.5
NC-286	TP53	c.853G>A	p.E285K	EX8	1.2%	NM_000546.5
NC-286	MAP2K4	c.430_436delCAACTTC	p.Q144Lfs*6	EX4	30.6%	NM_003010.2
NC-286	FLCN	c.1429C>T	p.R477*	EX12	1.6%	NM_144997.5
NC-286	KEAP1	c.1243C>T	p.R415C	EX3	44.6%	NM_203500.1
NC-286	NOTCH3	c.4216A[2>3]	p.N1406Kfs*157	EX24	34.9%	NM_000435.2
NC-287	PDGFRB	c.1998C>G	p.N666K	EX14	1.1%	NM_002609.3
NC-287	PTPRD	c.3655C>A	p.L1219I	EX32	22.4%	NM_002839.3
NC-287	RB1	c.1422-1G>T	.	IVS15	31.5%	NM_000321.2
NC-287	TP53	c.976G>T	p.E326*	EX9	23.9%	NM_000546.5
NC-287	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	19.8%	NM_004448.2
NC-287	CHEK2	c.5C>G	p.S2C	EX2	15.0%	NM_007194.3
NC-288	MAP2K2	c.1096C>G	p.H366D	EX11E	11.2%	NM_030662.3
NC-289	CASP8	c.1110C>G	p.I370M	EX8	57.3%	NM_001080125.1

NC-289	CASP8	c.1456C>T	p.Q486*	EX8	55.9%	NM_001080125.1
NC-289	FANCD2	c.2983G>A	p.G995R	EX31	26.3%	NM_033084.3
NC-289	KDR	c.2854G>C	p.V952L	EX21	20.9%	NM_002253.2
NC-289	FAT1	c.7891A>T	p.I2631F	EX10	37.3%	NM_005245.3
NC-289	HIST1H1C	c.412_420delCCCAAGAAG	p.P138_K140del	EX1E	8.9%	NM_005319.3
NC-289	MLL3	c.12358G>T	p.D4120Y	EX49	60.4%	NM_170606.2
NC-289	MLL	c.373A>G	p.N125D	EX1	1.9%	NM_001197104.1
NC-289	FLT3	c.508A>T	p.R170*	EX5	17.7%	NM_004119.2
NC-289	FLT1	c.736C>T	p.H246Y	EX6	31.5%	NM_002019.4
NC-289	ZFP36L1	c.736C>T	p.H246Y	EX3E	25.8%	NM_001244701.1
NC-289	TP53	c.734G>A	p.G245D	EX7	71.2%	NM_000546.5
NC-289	TOP2A	c.2444G>T	p.R815L	EX21	15.2%	NM_001067.3
NC-290	SETD2	c.4948T[6>7]	p.T1652Yfs*14	EX8	20.1%	NM_014159.6
NC-290	ATM	c.8408A>G	p.K2803R	EX57	4.2%	NM_000051.3
NC-290	POLE	c.3550A>C	p.S1184R	EX29	21.7%	NM_006231.2
NC-291	ERBB4	c.2478G>T	p.Q826H	EX20	9.4%	NM_005235.2
NC-291	KDR	c.3685C>T	p.R1229*	EX28	5.4%	NM_002253.2
NC-291	PTPRD	c.2785G>T	p.G929C	EX28	5.8%	NM_002839.3
NC-291	MEN1	c.795G>T	p.W265C	EX5	6.4%	NM_130799.2
NC-291	KRAS	c.35G>T	p.G12V	EX2	43.9%	NM_033360.2
NC-291	CDK4	c.112AG[2>1]	p.R38Sfs*18	EX2	5.9%	NM_000075.3
NC-291	FLT1	c.3973C>A	p.P1325T	EX30E	12.1%	NM_002019.4
NC-291	RB1	c.2103C[2>1]	p.Q702Kfs*3	EX20	13.0%	NM_000321.2
NC-291	TP53	c.166G>T	p.E56*	EX4	13.7%	NM_000546.5
NC-292	CDK13	c.477G[8>9]	p.A162Gfs*108	EX1	22.5%	NM_003718.4

NC-292	EGFR	c.2237_2255delAATTAAGAGAAGCAACATCinsT	p.E746_S752delinsV	EX19	31.5%	NM_005228.3
NC-293	TSC1	c.2508A[3>4]	p.N837Kfs*3	EX20	18.0%	NM_000368.4
NC-293	TSC1	c.1998-2A>T	.	IVS15	18.5%	NM_000368.4
NC-293	DOT1L	c.1687G>A	p.D563N	EX18	2.8%	NM_032482.2
NC-293	ARAF	c.641C>G	p.S214C	EX7	19.1%	NM_001654.4
NC-294	LRP1B	c.10633G>T	p.D3545Y	EX68	5.1%	NM_018557.2
NC-294	LRP1B	c.7640G>T	p.C2547F	EX46	6.3%	NM_018557.2
NC-294	FOXL2	c.251T>C	p.I84T	EX1E	17.6%	NM_023067.3
NC-294	PRDM1	c.1604C>A	p.S535*	EX5	11.9%	NM_001198.3
NC-294	ABCB1	c.1474C>A	p.R492S	EX14	8.5%	NM_000927.4
NC-294	POT1	c.1763A>T	p.D588V	EX18	10.9%	NM_015450.2
NC-294	EXT1	c.2076G>T	p.W692C	EX11E	16.3%	NM_000127.2
NC-294	FAM135B	c.4171C>T	p.L1391F	EX20E	4.4%	NM_015912.3
NC-294	KAT6B	c.3363A[3>2]	p.K1122Rfs*8	EX16	12.0%	NM_012330.3
NC-294	LCP1	c.1459A>T	p.N487Y	EX13	5.4%	NM_002298.4
NC-294	TP53	c.457C[3>2]	p.G154Afs*16	EX5	12.4%	NM_000546.5
NC-294	NCOR1	c.7246C>T	p.Q2416*	EX46E	1.3%	NM_006311.3
NC-294	STK11	c.709G>C	p.D237H	EX5	12.2%	NM_000455.4
NC-294	TSHZ3	c.385_386delTCinsCT	p.S129L	EX2E	19.6%	NM_020856.2
NC-295	EXT1	c.1186A>G	p.I396V	EX4	2.4%	NM_000127.2
NC-295	MLL	c.10184T>C	p.I3395T	EX27	3.1%	NM_001197104.1
NC-296	EPHA2	c.991G>A	p.A331T	EX5	1.0%	NM_004431.3
NC-296	TP53	c.380C>A	p.S127Y	EX5	40.0%	NM_000546.5
NC-296	JAK3	c.1739C>T	p.S580L	EX13	1.0%	NM_000215.3

NC-296	POLD1	c.2098G>A	p.V700I	EX17	1.1%	NM_002691.3
NC-296	SMARCB1	c.1121G>A	p.R374Q	EX9E	1.0%	NM_003073.3
NC-296	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	34.4%	NM_005228.3
NC-297	FAT2	c.2701A>G	p.K901E	EX1	24.0%	NM_001447.2
NC-297	RECQL	c.112A[9>10]	p.V41Sfs*14	EX3	3.6%	NM_002907.3
NC-297	TP53	c.919+1G>T	.	IVS8	62.3%	NM_000546.5
NC-298	NOTCH2	c.6401C>G	p.S2134C	EX34E	2.1%	NM_024408.3
NC-298	NOTCH2	c.509G>A	p.C170Y	EX4	9.5%	NM_024408.3
NC-298	POM121L12	c.577G>A	p.D193N	EX1E	5.3%	NM_182595.3
NC-298	BRAF	c.1799T>A	p.V600E	EX15	25.1%	NM_004333.4
NC-298	NBN	c.349T>G	p.S117A	EX4	2.8%	NM_002485.4
NC-298	ERCC5	c.2238G>T	p.Q746H	EX10	13.9%	NM_000123.3
NC-298	SMARCA4	c.1157A>G	p.E386G	EX7	21.3%	NM_003072.3
NC-298	SRC	c.152G>T	p.S51I	EX4	7.0%	NM_198291.1
NC-298	SRC	c.1084C>T	p.R362W	EX11	1.9%	NM_198291.1
NC-299	MET	c.2888-20_2888-16delTTCTTinsAGA	.	IVS13	21.6%	NM_000245.2
NC-299	POT1	c.410G>T	p.R137L	EX8	29.3%	NM_015450.2
NC-299	TBX3	c.1475A>T	p.H492L	EX7	6.6%	NM_016569.3
NC-299	AURKB	c.754G>C	p.E252Q	EX8	4.5%	NM_004217.3
NC-299	TOP1	c.1284G>A	p.M428I	EX13	8.9%	NM_003286.2
NC-300	NTRK1	c.704C>T	p.S235L	EX6	9.4%	NM_002529.3
NC-300	NTRK1	c.1846G>A	p.D616N	EX15	8.8%	NM_002529.3
NC-300	FAT1	c.10256C>G	p.P3419R	EX17	27.5%	NM_005245.3
NC-300	APC	c.7664C>T	p.S2555L	EX16E	10.0%	NM_000038.5

NC-300	APC	c.8492C>T	p.P2831L	EX16E	12.1%	NM_000038.5
NC-300	PDGFRB	c.2619G>T	p.E873D	EX19	12.3%	NM_002609.3
NC-300	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	58.3%	NM_005228.3
NC-300	FLT3	c.1037-1G>A	.	IVS8	15.3%	NM_004119.2
NC-300	ACIN1	c.868G>A	p.D290N	EX6	9.7%	NM_014977.3
NC-300	TP53	c.713G>A	p.C238Y	EX7	33.9%	NM_000546.5
NC-300	AKT2	c.442-1G>T	.	IVS5	8.9%	NM_001626.4
NC-300	MED12	c.2372-1G>T	.	IVS16	8.3%	NM_005120.2
NC-301	CTNNB1	c.98C>T	p.S33F	EX3	21.3%	NM_001904.3
NC-301	ATR	c.874G>A	p.E292K	EX4	19.1%	NM_001184.3
NC-301	HIST1H2BK	c.65C>T	p.A22V	EX1	11.4%	NM_080593.2
NC-301	EGFR	c.2237_2251delAATTAAGAGAAGCAA	p.E746_T751delinsA	EX19	41.5%	NM_005228.3
NC-301	FOXA1	c.258G[6>7]	p.S89Lfs*138	EX2E	13.5%	NM_004496.3
NC-301	AKT1	c.1133C>T	p.S378F	EX11	19.5%	NM_001014431.1
NC-301	FANCA	c.3418A>C	p.N1140H	EX35	2.9%	NM_000135.2
NC-301	MED12	c.814T[2>1]	p.L272Cfs*41	EX6	24.0%	NM_005120.2
NC-302	MCL1	c.888C>G	p.D296E	EX2	4.1%	NM_021960.4
NC-302	FAT1	c.11924G>C	p.G3975A	EX22	4.8%	NM_005245.3
NC-302	SDHA	c.1580G>T	p.R527L	EX12	3.4%	NM_004168.2
NC-302	RAD50	c.951G>C	p.E317D	EX7	4.7%	NM_005732.3
NC-302	PARK2	c.1235A>G	p.K412R	EX11	3.4%	NM_004562.2
NC-302	PIK3CG	c.214G>A	p.A72T	EX2	7.2%	NM_002649.2
NC-302	CYP19A1	c.1124G>A	p.R375H	EX10	4.1%	NM_031226.2
NC-302	GRIN2A	c.2991G>T	p.E997D	EX13E	3.6%	NM_001134407.1

NC-302	TP53	c.481G>A	p.A161T	EX5	9.8%	NM_000546.5
NC-302	RHOT1	c.833A>G	p.D278G	EX11	3.0%	NM_001033568.1
NC-302	SMARCA4	c.2971_2973+5delAAGGTGAT	.	EX20-IVS20	7.6%	NM_003072.3
NC-303	FCGR2B	c.922A>G	p.N308D	EX8E	41.3%	NM_004001.4
NC-303	HDAC4	c.1836G>T	p.M612I	EX14	43.0%	NM_006037.3
NC-303	SETD2	c.4793_4794delGAinsCG	p.R1598P	EX6	63.8%	NM_014159.6
NC-303	SMO	c.2077C>T	p.P693S	EX12E	17.7%	NM_005631.4
NC-303	PABPC1	c.494A>G	p.D165G	EX3	10.5%	NM_002568.3
NC-303	POLE	c.411_412delGGinsCT	p.E137_D138delinsDY	EX5	39.4%	NM_006231.2
NC-303	RB1	c.2068A[2>1]	p.N690Mfs*6	EX20	68.6%	NM_000321.2
NC-303	CREBBP	c.844C>T	p.Q282*	EX3	74.5%	NM_004380.2
NC-303	TP53	c.523C>G	p.R175G	EX5	88.5%	NM_000546.5
NC-303	RUNX1	c.780C>A	p.N260K	EX7	39.0%	NM_001754.4
NC-303	MAPK1	c.544G>A	p.G182R	EX4	41.7%	NM_002745.4
NC-304	BARD1	c.1518_1519delTGinsCA	p.V507M	EX6	7.4%	NM_000465.2
NC-304	EGFR	c.2573T>G	p.L858R	EX21	1.1%	NM_005228.3
NC-305	ARID1A	c.1651delT	p.Y551Tfs*68	EX3	4.1%	NM_006015.4
NC-305	PTCH2	c.2875G>A	p.G959S	EX18	1.5%	NM_001166292.1
NC-305	MCL1	c.748A>T	p.M250L	EX2	1.7%	NM_021960.4
NC-305	MLH1	c.124_125delGCinsAT	p.A42I	EX2	4.6%	NM_000249.3
NC-305	CTNNB1	c.133T>C	p.S45P	EX3	4.0%	NM_001904.3
NC-305	BAP1	c.2080C>T	p.Q694*	EX17E	1.6%	NM_004656.2
NC-305	ATR	c.2941G>A	p.V981I	EX14	3.7%	NM_001184.3
NC-305	FGFR3	c.52G>A	p.A18T	EX2	3.9%	NM_000142.4

NC-305	FAT1	c.13586C>T	p.A4529V	EX27E	1.4%	NM_005245.3
NC-305	FAT1	c.12058A>T	p.N4020Y	EX22	2.1%	NM_005245.3
NC-305	PIK3R1	c.209C>T	p.P70L	EX2	1.6%	NM_181523.2
NC-305	NSD1	c.2008G>A	p.D670N	EX5	2.0%	NM_022455.4
NC-305	PIK3CG	c.395C>T	p.P132L	EX2	5.2%	NM_002649.2
NC-305	NOTCH1	c.1396A>G	p.T466A	EX8	2.8%	NM_017617.3
NC-305	C11orf30	c.3331C>T	p.R1111C	EX20	1.9%	NM_020193.3
NC-305	CCND2	c.737G>A	p.C246Y	EX5E	5.5%	NM_001759.3
NC-305	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	6.0%	NM_004448.2
NC-305	STAT3	c.1708G>A	p.D570N	EX19	1.2%	NM_139276.2
NC-305	CEBPA	c.805A>G	p.S269G	EX1E	7.5%	NM_004364.3
NC-305	BBC3	c.709G>A	p.V237I	EX4E	6.0%	NM_001127240.2
NC-305	KDM6A	c.1840G>A	p.A614T	EX16	2.5%	NM_021140.2
NC-306	TP53	c.281C>G	p.S94*	EX4	41.7%	NM_000546.5
NC-306	ELF3	c.302C>T	p.T101I	EX3	39.0%	NM_004433.4
NC-306	FGFR3	c.2019C>A	p.H673Q	EX15	36.8%	NM_000142.4
NC-306	EGFR	c.2239_2248delinsC	p.L747_A750delinsP	EX19	32.1%	NM_005228.3
NC-306	EXT1	c.485A>G	p.D162G	EX1	30.5%	NM_000127.2
NC-306	PIK3CA	c.112C>A	p.R38S	EX2	13.6%	NM_006218.2
NC-306	CDH1	c.1138-3_1146delCAGTACAAGGGT	.	IVS8-EX9	11.1%	NM_004360.3
NC-306	PIK3CG	c.389G>A	p.R130Q	EX2	6.0%	NM_002649.2
NC-306	ERBB3	c.3353G>A	p.R1118Q	EX27	5.7%	NM_001982.3
NC-307	MTOR	c.1384G>T	p.A462S	EX9	4.5%	NM_004958.3

NC-307	KRAS	c.34G>T	p.G12C	EX2	17.8%	NM_033360.2
NC-307	RB1	c.1735C>T	p.R579*	EX18	13.2%	NM_000321.2
NC-307	TP53	c.818G>T	p.R273L	EX8	9.1%	NM_000546.5
NC-307	PPM1D	c.1552C>A	p.P518T	EX6E	5.5%	NM_003620.3
NC-307	SMARCA4	c.4090G>A	p.E1364K	EX29	1.2%	NM_003072.3
NC-307	KDM6A	c.3431C>T	p.P1144L	EX23	19.3%	NM_021140.2
NC-308	EPHB2	c.1043G>A	p.R348H	EX5	36.0%	NM_017449.3
NC-308	LRP1B	c.11458C>A	p.Q3820K	EX75	1.5%	NM_018557.2
NC-308	IL6ST	c.334G>C	p.E112Q	EX4	2.6%	NM_002184.3
NC-308	EGFR	c.2300_2308dupCCAGCGTGG	p.A767_V769dup	EX20	30.4%	NM_005228.3
NC-308	JAK2	c.185A>T	p.Y62F	EX3	2.2%	NM_004972.3
NC-308	MEN1	c.940C>T	p.R314W	EX7	31.3%	NM_130799.2
NC-308	CBL	c.1384C>T	p.R462*	EX9	32.3%	NM_005188.3
NC-308	RB1	c.2439T>G	p.Y813*	EX23	62.1%	NM_000321.2
NC-308	TP53	c.637C>T	p.R213*	EX6	61.9%	NM_000546.5
NC-308	MED12	c.4474_4500delCAGGATGAACAACGCGAGGGACTCCTT	p.Q1492_L1500del	EX32	7.5%	NM_005120.2
NC-309	TP73	c.454T>C	p.Y152H	EX5	38.0%	NM_005427.3
NC-309	NOTCH2	c.5854G>T	p.A1952S	EX32	42.2%	NM_024408.3
NC-309	ATR	c.2200delG	p.E734Nfs*12	EX10	63.7%	NM_001184.3
NC-309	FGFR4	c.2303G>A	p.G768D	EX18E	68.4%	NM_213647.1
NC-309	XRCC2	c.713G>A	p.R238K	EX3E	4.3%	NM_005431.1
NC-309	CCND1	c.814G>A	p.E272K	EX5E	44.6%	NM_053056.2
NC-309	RB1	c.1422-1G>T	.	IVS15	98.5%	NM_000321.2

NC-309	TP53	c.560-1G>T	.	IVS5	93.5%	NM_000546.5
NC-309	BRCA1	c.2668G[3>2]	p.S891Pfs*2	EX10	47.0%	NM_007294.3
NC-309	RPTOR	c.165G>A	p.M55I	EX2	5.4%	NM_020761.2
NC-310	EGFR	c.2573T>G	p.L858R	EX21	15.2%	NM_005228.3
NC-310	TP53	c.770T>A	p.L257Q	EX7	8.3%	NM_000546.5
NC-310	BRD4	c.1916C>A	p.S639*	EX10	4.2%	NM_058243.2
NC-311	EGFR	c.2573T>G	p.L858R	EX21	4.3%	NM_005228.3
NC-312	TLX3	c.757A>G	p.N253D	EX3E	13.7%	NM_021025.2
NC-312	ARID1B	c.1699C[3>2]	p.A569Pfs*24	EX2	7.8%	NM_020732.3
NC-313	CTNNB1	c.110C>G	p.S37C	EX3	8.1%	NM_001904.3
NC-313	IL6ST	c.2333C>G	p.S778*	EX17E	4.2%	NM_002184.3
NC-313	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	8.2%	NM_005228.3
NC-313	DICER1	c.4666G>A	p.D1556N	EX24	8.4%	NM_030621.3
NC-313	B2M	c.37CT[4>3]	p.L15Ffs*41	EX1	3.1%	NM_004048.2
NC-313	B2M	c.280G>T	p.E94*	EX2	9.1%	NM_004048.2
NC-313	NTHL1	c.886C>T	p.R296C	EX6E	3.6%	NM_002528.5
NC-313	TOP2A	c.2650G>C	p.E884Q	EX21	5.2%	NM_001067.3
NC-313	RBM10	c.2713G>A	p.G905S	EX22	5.6%	NM_001204468.1
NC-313	ARAF	c.308G>A	p.R103Q	EX5	6.0%	NM_001654.4
NC-313	BTK	c.498A>C	p.Q166H	EX6	3.3%	NM_000061.2
NC-314	CPS1	c.3181C>T	p.P1061S	EX26	10.8%	NM_001875.4
NC-314	PBRM1	c.2941G>T	p.E981*	EX19	11.1%	NM_018313.4
NC-314	FLT4	c.707C>A	p.P236H	EX6	9.6%	NM_182925.4
NC-314	TYRP1	c.745T>C	p.W249R	EX4	11.9%	NM_000550.2
NC-314	BRD3	c.1477G>A	p.E493K	EX9	1.7%	NM_007371.3

NC-314	KRAS	c.34G>T	p.G12C	EX2	11.9%	NM_033360.2
NC-314	FANCA	c.1450G>C	p.E484Q	EX15	11.2%	NM_000135.2
NC-314	STK11	c.527A>T	p.D176V	EX4	33.6%	NM_000455.4
NC-315	KRAS	c.35G>A	p.G12D	EX2	4.4%	NM_033360.2
NC-315	NKX2-1	c.840dupT	p.Q281Sfs*158	EX3E	5.3%	NM_001079668.2
NC-315	TP53	c.818G>A	p.R273H	EX8	5.2%	NM_000546.5
NC-315	SMAD4	c.157G>T	p.E53*	EX2	4.5%	NM_005359.5
NC-315	MED12	c.99G>C	p.E33D	EX1	9.3%	NM_005120.2
NC-316	ALK	c.355G>A	p.E119K	EX1	5.5%	NM_004304.4
NC-316	BAZ2B	c.1773C>G	p.F591L	EX9	2.4%	NM_013450.2
NC-316	PIK3CB	c.3199G>T	p.D1067Y	EX22E	1.5%	NM_006219.2
NC-316	PIK3R1	c.1746-9_1752delGTTTTTCAGGTGGTTG	.	IVS13-EX14	3.5%	NM_181523.2
NC-316	EGFR	c.2271G>T	p.K757N	EX19	73.5%	NM_005228.3
NC-316	EGFR	c.2573T>G	p.L858R	EX21	73.5%	NM_005228.3
NC-316	RECQL4	c.106G>C	p.E36Q	EX2	2.4%	NM_004260.3
NC-316	MEN1	c.205C>G	p.P69A	EX2	12.2%	NM_130799.2
NC-316	TP53	c.1044_1047delGGAA	p.L348Ffs*21	EX10	23.5%	NM_000546.5
NC-316	PIK3R2	c.572C>T	p.S191L	EX5	2.2%	NM_005027.2
NC-317	NFE2L2	c.259C>T	p.Q87*	EX2	7.9%	NM_006164.4
NC-317	BARD1	c.688G>T	p.D230Y	EX4	4.2%	NM_000465.2
NC-317	EGFR	c.2573T>G	p.L858R	EX21	57.6%	NM_005228.3
NC-317	EGFR	c.3034G>C	p.D1012H	EX25	59.5%	NM_005228.3
NC-317	JAK2	c.2284-1G>C	.	IVS17	9.6%	NM_004972.3

NC-317	CDKN2A	c.77_88delAGGAGGTGCGGG	p.E26_R29del	EX1	6.2%	NM_000077.4
NC-318	KRAS	c.437C>T	p.A146V	EX4	15.4%	NM_033360.2
NC-318	TP53	c.673-2A>T	.	IVS6	12.4%	NM_000546.5
NC-319	BRCA1	c.1889A>T	p.N630I	EX10	47.7%	NM_007294.3
NC-319	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	24.2%	NM_004448.2
NC-319	NBN	c.1439C>T	p.S480L	EX11	22.2%	NM_002485.4
NC-319	EZR	c.1024C>T	p.R342C	EX9	4.7%	NM_003379.4
NC-319	GNA13	c.905T>A	p.I302N	EX4	1.9%	NM_006572.4
NC-320	EGFR	c.2500G>T	p.V834L	EX21	7.6%	NM_005228.3
NC-320	EGFR	c.2573T>G	p.L858R	EX21	6.5%	NM_005228.3
NC-320	BCOR	c.4270C>T	p.Q1424*	EX10	5.0%	NM_001123385.1
NC-321	ABCG2	c.448A>G	p.T150A	EX5	4.0%	NM_004827.2
NC-321	NSD1	c.7343C>A	p.S2448*	EX23	7.9%	NM_022455.4
NC-321	EGFR	c.2573T>G	p.L858R	EX21	33.0%	NM_005228.3
NC-321	KDM5A	c.1294C>A	p.L432M	EX10	1.5%	NM_001042603.1
NC-321	ARAF	c.955G>T	p.G319C	EX10	1.9%	NM_001654.4
NC-321	KDM5C	c.2419C>T	p.P807S	EX17	23.8%	NM_004187.3
NC-321	ATRX	c.1223C>A	p.A408E	EX9	26.4%	NM_000489.3
NC-322	JAK1	c.3322T>G	p.L1108V	EX24	15.6%	NM_002227.2
NC-322	FANCL	c.335C>G	p.S112*	EX5	2.9%	NM_001114636.1
NC-322	EGFR	c.2573T>G	p.L858R	EX21	13.7%	NM_005228.3
NC-322	WT1	c.335G>A	p.G112D	EX1	8.2%	NM_024426.4
NC-322	TP53	c.716A>G	p.N239S	EX7	22.5%	NM_000546.5

NC-322	NCOR1	c.1364_1374delATCCAAAAAAC	p.H455Lfs*15	EX13	5.9%	NM_006311.3
NC-323	KRAS	c.34G>T	p.G12C	EX2	25.3%	NM_033360.2
NC-323	TP53	c.880G>T	p.E294*	EX8	18.0%	NM_000546.5
NC-323	MLH3	c.1268A>T	p.Q423L	EX2	14.6%	NM_001040108.1
NC-323	CDK8	c.1110+2T>G	.	IVS11	14.5%	NM_001260.1
NC-323	NOTCH4	c.1088C>G	p.T363S	EX6	14.1%	NM_004557.3
NC-323	WSCD2	c.676C>A	p.R226S	EX4	12.5%	NM_014653.2
NC-323	FAT2	c.7636G>T	p.E2546*	EX9	11.6%	NM_001447.2
NC-323	RBL1	c.2378G>T	p.R793I	EX16	8.0%	NM_002895.2
NC-323	MLL3	c.14374G>A	p.E4792K	EX56	7.6%	NM_170606.2
NC-323	ROCK1	c.2655-1G>C	.	IVS22	6.3%	NM_005406.2
NC-323	RUNX1	c.277G>A	p.D93N	EX4	5.2%	NM_001754.4
NC-323	TOP2A	c.613G>A	p.E205K	EX7	5.0%	NM_001067.3
NC-323	LRP1B	c.6979G>A	p.E2327K	EX42	4.4%	NM_018557.2
NC-323	MAD1L1	c.1918C>G	p.Q640E	EX18	4.3%	NM_003550.2
NC-323	STAG2	c.1966C>T	p.Q656*	EX20	4.2%	NM_001042749.1
NC-323	BRD4	c.3334G>T	p.E1112*	EX16	1.9%	NM_058243.2
NC-323	ROCK1	c.1694G>A	p.R565K	EX16	1.8%	NM_005406.2
NC-323	FANCA	c.553C>G	p.L185V	EX6	1.1%	NM_000135.2
NC-324	XPO1	c.1934C>G	p.T645R	EX17	8.2%	NM_003400.3
NC-324	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	10.3%	NM_004448.2
NC-325	EGFR	c.2573T>G	p.L858R	EX21	8.6%	NM_005228.3
NC-325	SOX9	c.1041_1049delGCAGCCCCC	p.P349_Q351del	EX3E	3.2%	NM_000346.3

NC-326	EPC1	c.631T>G	p.F211V	EX4	1.9%	NM_025209.2
NC-326	CASP1	c.140A>G	p.N47S	EX2	1.0%	NM_033292.3
NC-326	ACVR1B	c.1131A[3>2]	p.K378Sfs*7	EX7	1.0%	NM_020328.3
NC-326	ERBB3	c.284C>G	p.S95C	EX3	1.1%	NM_001982.3
NC-326	TP53	c.991C>T	p.Q331*	EX9	1.4%	NM_000546.5
NC-326	TP53	c.637C>T	p.R213*	EX6	1.4%	NM_000546.5
NC-326	PPP2R1A	c.699G>C	p.Q233H	EX6	4.8%	NM_014225.5
NC-326	EP300	c.3229C>T	p.Q1077*	EX17	1.6%	NM_001429.3
NC-327	ARID2	c.5174C>A	p.S1725*	EX19	31.4%	NM_152641.2
NC-327	CDK8	c.580G>T	p.V194F	EX6	78.5%	NM_001260.1
NC-327	TP53	c.469G>T	p.V157F	EX5	86.3%	NM_000546.5
NC-327	AURKA	c.659G>A	p.R220K	EX6	29.8%	NM_003600.2
NC-328	CAMTA1	c.2266T>C	p.S756P	EX9	13.0%	NM_015215.2
NC-328	MSH2	c.1153C>T	p.P385S	EX7	13.6%	NM_000251.2
NC-328	LRP1B	c.13095T>A	p.H4365Q	EX85	3.5%	NM_018557.2
NC-328	FAP	c.664G>C	p.A222P	EX9	20.8%	NM_004460.2
NC-328	CLDN18	c.146T>C	p.L49P	EX1	31.9%	NM_016369.3
NC-328	ATR	c.59+1G>A	.	IVS1	29.8%	NM_001184.3
NC-328	IL7R	c.152C>G	p.S51W	EX2	7.3%	NM_002185.3
NC-328	MLL2	c.6823C[5>4]	p.P2276Hfs*10	EX31	27.0%	NM_003482.3
NC-328	RB1	c.234G>A	p.W78*	EX2	90.9%	NM_000321.2
NC-328	TP53	c.578A>T	p.H193L	EX6	93.1%	NM_000546.5
NC-328	TOP2A	c.1385G>A	p.G462E	EX12	31.8%	NM_001067.3
NC-328	AKT2	c.970G>T	p.D324Y	EX11	11.1%	NM_001626.4
NC-328	AXL	c.152C>T	p.T51M	EX2	1.7%	NM_021913.3
NC-329	TXNIP	c.31G>C	p.E11Q	EX1	10.1%	NM_006472.3

NC-329	TXNIP	c.175_176delGGinsAC	p.G59T	EX1	8.2%	NM_006472.3
NC-329	RICTOR	c.547A>G	p.M183V	EX7	9.9%	NM_152756.3
NC-329	EGFR	c.2573T>G	p.L858R	EX21	17.5%	NM_005228.3
NC-329	EGFR	c.3040G>T	p.D1014Y	EX25	23.5%	NM_005228.3
NC-330	EGFR	c.2497T>G	p.L833V	EX21	34.9%	NM_005228.3
NC-330	EGFR	c.2573T>G	p.L858R	EX21	33.0%	NM_005228.3
NC-330	EPHB6	c.2156G>A	p.R719Q	EX15	15.3%	NM_004445.3
NC-330	PTPRD	c.1028G>T	p.W343L	EX21	33.4%	NM_002839.3
NC-330	TSHR	c.647T>C	p.I216T	EX8	1.7%	NM_000369.2
NC-330	TP53	c.745A>G	p.R249G	EX7	22.9%	NM_000546.5
NC-331	ARID1B	c.1379C>G	p.A460G	EX1	3.2%	NM_020732.3
NC-331	EGFR	c.2573T>G	p.L858R	EX21	4.8%	NM_005228.3
NC-331	MKL1	c.831G>C	p.Q277H	EX10	1.0%	NM_020831.3
NC-331	RBM10	c.1968C[4>3]	p.N658Tfs*111	EX16	7.8%	NM_001204468.1
NC-332	PPP2R1A	c.457G>A	p.V153I	EX4	14.5%	NM_014225.5
NC-332	AR	c.1351G>T	p.G451C	EX1	40.9%	NM_000044.3
NC-332	NOTCH2	c.5564C>T	p.S1855F	EX31	11.6%	NM_024408.3
NC-332	ABL2	c.2830G>C	p.A944P	EX12E	33.6%	NM_007314.3
NC-332	XPO1	c.276G>T	p.K92N	EX4	10.3%	NM_003400.3
NC-332	LRP1B	c.7985C>A	p.S2662Y	EX49	14.4%	NM_018557.2
NC-332	PMS1	c.22A>G	p.T8A	EX2	18.2%	NM_000534.4
NC-332	ERBB4	c.2488-1G>T	.	IVS20	20.3%	NM_005235.2
NC-332	EPHA3	c.287delA	p.Y96Lfs*18	EX3	23.4%	NM_005233.5
NC-332	RAD50	c.916G>C	p.D306H	EX7	2.0%	NM_005732.3
NC-332	MET	c.3496C>T	p.R1166*	EX17	41.0%	NM_000245.2
NC-332	EPHB6	c.2898G>T	p.Q966H	EX19	12.9%	NM_004445.3

NC-332	MLL3	c.11792G>A	p.G3931E	EX45	19.2%	NM_170606.2
NC-332	CDKN2A	c.294C[2>3]	p.R99Pfs*21	EX2	27.4%	NM_000077.4
NC-332	FANCM	c.681G>T	p.Q227H	EX2	12.8%	NM_020937.2
NC-332	TP53	c.380C[4>3]	p.P128Lfs*42	EX5	40.5%	NM_000546.5
NC-332	ERBB2	c.2005G>A	p.V669M	EX17	46.7%	NM_004448.2
NC-332	SMARCA4	c.2936G>A	p.R979Q	EX20	43.5%	NM_003072.3
NC-333	NRAS	c.38G>A	p.G13D	EX2	3.5%	NM_002524.4
NC-333	ARID2	c.2586_2600delCTCAGCAACTTCAGT	p.S863_V867del	EX15	2.6%	NM_152641.2
NC-333	NFKBIA	c.277delG	p.V93*fs*1	EX2	8.9%	NM_020529.2
NC-334	BCL11A	c.967G>T	p.A323S	EX4	10.7%	NM_018014.3
NC-334	PRDM1	c.1694C>A	p.P565Q	EX5	14.1%	NM_001198.3
NC-334	KRAS	c.50G>C	p.S17T	EX2	8.1%	NM_033360.2
NC-334	KRAS	c.37G>T	p.G13C	EX2	7.5%	NM_033360.2
NC-334	APEX1	c.847G>C	p.D283H	EX5E	12.5%	NM_001641.3
NC-334	TP53	c.783-1G>T	.	IVS7	15.0%	NM_000546.5
NC-334	NF1	c.4637C>G	p.S1546*	EX34	14.2%	NM_000267.3
NC-335	MAP3K1	c.168C>G	p.D56E	EX1	16.4%	NM_005921.1
NC-335	EGFR	c.2317_2318insCCAACCCCT	p.H773delinsPNPY	EX20	52.3%	NM_005228.3
NC-335	MAGI2	c.2649C>G	p.H883Q	EX16	12.2%	NM_012301.3
NC-335	MLL3	c.7906G>C	p.G2636R	EX38	22.0%	NM_170606.2
NC-335	TP53	c.355delG	p.A119Pfs*4	EX4	85.6%	NM_000546.5
NC-336	NTRK1	c.2119G>A	p.E707K	EX16	4.9%	NM_002529.3
NC-336	FCGR2A	c.402G>T	p.E134D	EX4	3.1%	NM_021642.3
NC-336	EPHA3	c.2267G>T	p.S756I	EX13	37.8%	NM_005233.5

NC-336	PIK3CA	c.1633G>A	p.E545K	EX10	20.5%	NM_006218.2
NC-336	SOX2	c.41C>A	p.P14Q	EX1	39.7%	NM_003106.3
NC-336	MSH3	c.2543G>T	p.R848I	EX18	11.6%	NM_002439.4
NC-336	EGFR	c.2303_2305delGCGinsTCT	p.S768_V769delinsIL	EX20	32.4%	NM_005228.3
NC-336	ANGPT1	c.694G>A	p.E232K	EX4	7.8%	NM_001146.3
NC-336	RB1	c.137G>C	p.R46T	EX1	20.5%	NM_000321.2
NC-336	CREBBP	c.2002A>T	p.K668*	EX10	8.1%	NM_004380.2
NC-336	GRIN2A	c.3812G>A	p.W1271*	EX13	7.6%	NM_001134407.1
NC-336	TP53	c.527G>A	p.C176Y	EX5	26.1%	NM_000546.5
NC-336	RNF43	c.1982C>T	p.S661F	EX9	6.5%	NM_017763.4
NC-336	ZNF521	c.532G>C	p.E178Q	EX4	12.5%	NM_015461.2
NC-336	BTK	c.388A>G	p.N130D	EX5	17.9%	NM_000061.2
NC-337	SETD2	c.5391G[2>1]	p.E1798Kfs*4	EX11	1.8%	NM_014159.6
NC-337	ATR	c.4615G>T	p.G1539C	EX26	12.4%	NM_001184.3
NC-337	CARD11	c.3040T>C	p.F1014L	EX23	15.1%	NM_032415.4
NC-337	EGFR	c.2573T>G	p.L858R	EX21	15.5%	NM_005228.3
NC-337	C11orf30	c.170+1G>A	.	IVS3	18.6%	NM_020193.3
NC-337	IRS2	c.1077C>G	p.C359W	EX1	19.0%	NM_003749.2
NC-337	TP53	c.83A[4>6]	p.N29Kfs*16	EX3	12.6%	NM_000546.5
NC-338	CDKN2A	c.172C>T	p.R58*	EX2	20.1%	NM_000077.4
NC-338	FLT1	c.1339G>T	p.G447C	EX10	11.8%	NM_002019.4
NC-338	TCF12	c.1964A>T	p.E655V	EX19	10.7%	NM_207037.1
NC-338	TP53	c.916C>T	p.R306*	EX8	15.3%	NM_000546.5
NC-338	NCOR1	c.5473G>A	p.V1825M	EX37	12.2%	NM_006311.3

NC-338	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	20.2%	NM_004448.2
NC-338	SMAD4	c.964T>A	p.Y322N	EX9	14.7%	NM_005359.5
NC-338	AR	c.171GCA[23>19]	p.Q58[23>19]	EX1	2.3%	NM_000044.3
NC-339	LRP1B	c.11353G>T	p.D3785Y	EX74	1.0%	NM_018557.2
NC-339	FANCD2	c.367G>A	p.E123K	EX5	7.8%	NM_033084.3
NC-339	FAT1	c.6370C>T	p.H2124Y	EX10	1.7%	NM_005245.3
NC-339	FAM131B	c.866C>T	p.P289L	EX7E	4.3%	NM_001031690.2
NC-339	PTCH1	c.2546G>C	p.R849T	EX15	1.2%	NM_000264.3
NC-339	PTCH1	c.2357G>A	p.R786K	EX15	2.0%	NM_000264.3
NC-339	PTCH1	c.2350G>A	p.E784K	EX15	1.7%	NM_000264.3
NC-339	NOTCH1	c.2080G>A	p.E694K	EX13	1.7%	NM_017617.3
NC-339	MLL	c.122C>T	p.P41L	EX1	1.7%	NM_001197104.1
NC-339	GRIN2A	c.1945C>G	p.L649V	EX9	1.5%	NM_001134407.1
NC-339	TP53	c.662_665dupAGCC	p.P223Afs*3	EX6	10.1%	NM_000546.5
NC-339	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	22.2%	NM_004448.2
NC-339	BCAS1	c.1319G>C	p.R440T	EX9	7.2%	NM_003657.2
NC-339	ERG	c.214C>A	p.P72T	EX2	5.7%	NM_182918.3
NC-339	KDM5C	c.1454C>T	p.S485F	EX11	34.0%	NM_004187.3
NC-339	AR	c.2089T>A	p.S697T	EX4	4.0%	NM_000044.3
NC-340	APC	c.5822CAGA[2>1]	p.D1942Efs*27	EX16E	68.5%	NM_000038.5
NC-340	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	31.3%	NM_005228.3
NC-340	EGFR	c.2369C>T	p.T790M	EX20	20.6%	NM_005228.3
NC-340	TSC1	c.2208+2T>A	.	IVS17	81.8%	NM_000368.4

NC-340	AKT1	c.797C>T	p.S266L	EX9	42.9%	NM_001014431.1
NC-340	SMAD4	c.353C>T	p.A118V	EX3	81.4%	NM_005359.5
NC-341	LRP1B	c.5134G>T	p.G1712*	EX31	10.3%	NM_018557.2
NC-341	NOTCH4	c.3962T>G	p.L1321R	EX22	5.0%	NM_004557.3
NC-341	ROS1	c.5165A>T	p.Y1722F	EX31	8.4%	NM_002944.2
NC-341	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	19.3%	NM_005228.3
NC-341	GRM3	c.640T>A	p.S214T	EX3	5.0%	NM_000840.2
NC-341	ABCB1	c.1957A>T	p.M653L	EX17	7.7%	NM_000927.4
NC-341	ZNF804B	c.341G>A	p.R114Q	EX3	8.5%	NM_181646.2
NC-341	PTPRD	c.3055G>A	p.V1019M	EX28	4.5%	NM_002839.3
NC-341	TP53	c.801_806delGAACAG	p.N268_S269del	EX8	11.3%	NM_000546.5
NC-342	EGFR	c.2573T>G	p.L858R	EX21	13.5%	NM_005228.3
NC-342	SMAD4	c.1051G>T	p.D351Y	EX9	13.2%	NM_005359.5
NC-342	APC	c.3872delA	p.Q1291Rfs*14	EX16	12.7%	NM_000038.5
NC-342	MYC	c.835GTT[2>1]	p.V279[2>1]	EX3	9.0%	NM_002467.4
NC-343	HIST1H3B	c.124T>C	p.Y42H	EX1E	1.1%	NM_003537.3
NC-343	MET	c.3029-1025C>A	.	IVS14	2.5%	NM_000245.2
NC-343	IFNG	c.403G>A	p.E135K	EX4E	5.4%	NM_000619.2
NC-343	IFNG	c.373G>A	p.D125N	EX4E	4.9%	NM_000619.2
NC-343	PTPRT	c.983G>A	p.R328H	EX7	5.2%	NM_133170.3
NC-344	NFE2L2	c.100C>G	p.R34G	EX2	8.6%	NM_006164.4
NC-344	EPHB1	c.2239G>A	p.A747T	EX12	9.8%	NM_004441.4
NC-344	RICTOR	c.3019G>C	p.D1007H	EX30	12.2%	NM_152756.3
NC-344	GLB1L3	c.1183A>C	p.T395P	EX13	4.2%	NM_001080407.2
NC-344	TP53	c.919+1G>T	.	IVS8	21.7%	NM_000546.5

NC-344	PTPN2	c.585C>G	p.F195L	EX6	11.4%	NM_080422.2
NC-345	ZFHX3	c.1831G>T	p.G611C	EX2	34.6%	NM_006885.3
NC-345	TP53	c.520A>T	p.R174W	EX5	45.8%	NM_000546.5
NC-345	STAG2	c.377G>T	p.G126V	EX6	10.2%	NM_001042749.1
NC-345	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	27.5%	NM_005228.3
NC-346	LRP4	c.1175C>T	p.T392M	EX10	1.1%	NM_002334.3
NC-346	KRAS	c.35G>A	p.G12D	EX2	34.2%	NM_033360.2
NC-346	ZFHX3	c.7994A>G	p.N2665S	EX9	15.4%	NM_006885.3
NC-346	TP53	c.701A>G	p.Y234C	EX7	24.1%	NM_000546.5
NC-347	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	26.0%	NM_005228.3
NC-347	EGFR	c.2369C>T	p.T790M	EX20	28.2%	NM_005228.3
NC-347	PTEN	c.951ACTT[2>1]	p.T319*fs*1	EX8	5.2%	NM_000314.4
NC-347	TP53	c.625A>T	p.R209*	EX6	10.8%	NM_000546.5
NC-347	BTK	c.718G>T	p.E240*	EX8	5.7%	NM_000061.2
NC-348	TAL1	c.926C>G	p.A309G	EX4E	14.4%	NM_003189.2
NC-348	CDC73	c.646G>C	p.A216P	EX7	19.0%	NM_024529.4
NC-348	SF3B1	c.2219G>A	p.G740E	EX15	14.3%	NM_012433.2
NC-348	FAT1	c.212G>A	p.R71K	EX2	4.2%	NM_005245.3
NC-348	EGFR	c.2237_2251delAATTAAGAGAAGCAA	p.E746_T751delinsA	EX19	23.6%	NM_005228.3
NC-348	PIK3CG	c.181G>A	p.V61M	EX2	6.9%	NM_002649.2
NC-348	POT1	c.56G>A	p.G19D	EX6	1.8%	NM_015450.2
NC-348	PTCH1	c.3254T>C	p.I1085T	EX19	13.3%	NM_000264.3
NC-348	ATM	c.1010G>A	p.R337H	EX8	22.4%	NM_000051.3

NC-348	FLT3	c.60G>T	p.M20I	EX2	1.5%	NM_004119.2
NC-348	TP53	c.600T[3>4]	p.L201Ffs*8	EX6	29.7%	NM_000546.5
NC-348	STAT3	c.1697A>G	p.D566G	EX19	19.3%	NM_139276.2
NC-348	HOXB13	c.782C>T	p.T261I	EX2E	23.7%	NM_006361.5
NC-349	ROS1	c.1939G>A	p.V647I	EX13	1.2%	NM_002944.2
NC-349	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	35.6%	NM_005228.3
NC-349	TP53	c.659A>G	p.Y220C	EX6	25.0%	NM_000546.5
NC-350	DDR2	c.2254C>G	p.R752G	EX16	24.6%	NM_006182.2
NC-350	KRAS	c.35G>C	p.G12A	EX2	60.8%	NM_033360.2
NC-351	TET2	c.5771A>C	p.K1924T	EX11E	12.3%	NM_001127208.2
NC-351	IRF2	c.88-2A>T	.	IVS2	7.8%	NM_002199.3
NC-351	IFNGR1	c.303A>T	p.R101S	EX3	3.1%	NM_000416.2
NC-351	BRAF	c.1406G>T	p.G469V	EX11	7.1%	NM_004333.4
NC-351	CDH23	c.4093G>C	p.D1365H	EX32	2.7%	NM_022124.5
NC-351	TP53	c.184G>T	p.E62*	EX4	11.3%	NM_000546.5
NC-352	DDR2	c.1083G>C	p.E361D	EX9	5.0%	NM_006182.2
NC-352	LRP1B	c.2438C>T	p.P813L	EX15	24.5%	NM_018557.2
NC-352	FAT2	c.8176C>G	p.L2726V	EX9	1.9%	NM_001447.2
NC-352	MLL3	c.8440A[6>7]	p.S2816Ifs*6	EX38	7.0%	NM_170606.2
NC-352	FGFR2	c.401A>G	p.E134G	EX4	1.5%	NM_000141.4
NC-352	MS4A1	c.72A>T	p.Q24H	EX3	25.3%	NM_152866.2
NC-352	FGF23	c.621_622delACinsCA	p.Q208K	EX3E	6.4%	NM_020638.2
NC-352	KRAS	c.35G>C	p.G12A	EX2	33.4%	NM_033360.2
NC-352	TP53	c.844C>T	p.R282W	EX8	23.3%	NM_000546.5
NC-352	CHEK2	c.259G>T	p.E87*	EX2	10.1%	NM_007194.3

NC-353	MYCN	c.1144C>T	p.R382C	EX3E	1.9%	NM_005378.4
NC-353	EPAS1	c.2587C>T	p.L863F	EX16E	11.5%	NM_001430.4
NC-353	LRP1B	c.3381T>A	p.D1127E	EX22	11.8%	NM_018557.2
NC-353	ERBB4	c.1472G>C	p.R491T	EX12	10.2%	NM_005235.2
NC-353	TGFBR2	c.1599+2T>A	.	IVS7	32.7%	NM_001024847.2
NC-353	BAP1	c.606G>A	p.W202*	EX8	28.6%	NM_004656.2
NC-353	GATA2	c.563C>A	p.T188K	EX3	3.9%	NM_032638.4
NC-353	EPHB1	c.2507C>G	p.A836G	EX14	15.0%	NM_004441.4
NC-353	IL7R	c.1375C>T	p.Q459*	EX8E	7.8%	NM_002185.3
NC-353	EBF1	c.1457C>T	p.T486M	EX14	15.5%	NM_024007.3
NC-353	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	32.6%	NM_005228.3
NC-353	GRM3	c.658G>T	p.G220C	EX3	22.0%	NM_000840.2
NC-353	NTRK2	c.341_342insG	p.N114Kfs*19	EX6	25.1%	NM_006180.3
NC-353	TBX3	c.682G>A	p.A228T	EX3	11.6%	NM_016569.3
NC-353	ACTG1	c.10G>A	p.E4K	EX2	2.2%	NM_001614.3
NC-354	EGFR	c.2573T>G	p.L858R	EX21	8.9%	NM_005228.3
NC-354	RBM10	c.943G[2>1]	p.G315Afs*16	EX9	13.0%	NM_001204468.1
NC-355	FANCM	c.4222+2T>C	.	IVS14	3.5%	NM_020937.2
NC-355	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	3.5%	NM_005228.3
NC-356	TP53	c.469G>T	p.V157F	EX5	51.1%	NM_000546.5
NC-356	BCL2	c.502C>T	p.P168S	EX2	1.0%	NM_000633.2
NC-356	NOTCH3	c.2978C>G	p.T993R	EX18	52.5%	NM_000435.2
NC-356	AURKA	c.707A>G	p.Y236C	EX7	32.6%	NM_003600.2
NC-356	KDM6A	c.1924-1G>T	.	IVS16	63.8%	NM_021140.2

NC-356	FBXW7	c.1513C>G	p.R505G	EX10	22.2%	NM_033632.3
NC-356	FAT1	c.9903_9909delTTACCTA	p.Y3301*fs*1	EX15	40.1%	NM_005245.3
NC-356	RICTOR	c.1970_1976delAACACTAinsCACACTT	p.Q657_Y659delinsPHF	EX21	24.0%	NM_152756.3
NC-356	PRDM1	c.1645C>G	p.L549V	EX5	27.1%	NM_001198.3
NC-356	ARID1B	c.3463A>G	p.K1155E	EX13	26.1%	NM_020732.3
NC-356	NFE2L2	c.101G>A	p.R34Q	EX2	43.0%	NM_006164.4
NC-356	EPHA5	c.2073_2077delTGGACinsAGGAA	p.S691_R693delinsRGS	EX12	42.8%	NM_004439.5
NC-358	SETD2	c.6772C[2>1]	p.P2258Qfs*51	EX15	8.0%	NM_014159.6
NC-358	SETD2	c.2008G>T	p.E670*	EX3	9.8%	NM_014159.6
NC-358	PDGFRA	c.401C>A	p.T134K	EX4	8.2%	NM_006206.4
NC-358	INPP4B	c.2482G>T	p.A828S	EX24	8.6%	NM_001101669.1
NC-358	ARID1B	c.514G>A	p.D172N	EX1	2.8%	NM_020732.3
NC-358	MLL3	c.7615C>T	p.Q2539*	EX38	1.5%	NM_170606.2
NC-358	NOTCH1	c.244G>T	p.V82L	EX3	7.7%	NM_017617.3
NC-358	PTEN	c.176C>G	p.S59*	EX3	1.2%	NM_000314.4
NC-358	KRAS	c.34G>T	p.G12C	EX2	10.5%	NM_033360.2
NC-358	MLL2	c.12450G>T	p.Q4150H	EX39	9.3%	NM_003482.3
NC-358	ERBB3	c.308G>T	p.R103L	EX3	8.0%	NM_001982.3
NC-358	HNF1A	c.569C>T	p.T190I	EX3	8.1%	NM_000545.5
NC-358	NTRK3	c.817G>T	p.V273L	EX9	8.0%	NM_001012338.2
NC-358	PALB2	c.1526G>C	p.G509A	EX4	2.2%	NM_024675.3
NC-358	ABCC11	c.3607G>T	p.G1203C	EX26	6.8%	NM_032583.3
NC-358	CDH11	c.1196G>T	p.G399V	EX8	14.6%	NM_001797.2

NC-358	ZFHX3	c.2451G>C	p.R817S	EX2	1.1%	NM_006885.3
NC-358	TP53	c.709_710delAT	p.M237Vfs*2	EX7	8.0%	NM_000546.5
NC-358	TP53	c.488A>G	p.Y163C	EX5	9.3%	NM_000546.5
NC-358	SMAD4	c.283delT	p.Y95Mfs*15	EX3	9.4%	NM_005359.5
NC-359	RAD54L	c.777G>A	p.M259I	EX9	1.6%	NM_001142548.1
NC-359	BCL10	c.118C>T	p.H40Y	EX2	9.8%	NM_003921.4
NC-359	ELF3	c.271G>T	p.D91Y	EX3	10.2%	NM_004433.4
NC-359	LRP1B	c.4160C>G	p.P1387R	EX25	11.5%	NM_018557.2
NC-359	PRKAA1	c.41A>G	p.E14G	EX1	12.1%	NM_206907.3
NC-359	HCN1	c.2537C>T	p.S846L	EX8E	11.7%	NM_021072.3
NC-359	FAT2	c.11114A>C	p.H3705P	EX18	1.5%	NM_001447.2
NC-359	ARID1B	c.4341G>A	p.M1447I	EX18	15.0%	NM_020732.3
NC-359	CARD11	c.3085A>C	p.K1029Q	EX23	4.5%	NM_032415.4
NC-359	C11orf30	c.3656C>G	p.S1219C	EX20	18.2%	NM_020193.3
NC-359	KDM5A	c.1121A>G	p.K374R	EX9	21.1%	NM_001042603.1
NC-359	DTX1	c.272_280delCCGTGCGGC	p.P91_R93del	EX2	4.8%	NM_004416.2
NC-359	NKX2-1	c.691A>T	p.T231S	EX3E	12.9%	NM_001079668.2
NC-359	TP53	c.1015G>T	p.E339*	EX10	13.7%	NM_000546.5
NC-359	RAD51D	c.145-1G>T	.	IVS2	23.2%	NM_002878.3
NC-359	KEAP1	c.475G>T	p.A159S	EX2	13.6%	NM_203500.1
NC-359	FAM123B	c.471G>T	p.E157D	EX2E	24.0%	NM_152424.3
NC-360	NOTCH2	c.3428G>A	p.G1143E	EX21	28.4%	NM_024408.3
NC-360	NTRK1	c.658C>T	p.R220W	EX6	63.6%	NM_002529.3
NC-360	PIK3C2B	c.20A>G	p.N7S	EX3	55.6%	NM_002646.3
NC-360	UMPS	c.682G>A	p.G228S	EX3	29.6%	NM_000373.3

NC-360	MSH3	c.153TGCAGCGGC[2>1]	p.A51[12>9]	EX1	25.4%	NM_002439.4
NC-360	NOTCH4	c.813_815delAGAinsGGG	p.D272G	EX5	32.3%	NM_004557.3
NC-360	MET	c.3029-731delA	.	IVS14	11.5%	NM_000245.2
NC-360	VIM	c.1098G>T	p.Q366H	EX7	23.5%	NM_003380.3
NC-360	MRE11A	c.1396G>A	p.E466K	EX13	29.5%	NM_005591.3
NC-360	KDM5A	c.4516C>T	p.R1506W	EX27	7.3%	NM_001042603.1
NC-360	MLL2	c.8053C>T	p.R2685*	EX32	11.4%	NM_003482.3
NC-360	FANCM	c.1889C>T	p.P630L	EX11	45.1%	NM_020937.2
NC-360	TP53	c.659A>G	p.Y220C	EX6	18.7%	NM_000546.5
NC-360	TP53	c.349G[3>2]	p.T118Qfs*5	EX4	52.8%	NM_000546.5
NC-360	AXIN2	c.2140C>T	p.R714W	EX8	42.7%	NM_004655.3
NC-361	MTHFR	c.587-2A>T	.	IVS4	10.6%	NM_005957.4
NC-361	CTNNB1	c.94G>T	p.D32Y	EX3	7.4%	NM_001904.3
NC-361	FBXW7	c.1978C>G	p.L660V	EX12E	11.4%	NM_033632.3
NC-361	EGFR	c.2126A>C	p.E709A	EX18	9.9%	NM_005228.3
NC-361	EGFR	c.2155G>A	p.G719S	EX18	9.8%	NM_005228.3
NC-361	GRM3	c.616C>T	p.R206C	EX3	1.0%	NM_000840.2
NC-361	TP53	c.524G>A	p.R175H	EX5	11.4%	NM_000546.5
NC-361	NF1	c.739_740delGAinsTT	p.E247L	EX8	4.1%	NM_000267.3
NC-362	ARID1B	c.124_126delGCGinsTCC	p.A42S	EX1	1.2%	NM_020732.3
NC-363	TP73	c.1135G>C	p.E379Q	EX10	3.8%	NM_005427.3
NC-363	PMS1	c.2339A>T	p.E780V	EX10	12.8%	NM_000534.4
NC-363	ROS1	c.616T>G	p.S206A	EX7	3.3%	NM_002944.2

NC-363	MET	c.2888-13_2888-4delTCTCTGTTTT	.	IVS13	25.7%	NM_000245.2
NC-363	KRAS	c.35G>A	p.G12D	EX2	1.7%	NM_033360.2
NC-363	CDK12	c.2806T>G	p.F936V	EX9	8.8%	NM_016507.2
NC-363	CDK12	c.2840T>C	p.L947P	EX9	9.0%	NM_016507.2
NC-363	CDK12	c.2953G>C	p.E985Q	EX10	11.5%	NM_016507.2
NC-364	DPYD	c.1660G>A	p.A554T	EX13	12.3%	NM_000110.3
NC-364	EPHA3	c.1099G>T	p.G367W	EX5	11.0%	NM_005233.5
NC-364	APC	c.3871C>T	p.Q1291*	EX16E	10.8%	NM_000038.5
NC-364	HIST1H1E	c.146C[2>1]	p.A50Pfs*39	EX1E	10.8%	NM_005321.2
NC-364	BRD2	c.1660A[5>6]	p.K556Efs*16	EX9	7.8%	NM_001199455.1
NC-364	NOTCH1	c.1336G>T	p.G446C	EX8	14.4%	NM_017617.3
NC-364	VIM	c.1063G>A	p.A355T	EX7	13.0%	NM_003380.3
NC-364	NAV3	c.1421A>T	p.D474V	EX8	8.2%	NM_014903.4
NC-364	FANCA	c.3930G>C	p.E1310D	EX39	11.2%	NM_000135.2
NC-364	TP53	c.586C>T	p.R196*	EX6	15.2%	NM_000546.5
NC-364	KDM5C	c.2189G>T	p.C730F	EX15	3.4%	NM_004187.3
NC-364	ATRX	c.1441G>C	p.E481Q	EX9	17.5%	NM_000489.3
NC-364	TBX22	c.59G>A	p.S20N	EX2	21.3%	NM_001109878.1
NC-365	PMS2	c.-87-u303G>A	.	.	17.9%	NM_000535.5
NC-365	EGFR	c.2573T>G	p.L858R	EX21	50.5%	NM_005228.3
NC-365	RB1	c.2063T>G	p.L688R	EX20	87.0%	NM_000321.2
NC-365	TP53	c.673-1G>T	.	IVS6	88.3%	NM_000546.5
NC-366	ARID1A	c.2231C>G	p.S744*	EX6	12.7%	NM_006015.4
NC-366	TGFBR2	c.17_37delTCAGGGGCCTGTGGCCGCTGC	p.L6_L12del	EX1	24.9%	NM_001024847.2

NC-366	BAP1	c.637C>T	p.R213C	EX8	42.4%	NM_004656.2
NC-366	MLL3	c.1837A>G	p.T613A	EX14	10.8%	NM_170606.2
NC-366	DLC1	c.454C[3>2]	p.I153Sfs*14	EX2	23.6%	NM_182643.2
NC-366	RECQL4	c.2953G>A	p.V985M	EX17	5.8%	NM_004260.3
NC-366	ROBO3	c.373T>A	p.F125I	EX2	21.9%	NM_022370.3
NC-366	MDM2	c.988_1005delGCCCTTCGTGAGAATTGG	p.A330_W335del	EX11E	12.7%	NM_002392.4
NC-366	FLT3	c.1489T>A	p.S497T	EX12	2.4%	NM_004119.2
NC-366	AXIN1	c.757A>G	p.M253V	EX2	7.8%	NM_003502.3
NC-366	ERBB2	c.2262_2270delGTTGAGGGAinsTCCCTC	p.L755_E757delinsPS	EX19	28.2%	NM_004448.2
NC-366	GNAS	c.661A>C	p.M221L	EX9	9.7%	NM_000516.4
NC-367	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	6.1%	NM_005228.3
NC-367	PTEN	c.1026G>T	p.K342N	EX8	7.7%	NM_000314.4
NC-367	CDH11	c.1153G>A	p.A385T	EX8	2.6%	NM_001797.2
NC-367	TP53	c.249G[2>1]	p.A84Pfs*39	EX4	11.4%	NM_000546.5
NC-368	CDKN2A	c.151-2A>G	.	IVS1	10.0%	NM_000077.4
NC-368	TP53	c.413C>T	p.A138V	EX5	9.8%	NM_000546.5
NC-368	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	10.9%	NM_004448.2
NC-369	EPHA5	c.1666G>C	p.E556Q	EX7	12.0%	NM_004439.5
NC-369	MET	c.3029-1160C>G	.	IVS14	6.0%	NM_000245.2
NC-369	RET	c.1840GAG[3>2]	p.E614[3>2]	EX10	10.6%	NM_020975.4
NC-369	SERPINB4	c.1096A>T	p.N366Y	EX8E	15.5%	NM_002974.2
NC-369	TOP1	c.1282A>G	p.M428V	EX13	9.0%	NM_003286.2

NC-370	LRP1B	c.8107G>T	p.G2703C	EX50	9.0%	NM_018557.2
NC-371	EGFR	c.2573T>G	p.L858R	EX21	12.7%	NM_005228.3
NC-371	TP53	c.581T>G	p.L194R	EX6	6.9%	NM_000546.5
NC-371	BRD4	c.3000G>T	p.Q1000H	EX14	7.4%	NM_058243.2
NC-372	ARID1A	c.1543C>G	p.Q515E	EX3	1.0%	NM_006015.4
NC-372	ALK	c.3691C>T	p.R1231W	EX24	2.0%	NM_004304.4
NC-372	EPHB1	c.1445C>T	p.S482F	EX7	1.3%	NM_004441.4
NC-372	RASA1	c.1351A[2>1]	p.N451Mfs*32	EX10	6.7%	NM_002890.2
NC-372	FAT2	c.3413C>T	p.S1138F	EX2	1.9%	NM_001447.2
NC-372	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	12.9%	NM_005228.3
NC-372	TGFBR1	c.592C>T	p.Q198*	EX4	1.1%	NM_004612.2
NC-372	PTEN	c.364A>T	p.I122F	EX5	8.3%	NM_000314.4
NC-372	NKX2-1	c.1073C>T	p.P358L	EX3E	1.1%	NM_001079668.2
NC-372	TP53	c.831T>G	p.C277W	EX8	9.1%	NM_000546.5
NC-372	STAT3	c.826C>G	p.Q276E	EX9	1.2%	NM_139276.2
NC-373	XPO1	c.1925G>T	p.G642V	EX17	9.6%	NM_003400.3
NC-373	ERBB4	c.1656T>A	p.C552*	EX14	13.0%	NM_005235.2
NC-373	BARD1	c.1904G>T	p.W635L	EX10	11.8%	NM_000465.2
NC-373	CUL3	c.77A>G	p.D26G	EX2	12.3%	NM_003590.4
NC-373	FANCD2	c.1312C>G	p.L438V	EX16	17.5%	NM_033084.3
NC-373	EPHA5	c.3064A>C	p.S1022R	EX18E	17.7%	NM_004439.5
NC-373	RICTOR	c.1874A>G	p.D625G	EX21	11.7%	NM_152756.3
NC-373	NOTCH4	c.4445G>T	p.W1482L	EX24	15.4%	NM_004557.3
NC-373	RINT1	c.1870T>G	p.L624V	EX12	14.9%	NM_021930.4
NC-373	XRCC2	c.122-1G>T	.	IVS2	7.2%	NM_005431.1

NC-373	ROBO3	c.1127C>A	p.P376H	EX7	15.0%	NM_022370.3
NC-373	MLL2	c.12826G>T	p.E4276*	EX39	14.6%	NM_003482.3
NC-373	TP53	c.711G>T	p.M237I	EX7	25.2%	NM_000546.5
NC-373	CDK12	c.2249-2A>T	.	IVS4	12.4%	NM_016507.2
NC-373	ERBB2	c.1930G>A	p.A644T	EX16	2.5%	NM_004448.2
NC-374	KRAS	c.35G>A	p.G12D	EX2	10.6%	NM_033360.2
NC-374	NKX2-1	c.1041G[3>4]	p.H349Pfs*90	EX3E	18.4%	NM_001079668.2
NC-374	GNAS	c.602G>A	p.R201H	EX8	9.3%	NM_000516.4
NC-375	TP53	c.736A>G	p.M246V	EX7	58.6%	NM_000546.5
NC-375	EGFR	c.2573T>G	p.L858R	EX21	31.6%	NM_005228.3
NC-375	LRP1B	c.575C>A	p.S192Y	EX5	1.2%	NM_018557.2
NC-376	NOTCH2	c.5761G>A	p.D1921N	EX31	1.0%	NM_024408.3
NC-376	LRP1B	c.1790A>G	p.D597G	EX12	5.8%	NM_018557.2
NC-376	SETD2	c.4916A>G	p.K1639R	EX7	12.5%	NM_014159.6
NC-376	TERT	c.-58-u66C>T	.	.	21.3%	NM_198253.2
NC-376	HGF	c.1684A[3>2]	p.K562Nfs*20	EX15	1.1%	NM_000601.4
NC-376	PIK3CG	c.1465_1466delGGinsTT	p.G489L	EX2	15.0%	NM_002649.2
NC-376	EZH2	c.622G>C	p.D208H	EX6	8.6%	NM_004456.4
NC-376	SGCZ	c.213G>T	p.L71F	EX2	11.1%	NM_139167.2
NC-376	PTGS1	c.1600C>A	p.L534I	EX11E	10.9%	NM_000962.3
NC-376	OR5L2	c.250A>G	p.N84D	EX1E	9.5%	NM_001004739.1
NC-376	MS4A1	c.22G>C	p.V8L	EX3	1.2%	NM_152866.2
NC-376	KDM5A	c.4412_4413delCC	p.A1471Dfs*6	EX26	7.7%	NM_001042603.1
NC-376	KRAS	c.35G>C	p.G12A	EX2	46.0%	NM_033360.2
NC-376	NTRK3	c.1438C>A	p.P480T	EX14	16.1%	NM_001012338.2
NC-376	GRIN2A	c.3727G>T	p.G1243W	EX13E	2.5%	NM_001134407.1

NC-376	TP53	c.818G>T	p.R273L	EX8	17.2%	NM_000546.5
NC-376	P4HB	c.1070G>C	p.S357T	EX8	1.4%	NM_000918.3
NC-376	JAK3	c.1348C>G	p.L450V	EX10	11.7%	NM_000215.3
NC-376	CIC	c.820C>T	p.R274*	EX6	12.9%	NM_015125.3
NC-376	RBM10	c.2689G>T	p.E897*	EX22	27.7%	NM_001204468.1
NC-377	TBX15	c.1261A>G	p.R421G	EX8E	7.5%	NM_152380.2
NC-377	EGFR	c.2573T>G	p.L858R	EX21	12.2%	NM_005228.3
NC-377	C11orf30	c.2645C>G	p.T882S	EX18	5.6%	NM_020193.3
NC-377	MLL	c.8176G>A	p.G2726R	EX27	6.3%	NM_001197104.1
NC-377	SMAD4	c.413C>A	p.S138*	EX3	4.6%	NM_005359.5
NC-377	KEAP1	c.571G>A	p.A191T	EX2	5.0%	NM_203500.1
NC-377	NF2	c.90_101delCGCCGAGATGGA	p.D30_M33del	EX1	2.9%	NM_000268.3
NC-377	RBM10	c.1260G>T	p.E420D	EX11	14.4%	NM_001204468.1
NC-378	CASP8	c.1363G>A	p.E455K	EX8	1.7%	NM_001080125.1
NC-378	HIST1H2AM	c.320G>T	p.G107V	EX1E	2.0%	NM_003514.2
NC-378	MLL	c.9551C>T	p.P3184L	EX27	9.0%	NM_001197104.1
NC-378	BRCA2	c.6176G>T	p.S2059I	EX11	19.0%	NM_000059.3
NC-378	FOXA1	c.1217T>C	p.M406T	EX2E	33.2%	NM_004496.3
NC-378	TP53	c.892G>T	p.E298*	EX8	42.0%	NM_000546.5
NC-379	H3F3C	c.234C>G	p.F78L	EX1E	6.0%	NM_001013699.2
NC-379	GRIN2A	c.1461delG	p.V489Lfs*8	EX6	5.7%	NM_001134407.1
NC-380	TOP2A	c.1435G>C	p.D479H	EX12	15.5%	NM_001067.3
NC-380	BRIP1	c.379G>A	p.D127N	EX4	1.5%	NM_032043.2
NC-380	RNASEL	c.250G>T	p.D84Y	EX2	7.3%	NM_021133.3
NC-380	KDR	c.2135-2A>T	.	IVS14	1.7%	NM_002253.2

NC-380	SDHA	c.149C>T	p.S50F	EX2	1.9%	NM_004168.2
NC-380	RHOT1	c.784G>A	p.G262R	EX11	4.0%	NM_001033568.1
NC-380	TOP2A	c.1617G>A	p.M539I	EX13	15.7%	NM_001067.3
NC-380	TOP2A	c.1611G>A	p.M537I	EX13	15.7%	NM_001067.3
NC-380	TOP2A	c.1576G>C	p.D526H	EX13	19.7%	NM_001067.3
NC-380	TOP2A	c.1483G>C	p.E495Q	EX12	17.1%	NM_001067.3
NC-382	PDGFRB	c.3136_3137+9delAGGTAACCACC	.	EX22-IVS22	8.2%	NM_002609.3
NC-382	ARID1B	c.1978G>A	p.G660R	EX5	11.7%	NM_020732.3
NC-382	EGFR	c.2237_2255delAATTAAGAGAAGCAACATCinsT	p.E746_S752delinsV	EX19	13.9%	NM_005228.3
NC-382	EGFR	c.2389T>A	p.C797S	EX20	11.9%	NM_005228.3
NC-382	TP53	c.726_727delCAinsT	p.M243Wfs*4	EX7	11.8%	NM_000546.5
NC-383	EPHA2	c.2159T>A	p.L720Q	EX13	5.8%	NM_004431.3
NC-383	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	3.6%	NM_005228.3
NC-383	ZFHX3	c.6989G>A	p.C2330Y	EX9	5.6%	NM_006885.3
NC-384	FAT4	c.13520C>T	p.A4507V	EX17E	18.3%	NM_024582.4
NC-384	RBM10	c.852delC	p.C284*fs*1	EX7	16.8%	NM_001204468.1
NC-385	PDGFRA	c.3230G>A	p.G1077D	EX23E	1.1%	NM_006206.4
NC-385	FAT2	c.5282C>G	p.S1761*	EX9	6.9%	NM_001447.2
NC-385	TSC1	c.2185C>G	p.L729V	EX17	7.3%	NM_000368.4
NC-385	KDM5A	c.1295T>A	p.L432Q	EX10	2.5%	NM_001042603.1
NC-385	TP53	c.814G>T	p.V272L	EX8	7.4%	NM_000546.5
NC-386	LRP1B	c.12814A>T	p.T4272S	EX84	13.3%	NM_018557.2

NC-386	PDGFRB	c.677G>A	p.R226H	EX5	12.1%	NM_002609.3
NC-386	NOTCH4	c.5962C>T	p.P1988S	EX30E	15.6%	NM_004557.3
NC-386	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	67.3%	NM_005228.3
NC-386	EGFR	c.2369C>T	p.T790M	EX20	38.6%	NM_005228.3
NC-386	EGFR	c.2389T>A	p.C797S	EX20	38.1%	NM_005228.3
NC-386	TP53	c.782_782+18delGGTCAGGAGCCACTTGCCA	.	EX7-IVS7	28.7%	NM_000546.5
NC-386	TP53	c.774A>C	p.E258D	EX7	43.7%	NM_000546.5
NC-387	RHOH	c.3G>T	p.0?	EX3E	4.5%	NM_004310.3
NC-387	PIK3CG	c.1414C>A	p.R472S	EX2	9.3%	NM_002649.2
NC-387	MLL3	c.6856A>T	p.T2286S	EX36	11.0%	NM_170606.2
NC-387	PTPRD	c.3449C>A	p.S1150Y	EX31	4.2%	NM_002839.3
NC-387	KRAS	c.35G>C	p.G12A	EX2	10.5%	NM_033360.2
NC-387	TP53	c.712T>A	p.C238S	EX7	13.1%	NM_000546.5
NC-387	CDK12	c.3377_3378delAAinsCC	p.Q1126P	EX13	1.6%	NM_016507.2
NC-387	STK11	c.153G[5>4]	p.D53Tfs*11	EX1	12.3%	NM_000455.4
NC-387	SMARCA4	c.953delT	p.V318Afs*8	EX6	11.0%	NM_003072.3
NC-388	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	23.2%	NM_005228.3
NC-388	EGFR	c.2369C>T	p.T790M	EX20	23.3%	NM_005228.3
NC-388	TP53	c.818G>T	p.R273L	EX8	56.1%	NM_000546.5
NC-389	FAT2	c.830T>A	p.V277D	EX1	2.3%	NM_001447.2
NC-389	SMAD3	c.658+1G>C	.	IVS5	8.2%	NM_005902.3

NC-389	TP53	c.827C>A	p.A276D	EX8	21.8%	NM_000546.5
NC-389	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	12.3%	NM_004448.2
NC-389	ROCK1	c.1014C>G	p.F338L	EX9	14.4%	NM_005406.2
NC-389	RBM10	c.1052C[3>2]	p.L352Cfs*21	EX9	47.8%	NM_001204468.1
NC-390	ARID1A	c.2069C>G	p.P690R	EX5	23.8%	NM_006015.4
NC-390	TET2	c.4329_4330delCAinsT	p.I1444Ffs*4	EX10	27.7%	NM_001127208.2
NC-390	SDHA	c.751A>T	p.N251Y	EX6	15.7%	NM_004168.2
NC-390	NSD1	c.7486G>T	p.G2496C	EX23E	5.0%	NM_022455.4
NC-390	GFRAL	c.503A>T	p.Q168L	EX5	20.5%	NM_207410.2
NC-390	PPP1R17	c.179A[8>9]	p.P63Tfs*25	EX3	32.5%	NM_006658.4
NC-390	EGFR	c.3536A>G	p.K1179R	EX28E	19.4%	NM_005228.3
NC-390	GALNT12	c.1589A>C	p.K530T	EX9	5.9%	NM_024642.4
NC-390	TSC1	c.497_508+4delTGAAGAAACCAGGTAC	.	EX6-IVS6	14.4%	NM_000368.4
NC-390	NOTCH1	c.1286G>A	p.C429Y	EX8	4.2%	NM_017617.3
NC-390	PTEN	c.693_697delCACAC	p.R233Gfs*8	EX7	21.7%	NM_000314.4
NC-390	ARID2	c.2976_3001delTACCCCTCAATCACAGGGACCACCTC	p.T993Yfs*55	EX15	5.4%	NM_152641.2
NC-390	MLL2	c.15822_15826delGAGAA	p.M5274Ifs*4	EX49	1.3%	NM_003482.3
NC-390	MLL2	c.12512A[2>3]	p.P4172Tfs*162	EX39	2.7%	NM_003482.3
NC-390	RB1	c.1216-1G>T	.	IVS12	30.7%	NM_000321.2
NC-390	IRS2	c.2887C>A	p.P963T	EX1	3.1%	NM_003749.2
NC-390	ZFHX3	c.187G>T	p.E63*	EX2	27.6%	NM_006885.3

NC-390	TP53	c.536A>G	p.H179R	EX5	32.7%	NM_000546.5
NC-391	MAP3K1	c.1105G>A	p.E369K	EX5	17.6%	NM_005921.1
NC-391	RBM10	c.1894C[3>4]	p.D633Rfs*9	EX16	35.0%	NM_001204468.1
NC-392	RNASEL	c.2212A>T	p.S738C	EX7E	6.1%	NM_021133.3
NC-392	TGFBR2	c.1411G>A	p.D471N	EX6	30.8%	NM_001024847.2
NC-392	NPM1	c.277G>C	p.E93Q	EX4	2.6%	NM_002520.6
NC-392	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	26.4%	NM_005228.3
NC-392	BRAF	c.561G>A	p.M187I	EX4	2.1%	NM_004333.4
NC-392	MLL	c.581C>T	p.S194F	EX3	3.7%	NM_001197104.1
NC-392	BLM	c.797G>T	p.R266I	EX3	3.0%	NM_000057.2
NC-392	TP53	c.560-2A>C	.	IVS5	18.0%	NM_000546.5
NC-393	MET	c.3028G>C	p.D1010H	EX14	4.6%	NM_000245.2
NC-394	TOP1	c.1981G>A	p.A661T	EX19	53.8%	NM_003286.2
NC-394	EGFR	c.2573T>G	p.L858R	EX21	37.0%	NM_005228.3
NC-394	EGFR	c.185T>G	p.L62R	EX2	35.1%	NM_005228.3
NC-394	MAP2K1	c.303_308delGGAGAT	p.E102_I103del	EX3	22.3%	NM_002755.3
NC-394	EP300	c.2159_2178delTGGCCCAGCCCCCTATTGTA	p.M720Tfs*72	EX12	9.5%	NM_001429.3
NC-395	PIK3CA	c.742G>C	p.G248R	EX4	6.0%	NM_006218.2
NC-395	MAP3K1	c.2293T>A	p.L765M	EX13	19.6%	NM_005921.1
NC-395	EGFR	c.2300_2308dupCCAGCGTGG	p.A767_V769dup	EX20	17.5%	NM_005228.3
NC-395	PTGS1	c.1687C>A	p.L563M	EX11E	27.7%	NM_000962.3
NC-395	GAB2	c.1075A>G	p.S359G	EX4	18.8%	NM_080491.2
NC-395	RB1	c.1695+1G>T	.	IVS17	31.8%	NM_000321.2

NC-395	TP53	c.844C>T	p.R282W	EX8	21.5%	NM_000546.5
NC-395	TP53	c.574C>T	p.Q192*	EX6	36.1%	NM_000546.5
NC-395	PIK3R2	c.43_50delTTCCGCCG	p.F15Gfs*52	EX2	3.9%	NM_005027.2
NC-395	BCL3	c.1285C>T	p.P429S	EX9E	5.0%	NM_005178.4
NC-396	ARID1A	c.687C>A	p.Y229*	EX1	29.6%	NM_006015.4
NC-396	FAM5C	c.1309G>A	p.A437T	EX8E	42.2%	NM_199051.1
NC-396	CREBBP	c.683C>T	p.T228I	EX2	15.1%	NM_004380.2
NC-396	TP53	c.862A[2>1]	p.N288Ifs*57	EX8	64.5%	NM_000546.5
NC-397	SETD2	c.5255_5256delTT	p.L1752Hfs*36	EX10	22.5%	NM_014159.6
NC-397	SETD2	c.1369G>T	p.E457*	EX3	25.6%	NM_014159.6
NC-397	NTRK2	c.988A>G	p.I330V	EX11	3.9%	NM_006180.3
NC-397	NTRK3	c.2008C>G	p.L670V	EX17	1.6%	NM_001012338.2
NC-397	KDM6A	c.1172delC	p.A391Efs*48	EX12	15.7%	NM_021140.2
NC-397	STAG2	c.2307T>A	p.C769*	EX24	1.3%	NM_001042749.1
NC-398	EPHB2	c.466G>A	p.V156I	EX3	2.2%	NM_017449.3
NC-398	EPCAM	c.210G[2>1]	p.A71Qfs*3	EX3	12.2%	NM_002354.2
NC-398	RICTOR	c.47G>C	p.R16P	EX1	2.2%	NM_152756.3
NC-398	NOTCH4	c.4415G>A	p.R1472Q	EX24	2.5%	NM_004557.3
NC-398	ROS1	c.716_723dupTAGATGCA	p.G242*fs*1	EX7	2.4%	NM_002944.2
NC-398	INHBA	c.635A>G	p.D212G	EX3E	9.2%	NM_002192.2
NC-398	HGF	c.262_263insC	p.V88Afs*3	EX3	13.6%	NM_000601.4
NC-398	HGF	c.119A>G	p.H40R	EX2	1.8%	NM_000601.4
NC-398	RAD52	c.1175G>A	p.S392N	EX11	10.1%	NM_134424.2
NC-398	FANCM	c.134C>T	p.A45V	EX1	1.7%	NM_020937.2
NC-398	FANCM	c.5359G>A	p.D1787N	EX21	2.1%	NM_020937.2

NC-398	RUNX1	c.156G>A	p.M52I	EX4	1.9%	NM_001754.4
NC-399	FAT1	c.8177G>T	p.R2726L	EX10	10.5%	NM_005245.3
NC-399	KRAS	c.35G>T	p.G12V	EX2	11.8%	NM_033360.2
NC-400	JUN	c.718C>T	p.P240S	EX1E	6.1%	NM_002228.3
NC-400	PBRM1	c.4629dupT	p.H1544Sfs*52	EX30E	8.5%	NM_018313.4
NC-400	PIK3CA	c.274C>T	p.L92F	EX2	5.6%	NM_006218.2
NC-400	PIK3CA	c.3140A>G	p.H1047R	EX21E	4.8%	NM_006218.2
NC-400	MET	c.2888-35_2888-14delTCTTTAACAAGCTCTTTCTTTC	.	IVS13	7.0%	NM_000245.2
NC-400	TP53	c.527G>A	p.C176Y	EX5	7.2%	NM_000546.5
NC-400	SERPINB3	c.224T>C	p.V75A	EX4	8.5%	NM_006919.2
NC-400	NOTCH3	c.5510G>A	p.R1837H	EX30	1.4%	NM_000435.2
NC-400	RBM10	c.755G>A	p.W252*	EX6	8.2%	NM_001204468.1
NC-401	ERRFI1	c.930T>A	p.Y310*	EX4E	6.7%	NM_018948.3
NC-401	EGFR	c.2573T>G	p.L858R	EX21	10.5%	NM_005228.3
NC-401	MAX	c.205G>C	p.E69Q	EX4	5.0%	NM_002382.4
NC-401	TP53	c.832C>T	p.P278S	EX8	14.4%	NM_000546.5
NC-402	EGFR	c.2239_2256delTTAAGAGAAGCAACATCT	p.L747_S752del	EX19	17.5%	NM_005228.3
NC-402	CYLD	c.2018C>A	p.T673N	EX12	15.2%	NM_001042355.1
NC-403	MSH6	c.3025A[4>3]	p.T1010Lfs*10	EX4	8.6%	NM_000179.2
NC-403	CDH18	c.2197G>C	p.D733H	EX13E	19.2%	NM_004934.3
NC-403	ROS1	c.4601ATT[3>2]	p.Y1535[2>1]	EX28	7.9%	NM_002944.2
NC-403	EGFR	c.2573T>G	p.L858R	EX21	21.5%	NM_005228.3
NC-403	NOTCH1	c.7264A>C	p.S2422R	EX34E	3.0%	NM_017617.3

NC-403	TP53	c.797_798delGAinsTT	p.G266V	EX8	17.2%	NM_000546.5
NC-403	CHEK2	c.454C>T	p.P152S	EX4	9.8%	NM_007194.3
NC-404	ALK	c.3586C>A	p.L1196M	EX23	6.7%	NM_004304.4
NC-404	TP53	c.584T>G	p.I195S	EX6	30.5%	NM_000546.5
NC-404	EP300	c.3610T>G	p.C1204G	EX20	26.1%	NM_001429.3
NC-404	EP300	c.3624C>G	p.I1208M	EX20	26.6%	NM_001429.3
NC-404	ELAC2	c.1918_1920delTGTinsCCC	p.C640P	EX21	1.6%	NM_018127.6
NC-405	FAT1	c.5323A>T	p.S1775C	EX10	2.5%	NM_005245.3
NC-405	CDKN2A	c.44G>A	p.W15*	EX1	3.4%	NM_000077.4
NC-405	MLL2	c.10867C>T	p.Q3623*	EX39	2.5%	NM_003482.3
NC-405	TP53	c.349G[3>2]	p.T118Qfs*5	EX4	4.8%	NM_000546.5
NC-405	NOTCH3	c.1743C>A	p.S581R	EX11	1.0%	NM_000435.2
NC-406	ALK	c.92C>T	p.S31F	EX1	9.6%	NM_004304.4
NC-406	SF3B1	c.2229G>T	p.L743F	EX16	3.6%	NM_012433.2
NC-406	BAP1	c.940G>T	p.E314*	EX11	4.6%	NM_004656.2
NC-406	FGFR4	c.162_166delTCTGT	p.C56Wfs*4	EX3	7.3%	NM_213647.1
NC-406	BRAF	c.1781A>G	p.D594G	EX15	10.9%	NM_004333.4
NC-406	IGF1R	c.1060A>T	p.T354S	EX4	4.6%	NM_000875.3
NC-406	RARA	c.1193T>C	p.L398P	EX9E	4.1%	NM_000964.3
NC-407	APC	c.7730C>G	p.S2577*	EX16E	2.1%	NM_000038.5
NC-407	ABCB1	c.1508C>G	p.A503G	EX14	20.0%	NM_000927.4
NC-407	CHEK1	c.1336G>A	p.G446S	EX13E	8.7%	NM_001274.5
NC-407	MLL2	c.15702G>C	p.E5234D	EX48	26.3%	NM_003482.3
NC-407	RB1	c.1215+1G>T	.	IVS12	27.1%	NM_000321.2
NC-407	RAD51B	c.198+1G>A	.	IVS3	23.7%	NM_133509.3

NC-407	CREBBP	c.4337G>T	p.R1446L	EX26	13.0%	NM_004380.2
NC-407	TP53	c.488A>G	p.Y163C	EX5	20.0%	NM_000546.5
NC-408	MSH6	c.3752C>G	p.S1251*	EX8	7.5%	NM_000179.2
NC-408	FAT1	c.9434C>G	p.T3145R	EX13	7.1%	NM_005245.3
NC-408	PDGFRB	c.448C>T	p.R150*	EX4	6.1%	NM_002609.3
NC-408	BRD2	c.1668G>C	p.K556N	EX9	13.4%	NM_001199455.1
NC-408	NBN	c.632A>G	p.D211G	EX6	24.9%	NM_002485.4
NC-408	ATM	c.7577G>A	p.R2526K	EX51	6.8%	NM_000051.3
NC-408	ROBO3	c.493C>T	p.R165C	EX3	12.5%	NM_022370.3
NC-408	SMAD3	c.450C>G	p.F150L	EX3	2.2%	NM_005902.3
NC-408	TP53	c.380C>T	p.S127F	EX5	13.7%	NM_000546.5
NC-408	PPM1D	c.1786C>T	p.H596Y	EX6E	7.0%	NM_003620.3
NC-409	FCGR3A	c.326T>G	p.L109R	EX5	14.2%	NM_001127593.1
NC-409	TNN	c.1931A>G	p.Q644R	EX9	26.1%	NM_022093.1
NC-409	EPPK1	c.7034C>T	p.T2345M	EX1E	4.2%	NM_031308.1
NC-409	NOTCH1	c.3427G>T	p.E1143*	EX21	2.4%	NM_017617.3
NC-409	MEN1	c.349C>G	p.L117V	EX2	13.2%	NM_130799.2
NC-409	MLL	c.59G>A	p.G20D	EX1	15.1%	NM_001197104.1
NC-409	POLE	c.2608A>T	p.N870Y	EX23	36.6%	NM_006231.2
NC-409	TP53	c.811G>T	p.E271*	EX8	43.8%	NM_000546.5
NC-409	SMARCA4	c.3931G>T	p.E1311*	EX28	41.0%	NM_003072.3
NC-410	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	3.6%	NM_005228.3
NC-410	EGFR	c.2609A>G	p.H870R	EX21	4.7%	NM_005228.3
NC-410	MAF	c.544CAC[6>5]	p.H182[6>5]	EX1E	4.4%	NM_001031804.2
NC-410	AR	c.173A>T	p.Q58L	EX1	12.6%	NM_000044.3

NC-411	ARID1A	c.2122C>T	p.Q708*	EX5	43.9%	NM_006015.4
NC-411	AFF3	c.2039T>C	p.L680P	EX14	39.3%	NM_001025108.1
NC-411	LRP1B	c.9863G>T	p.C3288F	EX62	36.8%	NM_018557.2
NC-411	SF3B1	c.1997A>G	p.K666R	EX14	41.5%	NM_012433.2
NC-411	KIT	c.856G>A	p.G286R	EX5	1.0%	NM_000222.2
NC-411	FLT4	c.1565T>A	p.V522E	EX12	26.1%	NM_182925.4
NC-411	PIM1	c.349G>T	p.V117F	EX4	46.7%	NM_002648.3
NC-411	EZH2	c.1169G>A	p.G390E	EX10	26.8%	NM_004456.4
NC-411	FANCF	c.1097G>C	p.G366A	EX1E	2.5%	NM_022725.3
NC-411	MLL2	c.11129G>T	p.G3710V	EX39	57.2%	NM_003482.3
NC-411	RB1	c.2053C>T	p.Q685*	EX20	83.7%	NM_000321.2
NC-411	CREBBP	c.6484G>A	p.G2162R	EX31E	1.2%	NM_004380.2
NC-411	CYLD	c.2297T>A	p.I766N	EX15	44.0%	NM_001042355.1
NC-411	CDH1	c.2134G>A	p.G712R	EX13	2.8%	NM_004360.3
NC-411	TP53	c.376-2A>G	.	IVS4	84.9%	NM_000546.5
NC-411	SMARCA4	c.4749G>C	p.E1583D	EX33	1.9%	NM_003072.3
NC-412	MTOR	c.1576C>T	p.R526C	EX11	35.4%	NM_004958.3
NC-412	EPHA5	c.2969G>C	p.G990A	EX17	26.8%	NM_004439.5
NC-412	CDH18	c.2111C>A	p.S704*	EX13E	39.6%	NM_004934.3
NC-412	IL7R	c.698A>G	p.N233S	EX5	19.7%	NM_002185.3
NC-412	APC	c.4945A>G	p.I1649V	EX16E	35.0%	NM_000038.5
NC-412	ESR1	c.882C>A	p.S294R	EX5	12.9%	NM_001122740.1
NC-412	ESR1	c.890T>G	p.M297R	EX5	13.2%	NM_001122740.1
NC-412	CDK13	c.1102C>A	p.P368T	EX1	30.8%	NM_003718.4
NC-412	HGF	c.674A>T	p.H225L	EX6	25.5%	NM_000601.4
NC-412	FLT1	c.1303G>T	p.V435L	EX10	37.6%	NM_002019.4

NC-412	FLT1	c.865G>T	p.A289S	EX7	33.5%	NM_002019.4
NC-412	CREBBP	c.4953C>A	p.D1651E	EX30	19.7%	NM_004380.2
NC-412	TP53	c.746G>C	p.R249T	EX7	37.4%	NM_000546.5
NC-412	STK11	c.731C>A	p.T244N	EX5	35.5%	NM_000455.4
NC-413	GRM3	c.2230G>A	p.D744N	EX4	60.6%	NM_000840.2
NC-413	TP53	c.184G>T	p.E62*	EX4	60.0%	NM_000546.5
NC-413	FAT2	c.4247A>G	p.Y1416C	EX6	57.5%	NM_001447.2
NC-413	NOTCH1	c.1711G>A	p.D571N	EX11	44.9%	NM_017617.3
NC-413	GRIN2A	c.1628C>A	p.T543N	EX7	27.8%	NM_001134407.1
NC-413	MLL2	c.4265G>T	p.W1422L	EX15	20.8%	NM_003482.3
NC-413	OR6F1	c.681G>C	p.R227S	EX1E	3.7%	NM_001005286.1
NC-413	PIK3CA	c.3140A>G	p.H1047R	EX21E	1.2%	NM_006218.2
NC-414	MNDA	c.626A>G	p.N209S	EX5	42.6%	NM_002432.1
NC-414	PTGS2	c.1099T>C	p.F367L	EX8	43.2%	NM_000963.2
NC-414	GRM3	c.112G>T	p.D38Y	EX2	46.2%	NM_000840.2
NC-414	PIK3CG	c.2849_2850delACinsGT	p.D950G	EX9	47.5%	NM_002649.2
NC-414	NOTCH1	c.3880G>T	p.E1294*	EX23	87.9%	NM_017617.3
NC-414	MLL2	c.9613G>T	p.G3205*	EX34	46.5%	NM_003482.3
NC-414	RB1	c.514delA	p.I172Yfs*3	EX5	86.7%	NM_000321.2
NC-414	TP53	c.871A>T	p.K291*	EX8	93.1%	NM_000546.5
NC-414	STAG2	c.1741G>A	p.D581N	EX19	92.7%	NM_001042749.1
NC-415	FUBP1	c.613G>A	p.G205R	EX8	4.0%	NM_003902.3
NC-415	MSH2	c.1009C>A	p.Q337K	EX6	1.3%	NM_000251.2
NC-415	FAT2	c.12047dupA	p.Y4016*fs*1	EX21	28.1%	NM_001447.2
NC-415	NOTCH1	c.4723GTG[4>3]	p.V1575[4>3]	EX26	20.0%	NM_017617.3
NC-415	MLL2	c.12563T[2>3]	p.G4189Wfs*145	EX39	1.0%	NM_003482.3

NC-415	TP53	c.853G>A	p.E285K	EX8	32.0%	NM_000546.5
NC-416	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.3%	NM_003921.4
NC-416	PIK3CA	c.2837G>T	p.G946V	EX20	17.1%	NM_006218.2
NC-416	FBXW7	c.1193C>T	p.S398F	EX8	36.0%	NM_033632.3
NC-416	HCN1	c.2459C>T	p.T820M	EX8E	38.1%	NM_021072.3
NC-416	CSF1R	c.1693G>C	p.D565H	EX12	20.3%	NM_005211.3
NC-416	FAT2	c.3148C>T	p.Q1050*	EX1	27.2%	NM_001447.2
NC-416	ROS1	c.2130G>T	p.M710I	EX15	16.0%	NM_002944.2
NC-416	PIK3CG	c.3208G>T	p.D1070Y	EX11E	28.8%	NM_002649.2
NC-416	SGCZ	c.131G>T	p.W44L	EX2	20.6%	NM_139167.2
NC-416	CCND1	c.682C>A	p.R228S	EX4	70.9%	NM_053056.2
NC-416	ATM	c.4010T>C	p.I1337T	EX27	35.8%	NM_000051.3
NC-416	FANCM	c.1A>G	p.0?	EX1	48.4%	NM_020937.2
NC-416	FANCM	c.859G>T	p.E287*	EX4	46.9%	NM_020937.2
NC-416	TP53	c.824G>A	p.C275Y	EX8	35.9%	NM_000546.5
NC-416	NCAM2	c.1558G>T	p.D520Y	EX12	32.1%	NM_004540.3
NC-417	SF3B1	c.2098A>G	p.K700E	EX15	19.7%	NM_012433.2
NC-417	EPHA3	c.415C>T	p.Q139*	EX3	1.5%	NM_005233.5
NC-417	PIK3CA	c.1633G>A	p.E545K	EX10	1.3%	NM_006218.2
NC-417	TET2	c.4622delA	p.Q1541Rfs*30	EX11E	47.5%	NM_001127208.2
NC-417	CTNNA1	c.398C>G	p.S133C	EX4	1.2%	NM_001903.2
NC-417	FAT2	c.4855G>C	p.D1619H	EX9	1.7%	NM_001447.2
NC-417	NSD1	c.2483C>G	p.S828C	EX5	1.1%	NM_022455.4
NC-417	NSD1	c.3020C>T	p.A1007V	EX5	1.4%	NM_022455.4
NC-417	PRDM1	c.2409_2410delTC	p.P804Qfs*17	EX7E	14.7%	NM_001198.3
NC-417	EGFR	c.2369C>T	p.T790M	EX20	11.8%	NM_005228.3

NC-417	EGFR	c.2573T>G	p.L858R	EX21	32.6%	NM_005228.3
NC-417	BRAF	c.1942G>A	p.E648K	EX16	1.7%	NM_004333.4
NC-417	EPHB6	c.316C>T	p.R106*	EX7	1.3%	NM_004445.3
NC-417	GNAQ	c.877C>T	p.P293S	EX6	1.0%	NM_002072.3
NC-417	CHEK1	c.295G>A	p.D99N	EX4	2.1%	NM_001274.5
NC-417	RAD52	c.285T>A	p.F95L	EX5	38.6%	NM_134424.2
NC-417	MLL2	c.12815G>T	p.G4272V	EX39	19.2%	NM_003482.3
NC-417	MLL2	c.4033G>A	p.D1345N	EX13	1.9%	NM_003482.3
NC-417	TBX3	c.583G>A	p.E195K	EX2	1.6%	NM_016569.3
NC-417	FANCM	c.4088C>G	p.S1363C	EX14	1.0%	NM_020937.2
NC-417	MLH3	c.3586G>C	p.D1196H	EX6	18.1%	NM_001040108.1
NC-417	SLX4	c.3739G>C	p.E1247Q	EX12	1.6%	NM_032444.2
NC-417	CREBBP	c.4004G>A	p.G1335E	EX24	1.2%	NM_004380.2
NC-417	TP53	c.659A>G	p.Y220C	EX6	49.9%	NM_000546.5
NC-417	NCOR1	c.2134G>A	p.E712K	EX19	1.1%	NM_006311.3
NC-417	SMAD2	c.1155C>A	p.F385L	EX10	2.0%	NM_001003652.3
NC-417	KEAP1	c.1462G>C	p.E488Q	EX4	50.1%	NM_203500.1
NC-417	KEAP1	c.1376G>A	p.R459Q	EX4	47.7%	NM_203500.1
NC-417	NOTCH3	c.5752G>T	p.V1918L	EX31	34.9%	NM_000435.2
NC-417	ERG	c.354G>C	p.M118I	EX3	1.6%	NM_182918.3
NC-417	RPGR	c.2112G>C	p.K704N	EX15E	6.3%	NM_001034853.1
NC-417	BCOR	c.5216C>T	p.S1739F	EX15E	3.5%	NM_001123385.1
NC-417	STAG2	c.2258C>T	p.S753F	EX23	1.4%	NM_001042749.1
NC-418	MLL2	c.5821A>G	p.M1941V	EX27	1.0%	NM_003482.3
NC-418	RB1	c.837_838delAGinsC	p.K279Nfs*7	EX8	81.8%	NM_000321.2
NC-418	CREBBP	c.3872A>G	p.H1291R	EX22	83.2%	NM_004380.2

NC-418	TP53	c.724T>G	p.C242G	EX7	84.3%	NM_000546.5
NC-419	EPAS1	c.2561C>T	p.S854F	EX16E	10.7%	NM_001430.4
NC-419	LRP1B	c.2009A>T	p.D670V	EX13	1.4%	NM_018557.2
NC-419	EGFR	c.2303_2311dupGCGTGGACA	p.S768_D770dup	EX20	13.9%	NM_005228.3
NC-419	MLL3	c.3736G>A	p.G1246R	EX24	1.6%	NM_170606.2
NC-419	AXIN1	c.2556G>C	p.E852D	EX11E	4.7%	NM_003502.3
NC-419	CDH1	c.1571G>A	p.R524Q	EX11	9.5%	NM_004360.3
NC-419	TMPRSS2	c.1442C>T	p.P481L	EX13	1.9%	NM_001135099.1
NC-420	CSF1	c.1268C>T	p.P423L	EX6	1.7%	NM_000757.5
NC-420	EGFR	c.2573T>G	p.L858R	EX21	5.8%	NM_005228.3
NC-420	KDM6A	c.2785C>T	p.P929S	EX18	1.3%	NM_021140.2
NC-420	RBM10	c.2653G>T	p.E885*	EX22	8.1%	NM_001204468.1
NC-420	MED12	c.3193C>T	p.H1065Y	EX22	2.4%	NM_005120.2
NC-421	BRAF	c.1353G>C	p.E451D	EX11	13.0%	NM_004333.4
NC-421	RET	c.2836A>T	p.T946S	EX17	24.2%	NM_020975.4
NC-422	ERBB4	c.3869T>A	p.L1290Q	EX28E	35.2%	NM_005235.2
NC-422	PTPRD	c.310G>T	p.V104L	EX14	33.9%	NM_002839.3
NC-422	CDKN2A	c.151-2A>T	.	IVS1	34.5%	NM_000077.4
NC-422	NTRK2	c.2332-2A>T	.	IVS20	35.2%	NM_006180.3
NC-422	FANCF	c.712G>T	p.V238F	EX1E	34.5%	NM_022725.3
NC-422	KRAS	c.180_181delTCinsAA	p.Q61K	EX3	47.6%	NM_033360.2
NC-422	MLL2	c.10355G>T	p.R3452I	EX35	26.7%	NM_003482.3
NC-422	TP53	c.817C>T	p.R273C	EX8	56.2%	NM_000546.5
NC-422	RBM10	c.1258G>T	p.E420*	EX11	70.6%	NM_001204468.1
NC-423	EPAS1	c.2509C>T	p.P837S	EX16E	13.7%	NM_001430.4

NC-423	TET2	c.4879C>T	p.Q1627*	EX11E	13.0%	NM_001127208.2
NC-423	POT1	c.40C>G	p.L14V	EX6	21.1%	NM_015450.2
NC-423	FGFR1	c.1503C>A	p.D501E	EX11	1.3%	NM_023110.2
NC-423	NOTCH1	c.1922A>G	p.N641S	EX12	24.3%	NM_017617.3
NC-423	ARID2	c.710G>A	p.W237*	EX7	22.7%	NM_152641.2
NC-423	MLL2	c.15877C>G	p.L5293V	EX49	35.6%	NM_003482.3
NC-423	TBX3	c.775G>C	p.D259H	EX4	31.0%	NM_016569.3
NC-423	TP53	c.733G[2>1]	p.G245Afs*2	EX7	46.3%	NM_000546.5
NC-423	BRCA1	c.5302T>A	p.C1768S	EX20	26.5%	NM_007294.3
NC-423	GNA11	c.245A>T	p.N82I	EX2	22.5%	NM_002067.2
NC-423	KEAP1	c.556G>A	p.G186S	EX2	23.4%	NM_203500.1
NC-424	ARID1A	c.2122C>T	p.Q708*	EX5	11.6%	NM_006015.4
NC-424	CASP8	c.1471C>T	p.R491*	EX8	8.3%	NM_001080125.1
NC-424	ATR	c.3559G>A	p.D1187N	EX18	6.7%	NM_001184.3
NC-424	PDGFRB	c.2875G>C	p.E959Q	EX21	25.5%	NM_002609.3
NC-424	RAC1	c.568G>A	p.E190K	EX7E	13.4%	NM_018890.3
NC-424	CDK13	c.27G[6>7]	p.G12Rfs*124	EX1	9.4%	NM_003718.4
NC-424	PLAG1	c.639C>A	p.F213L	EX5E	11.9%	NM_002655.2
NC-424	TAF1L	c.4247G>A	p.R1416K	EX1E	29.2%	NM_153809.2
NC-424	MLL2	c.4832G>T	p.R1611L	EX19	16.0%	NM_003482.3
NC-424	MLL2	c.3578C[5>4]	p.T1195Hfs*17	EX11	13.5%	NM_003482.3
NC-424	ACVRL1	c.1157G>A	p.R386H	EX8	16.2%	NM_000020.2
NC-424	PTPN11	c.1776C>G	p.F592L	EX15	13.7%	NM_002834.3
NC-424	NFKBIA	c.298G>C	p.D100H	EX2	34.7%	NM_020529.2
NC-424	NFKBIA	c.253G>T	p.E85*	EX2	36.9%	NM_020529.2
NC-424	TP53	c.422G>A	p.C141Y	EX5	31.7%	NM_000546.5

NC-424	ANKRD30B	c.3274G>A	p.A1092T	EX36E	18.9%	NM_001145029.1
NC-425	HDAC1	c.46G>T	p.D16Y	EX1	3.8%	NM_004964.2
NC-425	BRAF	c.1457_1471delATGTGACAGCACCTA	p.N486_P490del	EX12	25.4%	NM_004333.4
NC-425	FGF23	c.529C>A	p.H177N	EX3E	31.1%	NM_020638.2
NC-425	NCOR1	c.5926A>T	p.I1976L	EX38	9.4%	NM_006311.3
NC-425	RPTOR	c.2396_2397delTCinsCA	p.L799P	EX20	23.8%	NM_020761.2
NC-426	ARID1A	c.460delT	p.Y154Tfs*78	EX1	18.4%	NM_006015.4
NC-426	DNMT3A	c.2598G>T	p.R866S	EX23E	14.8%	NM_022552.4
NC-426	CUL3	c.2175G[2>1]	p.V726*fs*1	EX16E	8.9%	NM_003590.4
NC-426	KDR	c.3329A>G	p.K1110R	EX25	11.8%	NM_002253.2
NC-426	FBXW7	c.1915delAinsTG	p.T639Cfs*5	EX12E	9.2%	NM_033632.3
NC-426	IRF2	c.76_78delTGGinsAGT	p.W26S	EX2	7.0%	NM_002199.3
NC-426	EGFR	c.430C>A	p.L144M	EX4	1.1%	NM_005228.3
NC-426	CDKN2A	c.182_201delAGCTGCTGCTGCTCCACGGCinsGCT	p.E61Gfs*53	EX2	9.0%	NM_000077.4
NC-426	TP53	c.838A>G	p.R280G	EX8	17.9%	NM_000546.5
NC-427	EGFR	c.2154_2155delGGinsTT	p.G719C	EX18	82.8%	NM_005228.3
NC-427	EGFR	c.2303G>T	p.S768I	EX20	84.5%	NM_005228.3
NC-427	PTEN	c.379G>A	p.G127R	EX5	72.2%	NM_000314.4
NC-427	TP53	c.839G>T	p.R280I	EX8	74.0%	NM_000546.5
NC-427	AXIN2	c.953G>A	p.S318N	EX3	50.3%	NM_004655.3
NC-428	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	16.5%	NM_005228.3
NC-429	FUBP1	c.1082G>C	p.R361T	EX13	6.7%	NM_003902.3

NC-429	SETD2	c.5946_5950delTGAAGinsA	p.D1982Efs*23	EX12	8.7%	NM_014159.6
NC-429	SETD2	c.3964C>T	p.R1322*	EX3	10.5%	NM_014159.6
NC-429	IL6ST	c.927CTGGAGTGA[2>3]	p.D312_S314dup	EX8	4.1%	NM_002184.3
NC-429	APC	c.5108G>A	p.G1703E	EX16E	21.9%	NM_000038.5
NC-429	APC	c.5134G>T	p.E1712*	EX16E	21.5%	NM_000038.5
NC-429	APC	c.5235G>C	p.K1745N	EX16E	22.0%	NM_000038.5
NC-429	APC	c.5404G>C	p.E1802Q	EX16E	21.2%	NM_000038.5
NC-429	APC	c.5548G>A	p.E1850K	EX16E	22.4%	NM_000038.5
NC-429	BRAF	c.1799T>A	p.V600E	EX15	12.9%	NM_004333.4
NC-429	MYC	c.583G>T	p.D195Y	EX2	5.6%	NM_002467.4
NC-429	CDK8	c.689C>T	p.S230L	EX7	10.9%	NM_001260.1
NC-429	SMARCA4	c.4939G>A	p.D1647N	EX35E	5.0%	NM_003072.3
NC-429	ATRX	c.2402C>G	p.S801C	EX9	13.6%	NM_000489.3
NC-430	BRIP1	c.1306G>T	p.E436*	EX9	42.4%	NM_032043.2
NC-430	XRCC1	c.1638G>T	p.K546N	EX15	43.8%	NM_006297.2
NC-430	TP53	c.965_978delCACTGGATGGAGAA	p.P322Lfs*10	EX9	71.8%	NM_000546.5
NC-430	MAP2K4	c.400C>T	p.R134W	EX4	2.3%	NM_003010.2
NC-430	DPYD	c.1234G>C	p.E412Q	EX11	45.3%	NM_000110.3
NC-430	FCGR3A	c.117G>T	p.E39D	EX4	20.2%	NM_001127593.1
NC-430	LRP1B	c.11831G>A	p.G3944D	EX77	45.8%	NM_018557.2
NC-430	LRP1B	c.3964+1G>T	.	IVS24	42.5%	NM_018557.2
NC-430	ERBB4	c.3307G>T	p.D1103Y	EX27	47.7%	NM_005235.2
NC-430	NOTCH4	c.1775A>T	p.E592V	EX11	47.2%	NM_004557.3

NC-430	PIK3CG	c.1302C>A	p.Y434*	EX2	50.1%	NM_002649.2
NC-430	MLL3	c.5276A>G	p.Q1759R	EX36	45.6%	NM_170606.2
NC-430	NBN	c.850G>C	p.D284H	EX7	44.7%	NM_002485.4
NC-430	NOTCH1	c.6859G>T	p.G2287C	EX34E	46.5%	NM_017617.3
NC-430	CDH23	c.4781G>T	p.R1594L	EX38	46.6%	NM_022124.5
NC-430	TBX3	c.1578_1579delCAinsAT	p.M527L	EX7	43.9%	NM_016569.3
NC-430	RB1	c.1682T[2>3]	p.A562Cfs*10	EX17	82.6%	NM_000321.2
NC-430	IRS2	c.3162G>T	p.Q1054H	EX1	32.3%	NM_003749.2
NC-431	CTNNB1	c.88_99delTACCTGGACTCT	p.Y30_S33del	EX3	4.4%	NM_001904.3
NC-431	FAT2	c.5933A>C	p.K1978T	EX9	5.0%	NM_001447.2
NC-431	HIST1H2BC	c.165CT[2>1]	p.S56Ffs*12	EX1E	8.7%	NM_003526.2
NC-431	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	26.4%	NM_005228.3
NC-431	MLH3	c.2763G>A	p.M921I	EX2	2.8%	NM_001040108.1
NC-431	TP53	c.742C>T	p.R248W	EX7	30.5%	NM_000546.5
NC-432	LRP1B	c.11731C>A	p.H3911N	EX77	27.7%	NM_018557.2
NC-432	LRP1B	c.3473A>T	p.N1158I	EX22	28.3%	NM_018557.2
NC-432	PDGFRA	c.2764A>G	p.T922A	EX20	15.5%	NM_006206.4
NC-432	RAD50	c.3617A>T	p.K1206M	EX23	39.7%	NM_005732.3
NC-432	C7orf53	c.194T>G	p.V65G	EX3	16.4%	NM_182597.2
NC-432	GATA3	c.712A>T	p.S238C	EX3	26.8%	NM_002051.2
NC-432	KRAS	c.35G>C	p.G12A	EX2	50.0%	NM_033360.2
NC-432	TP53	c.733G>T	p.G245C	EX7	52.5%	NM_000546.5
NC-432	AXIN2	c.1339C>T	p.L447F	EX6	28.0%	NM_004655.3
NC-432	ASMTL	c.1123G>A	p.G375S	EX9	28.6%	NM_004192.3

NC-432	KDM6A	c.3246A>G	p.I1082M	EX22	62.6%	NM_021140.2
NC-432	ZIC3	c.996C>A	p.F332L	EX1	52.1%	NM_003413.3
NC-433	FOXP1	c.265A[3>2]	p.K89Nfs*13	EX3	10.9%	NM_001244814.1
NC-433	PIK3CA	c.1624G>A	p.E542K	EX10	20.4%	NM_006218.2
NC-433	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	9.9%	NM_005228.3
NC-434	EPHB2	c.1883G>T	p.G628V	EX10	33.9%	NM_017449.3
NC-434	FANCA	c.34G>T	p.G12C	EX1	82.8%	NM_000135.2
NC-434	TP53	c.578A>G	p.H193R	EX6	92.4%	NM_000546.5
NC-434	PTPRT	c.3134T>C	p.I1045T	EX23	40.5%	NM_133170.3
NC-435	IL10	c.370C>T	p.R124W	EX3	21.2%	NM_000572.2
NC-435	SETD2	c.3344A[5>6]	p.F1117Ifs*2	EX3	39.6%	NM_014159.6
NC-435	SMO	c.1847C>A	p.S616Y	EX11	23.9%	NM_005631.4
NC-435	TSC1	c.2208+1G>T	.	IVS17	4.3%	NM_000368.4
NC-435	FOXA1	c.1344C[4>3]	p.I450Sfs*20	EX2E	11.7%	NM_004496.3
NC-435	MAP2K4	c.362A>G	p.H121R	EX3	30.9%	NM_003010.2
NC-435	RAD51C	c.211A>G	p.N71D	EX2	29.5%	NM_058216.1
NC-435	MAP2K2	c.908G>T	p.R303L	EX7	4.7%	NM_030662.3
NC-436	ARID1A	c.3835_3838dupTATC	p.P1280Lfs*8	EX15	3.1%	NM_006015.4
NC-436	BMPR1A	c.176T>A	p.L59*	EX4	4.3%	NM_004329.2
NC-436	CIC	c.2484C>G	p.I828M	EX10	13.1%	NM_015125.3
NC-437	POM121L12	c.488G>A	p.R163H	EX1E	20.9%	NM_182595.3
NC-437	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	15.4%	NM_005228.3
NC-437	CREBBP	c.2575_2576delCCinsTT	p.P859F	EX14	2.5%	NM_004380.2
NC-437	CREBBP	c.2564C>T	p.P855L	EX14	2.8%	NM_004380.2

NC-437	MED12	c.1064A>C	p.H355P	EX7	4.5%	NM_005120.2
NC-438	LRP1B	c.7802G>T	p.G2601V	EX48	12.8%	NM_018557.2
NC-438	LRP1B	c.2936G>T	p.R979I	EX19	10.0%	NM_018557.2
NC-438	PMS2	c.-87-u32G>C	.	.	15.8%	NM_000535.5
NC-438	GRM3	c.867C>G	p.S289R	EX3	14.9%	NM_000840.2
NC-438	FANCG	c.438G>T	p.Q146H	EX4	12.6%	NM_004629.1
NC-438	PPP6C	c.508A>G	p.I170V	EX6	9.7%	NM_002721.4
NC-438	KRAS	c.35G>A	p.G12D	EX2	12.3%	NM_033360.2
NC-438	TBX3	c.1840G>T	p.A614S	EX8E	4.9%	NM_016569.3
NC-438	TBX3	c.1342G>T	p.G448C	EX7	13.2%	NM_016569.3
NC-438	POLE	c.3923G>T	p.R1308L	EX31	15.3%	NM_006231.2
NC-438	TSC2	c.1654G>T	p.A552S	EX16	8.4%	NM_000548.3
NC-438	RPTOR	c.2368G>A	p.A790T	EX20	13.2%	NM_020761.2
NC-438	GNAS	c.680A>T	p.Q227L	EX9	17.4%	NM_000516.4
NC-438	CRKL	c.786C>A	p.D262E	EX3E	12.3%	NM_005207.3
NC-438	RBM10	c.2296-1G>A	.	IVS18	29.4%	NM_001204468.1
NC-438	AR	c.170T>A	p.L57Q	EX1	11.8%	NM_000044.3
NC-439	EPHA5	c.481C>T	p.Q161*	EX3	1.8%	NM_004439.5
NC-439	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	13.2%	NM_005228.3
NC-439	RB1	c.958C>T	p.R320*	EX10	16.9%	NM_000321.2
NC-439	TP53	c.818G>T	p.R273L	EX8	19.8%	NM_000546.5
NC-439	SPOP	c.496G>A	p.D166N	EX6	1.2%	NM_001007228.1
NC-439	PPP2R1A	c.437C>T	p.S146L	EX4	1.3%	NM_014225.5
NC-439	EP300	c.401C>T	p.P134L	EX2	15.7%	NM_001429.3
NC-440	ABL2	c.2666A>T	p.K889M	EX12E	9.0%	NM_007314.3

NC-440	EGFR	c.2573T>G	p.L858R	EX21	31.2%	NM_005228.3
NC-440	OR4A15	c.497G>A	p.R166H	EX1E	15.3%	NM_001005275.1
NC-440	MEN1	c.85C>G	p.R29G	EX2	33.3%	NM_130799.2
NC-440	ZFHX3	c.1148C>G	p.S383C	EX2	10.6%	NM_006885.3
NC-441	AFF3	c.2033G>T	p.R678L	EX14	11.5%	NM_001025108.1
NC-441	PBRM1	c.1965G>A	p.M655I	EX17	1.7%	NM_018313.4
NC-441	PIK3CA	c.1624G>A	p.E542K	EX10	19.4%	NM_006218.2
NC-441	ESR1	c.739G>A	p.E247K	EX4	11.2%	NM_001122740.1
NC-441	HECW1	c.720C>G	p.I240M	EX8	5.2%	NM_015052.3
NC-441	PTPRD	c.3055G>T	p.V1019L	EX28	5.3%	NM_002839.3
NC-441	RB1	c.2253dupT	p.I752Yfs*6	EX22	13.5%	NM_000321.2
NC-441	TSC2	c.4798T>A	p.C1600S	EX37	8.5%	NM_000548.3
NC-441	TP53	c.451C>G	p.P151A	EX5	13.3%	NM_000546.5
NC-441	RAD51D	c.797G>A	p.R266H	EX9	1.5%	NM_002878.3
NC-441	KEAP1	c.1805G>T	p.S602I	EX6E	21.9%	NM_203500.1
NC-441	AKT2	c.1210A>G	p.M404V	EX12	1.4%	NM_001626.4
NC-441	RUNX1	c.320G>T	p.R107L	EX4	20.8%	NM_001754.4
NC-441	KDM5C	c.1135C>T	p.P379S	EX9	25.4%	NM_004187.3
NC-441	FAM123B	c.2867A>G	p.Y956C	EX2E	27.1%	NM_152424.3
NC-442	HCLS1	c.464G>A	p.R155H	EX7	9.8%	NM_005335.4
NC-442	TERT	c.-58-u66C>A	.	.	27.2%	NM_198253.2
NC-442	MLL3	c.1296C>A	p.C432*	EX9	15.3%	NM_170606.2
NC-442	PTPRD	c.431C>A	p.T144N	EX15	6.5%	NM_002839.3
NC-442	ARID2	c.1057_1061dupCATCT	p.M355Ifs*2	EX9	6.8%	NM_152641.2
NC-442	ARID2	c.3804C[3>4]	p.S1270Vfs*18	EX15	18.5%	NM_152641.2
NC-442	TP53	c.1015G>T	p.E339*	EX10	12.4%	NM_000546.5

NC-442	NF1	c.377A[2>1]	p.G127Efs*38	EX4	30.4%	NM_000267.3
NC-443	RAF1	c.1552C>T	p.R518*	EX15	17.6%	NM_002880.3
NC-443	NOTCH4	c.4034C>A	p.A1345D	EX22	10.2%	NM_004557.3
NC-443	RB1	c.265-2A>C	.	IVS2	45.2%	NM_000321.2
NC-443	TP53	c.818G>A	p.R273H	EX8	56.1%	NM_000546.5
NC-443	RAD51C	c.817G>T	p.A273S	EX5	24.2%	NM_058216.1
NC-444	ABL2	c.1034T>C	p.V345A	EX6	3.0%	NM_007314.3
NC-444	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	16.2%	NM_005228.3
NC-444	RB1	c.1216-1_1216insA	p.N406Kfs*22	EX13-IVS12	43.0%	NM_000321.2
NC-444	TP53	c.667_672+32delCCTGAGGTCTGGTTTGCAACTGGGGTCTCTGGGAGGAG	.	EX6-IVS6	10.6%	NM_000546.5
NC-444	SMAD4	c.877C[2>1]	p.P293Lfs*43	EX7	39.3%	NM_005359.5
NC-445	BAP1	c.3G>A	p.0?	EX1	9.5%	NM_004656.2
NC-445	NF1	c.3233C>A	p.S1078*	EX25	6.1%	NM_000267.3
NC-445	EGFR	c.2239_2248delinsC	p.L747_A750delinsP	EX19	8.2%	NM_005228.3
NC-446	HGF	c.1444C>T	p.H482Y	EX12	29.9%	NM_000601.4
NC-446	SYK	c.335G>T	p.G112V	EX2	36.7%	NM_003177.5
NC-446	SVEP1	c.4039G>C	p.D1347H	EX24	36.2%	NM_153366.3
NC-446	TP53	c.734G>T	p.G245V	EX7	94.2%	NM_000546.5
NC-446	STAT3	c.879C>A	p.Y293*	EX9	63.6%	NM_139276.2
NC-446	JAK3	c.2999C>A	p.S1000*	EX22	47.5%	NM_000215.3
NC-446	KDM6A	c.3134A>G	p.E1045G	EX20	9.0%	NM_021140.2
NC-446	TFE3	c.1567G>T	p.D523Y	EX10E	39.2%	NM_006521.4

NC-446	PMS1	c.1543G>A	p.V515M	EX9	44.1%	NM_000534.4
NC-446	ERBB4	c.2107A>T	p.T703S	EX18	46.7%	NM_005235.2
NC-446	TGFBR2	c.1418A>G	p.Y473C	EX6	94.1%	NM_001024847.2
NC-446	KIT	c.135C>G	p.D45E	EX2	94.2%	NM_000222.2
NC-446	HIST1H2AC	c.214C>G	p.R72G	EX1E	30.5%	NM_003512.3
NC-447	EPHA2	c.1145G>T	p.S382I	EX5	12.5%	NM_004431.3
NC-447	TERT	c.-58-u66C>T	.	.	13.2%	NM_198253.2
NC-447	BBS9	c.550C>G	p.L184V	EX6	18.5%	NM_198428.2
NC-447	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	24.9%	NM_005228.3
NC-447	EPPK1	c.7069G>T	p.V2357L	EX1E	3.4%	NM_031308.1
NC-447	TP53	c.919+1G>T	.	IVS8	24.4%	NM_000546.5
NC-448	PIK3CA	c.1030G>A	p.V344M	EX5	18.6%	NM_006218.2
NC-448	ROS1	c.4105C>T	p.Q1369*	EX25	28.8%	NM_002944.2
NC-448	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	17.3%	NM_005228.3
NC-448	ROBO3	c.2051G>A	p.R684Q	EX13	3.9%	NM_022370.3
NC-448	TP53	c.659A>G	p.Y220C	EX6	57.0%	NM_000546.5
NC-449	TSC1	c.161C>T	p.S54F	EX4	22.5%	NM_000368.4
NC-449	MAP3K1	c.3985G>A	p.G1329R	EX17	10.6%	NM_005921.1
NC-449	JAK3	c.1498G>T	p.V500F	EX11	10.2%	NM_000215.3
NC-450	LRP1B	c.12359G>T	p.R4120M	EX81	25.3%	NM_018557.2
NC-450	LRP1B	c.4558C>A	p.H1520N	EX27	25.8%	NM_018557.2
NC-450	EPHA5	c.118C>T	p.L40F	EX1	3.4%	NM_004439.5
NC-450	RICTOR	c.3707C>G	p.P1236R	EX31	16.9%	NM_152756.3
NC-450	HCN1	c.2581C>A	p.P861T	EX8E	22.3%	NM_021072.3

NC-450	APC	c.1409-2A>T	.	IVS11	32.5%	NM_000038.5
NC-450	NOTCH4	c.2135G>A	p.G712D	EX13	26.6%	NM_004557.3
NC-450	ARID1B	c.6385G>T	p.E2129*	EX20E	5.0%	NM_020732.3
NC-450	HOXA13	c.1070C>G	p.A357G	EX2E	17.9%	NM_000522.4
NC-450	FLT3	c.2274T>A	p.N758K	EX18	25.6%	NM_004119.2
NC-450	RB1	c.718+2T>C	.	IVS7	32.6%	NM_000321.2
NC-450	TP53	c.511G>T	p.E171*	EX5	30.7%	NM_000546.5
NC-450	POLD1	c.1409G>T	p.R470L	EX12	24.3%	NM_002691.3
NC-450	KDM6A	c.130G>T	p.E44*	EX1	4.0%	NM_021140.2
NC-451	MDM4	c.72delC	p.N25Ifs*10	EX2	18.2%	NM_002393.4
NC-451	EPHB6	c.190G>T	p.D64Y	EX7	24.5%	NM_004445.3
NC-451	MLL3	c.4111G>C	p.D1371H	EX27	21.5%	NM_170606.2
NC-451	HSPA8	c.1301A>G	p.N434S	EX6	25.0%	NM_006597.4
NC-451	TP53	c.994-1G>A	.	IVS9	29.8%	NM_000546.5
NC-451	KEAP1	c.349G>A	p.E117K	EX2	27.0%	NM_203500.1
NC-452	RHOA	c.118G>C	p.E40Q	EX2	23.7%	NM_001664.2
NC-452	IGF1R	c.941A>G	p.N314S	EX3	44.6%	NM_000875.3
NC-452	TP53	c.686_687delGT	p.C229Yfs*10	EX7	38.0%	NM_000546.5
NC-452	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	55.4%	NM_004448.2
NC-453	HDAC1	c.289G>A	p.G97S	EX4	19.3%	NM_004964.2
NC-453	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.1%	NM_003921.4
NC-453	MST1R	c.3136G>A	p.E1046K	EX14	11.2%	NM_002447.2
NC-453	EGFR	c.2573T>G	p.L858R	EX21	10.2%	NM_005228.3
NC-453	TP53	c.746G>T	p.R249M	EX7	13.2%	NM_000546.5
NC-453	PPP2R1A	c.767C>T	p.S256F	EX6	12.9%	NM_014225.5

NC-453	RBM10	c.2464C>T	p.Q822*	EX20	13.0%	NM_001204468.1
NC-454	ROS1	c.2258T>C	p.F753S	EX15	4.0%	NM_002944.2
NC-454	EGFR	c.2573T>G	p.L858R	EX21	12.7%	NM_005228.3
NC-454	SMARCB1	c.250C>G	p.L84V	EX3	18.0%	NM_003073.3
NC-454	RBM10	c.2572C>T	p.R858*	EX21	24.0%	NM_001204468.1
NC-455	NRAS	c.34G>A	p.G12S	EX2	1.1%	NM_002524.4
NC-455	LRP1B	c.10973G>C	p.C3658S	EX71	16.6%	NM_018557.2
NC-455	HDAC4	c.3086G>A	p.R1029H	EX26	1.2%	NM_006037.3
NC-455	FANCE	c.362C>T	p.A121V	EX2	6.8%	NM_021922.2
NC-455	EGFR	c.2303_2311dupGCGTGGACA	p.S768_D770dup	EX20	11.1%	NM_005228.3
NC-455	COL5A1	c.4722G>T	p.Q1574H	EX62	4.0%	NM_000093.3
NC-455	FANCM	c.1826A>G	p.Y609C	EX11	9.4%	NM_020937.2
NC-455	CDH1	c.638G>A	p.W213*	EX5	8.1%	NM_004360.3
NC-455	ZFHX3	c.7108G>C	p.D2370H	EX9	4.4%	NM_006885.3
NC-455	TP53	c.608T>A	p.V203E	EX6	19.1%	NM_000546.5
NC-455	ATRX	c.5995C>T	p.P1999S	EX26	9.4%	NM_000489.3
NC-456	JAK1	c.1054A>T	p.K352*	EX8	12.0%	NM_002227.2
NC-456	HDAC4	c.1759G>C	p.E587Q	EX13	5.1%	NM_006037.3
NC-456	FAT2	c.1247C>G	p.T416S	EX1	4.5%	NM_001447.2
NC-456	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	10.8%	NM_005228.3
NC-456	EGFR	c.2369C>T	p.T790M	EX20	2.9%	NM_005228.3
NC-456	CBL	c.2116A>T	p.R706W	EX13	11.1%	NM_005188.3
NC-456	BRCA2	c.9322G>C	p.D3108H	EX25	6.7%	NM_000059.3
NC-456	RB1	c.1333C>T	p.R445*	EX14	11.0%	NM_000321.2

NC-456	TP53	c.417G>T	p.K139N	EX5	13.7%	NM_000546.5
NC-456	BRCA1	c.4138G>A	p.E1380K	EX11	5.1%	NM_007294.3
NC-456	PIK3R2	c.2110C>T	p.H704Y	EX16E	12.3%	NM_005027.2
NC-457	TP73	c.559G>A	p.V187M	EX5	9.4%	NM_005427.3
NC-457	FAT2	c.4025C>T	p.P1342L	EX5	15.3%	NM_001447.2
NC-457	EGFR	c.2573T>G	p.L858R	EX21	41.2%	NM_005228.3
NC-457	MLL	c.3868G>C	p.A1290P	EX7	10.8%	NM_001197104.1
NC-457	TP53	c.273G>A	p.W91*	EX4	56.3%	NM_000546.5
NC-457	NF1	c.7160G>A	p.R2387K	EX48	16.8%	NM_000267.3
NC-457	BRD4	c.1897G>A	p.V633M	EX10	4.1%	NM_058243.2
NC-458	CDK12	c.3998G>A	p.R1333H	EX14E	2.3%	NM_016507.2
NC-458	STK11	c.439C>T	p.R147C	EX3	19.5%	NM_000455.4
NC-459	LRP1B	c.6386A>C	p.N2129T	EX40	9.1%	NM_018557.2
NC-459	MEF2C	c.521C>T	p.S174F	EX6	4.2%	NM_001131005.2
NC-459	PIK3CG	c.515A>G	p.E172G	EX2	20.8%	NM_002649.2
NC-459	ERBB2	c.2305G>C	p.D769H	EX19	75.6%	NM_004448.2
NC-459	PCK1	c.1256C>T	p.A419V	EX8	21.1%	NM_002591.3
NC-460	NOTCH2	c.7258G>C	p.E2420Q	EX34E	1.0%	NM_024408.3
NC-460	HSP90AB1	c.2035C>T	p.R679C	EX11	9.7%	NM_007355.2
NC-460	MLL3	c.11086C>T	p.Q3696*	EX43	1.1%	NM_170606.2
NC-460	TP53	c.409delC	p.L137Wfs*33	EX5	1.1%	NM_000546.5
NC-461	MTOR	c.2080C>A	p.Q694K	EX13	3.4%	NM_004958.3
NC-461	LRP1B	c.11926G>A	p.V3976I	EX78	6.6%	NM_018557.2
NC-461	KDR	c.3382C>T	p.P1128S	EX25	14.8%	NM_002253.2
NC-461	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	16.4%	NM_005228.3

NC-461	TP53	c.844C>T	p.R282W	EX8	14.4%	NM_000546.5
NC-462	NTRK1	c.1034G>C	p.C345S	EX8	4.6%	NM_002529.3
NC-462	FANCE	c.1010C>G	p.S337*	EX5	4.1%	NM_021922.2
NC-462	WRN	c.2837G>A	p.C946Y	EX24	4.9%	NM_000553.4
NC-462	TBX3	c.529G>A	p.D177N	EX2	3.5%	NM_016569.3
NC-462	FANCA	c.1648G>A	p.D550N	EX18	2.8%	NM_000135.2
NC-462	TP53	c.820G>T	p.V274F	EX8	14.2%	NM_000546.5
NC-462	RAD51C	c.61C>T	p.P21S	EX1	4.9%	NM_058216.1
NC-462	PTPRT	c.3082G>A	p.G1028R	EX23	7.6%	NM_133170.3
NC-463	PTCH2	c.938C>A	p.A313E	EX8	5.6%	NM_001166292.1
NC-463	MSH3	c.2051A>G	p.H684R	EX14	36.8%	NM_002439.4
NC-463	EGFR	c.2239_2247delTTAAGAGAA	p.L747_E749del	EX19	71.9%	NM_005228.3
NC-463	EGFR	c.2260A>G	p.K754E	EX19	92.2%	NM_005228.3
NC-463	TP53	c.132dupG	p.L45Afs*7	EX4	61.4%	NM_000546.5
NC-463	PCK1	c.1181A>G	p.E394G	EX7	1.8%	NM_002591.3
NC-464	KRAS	c.35G>A	p.G12D	EX2	5.2%	NM_033360.2
NC-464	MLL2	c.16053-1G>A	.	IVS50	5.9%	NM_003482.3
NC-464	HSP90AA1	c.1087A>G	p.K363E	EX6	7.8%	NM_001017963.2
NC-464	NR2F2	c.226A>T	p.I76F	EX2	5.0%	NM_001145155.1
NC-464	TSC2	c.299C>T	p.A100V	EX4	1.3%	NM_000548.3
NC-465	EPHA3	c.1769T>G	p.L590R	EX10	16.1%	NM_005233.5
NC-465	FAT2	c.1822G>C	p.E608Q	EX1	12.2%	NM_001447.2
NC-465	EGFR	c.2239_2256delTTAAGAGAAGCAACATCTinsCAA	p.L747_S752delinsQ	EX19	42.2%	NM_005228.3

NC-465	EGFR	c.2369C>T	p.T790M	EX20	11.2%	NM_005228.3
NC-465	EGFR	c.2389T>A	p.C797S	EX20	11.6%	NM_005228.3
NC-466	NDUFA13	c.68G>A	p.R23Q	EX1	21.3%	NM_015965.6
NC-466	ALK	c.398G>T	p.R133L	EX1	10.3%	NM_004304.4
NC-466	GLI2	c.1392C>A	p.H464Q	EX9	16.7%	NM_005270.4
NC-466	CUL3	c.654G>T	p.Q218H	EX5	23.5%	NM_003590.4
NC-466	EPHA5	c.2473C>A	p.L825M	EX14	13.9%	NM_004439.5
NC-466	EPHA5	c.1816G>T	p.A606S	EX9	24.5%	NM_004439.5
NC-466	MLL3	c.8440A[6>7]	p.S2816Ifs*6	EX38	21.9%	NM_170606.2
NC-466	CDKN2A	c.322G>T	p.D108Y	EX2	44.3%	NM_000077.4
NC-466	MS4A1	c.221C>A	p.A74E	EX4	11.5%	NM_152866.2
NC-466	TP53	c.524G>A	p.R175H	EX5	33.9%	NM_000546.5
NC-467	ZNF804B	c.284G>A	p.R95Q	EX3	4.3%	NM_181646.2
NC-468	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	25.1%	NM_005228.3
NC-468	CDKN2A	c.329G>A	p.W110*	EX2	2.0%	NM_000077.4
NC-468	TSC2	c.3356A>C	p.Q1119P	EX29	28.9%	NM_000548.3
NC-468	KEAP1	c.1498A>T	p.I500F	EX4	1.2%	NM_203500.1
NC-469	MTOR	c.6217G>A	p.A2073T	EX45	2.5%	NM_004958.3
NC-469	DPYD	c.2275C>T	p.R759*	EX18	8.9%	NM_000110.3
NC-469	IL6ST	c.2678T>C	p.M893T	EX17E	2.3%	NM_002184.3
NC-469	HIST1H2BC	c.11C>A	p.P4Q	EX1E	7.7%	NM_003526.2
NC-469	EGFR	c.2573T>G	p.L858R	EX21	27.1%	NM_005228.3
NC-469	KDM5A	c.2407A>G	p.S803G	EX17	1.2%	NM_001042603.1
NC-469	HSP90AA1	c.724G>T	p.E242*	EX4	8.4%	NM_001017963.2

NC-469	TP53	c.466_489delCGCGTCCGCGCCATGGCCATCTAC	p.R156_Y163del	EX5	20.1%	NM_000546.5
NC-470	DPYD	c.560C>T	p.S187F	EX6	10.6%	NM_000110.3
NC-470	CUL3	c.552A[3>2]	p.N185Mfs*6	EX5	19.3%	NM_003590.4
NC-470	SOX2	c.590T>G	p.M197R	EX1E	2.9%	NM_003106.3
NC-470	PMS2	c.1687C>T	p.R563*	EX11	21.2%	NM_000535.5
NC-470	EGFR	c.2573T>G	p.L858R	EX21	40.0%	NM_005228.3
NC-470	CDH23	c.1814C>T	p.A605V	EX17	2.8%	NM_022124.5
NC-470	C11orf30	c.851C>T	p.S284L	EX8	1.4%	NM_020193.3
NC-470	KDM5A	c.1503G>T	p.K501N	EX12	5.5%	NM_001042603.1
NC-470	TP53	c.880G>T	p.E294*	EX8	18.4%	NM_000546.5
NC-470	TOP2A	c.1898G>C	p.R633T	EX16	1.6%	NM_001067.3
NC-470	TOP2A	c.1867G>A	p.E623K	EX16	2.2%	NM_001067.3
NC-470	PSG2	c.781T>A	p.C261S	EX4	2.5%	NM_031246.3
NC-471	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	52.8%	NM_005228.3
NC-472	LRP1B	c.3342G>A	p.W1114*	EX22	7.3%	NM_018557.2
NC-472	SDHA	c.736C>T	p.R246C	EX6	8.6%	NM_004168.2
NC-472	EPHA7	c.2635G>A	p.E879K	EX15	16.8%	NM_004440.3
NC-472	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	26.5%	NM_005228.3
NC-472	MS4A1	c.467G>A	p.R156K	EX6	13.3%	NM_152866.2
NC-472	TP53	c.96+2T>G	.	IVS3	59.0%	NM_000546.5
NC-472	RAD51D	c.418G>A	p.G140R	EX5	11.1%	NM_002878.3
NC-473	DDR2	c.1892G>C	p.R631P	EX15	32.9%	NM_006182.2

NC-473	PIK3CA	c.1892A>T	p.Y631F	EX12	28.1%	NM_006218.2
NC-473	APC	c.7320G>T	p.Q2440H	EX16E	41.7%	NM_000038.5
NC-473	FGFR4	c.2350C>A	p.H784N	EX18E	39.8%	NM_213647.1
NC-473	MYOD1	c.298G>T	p.A100S	EX1	29.1%	NM_002478.4
NC-473	CBL	c.1348G>T	p.A450S	EX9	29.3%	NM_005188.3
NC-473	FGF23	c.622C>A	p.Q208K	EX3E	20.0%	NM_020638.2
NC-473	KRAS	c.37G>T	p.G13C	EX2	45.2%	NM_033360.2
NC-473	FLT3	c.253G>T	p.V85L	EX3	25.6%	NM_004119.2
NC-473	TP53	c.744_745delGAinsTT	p.R249W	EX7	51.9%	NM_000546.5
NC-473	STK11	c.837C[6>5]	p.P281Rfs*6	EX6	37.7%	NM_000455.4
NC-473	SMARCA4	c.3379G>T	p.D1127Y	EX24	37.7%	NM_003072.3
NC-473	MED12	c.50_51delCGinsTT	p.P17L	EX1	51.6%	NM_005120.2
NC-474	CTNNB1	c.110C>T	p.S37F	EX3	23.9%	NM_001904.3
NC-474	FLT4	c.4033G>A	p.E1345K	EX30E	4.9%	NM_182925.4
NC-474	CDK13	c.319C>T	p.R107C	EX1	5.5%	NM_003718.4
NC-474	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	23.3%	NM_005228.3
NC-474	EGFR	c.2369C>T	p.T790M	EX20	9.0%	NM_005228.3
NC-474	SMAD3	c.1163C>T	p.T388I	EX9E	24.1%	NM_005902.3
NC-474	IGF1R	c.1424G>T	p.G475V	EX6	4.6%	NM_000875.3
NC-474	TP53	c.673-2A>C	.	IVS6	33.6%	NM_000546.5
NC-474	NOTCH3	c.5960C>T	p.A1987V	EX33E	24.6%	NM_000435.2
NC-474	RBM10	c.2185A>T	p.K729*	EX18	40.1%	NM_001204468.1
NC-475	BAP1	c.680G>A	p.R227H	EX9	1.1%	NM_004656.2
NC-475	EPHA5	c.1481G>A	p.R494H	EX6	8.9%	NM_004439.5

NC-475	EGFR	c.2239_2251delTTAAGAGAAGCAAinsC	p.L747_T751delinsP	EX19	38.4%	NM_005228.3
NC-475	BRD3	c.1492G>A	p.E498K	EX9	11.7%	NM_007371.3
NC-475	BRD3	c.1486G>A	p.E496K	EX9	11.8%	NM_007371.3
NC-475	BRD3	c.1477G>A	p.E493K	EX9	12.0%	NM_007371.3
NC-475	NOTCH1	c.5560C>T	p.R1854C	EX30	1.1%	NM_017617.3
NC-475	NTM	c.679G>A	p.E227K	EX5	19.1%	NM_001144058.1
NC-475	ZFP36L1	c.653G>A	p.R218H	EX3E	2.4%	NM_001244701.1
NC-475	MLH3	c.3233G>T	p.C1078F	EX2	21.7%	NM_001040108.1
NC-475	ZFHX3	c.6127C>T	p.P2043S	EX9	1.1%	NM_006885.3
NC-475	TP53	c.1006G>T	p.E336*	EX10	11.3%	NM_000546.5
NC-475	TP53	c.991C>T	p.Q331*	EX9	27.5%	NM_000546.5
NC-475	RNF43	c.1156C>T	p.R386W	EX9	25.6%	NM_017763.4
NC-475	CIC	c.3104C>T	p.T1035M	EX13	1.2%	NM_015125.3
NC-475	MED12	c.3403C>G	p.L1135V	EX24	19.0%	NM_005120.2
NC-476	TP53	c.533A>C	p.H178P	EX5	31.8%	NM_000546.5
NC-476	NF1	c.6371G>T	p.G2124V	EX42	28.5%	NM_001042492.2
NC-476	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	15.6%	NM_005228.3
NC-476	EGFR	c.2369C>T	p.T790M	EX20	12.7%	NM_005228.3
NC-477	ARID1A	c.3690G[2>1]	p.D1231Ifs*6	EX14	12.9%	NM_006015.4
NC-477	EGFR	c.2573T>G	p.L858R	EX21	32.7%	NM_005228.3
NC-477	FGF3	c.407C>T	p.T136M	EX3E	21.1%	NM_005247.2
NC-477	ERCC5	c.2539G>C	p.D847H	EX12	8.9%	NM_000123.3
NC-477	TP53	c.832C[2>1]	p.P278Lfs*67	EX8	29.3%	NM_000546.5
NC-478	LRP1B	c.1320C>A	p.N440K	EX9	27.7%	NM_018557.2

NC-478	CTNNB1	c.101G>A	p.G34E	EX3	37.7%	NM_001904.3
NC-478	FGF10	c.578G>A	p.R193Q	EX3	21.5%	NM_004465.1
NC-478	EGFR	c.2369C>T	p.T790M	EX20	12.0%	NM_005228.3
NC-478	EGFR	c.2573T>G	p.L858R	EX21	53.8%	NM_005228.3
NC-478	TP53	c.776A>T	p.D259V	EX7	35.0%	NM_000546.5
NC-478	TP53	c.722C>T	p.S241F	EX7	35.2%	NM_000546.5
NC-478	PIK3R2	c.1573T>A	p.S525T	EX13	14.0%	NM_005027.2
NC-479	EGFR	c.2573T>G	p.L858R	EX21	14.6%	NM_005228.3
NC-480	NOTCH2	c.6956C>T	p.A2319V	EX34E	28.4%	NM_024408.3
NC-480	NTRK1	c.737C>T	p.S246F	EX7	4.3%	NM_002529.3
NC-480	EPHA3	c.2648G>A	p.R883Q	EX15	25.3%	NM_005233.5
NC-480	ATR	c.597G>A	p.M199I	EX4	3.9%	NM_001184.3
NC-480	PDGFRB	c.1561G>A	p.V521I	EX10	24.2%	NM_002609.3
NC-480	EGFR	c.2311_2319dupAACCCCCAC	p.N771_H773dup	EX20	33.8%	NM_005228.3
NC-480	ACVRL1	c.1162G>C	p.D388H	EX8	6.1%	NM_000020.2
NC-480	TP53	c.626_627delGA	p.R209Kfs*6	EX6	34.6%	NM_000546.5
NC-480	NF2	c.1258G>T	p.E420*	EX12	5.4%	NM_000268.3
NC-481	TNFRSF14	c.599A>G	p.H200R	EX6	1.7%	NM_003820.2
NC-481	ERBB2	c.2326_2327insTGGTGATGGCTG	p.A775_G776insVVMA	EX20	8.6%	NM_004448.2
NC-482	ASPM	c.1590A>C	p.K530N	EX3	1.2%	NM_018136.4
NC-482	LRP1B	c.11128T>C	p.C3710R	EX72	1.4%	NM_018557.2
NC-482	LRP1B	c.3424C>G	p.P1142A	EX22	2.5%	NM_018557.2
NC-482	HIST1H3B	c.371A>G	p.D124G	EX1E	2.0%	NM_003537.3
NC-482	HIST1H2AG	c.148G>T	p.V50L	EX1E	12.7%	NM_021064.4

NC-482	EGFR	c.2156G>C	p.G719A	EX18	12.5%	NM_005228.3
NC-482	ABCB1	c.2058G>T	p.E686D	EX17	11.5%	NM_000927.4
NC-482	SMO	c.1474G>T	p.A492S	EX9	10.7%	NM_005631.4
NC-482	NTRK2	c.2406G>A	p.M802I	EX21E	2.2%	NM_006180.3
NC-482	ANKRD30A	c.1547G>A	p.C516Y	EX13	7.0%	NM_052997.2
NC-482	NAV3	c.1530C>G	p.S510R	EX8	10.2%	NM_014903.4
NC-482	FLT3	c.883G>A	p.G295S	EX8	8.5%	NM_004119.2
NC-482	IGF1R	c.1590-1G>C	.	IVS7	2.7%	NM_000875.3
NC-482	TP53	c.742C>T	p.R248W	EX7	15.0%	NM_000546.5
NC-482	DOT1L	c.2182C>T	p.R728W	EX20	13.0%	NM_032482.2
NC-482	NOTCH3	c.6212G>C	p.G2071A	EX33E	2.5%	NM_000435.2
NC-483	EGFR	c.2237_2251delAATTAAGAGAAGCAA	p.E746_T751delinsA	EX19	15.4%	NM_005228.3
NC-483	EGFR	c.2369C>T	p.T790M	EX20	26.4%	NM_005228.3
NC-483	MLL3	c.3355A>G	p.T1119A	EX21	12.3%	NM_170606.2
NC-483	LZTS1	c.779A>T	p.E260V	EX2	6.5%	NM_021020.2
NC-483	TP53	c.853G>A	p.E285K	EX8	6.1%	NM_000546.5
NC-483	RBM10	c.2608G>T	p.E870*	EX21	5.9%	NM_001204468.1
NC-484	TP53	c.536A>G	p.H179R	EX5	25.8%	NM_000546.5
NC-484	ELF1	c.904G>A	p.E302K	EX8	16.6%	NM_172373.3
NC-484	SMAD4	c.426TC[3>2]	p.S144Rfs*7	EX4	13.2%	NM_005359.5
NC-484	EGFR	c.2573T>G	p.L858R	EX21	11.0%	NM_005228.3
NC-485	PALB2	c.1075A>T	p.S359C	EX4	3.2%	NM_024675.3
NC-485	TP53	c.431A>C	p.Q144P	EX5	43.7%	NM_000546.5
NC-485	AXL	c.1318G>A	p.E440K	EX11	3.2%	NM_021913.3
NC-485	POLD1	c.1168C>T	p.P390S	EX10	30.1%	NM_002691.3

NC-485	FOXL2	c.1087C>A	p.H363N	EX1E	1.4%	NM_023067.3
NC-485	VEGFA	c.251G>A	p.G84E	EX3	2.6%	NM_001171623.1
NC-485	ROS1	c.6470T>C	p.L2157P	EX41	28.0%	NM_002944.2
NC-485	ESR1	c.914G>T	p.S305I	EX5	28.6%	NM_001122740.1
NC-485	ABCA13	c.13735G>A	p.G4579S	EX52	30.8%	NM_152701.3
NC-485	CDKN2A	c.156delG	p.M52Ifs*2	EX2	43.6%	NM_000077.4
NC-485	PTEN	c.1026+1G>A	.	IVS8	38.7%	NM_000314.4
NC-485	NTRK1	c.1054A>T	p.T352S	EX8	32.1%	NM_002529.3
NC-485	ALK	c.4307G>A	p.R1436H	EX29E	27.1%	NM_004304.4
NC-485	ERBB4	c.2308C>G	p.L770V	EX20	27.8%	NM_005235.2
NC-486	EPHA2	c.2041G>A	p.V681I	EX11	8.7%	NM_004431.3
NC-486	RB1	c.875_878delATTT	p.Y292Sfs*8	EX9	77.4%	NM_000321.2
NC-486	TP53	c.1015G>T	p.E339*	EX10	71.3%	NM_000546.5
NC-486	PTPN2	c.527A>C	p.H176P	EX6	47.0%	NM_080422.2
NC-486	NOTCH3	c.3673G>C	p.D1225H	EX22	58.2%	NM_000435.2
NC-486	NDUFA13	c.376G>A	p.G126R	EX5E	26.1%	NM_015965.6
NC-487	TGFBR2	c.326G>T	p.C109F	EX3	38.5%	NM_001024847.2
NC-487	CRIPAK	c.632C>T	p.S211L	EX1E	24.8%	NM_175918.3
NC-487	SLIT2	c.3243_3245delAGAinsGTT	p.D1082F	EX31	2.0%	NM_004787.1
NC-487	RICTOR	c.47G>A	p.R16Q	EX1	21.5%	NM_152756.3
NC-487	FAT2	c.3268C>T	p.Q1090*	EX2	22.5%	NM_001447.2
NC-487	EGFR	c.2573T>G	p.L858R	EX21	42.5%	NM_005228.3
NC-487	GNAQ	c.349G>C	p.D117H	EX3	28.2%	NM_002072.3
NC-487	IFITM3	c.11C>T	p.T4I	EX1	2.2%	NM_021034.2
NC-487	C11orf30	c.1289C>T	p.S430F	EX9	28.3%	NM_020193.3

NC-487	HSP90AA1	c.1199A>T	p.K400M	EX6	1.2%	NM_001017963.2
NC-487	MAP2K4	c.580A>T	p.S194C	EX5	1.7%	NM_003010.2
NC-487	BTK	c.721T>G	p.Y241D	EX8	9.6%	NM_000061.2
NC-488	TP53	c.487T>A	p.Y163N	EX5	37.5%	NM_000546.5
NC-488	HSP90AA1	c.1010G>C	p.G337A	EX5	21.9%	NM_001017963.2
NC-488	SRC	c.190T>A	p.F64I	EX4	19.9%	NM_198291.1
NC-488	HSP90AA1	c.1011AT[2>3]	p.P339Ifs*15	EX5	18.7%	NM_001017963.2
NC-488	ERBB4	c.3227G>C	p.G1076A	EX27	4.5%	NM_005235.2
NC-488	HIST1H1C	c.504G>C	p.K168N	EX1	3.4%	NM_005319.3
NC-488	MYC	c.484G>C	p.E162Q	EX2	2.9%	NM_002467.4
NC-488	AXIN1	c.1954G>A	p.G652R	EX7	1.4%	NM_003502.3
NC-488	BARD1	c.1518_1519delTGinsCA	p.V507M	EX6	1.4%	NM_000465.2
NC-489	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	9.6%	NM_005228.3
NC-490	MSH2	c.76A>G	p.M26V	EX1	25.1%	NM_000251.2
NC-490	JARID2	c.2968C>G	p.L990V	EX14	18.1%	NM_004973.3
NC-490	EGFR	c.2500G>T	p.V834L	EX21	45.0%	NM_005228.3
NC-490	EGFR	c.2573T>G	p.L858R	EX21	46.6%	NM_005228.3
NC-490	MLL2	c.9308C>G	p.A3103G	EX34	29.9%	NM_003482.3
NC-490	STAG2	c.3658G>A	p.E1220K	EX33	10.1%	NM_001042749.1
NC-491	EPAS1	c.1821C>G	p.I607M	EX12	1.5%	NM_001430.4
NC-491	MSH2	c.691G>T	p.D231Y	EX4	1.0%	NM_000251.2
NC-491	LRP1B	c.1957G>T	p.D653Y	EX12	1.6%	NM_018557.2
NC-491	APC	c.3605C>G	p.S1202C	EX16E	1.3%	NM_000038.5
NC-491	EGFR	c.2573T>G	p.L858R	EX21	14.9%	NM_005228.3
NC-491	TRRAP	c.3398G>T	p.C1133F	EX25	1.0%	NM_001244580.1

NC-491	TP53	c.769C>G	p.L257V	EX7	14.8%	NM_000546.5
NC-491	BRCA1	c.3413G>T	p.G1138V	EX10	7.8%	NM_007294.3
NC-491	PCK1	c.716C>T	p.S239L	EX5	1.7%	NM_002591.3
NC-492	TGFBR2	c.1689C>A	p.F563L	EX8E	1.1%	NM_001024847.2
NC-492	FAT1	c.3503C>T	p.S1168L	EX3	1.6%	NM_005245.3
NC-492	CSF1R	c.2420C>G	p.S807C	EX18	6.2%	NM_005211.3
NC-492	FAT2	c.3079C>G	p.L1027V	EX1	1.0%	NM_001447.2
NC-492	FLT4	c.3461G>C	p.G1154A	EX26	4.2%	NM_182925.4
NC-492	IRF4	c.1078G>C	p.D360H	EX7	2.5%	NM_002460.3
NC-492	ROS1	c.4592C>A	p.A1531D	EX28	1.6%	NM_002944.2
NC-492	ARID1B	c.6001G>A	p.E2001K	EX20E	1.3%	NM_020732.3
NC-492	XRCC2	c.532C>G	p.Q178E	EX3E	2.4%	NM_005431.1
NC-492	TSC1	c.833C>G	p.S278C	EX9	5.8%	NM_000368.4
NC-492	MRE11A	c.88G>A	p.A30T	EX3	18.4%	NM_005591.3
NC-492	CREBBP	c.6457G>A	p.G2153S	EX31E	1.2%	NM_004380.2
NC-492	ZFHX3	c.3040C>A	p.L1014M	EX3	1.0%	NM_006885.3
NC-492	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	41.4%	NM_004448.2
NC-492	PPP2R1A	c.347C>G	p.S116*	EX4	9.8%	NM_014225.5
NC-492	EP300	c.5032G>T	p.E1678*	EX30	1.4%	NM_001429.3
NC-493	CARD11	c.2336G>T	p.R779L	EX18	44.9%	NM_032415.4
NC-493	HDAC9	c.3074C>T	p.A1025V	EX25	44.7%	NM_178423.1
NC-493	GNAQ	c.37G>A	p.E13K	EX1	22.6%	NM_002072.3
NC-493	ARID2	c.139C>T	p.L47F	EX2	17.4%	NM_152641.2
NC-493	IFNG	c.366+1G>T	.	IVS3	45.3%	NM_000619.2
NC-493	TBX3	c.306C[4>3]	p.K104Rfs*35	EX1	43.5%	NM_016569.3

NC-493	RB1	c.1421+1G>A	.	IVS15	91.9%	NM_000321.2
NC-493	FOXA1	c.434C>G	p.P145R	EX2E	67.2%	NM_004496.3
NC-493	TP53	c.817C>T	p.R273C	EX8	93.5%	NM_000546.5
NC-493	SMARCA4	c.4582G>C	p.D1528H	EX32	60.5%	NM_003072.3
NC-493	TOP1	c.265C>T	p.R89*	EX4	13.5%	NM_003286.2
NC-494	EPHB2	c.223A>G	p.T75A	EX3	1.4%	NM_017449.3
NC-494	EGFR	c.2573T>G	p.L858R	EX21	25.5%	NM_005228.3
NC-494	TP53	c.394A[2>1]	p.K132Rfs*38	EX5	31.2%	NM_000546.5
NC-495	AFF1	c.160-17_161delTTCTCCTTTTTTTTCAGACinsA	.	IVS3-EX4	14.5%	NM_001166693.1
NC-495	EGFR	c.2369C>T	p.T790M	EX20	17.6%	NM_005228.3
NC-495	EGFR	c.2573T>G	p.L858R	EX21	25.5%	NM_005228.3
NC-495	TP53	c.530C>G	p.P177R	EX5	21.3%	NM_000546.5
NC-496	TP53	c.1019_1028delTGTTCCGAGA	p.M340Sfs*2	EX10	30.2%	NM_000546.5
NC-496	HDAC4	c.2086G>T	p.G696C	EX15	24.1%	NM_006037.3
NC-496	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	20.6%	NM_005228.3
NC-496	ROBO3	c.1525_1526delGCinsAT	p.A509I	EX9	16.0%	NM_022370.3
NC-496	INPP4B	c.367_369delGACinsTAT	p.D123Y	EX7	13.0%	NM_001101669.1
NC-497	APC	c.7958_7964delAAACAGA	p.K2653Rfs*5	EX16E	9.7%	NM_000038.5
NC-497	MS4A1	c.830C>T	p.T277M	EX8E	10.6%	NM_152866.2
NC-497	KRAS	c.64C>A	p.Q22K	EX2	2.2%	NM_033360.2

NC-497	IFNG	c.406C>G	p.L136V	EX4E	11.3%	NM_000619.2
NC-497	SMAD4	c.431C>G	p.S144*	EX4	13.5%	NM_005359.5
NC-498	EPHA2	c.1993G>A	p.G665S	EX11	12.2%	NM_004431.3
NC-498	LRP1B	c.11458C>G	p.Q3820E	EX75	4.9%	NM_018557.2
NC-498	TGFBR2	c.1110_1120delGGACCTGCGCA	p.D371Afs*15	EX5	15.2%	NM_001024847.2
NC-498	FOXL2	c.433C>T	p.R145C	EX1E	1.5%	NM_023067.3
NC-498	NSD1	c.4486C>G	p.P1496A	EX10	5.2%	NM_022455.4
NC-498	EGFR	c.2239_2258delTTAAGAGAAGCAACATCTCCinsCA	p.L747_P753delinsQ	EX19	24.6%	NM_005228.3
NC-498	PIK3CG	c.69G>A	p.M23I	EX2	1.3%	NM_002649.2
NC-498	MLL2	c.15550G>C	p.V5184L	EX48	6.4%	NM_003482.3
NC-498	POLE	c.409G>A	p.E137K	EX5	6.8%	NM_006231.2
NC-498	GRIN2A	c.3332G>T	p.S1111I	EX13E	1.0%	NM_001134407.1
NC-498	ABCC11	c.345C>A	p.N115K	EX4	6.6%	NM_032583.3
NC-498	TP53	c.583A>T	p.I195F	EX6	30.6%	NM_000546.5
NC-499	CBLB	c.2842G>A	p.E948K	EX19E	29.5%	NM_170662.3
NC-499	RICTOR	c.3650G>C	p.S1217T	EX31	22.9%	NM_152756.3
NC-499	EGFR	c.2315_2320dupCCCACG	p.H773_V774insAH	EX20	20.8%	NM_005228.3
NC-499	HSP90AA1	c.2205C>G	p.I735M	EX11	30.8%	NM_001017963.2
NC-499	TP53	c.734G>A	p.G245D	EX7	28.3%	NM_000546.5
NC-499	EP300	c.2362C>G	p.Q788E	EX13	21.8%	NM_001429.3
NC-500	LRP1B	c.8165G>T	p.W2722L	EX51	7.3%	NM_018557.2
NC-500	EGFR	c.2369C>T	p.T790M	EX20	28.3%	NM_005228.3

NC-500	EGFR	c.2573T>G	p.L858R	EX21	53.6%	NM_005228.3
NC-500	HRAS	c.331A>G	p.M111V	EX4	4.7%	NM_001130442.1
NC-500	ATM	c.8426A[7>6]	p.K2811Sfs*46	EX58	13.5%	NM_000051.3
NC-500	FLT3	c.228C>G	p.Y76*	EX3	6.6%	NM_004119.2
NC-500	RB1	c.1448AT[2>1]	p.M484Vfs*8	EX16	18.6%	NM_000321.2
NC-500	TP53	c.960_966delGAAACCA	p.K320Nfs*23	EX9	25.0%	NM_000546.5
NC-500	RUNX1	c.400G>C	p.A134P	EX5	11.4%	NM_001754.4
NC-501	ABL2	c.73A>T	p.S25C	EX1	8.7%	NM_007314.3
NC-501	MLL3	c.3683C>G	p.S1228*	EX23	6.4%	NM_170606.2
NC-501	GALNT12	c.3G>T	p.0?	EX1	4.9%	NM_024642.4
NC-501	SF1	c.557G>A	p.G186E	EX6	8.1%	NM_004630.3
NC-501	CHEK1	c.22G>A	p.D8N	EX2	5.0%	NM_001274.5
NC-501	CBFB	c.191T>A	p.L64Q	EX3	6.2%	NM_022845.2
NC-501	TP53	c.773A>G	p.E258G	EX7	8.2%	NM_000546.5
NC-501	NF1	c.2851-1G>T	.	IVS21	6.2%	NM_000267.3
NC-501	TOP2A	c.4507G>A	p.D1503N	EX35E	5.4%	NM_001067.3
NC-502	TXNIP	c.96A>G	p.I32M	EX1	21.5%	NM_006472.3
NC-502	RAF1	c.781C>T	p.P261S	EX7	19.9%	NM_002880.3
NC-502	GABRA6	c.1300C>A	p.L434I	EX9E	13.7%	NM_000811.2
NC-502	NSD1	c.4211G>A	p.R1404H	EX8	17.2%	NM_022455.4
NC-502	GRM3	c.1004G>A	p.R335H	EX3	1.7%	NM_000840.2
NC-502	KRAS	c.34_35delGGinsTT	p.G12F	EX2	29.1%	NM_033360.2
NC-502	NF2	c.115-1G>C	.	IVS1	25.6%	NM_000268.3
NC-503	NF1	c.821T>G	p.L274R	EX8	2.1%	NM_000267.3

NC-503	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	9.5%	NM_004448.2
NC-504	ARID1A	c.1072C>T	p.H358Y	EX1	4.5%	NM_006015.4
NC-504	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	10.3%	NM_005228.3
NC-504	FGF4	c.77G>A	p.R26Q	EX1	14.4%	NM_002007.2
NC-504	STK11	c.147C>G	p.Y49*	EX1	1.8%	NM_000455.4
NC-504	STK11	c.869T>C	p.L290P	EX7	4.2%	NM_000455.4
NC-504	SMARCA4	c.4471C>T	p.R1491*	EX31	1.6%	NM_003072.3
NC-504	FAM123B	c.2820G>T	p.W940C	EX2E	11.9%	NM_152424.3
NC-505	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	17.1%	NM_005228.3
NC-505	BNC2	c.520C>G	p.L174V	EX5	10.5%	NM_017637.5
NC-505	TP53	c.916C>T	p.R306*	EX8	18.3%	NM_000546.5
NC-506	CDA	c.262G>T	p.A88S	EX2	10.5%	NM_001785.2
NC-506	MSH6	c.610G>A	p.E204K	EX3	4.3%	NM_000179.2
NC-506	MTRR	c.43G>T	p.A15S	EX2	27.1%	NM_002454.2
NC-506	LIFR	c.1849C>G	p.P617A	EX13	28.2%	NM_002310.5
NC-506	PRDM1	c.1391_1392delCT	p.T464Ifs*47	EX5	24.2%	NM_001198.3
NC-506	PIK3CG	c.3177A>T	p.K1059N	EX11E	40.5%	NM_002649.2
NC-506	EXT1	c.2201C>T	p.S734F	EX11E	6.5%	NM_000127.2
NC-506	TRAF2	c.374_387delACGAAGGCCGCTGCinsTT	p.H125_C129delinsL	EX5	63.7%	NM_021138.3
NC-506	ATM	c.5272G>C	p.D1758H	EX35	19.2%	NM_000051.3
NC-506	TP53	c.211C[6>7]	p.V73Rfs*76	EX4	71.0%	NM_000546.5
NC-506	NF1	c.73A>G	p.T25A	EX2	1.3%	NM_000267.3

NC-506	RPTOR	c.1390G>A	p.V464M	EX12	73.1%	NM_020761.2
NC-507	ARID1A	c.112G>A	p.E38K	EX1	25.2%	NM_006015.4
NC-507	FCRL4	c.219C>G	p.N73K	EX3	1.0%	NM_031282.2
NC-507	H3F3A	c.17A>T	p.Q6L	EX2	6.1%	NM_002107.4
NC-507	SUCLG1	c.358G>C	p.V120L	EX4	1.5%	NM_003849.3
NC-507	LRP1B	c.13463T>C	p.V4488A	EX89	3.7%	NM_018557.2
NC-507	NOTCH4	c.2438+1G>T	.	IVS15	1.0%	NM_004557.3
NC-507	ROS1	c.4612G>C	p.D1538H	EX28	24.2%	NM_002944.2
NC-507	EGFR	c.2303_2311dupGCGTGGACA	p.S768_D770dup	EX20	27.0%	NM_005228.3
NC-507	TLL2	c.1273T[4>3]	p.C426Vfs*43	EX11	22.1%	NM_012465.3
NC-507	C11orf30	c.349A>C	p.N117H	EX5	4.5%	NM_020193.3
NC-507	B2M	c.346+2T>A	.	IVS2	4.8%	NM_004048.2
NC-507	ZFHX3	c.7779A>G	p.I2593M	EX9	1.0%	NM_006885.3
NC-507	BRIP1	c.2692G>A	p.D898N	EX19	1.7%	NM_032043.2
NC-507	ARAF	c.700-1G>A	.	IVS7	1.7%	NM_001654.4
NC-507	MED12	c.2341G>T	p.V781F	EX16	20.1%	NM_005120.2
NC-508	ABL2	c.257C>A	p.P86H	EX3	2.0%	NM_007314.3
NC-508	MSH2	c.394G>T	p.E132*	EX3	1.9%	NM_000251.2
NC-508	LRP1B	c.7482C>A	p.D2494E	EX45	5.4%	NM_018557.2
NC-508	CUL3	c.163G>A	p.E55K	EX2	1.0%	NM_003590.4
NC-508	BAP1	c.299T>C	p.L100P	EX5	2.4%	NM_004656.2
NC-508	EPHA5	c.2732T>C	p.M911T	EX16	3.9%	NM_004439.5
NC-508	EPHA5	c.2359G>C	p.G787R	EX14	7.2%	NM_004439.5
NC-508	FAT1	c.11177T>A	p.I3726N	EX19	1.1%	NM_005245.3
NC-508	APC	c.2684C>G	p.S895*	EX16E	2.1%	NM_000038.5

NC-508	CSF1R	c.739C>T	p.P247S	EX6	1.6%	NM_005211.3
NC-508	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	29.3%	NM_005228.3
NC-508	BMPR1A	c.1084G>A	p.D362N	EX10	15.8%	NM_004329.2
NC-508	MLL2	c.3772C>T	p.R1258W	EX11	1.5%	NM_003482.3
NC-508	TP53	c.749C>T	p.P250L	EX7	31.5%	NM_000546.5
NC-509	CTNNB1	c.110C>T	p.S37F	EX3	1.1%	NM_001904.3
NC-509	PBRM1	c.2524G>C	p.E842Q	EX17	1.9%	NM_018313.4
NC-509	EGFR	c.2573T>G	p.L858R	EX21	39.4%	NM_005228.3
NC-509	PTPRD	c.14C>A	p.A5D	EX12	13.0%	NM_002839.3
NC-509	CDKN2A	c.58_59delGCinsAA	p.A20K	EX1	2.5%	NM_000077.4
NC-509	MDM2	c.633A>G	p.I211M	EX8	2.4%	NM_002392.4
NC-509	AKT1	c.235C>A	p.Q79K	EX4	5.7%	NM_001014431.1
NC-509	TSC2	c.4520C>T	p.S1507F	EX35	1.8%	NM_000548.3
NC-509	TP53	c.722C>T	p.S241F	EX7	1.1%	NM_000546.5
NC-509	NF1	c.466C>T	p.R156C	EX4	9.8%	NM_000267.3
NC-509	EP300	c.4398G>T	p.W1466C	EX27	1.3%	NM_001429.3
NC-510	JAK1	c.1138T>G	p.S380A	EX8	3.8%	NM_002227.2
NC-510	IDH1	c.394C>T	p.R132C	EX4	3.3%	NM_005896.2
NC-510	BRAF	c.1799T>A	p.V600E	EX15	4.3%	NM_004333.4
NC-511	FUBP1	c.250+1_250+2delGT	.	IVS3	37.7%	NM_003902.3
NC-511	LRP1B	c.3658A>T	p.N1220Y	EX23	25.6%	NM_018557.2
NC-511	ERBB4	c.3175A>G	p.M1059V	EX26	28.2%	NM_005235.2
NC-511	EPHA3	c.35G>T	p.S12I	EX1	41.8%	NM_005233.5
NC-511	EPHB1	c.1876_1877delGGinsTT	p.G626L	EX10	36.3%	NM_004441.4
NC-511	PIK3R1	c.478G>T	p.E160*	EX4	18.3%	NM_181523.2

NC-511	SMO	c.772A>G	p.N258D	EX4	19.7%	NM_005631.4
NC-511	SNTG1	c.670G>T	p.D224Y	EX11	55.0%	NM_018967.2
NC-511	TP53	c.488A>G	p.Y163C	EX5	67.6%	NM_000546.5
NC-511	NF1	c.585_586delGGinsTT	p.K195_E196delinsN*	EX5	57.1%	NM_000267.3
NC-511	ROCK1	c.543A>T	p.E181D	EX5	53.8%	NM_005406.2
NC-511	KEAP1	c.742G>A	p.A248T	EX3	59.8%	NM_203500.1
NC-512	LRP1B	c.1241dupG	p.H415Tfs*9	EX9	1.4%	NM_018557.2
NC-512	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	16.7%	NM_005228.3
NC-512	RARA	c.872C>T	p.T291I	EX7	5.0%	NM_000964.3
NC-512	ATRX	c.4487C>G	p.A1496G	EX15	1.2%	NM_000489.3
NC-513	EPHB1	c.2071C>T	p.R691W	EX11	1.8%	NM_004441.4
NC-513	EGFR	c.2311delinsCACC	p.N771delinsHH	EX20	8.2%	NM_005228.3
NC-514	DPYD	c.1660G>T	p.A554S	EX13	2.5%	NM_000110.3
NC-514	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	15.2%	NM_005228.3
NC-515	SETD2	c.4379G>A	p.W1460*	EX3	7.2%	NM_014159.6
NC-515	SETD2	c.2762_2763delTA	p.L921*fs*1	EX3	6.4%	NM_014159.6
NC-515	PIK3CA	c.2176G>A	p.E726K	EX14	1.4%	NM_006218.2
NC-515	ROBO3	c.2684C>T	p.A895V	EX17	1.8%	NM_022370.3
NC-515	KRAS	c.35G>A	p.G12D	EX2	12.8%	NM_033360.2
NC-515	FOXA2	c.647C>T	p.S216L	EX2E	6.4%	NM_021784.4
NC-516	HDAC4	c.1699G>A	p.E567K	EX13	13.1%	NM_006037.3
NC-516	FAT1	c.1667C>A	p.T556K	EX2	2.0%	NM_005245.3
NC-516	MET	c.3028G>A	p.D1010N	EX14	96.6%	NM_000245.2
NC-516	RB1	c.2325+1G>A	.	IVS22	70.0%	NM_000321.2

NC-516	TP53	c.422_423dupGC	p.P142Afs*29	EX5	52.6%	NM_000546.5
NC-517	ERBB4	c.2512C>T	p.R838*	EX21	13.4%	NM_005235.2
NC-517	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	16.5%	NM_005228.3
NC-517	EGFR	c.2369C>T	p.T790M	EX20	11.1%	NM_005228.3
NC-517	CDH23	c.6808C>T	p.R2270C	EX49	9.9%	NM_022124.5
NC-517	KDM5A	c.3862G>A	p.A1288T	EX23	21.6%	NM_001042603.1
NC-517	DICER1	c.399G>C	p.W133C	EX5	5.8%	NM_030621.3
NC-517	DICER1	c.361G>A	p.V121I	EX5	5.4%	NM_030621.3
NC-517	DICER1	c.272G>A	p.R91K	EX4	6.5%	NM_030621.3
NC-517	DICER1	c.238G>A	p.E80K	EX4	7.3%	NM_030621.3
NC-517	DICER1	c.115G>A	p.D39N	EX3	5.6%	NM_030621.3
NC-517	PALB2	c.2794G>A	p.V932M	EX8	10.8%	NM_024675.3
NC-517	TP53	c.211C[6>7]	p.V73Rfs*76	EX4	22.3%	NM_000546.5
NC-517	NCOR1	c.177_179delACA	p.Q58[7>6]	EX3	2.0%	NM_006311.3
NC-517	MN1	c.1572GCA[9>11]	p.Q523[28>30]	EX1	20.3%	NM_002430.2
NC-518	APC	c.872T[4>3]	p.L292*fs*1	EX9	11.1%	NM_000038.5
NC-518	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	6.2%	NM_005228.3
NC-518	ZFPM2	c.1015G>A	p.V339I	EX8E	3.6%	NM_012082.3
NC-518	TP53	c.586C>G	p.R196G	EX6	11.5%	NM_000546.5
NC-518	SMAD4	c.1067C>T	p.P356L	EX9	7.3%	NM_005359.5
NC-519	FMN2	c.2932C>A	p.P978T	EX5	25.5%	NM_020066.4
NC-519	HDAC4	c.1199C>A	p.S400*	EX11	23.0%	NM_006037.3
NC-519	MLH1	c.986A>T	p.H329L	EX11	36.0%	NM_000249.3
NC-519	NOTCH4	c.5371G>A	p.A1791T	EX30E	23.2%	NM_004557.3

NC-519	HGF	c.1631A>T	p.Y544F	EX15	32.7%	NM_000601.4
NC-519	ROBO3	c.193C>G	p.R65G	EX2	24.4%	NM_022370.3
NC-519	CCNA1	c.802G>T	p.A268S	EX5	5.3%	NM_003914.3
NC-519	GRIN2A	c.2365G>T	p.E789*	EX12	51.8%	NM_001134407.1
NC-519	TP53	c.645T>A	p.S215R	EX6	79.3%	NM_000546.5
NC-519	MAP2K4	c.159C>G	p.F53L	EX2	34.9%	NM_003010.2
NC-519	SERPINB3	c.1102C>A	p.P368T	EX8E	2.8%	NM_006919.2
NC-519	TOP1	c.1118T>C	p.L373P	EX12	33.1%	NM_003286.2
NC-519	ZNF217	c.1480A>G	p.T494A	EX2	35.8%	NM_006526.2
NC-519	DDX3X	c.1498-1G>T	.	IVS13	88.6%	NM_001356.3
NC-519	ARAF	c.769A>T	p.S257C	EX9	34.3%	NM_001654.4
NC-520	LRP1B	c.3932G>C	p.R1311T	EX24	2.4%	NM_018557.2
NC-520	EGFR	c.2573T>G	p.L858R	EX21	19.5%	NM_005228.3
NC-520	EGFR	c.2665A>G	p.R889G	EX22	19.8%	NM_005228.3
NC-520	GRIN2A	c.3476G>A	p.R1159H	EX13E	3.3%	NM_001134407.1
NC-521	ERBB3	c.3491C>G	p.T1164R	EX27	12.4%	NM_001982.3
NC-521	EGFR	c.2300_2308dupCCAGCGTGG	p.A767_V769dup	EX20	12.3%	NM_005228.3
NC-521	BARD1	c.214A>T	p.S72C	EX2	7.2%	NM_000465.2
NC-521	LRP1B	c.4091T>C	p.L1364P	EX25	4.7%	NM_018557.2
NC-521	NPM1	c.523GAT[6>5]	p.D175[6>5]	EX7	2.1%	NM_002520.6
NC-521	COL5A3	c.728G>A	p.R243H	EX6	1.1%	NM_015719.3
NC-521	AXIN1	c.2545G>A	p.V849I	EX11	0.9%	NM_003502.3
NC-521	STAG2	c.3393A>T	p.R1131S	EX31	0.7%	NM_001042749.1
NC-522	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	51.0%	NM_005228.3

NC-522	PIK3CG	c.1408G>A	p.D470N	EX2	25.4%	NM_002649.2
NC-522	MLL3	c.11577G>C	p.E3859D	EX44	32.9%	NM_170606.2
NC-522	RAD21	c.935C>A	p.T312N	EX8	2.0%	NM_006265.2
NC-522	RB1	c.649C>T	p.Q217*	EX7	65.6%	NM_000321.2
NC-522	TP53	c.244C[2>1]	p.P82Rfs*41	EX4	78.2%	NM_000546.5
NC-522	PTCH2	c.1073G>A	p.R358H	EX8	27.8%	NM_001166292.1
NC-522	PIK3CA	c.886C>G	p.Q296E	EX5	18.1%	NM_006218.2
NC-523	CDC73	c.133A>G	p.T45A	EX2	10.5%	NM_024529.4
NC-523	TERT	c.67C>T	p.P23S	EX1	3.2%	NM_198253.2
NC-523	KRAS	c.35G>A	p.G12D	EX2	15.2%	NM_033360.2
NC-523	TP53	c.476C>T	p.A159V	EX5	20.3%	NM_000546.5
NC-523	STK11	c.837C[6>5]	p.P281Rfs*6	EX6	16.7%	NM_000455.4
NC-524	ABL2	c.2765T>C	p.V922A	EX12E	1.6%	NM_007314.3
NC-524	FANCD2	c.355C>T	p.R119C	EX5	1.0%	NM_033084.3
NC-524	PBRM1	c.436C>T	p.R146*	EX5	12.5%	NM_018313.4
NC-524	EPHA3	c.1104G>T	p.W368C	EX5	1.8%	NM_005233.5
NC-524	PCDH18	c.2728A>G	p.R910G	EX3	8.1%	NM_019035.3
NC-524	ARID1B	c.2222G>T	p.G741V	EX6	1.1%	NM_020732.3
NC-524	HGF	c.1940G>T	p.R647L	EX17	1.6%	NM_000601.4
NC-524	MNX1	c.1177C>T	p.R393W	EX3E	1.8%	NM_005515.3
NC-524	NTRK2	c.2442G>T	p.K814N	EX21E	11.2%	NM_006180.3
NC-524	MYO3A	c.3034C>G	p.P1012A	EX27	1.3%	NM_017433.4
NC-524	WSCD2	c.544G>A	p.G182S	EX4	19.7%	NM_014653.2
NC-524	SH2B3	c.158C>A	p.P53Q	EX2	13.4%	NM_005475.2
NC-524	FLT1	c.3721G>T	p.D1241Y	EX29	2.1%	NM_002019.4
NC-524	FLT1	c.1276G>T	p.V426L	EX9	1.3%	NM_002019.4

NC-524	NTRK3	c.1591C>A	p.Q531K	EX15	3.1%	NM_001012338.2
NC-524	MAF	c.544CAC[6>5]	p.H182[6>5]	EX1E	3.6%	NM_001031804.2
NC-524	MAF	c.525C>A	p.S175R	EX1E	1.6%	NM_001031804.2
NC-524	FANCA	c.1225+1G>T	.	IVS13	2.9%	NM_000135.2
NC-524	TP53	c.706T>A	p.Y236N	EX7	22.4%	NM_000546.5
NC-524	NOTCH3	c.4463G>T	p.C1488F	EX25	1.7%	NM_000435.2
NC-524	NOTCH3	c.2143G>T	p.G715W	EX13	1.7%	NM_000435.2
NC-524	CYP2D6	c.512C>A	p.P171H	EX4	1.3%	NM_000106.5
NC-525	HDAC4	c.160G>C	p.D54H	EX4	1.3%	NM_006037.3
NC-525	TGFBR2	c.1472-1G>C	.	IVS6	3.0%	NM_001024847.2
NC-525	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	4.2%	NM_005228.3
NC-525	ATM	c.4577C>T	p.P1526L	EX30	3.3%	NM_000051.3
NC-525	RBM10	c.1404_1413delCAGCACTGCC	p.S469Lfs*78	EX12	4.6%	NM_001204468.1
NC-526	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	30.7%	NM_005228.3
NC-526	EGFR	c.2369C>T	p.T790M	EX20	7.7%	NM_005228.3
NC-526	BRAF	c.1799T>A	p.V600E	EX15	6.2%	NM_004333.4
NC-526	NKX3-1	c.507G>C	p.K169N	EX2E	7.6%	NM_006167.3
NC-526	TP53	c.725G>A	p.C242Y	EX7	75.3%	NM_000546.5
NC-527	ABL1	c.1625GA[2>1]	p.D543Hfs*3	EX10	1.3%	NM_005157.4
NC-527	FANCA	c.3665C>T	p.P1222L	EX37	23.3%	NM_000135.2
NC-528	APC	c.1234C>T	p.Q412*	EX10	3.4%	NM_000038.5
NC-528	APC	c.2710A>T	p.R904*	EX16E	1.1%	NM_000038.5
NC-528	APC	c.4339C>T	p.Q1447*	EX16E	2.5%	NM_000038.5

NC-528	EGFR	c.2239_2247delTTAAGAGAA	p.L747_E749del	EX19	20.9%	NM_005228.3
NC-528	EGFR	c.2260A>G	p.K754E	EX19	30.7%	NM_005228.3
NC-528	TSC2	c.4729G>A	p.G1577S	EX37	17.2%	NM_000548.3
NC-528	SMARCA4	c.2921C>T	p.P974L	EX20	2.0%	NM_003072.3
NC-528	BRD4	c.2707C[6>5]	p.M905Wfs*44	EX14	23.9%	NM_058243.2
NC-528	RBM10	c.1115T>C	p.L372P	EX10	2.1%	NM_001204468.1
NC-528	MED12	c.6274C>T	p.Q2092*	EX43	53.2%	NM_005120.2
NC-529	FGF23	c.560G>T	p.R187L	EX3E	39.4%	NM_020638.2
NC-529	MLL2	c.15766A>C	p.T5256P	EX48	22.6%	NM_003482.3
NC-529	MLL2	c.4583G>C	p.R1528P	EX16	37.2%	NM_003482.3
NC-529	RB1	c.1303G>T	p.G435*	EX13	87.0%	NM_000321.2
NC-529	MYH11	c.4729C>A	p.Q1577K	EX34	55.2%	NM_001040113.1
NC-529	TP53	c.730G>C	p.G244R	EX7	49.5%	NM_000546.5
NC-529	NOTCH3	c.511G>T	p.G171C	EX4	22.4%	NM_000435.2
NC-529	HDAC1	c.1247G>T	p.C416F	EX12	56.5%	NM_004964.2
NC-529	LRRC7	c.2175G>C	p.R725S	EX19	62.0%	NM_020794.2
NC-529	BAP1	c.857A>T	p.K286M	EX10	44.3%	NM_004656.2
NC-529	KDR	c.2618G>A	p.G873E	EX19	1.9%	NM_002253.2
NC-529	KDR	c.436G>A	p.V146M	EX4	26.3%	NM_002253.2
NC-529	EPHA5	c.748G>T	p.A250S	EX3	55.9%	NM_004439.5
NC-529	CTNNA1	c.2023C>T	p.Q675*	EX15	36.4%	NM_001903.2
NC-529	TCP11	c.706A>G	p.I236V	EX6	11.8%	NM_001093728.2
NC-529	HGF	c.1771G>T	p.D591Y	EX16	65.3%	NM_000601.4
NC-529	MED12	c.6411C>A	p.F2137L	EX44	16.9%	NM_005120.2
NC-529	ATRX	c.5573G>T	p.G1858V	EX23	15.8%	NM_000489.3

NC-530	ARID1A	c.5542G[7>6]	p.D1850Tfs*33	EX20E	82.1%	NM_006015.4
NC-530	PIK3CA	c.1624G>A	p.E542K	EX10	64.0%	NM_006218.2
NC-530	RB1	c.709G>T	p.E237*	EX7	94.1%	NM_000321.2
NC-530	IGF1R	c.1090A>G	p.I364V	EX4	4.3%	NM_000875.3
NC-530	TP53	c.730G>A	p.G244S	EX7	93.4%	NM_000546.5
NC-530	DCC	c.1732G>T	p.V578F	EX11	39.3%	NM_005215.3
NC-531	LRP1B	c.5683G>A	p.E1895K	EX35	6.8%	NM_018557.2
NC-531	EGFR	c.2369C>T	p.T790M	EX20	40.6%	NM_005228.3
NC-531	EGFR	c.2573T>G	p.L858R	EX21	36.1%	NM_005228.3
NC-531	MET	c.3028+770T>A	.	IVS14	1.4%	NM_000245.2
NC-532	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	46.3%	NM_005228.3
NC-532	MET	c.3029-731delA	.	IVS14	13.1%	NM_000245.2
NC-532	MLLT3	c.471CAG[10>9]	p.S149[42>41]	EX5	11.0%	NM_004529.2
NC-532	POLE	c.5179_5193delGTGGAGCTGGACCTTinsC	p.V1727Pfs*53	EX39	9.0%	NM_006231.2
NC-532	ACIN1	c.3360delAinsCCCCCCC	p.P1119[6>8]	EX17	37.1%	NM_014977.3
NC-532	PALB2	c.3355C>G	p.L1119V	EX13E	25.5%	NM_024675.3
NC-532	TP53	c.1016delA	p.E339Gfs*6	EX10	33.9%	NM_000546.5
NC-533	FH	c.1415C>G	p.A472G	EX10E	12.0%	NM_000143.3
NC-533	CTNNB1	c.122C>T	p.T41I	EX3	9.3%	NM_001904.3
NC-533	EPHA3	c.682G>A	p.G228R	EX3	11.8%	NM_005233.5
NC-533	PIK3CA	c.1633G>A	p.E545K	EX10	1.2%	NM_006218.2
NC-533	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	9.8%	NM_005228.3

NC-533	BRIP1	c.1352C>A	p.A451E	EX10	3.6%	NM_032043.2
NC-533	TFE3	c.560C>T	p.T187M	EX4	12.3%	NM_006521.4
NC-534	MSH6	c.3757G>C	p.V1253L	EX8	41.2%	NM_000179.2
NC-534	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	22.1%	NM_005228.3
NC-534	MET	c.1771C>T	p.R591W	EX6	23.5%	NM_000245.2
NC-534	NTHL1	c.306G>A	p.M102I	EX2	1.4%	NM_002528.5
NC-534	IL21R	c.1576G>A	p.E526K	EX10E	1.3%	NM_181079.4
NC-534	TP53	c.754_762delCTCACCATC	p.L252_I254del	EX7	66.5%	NM_000546.5
NC-535	CARD11	c.215G>T	p.R72L	EX3	5.6%	NM_032415.4
NC-535	EGFR	c.2573T>G	p.L858R	EX21	33.2%	NM_005228.3
NC-535	NFKBIA	c.79G>A	p.D27N	EX1	8.6%	NM_020529.2
NC-535	NCOR1	c.482C>T	p.S161L	EX5	3.2%	NM_006311.3
NC-536	PTCH2	c.403C>A	p.H135N	EX3	12.6%	NM_001166292.1
NC-536	HGF	c.1079C>G	p.S360C	EX9	9.7%	NM_000601.4
NC-536	ARID2	c.187-2A>T	.	IVS2	9.2%	NM_152641.2
NC-536	DNMT3A	c.472A>T	p.I158F	EX5	8.7%	NM_022552.4
NC-536	CDK8	c.1010A>T	p.E337V	EX10	8.6%	NM_001260.1
NC-536	RFC1	c.1842G>T	p.W614C	EX13	7.3%	NM_001204747.1
NC-536	FAT4	c.13600G>T	p.A4534S	EX17	7.2%	NM_024582.4
NC-536	TBX3	c.1408GC[5>4]	p.L473Pfs*218	EX7	6.3%	NM_016569.3
NC-536	CDC73	c.1466T>C	p.V489A	EX16	4.7%	NM_024529.4
NC-536	GATA3	c.305C>A	p.A102D	EX3	4.6%	NM_002051.2
NC-536	ALK	c.3562C>A	p.Q1188K	EX23	4.3%	NM_004304.4
NC-536	TP53	c.460G>T	p.G154C	EX5	4.1%	NM_000546.5

NC-536	ZMAT3	c.412G>T	p.G138C	EX4	3.7%	NM_022470.3
NC-536	ABCC11	c.1872G>A	p.M624I	EX14	3.5%	NM_032583.3
NC-536	THBS1	c.1874C>A	p.T625N	EX12	3.5%	NM_003246.2
NC-536	MAGI2	c.1243C>T	p.R415W	EX9	3.4%	NM_012301.3
NC-536	ABCC2	c.3539A>T	p.Q1180L	EX25	3.2%	NM_000392.3
NC-536	CTNNA2	c.944C>A	p.A315E	EX7	2.8%	NM_004389.3
NC-537	PDGFRB	c.3028A>T	p.T1010S	EX22	1.2%	NM_002609.3
NC-537	SLX4	c.1706C>T	p.P569L	EX8	1.6%	NM_032444.2
NC-537	TP53	c.814G>T	p.V272L	EX8	20.0%	NM_000546.5
NC-537	TP53	c.83A[4>3]	p.N29Tfs*15	EX3	3.4%	NM_000546.5
NC-538	LRP1B	c.9413A>G	p.D3138G	EX59	8.7%	NM_018557.2
NC-538	ERBB4	c.1467C>A	p.D489E	EX12	7.0%	NM_005235.2
NC-538	HDAC4	c.442C>T	p.R148W	EX5	8.9%	NM_006037.3
NC-538	FOXL2	c.725C>A	p.A242D	EX1E	7.2%	NM_023067.3
NC-538	FAT1	c.3709G>C	p.D1237H	EX5	1.2%	NM_005245.3
NC-538	HGF	c.2010+1G>T	.	IVS17	5.1%	NM_000601.4
NC-538	MET	c.3029-1221A>T	.	IVS14	8.7%	NM_000245.2
NC-538	CDKN2A	c.247C>T	p.H83Y	EX2	13.5%	NM_000077.4
NC-538	KRAS	c.35G>A	p.G12D	EX2	24.5%	NM_033360.2
NC-538	PALB2	c.2471G>T	p.C824F	EX5	7.2%	NM_024675.3
NC-538	TP53	c.743G>A	p.R248Q	EX7	17.1%	NM_000546.5
NC-538	ERBB2	c.2811G>T	p.K937N	EX23	2.3%	NM_004448.2
NC-538	CYP2D6	c.1075G>T	p.V359L	EX7	5.4%	NM_000106.5
NC-538	KDM5C	c.1865G>T	p.W622L	EX13	21.7%	NM_004187.3
NC-539	PIK3R1	c.1768C>T	p.R590W	EX14	10.2%	NM_181523.2
NC-539	KDM6A	c.706A>T	p.N236Y	EX9	6.1%	NM_021140.2

NC-540	MTOR	c.6179G>T	p.R2060L	EX44	14.7%	NM_004958.3
NC-540	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	67.9%	NM_005228.3
NC-540	TP53	c.742C>T	p.R248W	EX7	55.8%	NM_000546.5
NC-540	ASXL1	c.1874G>A	p.R625Q	EX13E	1.6%	NM_015338.5
NC-540	TRPC5	c.1620C>G	p.F540L	EX6	7.9%	NM_012471.2
NC-541	TERT	c.-58-u66C>T	.	.	8.6%	NM_198253.2
NC-541	EGFR	c.2573T>G	p.L858R	EX21	12.1%	NM_005228.3
NC-541	PGR	c.2169G>C	p.E723D	EX4	1.5%	NM_000926.4
NC-541	RBM10	c.695C>G	p.S232*	EX5	13.1%	NM_001204468.1
NC-542	MTOR	c.6352-2A>T	.	IVS45	19.5%	NM_004958.3
NC-542	CDKN2A	c.83_100delTGCGGGCGCTGCTGGAGG	p.V28_E33del	EX1	45.1%	NM_000077.4
NC-542	CYP19A1	c.1208G>A	p.R403K	EX10	23.4%	NM_031226.2
NC-542	ZFHX3	c.944A>C	p.K315T	EX2	33.5%	NM_006885.3
NC-542	TP53	c.512_520delAGGTTGTGA	p.E171_R174delinsG	EX5	69.0%	NM_000546.5
NC-542	NCOR1	c.733A[6>5]	p.A247Qfs*38	EX7	15.3%	NM_006311.3
NC-542	SRSF2	c.175TTCG[2>3]	p.F62Sfs*9	EX1	18.6%	NM_003016.4
NC-542	ASXL1	c.653G>A	p.R218H	EX8	38.1%	NM_015338.5
NC-543	ABL2	c.931dupA	p.S311Kfs*33	EX5	16.8%	NM_007314.3
NC-543	BCL6	c.1675_1676insTTCAGG	p.K558_G559insVQ	EX7	3.9%	NM_001706.4
NC-543	FGFR4	c.1872_1885delTGTGATGAAGATTG	p.V625*fs*1	EX14	6.4%	NM_213647.1
NC-543	TCF7L2	c.364T>C	p.S122P	EX3	20.9%	NM_001146274.1

NC-543	EXT2	c.203T>C	p.V68A	EX2	8.3%	NM_207122.1
NC-543	MLL2	c.13344C>G	p.H4448Q	EX39	10.9%	NM_003482.3
NC-543	MAP2K1	c.720CT[2>1]	p.S241Cfs*44	EX7	15.8%	NM_002755.3
NC-543	TP53	c.415A>T	p.K139*	EX5	29.0%	NM_000546.5
NC-544	MTRR	c.1180G>A	p.D394N	EX9	23.5%	NM_002454.2
NC-544	MTRR	c.1189G>A	p.E397K	EX9	24.5%	NM_002454.2
NC-544	MTRR	c.1276G>A	p.D426N	EX9	26.4%	NM_002454.2
NC-544	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	46.7%	NM_005228.3
NC-544	POT1	c.524A>G	p.D175G	EX8	36.2%	NM_015450.2
NC-545	KRAS	c.34G>T	p.G12C	EX2	54.7%	NM_033360.2
NC-545	FLCN	c.781C>T	p.L261F	EX8	33.0%	NM_144997.5
NC-545	ASMTL	c.1219G>A	p.G407R	EX9	31.1%	NM_004192.3
NC-545	PTPRD	c.5473G>C	p.G1825R	EX44	28.3%	NM_002839.3
NC-545	TP53	c.818G>T	p.R273L	EX8	28.0%	NM_000546.5
NC-545	EPHA7	c.2615G>T	p.C872F	EX15	26.1%	NM_004440.3
NC-545	GRIN2A	c.1122+1G>T	.	IVS4	25.0%	NM_001134407.1
NC-545	MAGOH	c.407T[2>1]	p.I137Lfs*24	EX5	22.8%	NM_002370.3
NC-545	MAP3K1	c.3143A>T	p.Q1048L	EX14	12.6%	NM_005921.1
NC-546	CNTN5	c.185delT	p.L62Rfs*9	EX4	7.9%	NM_014361.3
NC-546	TP53	c.645T>A	p.S215R	EX6	38.6%	NM_000546.5
NC-547	CTNNA2	c.976G>A	p.D326N	EX7	6.5%	NM_004389.3
NC-547	LRP1B	c.2251G>A	p.V751M	EX14	13.7%	NM_018557.2
NC-547	EGFR	c.2573T>G	p.L858R	EX21	48.3%	NM_005228.3
NC-548	TP53	c.451C[5>6]	p.P153Afs*28	EX5	61.7%	NM_000546.5
NC-548	FH	c.733G>T	p.G245W	EX5	68.6%	NM_000143.3

NC-548	LRP1B	c.8322C>A	p.C2774*	EX52	32.7%	NM_018557.2
NC-548	CDKN2A	c.250G>A	p.D84N	EX2	74.2%	NM_000077.4
NC-549	EPHA3	c.2071A>G	p.K691E	EX11	19.4%	NM_005233.5
NC-549	EGFR	c.2573T>G	p.L858R	EX21	27.8%	NM_005228.3
NC-549	GRM3	c.682G>A	p.E228K	EX3	4.2%	NM_000840.2
NC-549	TP53	c.376-2A>G	.	IVS4	36.2%	NM_000546.5
NC-549	PCK1	c.524G>A	p.R175Q	EX4	5.3%	NM_002591.3
NC-550	TP73	c.1038G>C	p.K346N	EX9	15.3%	NM_005427.3
NC-550	NFE2L2	c.1689A>T	p.E563D	EX5E	26.2%	NM_006164.4
NC-550	PDGFRA	c.879_881delCCAinsGCT	p.Q294L	EX6	26.0%	NM_006206.4
NC-550	AHNAK	c.8012G>T	p.G2671V	EX5E	31.2%	NM_001620.1
NC-550	TP53	c.473G>T	p.R158L	EX5	45.9%	NM_000546.5
NC-550	NF1	c.1205C>G	p.S402*	EX11	22.8%	NM_000267.3
NC-550	TCF4	c.1526G>T	p.G509V	EX17	24.2%	NM_001083962.1
NC-550	POLD1	c.668C>T	p.A223V	EX6	15.8%	NM_002691.3
NC-551	TGFBR2	c.1635C>A	p.C545*	EX8E	9.3%	NM_001024847.2
NC-551	PBRM1	c.3459-1G>A	.	IVS22	4.8%	NM_018313.4
NC-551	RAD50	c.3799A>T	p.I1267F	EX25E	11.7%	NM_005732.3
NC-551	TLX3	c.797C>G	p.S266W	EX3E	14.4%	NM_021025.2
NC-551	NTRK2	c.2227T>C	p.Y743H	EX20	13.1%	NM_006180.3
NC-551	KRAS	c.35G>A	p.G12D	EX2	16.9%	NM_033360.2
NC-551	STK11	c.464+1G>T	.	IVS3	18.3%	NM_000455.4
NC-551	KEAP1	c.715G>T	p.V239L	EX3	17.8%	NM_203500.1
NC-552	SETD2	c.6376G>A	p.E2126K	EX15	5.7%	NM_014159.6
NC-552	NOTCH4	c.2541A>C	p.L847F	EX17	5.9%	NM_004557.3

NC-552	EGFR	c.2573T>G	p.L858R	EX21	12.3%	NM_005228.3
NC-552	TLL2	c.1303G>A	p.V435I	EX11	4.6%	NM_012465.3
NC-552	TP53	c.469G>T	p.V157F	EX5	14.1%	NM_000546.5
NC-552	SERPINB3	c.638_664delTGAGGCAATACACATCTTTTCATTTTG	p.M213_A222delinsT	EX7	3.3%	NM_006919.2
NC-552	ARAF	c.485C>G	p.S162C	EX6	12.1%	NM_001654.4
NC-553	EPHA2	c.53T>G	p.L18R	EX1	19.7%	NM_004431.3
NC-553	ARID1A	c.3413C>G	p.S1138*	EX13	41.1%	NM_006015.4
NC-553	ARID1A	c.3446C>T	p.S1149L	EX13	45.1%	NM_006015.4
NC-553	ARID1A	c.3590C>A	p.S1197Y	EX14	52.5%	NM_006015.4
NC-553	ARID1A	c.3694C>G	p.P1232A	EX14	42.4%	NM_006015.4
NC-553	LRP1B	c.5417G>A	p.R1806K	EX33	41.8%	NM_018557.2
NC-553	MLL3	c.2417C>T	p.S806F	EX14	7.7%	NM_170606.2
NC-553	EPPK1	c.7196A>T	p.Q2399L	EX1E	12.5%	NM_031308.1
NC-553	RB1	c.2206C>T	p.Q736*	EX21	75.2%	NM_000321.2
NC-553	ERCC4	c.313G>A	p.G105S	EX2	25.4%	NM_005236.2
NC-553	TP53	c.406C>G	p.Q136E	EX5	56.5%	NM_000546.5
NC-554	HIST1H3G	c.403A>G	p.R135G	EX1E	10.9%	NM_003534.2
NC-554	MET	c.3029-109T>A	.	IVS14	1.8%	NM_000245.2
NC-554	ARID5B	c.1233AGA[3>2]	p.E412[2>1]	EX9	9.6%	NM_032199.2
NC-554	TP53	c.560-2A>G	.	IVS5	47.4%	NM_000546.5
NC-554	NOTCH3	c.164G>A	p.C55Y	EX2	37.4%	NM_000435.2
NC-555	TXNIP	c.64G>T	p.G22C	EX1	39.7%	NM_006472.3
NC-555	CTNNA2	c.944C>A	p.A315E	EX7	19.0%	NM_004389.3
NC-555	EPHA3	c.2938C>T	p.P980S	EX17E	45.1%	NM_005233.5

NC-555	SLC22A16	c.145_146delCAinsTG	p.H49C	EX2	21.7%	NM_033125.3
NC-555	CARD11	c.1852TCC[5>4]	p.S618[5>4]	EX15	1.4%	NM_032415.4
NC-555	POT1	c.1145G>A	p.C382Y	EX13	28.2%	NM_015450.2
NC-555	EZH2	c.251C>T	p.S84L	EX4	1.1%	NM_004456.4
NC-555	CDKN2A	c.322G>T	p.D108Y	EX2	60.3%	NM_000077.4
NC-555	GATA3	c.1027C>A	p.L343I	EX5	20.9%	NM_002051.2
NC-555	GATA3	c.1326G>T	p.M442I	EX6E	22.6%	NM_002051.2
NC-555	MLL2	c.2398C>T	p.Q800*	EX10	29.6%	NM_003482.3
NC-555	TP53	c.310C>T	p.Q104*	EX4	28.7%	NM_000546.5
NC-555	TP53	c.97-1G>T	.	IVS3	32.6%	NM_000546.5
NC-555	IGLL5	c.521A>T	p.Y174F	EX3E	32.5%	NM_001178126.1
NC-555	EP300	c.5288G>A	p.R1763Q	EX31E	1.1%	NM_001429.3
NC-556	CTNNB1	c.520A>G	p.M174V	EX5	3.1%	NM_001904.3
NC-556	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	25.0%	NM_005228.3
NC-557	PIK3CA	c.1252G>A	p.E418K	EX8	17.3%	NM_006218.2
NC-557	FAT1	c.13045G>A	p.E4349K	EX26	13.1%	NM_005245.3
NC-557	DDR1	c.1335G>C	p.R445S	EX12	1.9%	NM_001954.4
NC-557	EGFR	c.2252_2275delCATCTCCGAAAGCCAACAAGGAAA	p.T751_E758del	EX19	10.6%	NM_005228.3
NC-557	EGFR	c.2276T>G	p.I759S	EX19	14.2%	NM_005228.3
NC-557	TSC2	c.1378G>A	p.A460T	EX14	9.9%	NM_000548.3
NC-557	DOT1L	c.1184G>A	p.R395H	EX14	2.4%	NM_032482.2
NC-558	EGFR	c.2573T>G	p.L858R	EX21	27.8%	NM_005228.3
NC-558	RBM10	c.994C>T	p.Q332*	EX9	38.1%	NM_001204468.1

NC-558	BTK	c.1150G>A	p.A384T	EX13	34.3%	NM_000061.2
NC-559	TP53	c.244C[2>1]	p.P82Rfs*41	EX4	24.0%	NM_000546.5
NC-559	SMAD2	c.1036T>A	p.F346I	EX9	2.3%	NM_001003652.3
NC-559	U2AF1	c.101C>T	p.S34F	EX2	19.4%	NM_006758.2
NC-560	EPHA3	c.512T>A	p.V171E	EX3	1.4%	NM_005233.5
NC-560	APC	c.879T[2>1]	p.S294Lfs*11	EX9	34.6%	NM_000038.5
NC-560	CBL	c.1750A>G	p.S584G	EX11	26.9%	NM_005188.3
NC-560	ERBB2	c.1976_1977delTTinsAA	p.V659E	EX17	34.2%	NM_004448.2
NC-560	BRIP1	c.1670C>A	p.S557Y	EX12	1.5%	NM_032043.2
NC-561	SLC16A1	c.1477C[3>2]	p.K494Rfs*20	EX5E	4.9%	NM_003051.3
NC-561	PDK1	c.996C>G	p.F332L	EX9	1.6%	NM_002610.3
NC-561	ERBB3	c.2537G>T	p.S846I	EX21	17.3%	NM_001982.3
NC-561	TP53	c.838A>T	p.R280*	EX8	15.8%	NM_000546.5
NC-562	RAC1	c.31G>C	p.D11H	EX1	4.7%	NM_018890.3
NC-562	NAV3	c.1834G>T	p.G612C	EX8	1.8%	NM_014903.4
NC-563	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	10.6%	NM_005228.3
NC-563	BRCA1	c.3661G>C	p.E1221Q	EX10	4.8%	NM_007294.3
NC-564	APC	c.3245C>T	p.T1082I	EX16E	1.7%	NM_000038.5
NC-564	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	48.4%	NM_005228.3
NC-564	PTEN	c.367C>G	p.H123D	EX5	1.7%	NM_000314.4
NC-564	WSCD2	c.616G>A	p.V206M	EX4	14.5%	NM_014653.2
NC-564	TP53	c.659A>G	p.Y220C	EX6	44.2%	NM_000546.5
NC-564	NOTCH3	c.6266C>T	p.P2089L	EX33E	42.1%	NM_000435.2
NC-565	CTNNB1	c.98C>G	p.S33C	EX3	4.1%	NM_001904.3

NC-565	CTNNB1	c.133T>C	p.S45P	EX3	2.2%	NM_001904.3
NC-565	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	21.1%	NM_005228.3
NC-565	ACVR1B	c.970G>A	p.D324N	EX6	2.1%	NM_020328.3
NC-565	MAP2K4	c.551C>T	p.S184L	EX5	1.6%	NM_003010.2
NC-565	CDK12	c.2530A>T	p.M844L	EX6	3.1%	NM_016507.2
NC-565	NF2	c.1387G>A	p.E463K	EX13	1.2%	NM_000268.3
NC-566	LRP1B	c.7971G>T	p.W2657C	EX49	6.4%	NM_018557.2
NC-566	FAT1	c.5832A[2>1]	p.R1945Efs*6	EX10	6.3%	NM_005245.3
NC-566	ARID1B	c.1425G>C	p.L475F	EX1	7.3%	NM_020732.3
NC-566	KRAS	c.34G>T	p.G12C	EX2	42.1%	NM_033360.2
NC-566	TP53	c.375+1delG	.	IVS4	15.0%	NM_000546.5
NC-566	STK11	c.521A>T	p.H174L	EX4	16.8%	NM_000455.4
NC-566	KEAP1	c.404delG	p.R135Pfs*22	EX2	14.5%	NM_203500.1
NC-566	RAC2	c.417C[3>4]	p.Q141Afs*10	EX5	15.0%	NM_002872.3
NC-567	FAT2	c.969G>A	p.M323I	EX1	18.4%	NM_001447.2
NC-568	MAP3K1	c.3116C>T	p.S1039L	EX14	6.5%	NM_005921.1
NC-568	EGFR	c.721A>G	p.T241A	EX6	6.5%	NM_005228.3
NC-568	EGFR	c.1781C>G	p.T594S	EX15	6.4%	NM_005228.3
NC-568	CDH23	c.2836G>A	p.V946M	EX25	29.3%	NM_022124.5
NC-568	TP53	c.839G>C	p.R280T	EX8	16.8%	NM_000546.5
NC-568	KCNQ2	c.1394G>A	p.R465Q	EX13	4.9%	NM_172107.2
NC-568	TMPRSS2	c.586C>T	p.Q196*	EX6	5.6%	NM_001135099.1
NC-568	EGFR	c.2235_2252delGGAATTAAGAGAAGCAACinsAAT	p.E746_T751delinsI	EX19	12.6%	NM_005228.3

NC-569	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	5.3%	NM_005228.3
NC-570	PIK3CB	c.2461C>T	p.R821C	EX17	3.0%	NM_006219.2
NC-570	HOXA3	c.508A>C	p.T170P	EX3	2.5%	NM_153631.2
NC-570	EGFR	c.2573T>G	p.L858R	EX21	36.4%	NM_005228.3
NC-570	XRCC2	c.176A>G	p.Y59C	EX3E	1.6%	NM_005431.1
NC-570	SMAD3	c.1139G>A	p.W380*	EX8	3.1%	NM_005902.3
NC-570	TP53	c.843C[2>1]	p.R282Gfs*63	EX8	34.7%	NM_000546.5
NC-570	STAG2	c.832_833delCA	p.Q278Rfs*2	EX10	6.5%	NM_001042749.1
NC-571	SOX2	c.117_120delCCGC	p.D39Efs*6	EX1E	1.9%	NM_003106.3
NC-572	ESR1	c.1142G>C	p.C381S	EX6	5.6%	NM_001122740.1
NC-572	ABCA13	c.13785C>G	p.I4595M	EX52	1.2%	NM_152701.3
NC-572	EGFR	c.1793G>T	p.G598V	EX15	1.4%	NM_005228.3
NC-572	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	34.4%	NM_005228.3
NC-572	PTPRD	c.425C>T	p.T142M	EX15	1.3%	NM_002839.3
NC-572	IFNG	c.485G>A	p.R162Q	EX4E	1.1%	NM_000619.2
NC-573	FMN2	c.2882G>A	p.G961E	EX5	6.5%	NM_020066.4
NC-573	SETD2	c.1597C>A	p.P533T	EX3	41.2%	NM_014159.6
NC-573	FAT2	c.12484G>A	p.V4162I	EX22	15.6%	NM_001447.2
NC-573	HGF	c.1168+1G>T	.	IVS9	11.8%	NM_000601.4
NC-573	MLL3	c.14404G>A	p.G4802R	EX56	23.7%	NM_170606.2
NC-573	CDKN2A	c.124_125insG	p.N42Rfs*2	EX1	32.9%	NM_000077.4
NC-573	GAB2	c.1299C>A	p.F433L	EX5	12.9%	NM_080491.2
NC-573	IRS2	c.931T>G	p.S311A	EX1	3.7%	NM_003749.2
NC-573	HSP90AA1	c.1187AGA[6>5]	p.K396[6>5]	EX6	14.7%	NM_001017963.2

NC-573	TSC2	c.482C>T	p.A161V	EX6	14.4%	NM_000548.3
NC-573	GRIN2A	c.3926G>A	p.R1309Q	EX13E	12.5%	NM_001134407.1
NC-573	TP53	c.949C>T	p.Q317*	EX9	33.5%	NM_000546.5
NC-573	TOP1	c.2150G>T	p.G717V	EX20	14.2%	NM_003286.2
NC-573	KDM5C	c.523C>T	p.Q175*	EX5	24.4%	NM_004187.3
NC-574	DNMT3A	c.218C[2>3]	p.K74Qfs*25	EX4	9.8%	NM_022552.4
NC-574	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	15.3%	NM_005228.3
NC-574	TP53	c.949C>T	p.Q317*	EX9	13.4%	NM_000546.5
NC-575	ARID1A	c.2725C>A	p.Q909K	EX8	22.6%	NM_006015.4
NC-575	PMS2	c.1332G>T	p.R444S	EX11	17.4%	NM_000535.5
NC-575	MET	c.3028+587G>C	.	IVS14	7.8%	NM_000245.2
NC-575	PREX2	c.2267G>T	p.W756L	EX21	16.3%	NM_024870.2
NC-575	CDKN2A	c.59C>A	p.A20E	EX1	24.3%	NM_000077.4
NC-575	TP53	c.832C>A	p.P278T	EX8	14.9%	NM_000546.5
NC-575	TP53	c.296_298delCCC	p.S99*	EX4	16.2%	NM_000546.5
NC-576	G3BP2	c.1227_1228delAA	p.R410Sfs*12	EX12E	3.9%	NM_203505.2
NC-576	ARID1B	c.1340C>T	p.P447L	EX1	33.1%	NM_020732.3
NC-576	CDK6	c.658C>G	p.R220G	EX6	27.0%	NM_001145306.1
NC-576	BMPR1A	c.409A>T	p.T137S	EX6	26.0%	NM_004329.2
NC-576	GAB2	c.1754T>C	p.V585A	EX8	28.9%	NM_080491.2
NC-576	RB1	c.288G[2>1]	p.E97Nfs*14	EX3	35.5%	NM_000321.2
NC-576	TP53	c.469G>T	p.V157F	EX5	38.5%	NM_000546.5
NC-576	CRKL	c.337G>C	p.V113L	EX2	25.4%	NM_005207.3
NC-577	HIST1H1C	c.618G>C	p.K206N	EX1E	23.0%	NM_005319.3

NC-577	EGFR	c.2237_2251delAATTAAGAGAAGCAA	p.E746_T751delinsA	EX19	43.4%	NM_005228.3
NC-577	EGFR	c.2944C>T	p.Q982*	EX24	1.4%	NM_005228.3
NC-577	RINT1	c.1306C>T	p.Q436*	EX9	4.8%	NM_021930.4
NC-577	PIK3CG	c.1033G>T	p.D345Y	EX2	38.7%	NM_002649.2
NC-577	RAD21	c.997G>C	p.D333H	EX9	27.5%	NM_006265.2
NC-577	FANCG	c.130_131delCAinsTC	p.Q44S	EX2	35.8%	NM_004629.1
NC-577	RECQL	c.1203G>C	p.E401D	EX10	7.2%	NM_002907.3
NC-577	BRCA2	c.8941G>T	p.E2981*	EX22	3.4%	NM_000059.3
NC-577	FANCM	c.2773A>T	p.T925S	EX14	1.5%	NM_020937.2
NC-577	TP53	c.716A>G	p.N239S	EX7	46.8%	NM_000546.5
NC-577	JAK3	c.2887G>A	p.V963I	EX21	8.6%	NM_000215.3
NC-577	KDM5C	c.3475G>C	p.E1159Q	EX23	36.8%	NM_004187.3
NC-577	ATRX	c.5222G>A	p.R1741K	EX20	11.0%	NM_000489.3
NC-578	RNASEL	c.604G>T	p.G202C	EX2	12.5%	NM_021133.3
NC-578	DNMT3A	c.2057A>T	p.D686V	EX17	24.1%	NM_022552.4
NC-578	CUL3	c.48G>T	p.M16I	EX1	11.5%	NM_003590.4
NC-578	CBLB	c.1477C>T	p.Q493*	EX11	10.3%	NM_170662.3
NC-578	EPHB1	c.1519C>A	p.R507S	EX7	23.8%	NM_004441.4
NC-578	FGF10	c.285C>A	p.N95K	EX1	2.1%	NM_004465.1
NC-578	EGFR	c.2573T>G	p.L858R	EX21	52.8%	NM_005228.3
NC-578	NF1	c.2376_2377insG	p.N793Efs*14	EX20	15.7%	NM_000267.3
NC-578	ERBB2	c.929C>T	p.S310F	EX8	27.7%	NM_004448.2
NC-578	RBM10	c.1355+1G>T	.	IVS11	42.5%	NM_001204468.1
NC-579	FAT1	c.6641T>G	p.V2214G	EX10	14.9%	NM_005245.3
NC-579	EGFR	c.2573T>G	p.L858R	EX21	88.7%	NM_005228.3

NC-579	PALB2	c.376G>A	p.E126K	EX4	22.3%	NM_024675.3
NC-579	TP53	c.659A>G	p.Y220C	EX6	39.4%	NM_000546.5
NC-579	CDK12	c.3377_3378delAAinsCC	p.Q1126P	EX13	1.0%	NM_016507.2
NC-580	EGFR	c.2573T>G	p.L858R	EX21	17.2%	NM_005228.3
NC-580	MLL	c.9902C>T	p.P3301L	EX27	5.8%	NM_001197104.1
NC-580	FANCA	c.343G>A	p.G115R	EX4	3.2%	NM_000135.2
NC-580	TP53	c.390CAA[2>1]	p.N131del	EX5	5.2%	NM_000546.5
NC-581	PTCH2	c.2812G>A	p.G938S	EX18	1.0%	NM_001166292.1
NC-581	LRP1B	c.2586G>A	p.W862*	EX16	4.5%	NM_018557.2
NC-581	FBXW7	c.1725C>A	p.H575Q	EX11	27.0%	NM_033632.3
NC-581	EGFR	c.2318_2320delACGinsTCA	p.H773_V774delinsLM	EX20	63.4%	NM_005228.3
NC-581	PIK3CG	c.3205C>T	p.L1069F	EX11E	20.5%	NM_002649.2
NC-581	TP53	c.329G>T	p.R110L	EX4	55.5%	NM_000546.5
NC-582	LRP1B	c.12359G>A	p.R4120K	EX81	8.0%	NM_018557.2
NC-582	ERBB4	c.2791G>T	p.D931Y	EX23	26.0%	NM_005235.2
NC-582	C3orf70	c.463C>T	p.H155Y	EX2E	49.6%	NM_001025266.1
NC-582	CARD11	c.3422A>T	p.E1141V	EX25E	21.4%	NM_032415.4
NC-582	CDK13	c.3266A>T	p.H1089L	EX13	18.7%	NM_003718.4
NC-582	BRAF	c.1406G>C	p.G469A	EX11	37.3%	NM_004333.4
NC-582	SYK	c.1042T>A	p.Y348N	EX9	22.9%	NM_003177.5
NC-582	MS4A1	c.198G[6>7]	p.L69Sfs*72	EX4	9.8%	NM_152866.2
NC-582	MLL2	c.7694A>G	p.H2565R	EX31	20.3%	NM_003482.3
NC-582	NTRK3	c.2378G>T	p.R793L	EX20E	20.8%	NM_001012338.2
NC-582	TP53	c.461G>T	p.G154V	EX5	34.3%	NM_000546.5

NC-582	KEAP1	c.997G>T	p.G333C	EX3	27.1%	NM_203500.1
NC-582	CYP2D6	c.110C>T	p.P37L	EX1	12.1%	NM_000106.5
NC-583	EGFR	c.2313_2314insGGC	p.N771_P772insG	EX20	45.8%	NM_005228.3
NC-583	TP53	c.747G>T	p.R249S	EX7	20.9%	NM_000546.5
NC-583	EPOR	c.419A>G	p.N140S	EX3	17.0%	NM_000121.3
NC-583	BMPR1A	c.340C>T	p.P114S	EX6	16.1%	NM_004329.2
NC-583	LRP1B	c.13243T>A	p.C4415S	EX86	15.5%	NM_018557.2
NC-583	LRP1B	c.6491_6492delCCinsAA	p.S2164*	EX41	14.8%	NM_018557.2
NC-583	DNMT3A	c.2462A>G	p.H821R	EX21	13.7%	NM_022552.4
NC-583	BRIP1	c.2371G>T	p.D791Y	EX16	13.2%	NM_032043.2
NC-583	PMS2	c.-87-u39C>A	.	.	9.7%	NM_000535.5
NC-583	ROS1	c.438+1G>T	.	IVS5	3.5%	NM_002944.2
NC-584	NTRK1	c.722C>A	p.S241Y	EX7	6.2%	NM_002529.3
NC-584	EGFR	c.2573T>G	p.L858R	EX21	55.7%	NM_005228.3
NC-584	TP53	c.1051_1058delAAGGATGC	p.K351Pfs*28	EX10	42.4%	NM_000546.5
NC-585	SF3B1	c.3512C>T	p.P1171L	EX23	6.9%	NM_012433.2
NC-585	EGFR	c.3448_3459delACATTCGACAGC	p.T1150_S1153del	EX28E	4.8%	NM_005228.3
NC-585	ERCC5	c.1365G[2>1]	p.E456Sfs*3	EX8	7.1%	NM_000123.3
NC-585	EPOR	c.406G>A	p.V136I	EX3	7.1%	NM_000121.3
NC-586	BAZ2B	c.1760T>A	p.L587*	EX9	8.6%	NM_013450.2
NC-586	NOTCH4	c.1442C>T	p.S481F	EX8	4.7%	NM_004557.3
NC-586	EGFR	c.2573T>G	p.L858R	EX21	13.5%	NM_005228.3
NC-586	RBM10	c.2388_2391dupCTAC	p.S798Lfs*6	EX20	20.5%	NM_001204468.1

NC-587	NOTCH2	c.1174A>T	p.T392S	EX7	16.4%	NM_024408.3
NC-587	MYCN	c.28C>T	p.P10S	EX2	20.9%	NM_005378.4
NC-587	EGFR	c.2224G>T	p.V742F	EX19	27.2%	NM_005228.3
NC-587	SCUBE2	c.1975G>C	p.G659R	EX16	15.8%	NM_020974.2
NC-587	TP53	c.718delA	p.S240Vfs*7	EX7	28.0%	NM_000546.5
NC-587	SERPINB4	c.699A>C	p.E233D	EX7	27.1%	NM_002974.2
NC-587	TBX22	c.98C>T	p.P33L	EX2	25.8%	NM_001109878.1
NC-589	CSF1R	c.360C[2>1]	p.Q121Rfs*60	EX4	4.7%	NM_005211.3
NC-589	MLL3	c.9710T>C	p.V3237A	EX42	4.8%	NM_170606.2
NC-589	MS4A1	c.708A>T	p.K236N	EX8E	7.0%	NM_152866.2
NC-589	ARID2	c.3298C>T	p.Q1100*	EX15	4.0%	NM_152641.2
NC-589	ARID2	c.4040A[2>1]	p.D1348Ifs*6	EX15	6.9%	NM_152641.2
NC-589	RB1	c.184C>T	p.Q62*	EX2	8.5%	NM_000321.2
NC-589	TP53	c.213_215delCCCinsG	p.P72Rfs*76	EX4	6.7%	NM_000546.5
NC-589	NF1	c.3579T>G	p.F1193L	EX27	8.6%	NM_000267.3
NC-589	RAD54L	c.209A>G	p.H70R	EX4	2.0%	NM_001142548.1
NC-589	FCGR2B	c.808G>A	p.E270K	EX6	1.1%	NM_004001.4
NC-589	FCGR2B	c.859G>A	p.E287K	EX8E	1.0%	NM_004001.4
NC-589	NFE2L2	c.242G>A	p.G81D	EX2	7.0%	NM_006164.4
NC-589	PMS1	c.656T>C	p.M219T	EX6	7.3%	NM_000534.4
NC-589	PIK3CA	c.1480G>C	p.E494Q	EX9	9.4%	NM_006218.2
NC-589	FAT1	c.2863G>C	p.D955H	EX2	5.1%	NM_005245.3
NC-589	TP73	c.649G>T	p.V217L	EX6	2.3%	NM_005427.3
NC-590	MDM4	c.829G>A	p.E277K	EX10	10.2%	NM_002393.4
NC-590	RAF1	c.1171A>T	p.R391W	EX11	8.5%	NM_002880.3
NC-590	ATR	c.6147G>T	p.L2049F	EX36	10.8%	NM_001184.3

NC-590	CTNNA1	c.712delAinsTT	p.K238Lfs*47	EX6	6.5%	NM_001903.2
NC-590	ROS1	c.1682C>T	p.P561L	EX12	4.7%	NM_002944.2
NC-590	POT1	c.248G>A	p.R83K	EX7	5.9%	NM_015450.2
NC-590	BNC2	c.577C>A	p.L193I	EX5	12.1%	NM_017637.5
NC-590	EGFL7	c.100C>G	p.R34G	EX5	12.6%	NM_016215.4
NC-590	C11orf30	c.1108G>T	p.G370C	EX8	15.4%	NM_020193.3
NC-590	TP53	c.818G>C	p.R273P	EX8	12.9%	NM_000546.5
NC-590	BRCA1	c.5567C>T	p.P1856L	EX23E	9.2%	NM_007294.3
NC-591	NOTCH2	c.1587C>G	p.C529W	EX10	38.5%	NM_024408.3
NC-591	ALK	c.1720G>A	p.G574R	EX9	26.1%	NM_004304.4
NC-591	NOTCH1	c.3653G>C	p.C1218S	EX23	47.5%	NM_017617.3
NC-591	MLL2	c.12696G>C	p.Q4232H	EX39	24.1%	NM_003482.3
NC-591	RB1	c.2107-1G>T	.	IVS20	83.7%	NM_000321.2
NC-591	IRS2	c.2834C>T	p.S945F	EX1	36.2%	NM_003749.2
NC-591	TP53	c.851C>T	p.T284I	EX8	86.8%	NM_000546.5
NC-591	TP53	c.96+1G>A	.	IVS3	84.4%	NM_000546.5
NC-591	ADAMTS5	c.384C>A	p.S128R	EX1	55.5%	NM_007038.3
NC-592	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	5.2%	NM_004448.2
NC-592	U2AF1	c.101C>T	p.S34F	EX2	4.2%	NM_006758.2
NC-593	ERBB4	c.425T>A	p.I142N	EX4	5.3%	NM_005235.2
NC-593	TGFBR2	c.449A[10>11]	p.P154Afs*3	EX4	13.0%	NM_001024847.2
NC-593	SETD2	c.5409T[3>2]	p.L1804Wfs*34	EX12	16.2%	NM_014159.6
NC-593	TET2	c.412C>T	p.Q138*	EX3	3.6%	NM_001127208.2
NC-593	APC	c.8044G>A	p.V2682M	EX16E	2.4%	NM_000038.5
NC-593	EGFR	c.2303G>T	p.S768I	EX20	16.5%	NM_005228.3

NC-593	PTEN	c.892C>T	p.Q298*	EX8	1.6%	NM_000314.4
NC-594	SF3B1	c.2196G>T	p.W732C	EX15	12.3%	NM_012433.2
NC-594	PIK3CA	c.1401T>G	p.N467K	EX8	10.8%	NM_006218.2
NC-594	ROS1	c.3477_3500delTCTTGGTAACAAGATAGTTTTTTT	p.L1160_L1167del	EX23	13.2%	NM_002944.2
NC-594	FGF23	c.479G>A	p.R160Q	EX3E	10.5%	NM_020638.2
NC-594	KRAS	c.34G>T	p.G12C	EX2	54.2%	NM_033360.2
NC-594	TP53	c.820G>T	p.V274F	EX8	22.6%	NM_000546.5
NC-594	NF1	c.22G>T	p.E8*	EX1	25.8%	NM_000267.3
NC-595	EGFR	c.2573T>G	p.L858R	EX21	20.7%	NM_005228.3
NC-595	EXT1	c.2179G>A	p.V727I	EX11	13.8%	NM_000127.2
NC-595	GRIN2A	c.3464G>A	p.S1155N	EX13	13.3%	NM_001134407.1
NC-595	TP53	c.831T>A	p.C277*	EX8	13.2%	NM_000546.5
NC-595	AKT3	c.1054G>A	p.E352K	EX10	12.7%	NM_005465.4
NC-595	EGFR	c.2369C>T	p.T790M	EX20	8.0%	NM_005228.3
NC-595	TP53	c.839_857delGAGACCGGCGCACAGAGGA	p.R280Kfs*59	EX8	5.8%	NM_000546.5
NC-595	SCUBE2	c.1870G>A	p.A624T	EX16	5.5%	NM_020974.2
NC-595	HGF	c.865G>C	p.A289P	EX7	5.2%	NM_000601.4
NC-596	TGFBR2	c.1454G>T	p.R485L	EX6	8.7%	NM_001024847.2
NC-596	ROBO3	c.217C>G	p.L73V	EX2	7.5%	NM_022370.3
NC-596	TP53	c.404G>T	p.C135F	EX5	7.8%	NM_000546.5
NC-596	NF1	c.1400_1401delCA	p.T467Ifs*2	EX13	10.2%	NM_000267.3
NC-597	EGFR	c.1951G>A	p.V651M	EX17	55.1%	NM_005228.3
NC-597	EGFR	c.2573T>G	p.L858R	EX21	53.0%	NM_005228.3

NC-597	OR4A15	c.545T>G	p.L182R	EX1E	7.8%	NM_001005275.1
NC-597	PCSK6	c.898G>A	p.D300N	EX7	7.8%	NM_002570.3
NC-597	TP53	c.470T>G	p.V157G	EX5	18.8%	NM_000546.5
NC-597	CDK12	c.3377_3378delAAinsCC	p.Q1126P	EX13	1.8%	NM_016507.2
NC-598	GRM3	c.1466C>A	p.T489N	EX4	1.0%	NM_000840.2
NC-599	APC	c.5572C>T	p.R1858*	EX16E	1.1%	NM_000038.5
NC-599	KRAS	c.35G>A	p.G12D	EX2	24.3%	NM_033360.2
NC-599	TP53	c.1010G>A	p.R337H	EX10	10.2%	NM_000546.5
NC-599	TP53	c.517G>T	p.V173L	EX5	2.4%	NM_000546.5
NC-599	CD22	c.824C>T	p.T275M	EX5	1.3%	NM_001771.3
NC-599	CSNK2A1	c.127C>T	p.R43*	EX4	11.7%	NM_177559.2
NC-600	JUN	c.930_931delGA	p.K311Sfs*6	EX1E	15.4%	NM_002228.3
NC-600	NSD1	c.5974G>C	p.D1992H	EX19	1.3%	NM_022455.4
NC-600	EGFR	c.2573T>G	p.L858R	EX21	36.4%	NM_005228.3
NC-600	TP53	c.733G>A	p.G245S	EX7	27.7%	NM_000546.5
NC-600	BRCA1	c.224_227delAAAG	p.E75Vfs*12	EX5	19.5%	NM_007294.3
NC-600	BCOR	c.1618C>T	p.R540W	EX4	11.8%	NM_001123385.1
NC-601	EGFR	c.2237_2255delAATTAAGAGAAGCAACATCinsT	p.E746_S752delinsV	EX19	19.2%	NM_005228.3
NC-601	ATM	c.8398_8407delCAGTGCCAAA	p.Q2800Rfs*3	EX57	23.1%	NM_000051.3
NC-601	MLL2	c.2521T>A	p.C841S	EX10	2.0%	NM_003482.3
NC-601	NOTCH3	c.3017G>T	p.R1006L	EX19	30.1%	NM_000435.2
NC-601	STAG2	c.913C>T	p.R305*	EX11	9.1%	NM_001042749.1

NC-602	MTOR	c.5000C>A	p.A1667D	EX36	1.6%	NM_004958.3
NC-602	LRP1B	c.12151C>T	p.H4051Y	EX79	2.7%	NM_018557.2
NC-602	LRP1B	c.9713G>T	p.S3238I	EX61	1.9%	NM_018557.2
NC-602	INPP4B	c.889C>T	p.R297*	EX13	5.4%	NM_001101669.1
NC-602	EGFR	c.2573T>G	p.L858R	EX21	13.8%	NM_005228.3
NC-603	PBRM1	c.3227T>G	p.F1076C	EX21	21.3%	NM_018313.4
NC-603	ROS1	c.6094G>A	p.G2032R	EX38	11.4%	NM_002944.2
NC-603	ROS1	c.5528G>T	p.G1843V	EX33	36.9%	NM_002944.2
NC-603	ATM	c.5911G>A	p.E1971K	EX39	4.9%	NM_000051.3
NC-604	SEMA6A	c.142C>T	p.R48W	EX3	15.8%	NM_020796.3
NC-605	ERBB4	c.257A>G	p.Y86C	EX3	1.1%	NM_005235.2
NC-605	FANCD2	c.32_33delAGinsGT	p.E11G	EX2	1.0%	NM_033084.3
NC-605	HIST1H3D	c.263C>A	p.S88*	EX2E	17.2%	NM_003530.3
NC-605	FGF3	c.355G>T	p.E119*	EX3E	1.2%	NM_005247.2
NC-605	POLD1	c.31C>G	p.P11A	EX2	1.5%	NM_002691.3
NC-606	FANCA	c.3457G>A	p.D1153N	EX35	5.3%	NM_000135.2
NC-606	SMARCA4	c.3566G>T	p.R1189L	EX26	5.0%	NM_003072.3
NC-606	TP53	c.586C>T	p.R196*	EX6	4.8%	NM_000546.5
NC-607	ATR	c.3904C>T	p.H1302Y	EX21	3.5%	NM_001184.3
NC-607	APC	c.3646G>A	p.E1216K	EX16E	23.4%	NM_000038.5
NC-607	HGF	c.491C>G	p.P164R	EX5	10.8%	NM_000601.4
NC-607	NTRK2	c.2025G>T	p.Q675H	EX19	21.1%	NM_006180.3
NC-607	TP53	c.839G>C	p.R280T	EX8	11.7%	NM_000546.5
NC-607	SMARCA4	c.2802G>C	p.K934N	EX19	12.1%	NM_003072.3
NC-607	CEBPA	c.283G>A	p.V95M	EX1E	3.7%	NM_004364.3
NC-608	TP53	c.584T>C	p.I195T	EX6	66.0%	NM_000546.5

NC-608	MLL2	c.12526G>C	p.G4176R	EX39	58.3%	NM_003482.3
NC-608	EGFR	c.2572_2573delCTinsAG	p.L858R	EX21	47.4%	NM_005228.3
NC-608	EGFR	c.2369C>T	p.T790M	EX20	14.0%	NM_005228.3
NC-608	C7orf53	c.232G>T	p.V78F	EX3	12.8%	NM_182597.2
NC-608	CREBBP	c.865G>A	p.G289R	EX3	10.2%	NM_004380.2
NC-608	EGFR	c.2390G>C	p.C797S	EX20	7.4%	NM_005228.3
NC-608	ALK	c.379C>G	p.L127V	EX1	1.6%	NM_004304.4
NC-609	ARID1A	c.2183_2189delCACCCAG	p.P728Lfs*12	EX6	35.1%	NM_006015.4
NC-609	EGFR	c.2573T>G	p.L858R	EX21	84.5%	NM_005228.3
NC-609	NFKBIA	c.764A>T	p.Q255L	EX5	31.8%	NM_020529.2
NC-609	TP53	c.661G>T	p.E221*	EX6	55.4%	NM_000546.5
NC-610	CD5L	c.265G>T	p.V89F	EX3	16.7%	NM_005894.2
NC-610	SPTA1	c.2758C>A	p.P920T	EX19	14.6%	NM_003126.2
NC-610	MST1R	c.941G>T	p.G314V	EX1	28.0%	NM_002447.2
NC-610	INPP4B	c.442G>T	p.A148S	EX9	15.0%	NM_001101669.1
NC-610	NPM1	c.259G>T	p.V87F	EX4	3.4%	NM_002520.6
NC-610	HOXA3	c.409C>A	p.P137T	EX3	22.0%	NM_153631.2
NC-610	POM121L12	c.431C>A	p.P144H	EX1E	19.7%	NM_182595.3
NC-610	POT1	c.365A>T	p.Y122F	EX8	4.8%	NM_015450.2
NC-610	POT1	c.337C>A	p.P113T	EX8	4.7%	NM_015450.2
NC-610	C11orf30	c.758C>T	p.P253L	EX7	12.8%	NM_020193.3
NC-610	KRAS	c.34G>T	p.G12C	EX2	46.8%	NM_033360.2
NC-610	NTHL1	c.214G>A	p.D72N	EX2	3.1%	NM_002528.5
NC-610	ABCC11	c.2141G>T	p.G714V	EX16	28.0%	NM_032583.3
NC-610	KEAP1	c.833C>G	p.P278R	EX3	26.4%	NM_203500.1

NC-610	EPOR	c.227A>G	p.N76S	EX2	26.4%	NM_000121.3
NC-610	MAPK1	c.97G>A	p.E33K	EX1	12.3%	NM_002745.4
NC-611	FOXQ1	c.352C[3>2]	p.K119Sfs*22	EX1E	8.9%	NM_033260.3
NC-612	TP53	c.956_963delAGAAGAAA	p.K319Tfs*15	EX9	19.4%	NM_000546.5
NC-612	AXL	c.1103G>A	p.R368Q	EX8	9.2%	NM_021913.3
NC-612	LRP1B	c.8902G>T	p.D2968Y	EX56	4.2%	NM_018557.2
NC-612	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	16.5%	NM_005228.3
NC-612	MLL3	c.9518-1G>C	.	IVS41	13.8%	NM_170606.2
NC-612	MLL3	c.422A[6>7]	p.S143Kfs*27	EX4	4.5%	NM_170606.2
NC-612	CDKN2A	c.148C>T	p.Q50*	EX1	15.7%	NM_000077.4
NC-612	ABL1	c.2164G>A	p.V722I	EX11E	4.4%	NM_005157.4
NC-613	ZFP36L2	c.511G>A	p.G171S	EX2E	2.0%	NM_006887.4
NC-613	EGFR	c.2573T>G	p.L858R	EX21	38.6%	NM_005228.3
NC-613	PIK3CG	c.278C>T	p.P93L	EX2	1.0%	NM_002649.2
NC-613	TLR4	c.2400T>A	p.S800R	EX3E	1.1%	NM_138554.4
NC-613	ERBB2	c.929C>T	p.S310F	EX8	16.7%	NM_004448.2
NC-613	BRCA1	c.4132G>A	p.V1378I	EX11	15.2%	NM_007294.3
NC-613	EP300	c.6181C>T	p.P2061S	EX31E	1.1%	NM_001429.3
NC-613	GATA1	c.317C>T	p.A106V	EX3	2.9%	NM_002049.3
NC-614	BCL9	c.2939C>T	p.S980F	EX9	22.9%	NM_004326.2
NC-614	ALK	c.3541C>A	p.R1181S	EX23	28.9%	NM_004304.4
NC-614	KRAS	c.35G>T	p.G12V	EX2	28.5%	NM_033360.2
NC-614	STK11	c.902_920+16delGGCAGATCCGGCAGCACA	.	EX7-IVS7	5.7%	NM_000455.4

		GGTGAGCGGCCCCT GGG				
NC-614	KEAP1	c.671C[3>2]	p.H225Tfs*5	EX3	50.5%	NM_203500.1
NC-614	SMARCA4	c.3580G>A	p.G1194R	EX26	44.9%	NM_003072.3
NC-615	EGFR	c.2573T>G	p.L858R	EX21	24.6%	NM_005228.3
NC-615	AXIN1	c.2210G>A	p.R737Q	EX9	12.7%	NM_003502.3
NC-615	RBM10	c.2550+2delT	.	IVS20	29.1%	NM_001204468.1
NC-616	REL	c.105T>G	p.I35M	EX2	1.2%	NM_002908.2
NC-616	LRP1B	c.10174+1G>T	.	IVS64	1.2%	NM_018557.2
NC-616	TGFBR2	c.367GA[2>1]	p.E123Dfs*5	EX4	1.6%	NM_001024847.2
NC-616	CTNNB1	c.100G>C	p.G34R	EX3	35.6%	NM_001904.3
NC-616	NSD1	c.4612G>T	p.G1538*	EX11	10.3%	NM_022455.4
NC-616	WRN	c.1442A>G	p.N481S	EX12	2.1%	NM_000553.4
NC-616	MYC	c.737C>T	p.P246L	EX2	1.2%	NM_002467.4
NC-616	FANCC	c.920G>A	p.G307E	EX10	34.9%	NM_000136.2
NC-616	TSC1	c.1550G>A	p.R517Q	EX15	1.2%	NM_000368.4
NC-616	ETV6	c.1080G>T	p.W360C	EX6	18.5%	NM_001987.4
NC-616	DICER1	c.5428G>T	p.D1810Y	EX26	33.7%	NM_030621.3
NC-616	DICER1	c.1583dupT	p.P529Tfs*10	EX11	34.1%	NM_030621.3
NC-616	NTRK3	c.2438A>C	p.Q813P	EX20E	4.1%	NM_001012338.2
NC-616	CREBBP	c.5153G>A	p.W1718*	EX30	34.7%	NM_004380.2
NC-616	TP53	c.856G>A	p.E286K	EX8	9.1%	NM_000546.5
NC-616	STAT3	c.84G>T	p.M28I	EX2	1.2%	NM_139276.2
NC-616	PPM1D	c.1618G>T	p.E540*	EX6E	1.7%	NM_003620.3
NC-616	SMARCA4	c.2729C>T	p.T910M	EX19	35.9%	NM_003072.3
NC-616	SMARCB1	c.759C>G	p.I253M	EX6	1.6%	NM_003073.3

NC-617	NTRK1	c.2078G>A	p.W693*	EX16	10.6%	NM_002529.3
NC-617	CCND3	c.804_808delAGCCC	p.K268Nfs*54	EX5E	10.9%	NM_001760.3
NC-618	TP53	c.700T>C	p.Y234H	EX7	63.3%	NM_000546.5
NC-618	CDK12	c.2237A>G	p.D746G	EX4	36.2%	NM_016507.2
NC-618	UGT1A1	c.680A>C	p.Y227S	EX1	14.8%	NM_000463.2
NC-618	AXIN2	c.1034G>T	p.G345V	EX4	9.6%	NM_004655.3
NC-618	ROBO3	c.2704G[4>3]	p.A903Rfs*101	EX17	2.4%	NM_022370.3
NC-618	EGFR	c.2252_2276delCATCTCCGAAAGCCAACAAGGAAATinsA	p.T751_I759delinsN	EX19	28.8%	NM_005228.3
NC-619	ARID1A	c.6161delA	p.E2054Gfs*81	EX20E	34.4%	NM_006015.4
NC-619	DPYD	c.2255C>A	p.P752Q	EX18	32.0%	NM_000110.3
NC-619	SETD2	c.4871C>T	p.S1624F	EX7	35.8%	NM_014159.6
NC-619	CBL	c.32C[2>1]	p.G13Afs*13	EX1	28.2%	NM_005188.3
NC-619	TP53	c.743G>A	p.R248Q	EX7	35.1%	NM_000546.5
NC-619	NF1	c.2792_2798delCAATGCT	p.P931Hfs*5	EX21	18.4%	NM_000267.3
NC-619	NF1	c.5914C>T	p.Q1972*	EX39	27.2%	NM_000267.3
NC-620	ATR	c.2977-1G>C	.	IVS14	23.8%	NM_001184.3
NC-620	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	15.7%	NM_005228.3
NC-620	IRS2	c.785C>G	p.S262W	EX1	23.1%	NM_003749.2
NC-620	GRIN2A	c.549C>G	p.F183L	EX3	24.0%	NM_001134407.1
NC-620	TP53	c.817C>T	p.R273C	EX8	34.4%	NM_000546.5
NC-620	TOP2A	c.2444G>A	p.R815Q	EX21	2.7%	NM_001067.3
NC-621	HDAC1	c.319_322delTTTG	p.F107Sfs*15	EX4	19.8%	NM_004964.2

NC-621	PTEN	c.1103delA	p.D368Vfs*48	EX9E	21.7%	NM_000314.4
NC-621	MAX	c.159_160delCC	p.Q54Rfs*32	EX3	23.4%	NM_002382.4
NC-621	GRIN2A	c.3884T>A	p.I1295N	EX13E	33.1%	NM_001134407.1
NC-621	NF1	c.7259-1G>C	.	IVS48	19.1%	NM_000267.3
NC-622	ARID1A	c.6270_6271dupCT	p.W2091Sfs*45	EX20E	8.1%	NM_006015.4
NC-622	NFE2L2	c.238A>G	p.T80A	EX2	8.0%	NM_006164.4
NC-622	PIK3CB	c.191A>T	p.H64L	EX2	10.0%	NM_006219.2
NC-622	FBXW7	c.1511T>G	p.V504G	EX10	7.9%	NM_033632.3
NC-622	FAT1	c.12112T>C	p.C4038R	EX23	9.1%	NM_005245.3
NC-622	ABCB1	c.1160A>T	p.N387I	EX12	6.9%	NM_000927.4
NC-622	CDKN2A	c.250G>T	p.D84Y	EX2	11.3%	NM_000077.4
NC-622	TLR4	c.2453G>T	p.G818V	EX3E	15.5%	NM_138554.4
NC-622	FGF14	c.548A[2>1]	p.Q185Kfs*3	EX4	7.5%	NM_175929.2
NC-622	OR11G2	c.793A>T	p.R265W	EX1E	9.0%	NM_001005503.1
NC-622	NTRK3	c.881A>T	p.N294I	EX9	8.4%	NM_001012338.2
NC-622	CREBBP	c.1201G[3>2]	p.A403Pfs*31	EX4	7.4%	NM_004380.2
NC-622	TP53	c.782+1G>T	.	IVS7	8.7%	NM_000546.5
NC-622	TP53	c.637C>T	p.R213*	EX6	7.8%	NM_000546.5
NC-622	RNF43	c.1248G>T	p.W416C	EX9	7.2%	NM_017763.4
NC-623	GLI3	c.2218G>T	p.D740Y	EX14	15.1%	NM_000168.5
NC-623	KRAS	c.34G>T	p.G12C	EX2	15.3%	NM_033360.2
NC-623	BRCA2	c.10061delC	p.S3354Lfs*29	EX27E	15.4%	NM_000059.3
NC-624	EGFR	c.2303_2311dupGCGTGGACA	p.S768_D770dup	EX20	31.9%	NM_005228.3
NC-624	TP53	c.574C>T	p.Q192*	EX6	45.3%	NM_000546.5
NC-624	RARA	c.37G>T	p.G13C	EX2	50.4%	NM_000964.3

NC-625	TP53	c.734G>T	p.G245V	EX7	30.1%	NM_000546.5
NC-625	AR	c.2189A>T	p.H730L	EX5	21.4%	NM_000044.3
NC-625	CRLF2	c.290T>A	p.F97Y	EX3	17.0%	NM_022148.2
NC-625	CDK8	c.457-1G>C	.	IVS4	12.8%	NM_001260.1
NC-625	RBM10	c.2623G>T	p.E875*	EX21	11.1%	NM_001204468.1
NC-625	EPHA5	c.958G[2>1]	p.G320Afs*102	EX4	10.9%	NM_004439.5
NC-625	MYCN	c.425_426delCCinsGA	p.T142R	EX2	9.4%	NM_005378.4
NC-625	NOTCH1	c.59G>A	p.R20Q	EX1	8.5%	NM_017617.3
NC-625	POLE	c.52G>A	p.E18K	EX1	7.7%	NM_006231.2
NC-625	EPHB6	c.2156G>T	p.R719L	EX15	6.7%	NM_004445.3
NC-625	CYP2D6	c.319A>C	p.T107P	EX2	6.5%	NM_000106.5
NC-625	FBXW7	c.74C>A	p.S25*	EX2	6.3%	NM_033632.3
NC-625	ERBB3	c.3580G>C	p.D1194H	EX28	5.9%	NM_001982.3
NC-625	MTOR	c.4591G>A	p.E1531K	EX32	5.5%	NM_004958.3
NC-625	ARID2	c.4444C>G	p.Q1482E	EX15	5.2%	NM_152641.2
NC-625	ROS1	c.3624C>G	p.H1208Q	EX23	3.9%	NM_002944.2
NC-625	RICTOR	c.598G>C	p.E200Q	EX8	3.6%	NM_152756.3
NC-625	EPC1	c.501T>G	p.D167E	EX4	2.3%	NM_025209.2
NC-625	MS4A1	c.758C>G	p.S253C	EX8	1.3%	NM_152866.2
NC-626	FCGR2B	c.167C>T	p.P56L	EX3	2.3%	NM_004001.4
NC-626	CTNNB1	c.98C>T	p.S33F	EX3	17.1%	NM_001904.3
NC-626	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	10.7%	NM_005228.3
NC-626	MLL2	c.7838C>T	p.P2613L	EX31	2.6%	NM_003482.3
NC-626	SMAD4	c.1081C>T	p.R361C	EX9	21.2%	NM_005359.5
NC-626	RUNX1	c.1280G>A	p.R427H	EX9E	7.9%	NM_001754.4

NC-627	LRP1B	c.9043C>G	p.P3015A	EX57	9.9%	NM_018557.2
NC-627	RAD50	c.709T>G	p.S237A	EX5	13.4%	NM_005732.3
NC-627	MET	c.2888-27_2888-4delAAGCTCTTTCTTTCTCTCTGTTTT	.	IVS13	17.2%	NM_000245.2
NC-627	POT1	c.664G>T	p.V222F	EX9	35.9%	NM_015450.2
NC-627	EPHB6	c.1945T>C	p.S649P	EX14	31.5%	NM_004445.3
NC-627	GNAQ	c.832C>T	p.L278F	EX6	5.7%	NM_002072.3
NC-627	ACVR1B	c.1132A>C	p.K378Q	EX7	12.4%	NM_020328.3
NC-627	FANCM	c.2576A>T	p.K859I	EX14	6.6%	NM_020937.2
NC-627	TP53	c.920-2A>G	.	IVS8	14.5%	NM_000546.5
NC-627	RBM10	c.1222C>T	p.R408C	EX10	25.2%	NM_001204468.1
NC-628	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	15.5%	NM_005228.3
NC-628	EXT2	c.884C>T	p.S295F	EX5	25.3%	NM_207122.1
NC-628	ATM	c.7011T>A	p.C2337*	EX48	8.3%	NM_000051.3
NC-628	POLE	c.6013G>C	p.V2005L	EX44	5.2%	NM_006231.2
NC-629	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.3%	NM_003921.4
NC-629	CREBBP	c.5280G>T	p.Q1760H	EX31E	17.8%	NM_004380.2
NC-629	MAP2K2	c.527C>T	p.A176V	EX4	4.7%	NM_030662.3
NC-630	LRP1B	c.11266A>T	p.T3756S	EX74	29.8%	NM_018557.2
NC-630	PMS1	c.2428G>A	p.D810N	EX11	7.3%	NM_000534.4
NC-630	HCLS1	c.58G>C	p.D20H	EX2	19.8%	NM_005335.4
NC-630	TET2	c.4138C>T	p.H1380Y	EX9	30.7%	NM_001127208.2
NC-630	RICTOR	c.349C>G	p.L117V	EX5	7.1%	NM_152756.3
NC-630	PDGFRB	c.1429G>A	p.E477K	EX10	1.1%	NM_002609.3

NC-630	FGFR1	c.1028C>T	p.A343V	EX8	1.5%	NM_023110.2
NC-630	GRIN2A	c.422C>A	p.T141K	EX3	26.5%	NM_001134407.1
NC-630	ZFHX3	c.9551C>A	p.A3184E	EX10E	11.1%	NM_006885.3
NC-630	TP53	c.1015G>T	p.E339*	EX10	10.4%	NM_000546.5
NC-630	TP53	c.83_96delAAAACAACGTTCTG	p.E28Vfs*10	EX3	12.2%	NM_000546.5
NC-630	NF1	c.6743G>A	p.R2248H	EX44	9.2%	NM_000267.3
NC-630	ROCK1	c.2099A>T	p.D700V	EX18	20.9%	NM_005406.2
NC-631	PDGFRA	c.646C>A	p.L216I	EX5	36.9%	NM_006206.4
NC-631	KDM5C	c.704A>G	p.K235R	EX6	34.0%	NM_004187.3
NC-631	MED12	c.4850C>G	p.A1617G	EX35	33.6%	NM_005120.2
NC-631	CCT5	c.1003A>G	p.I335V	EX8	29.3%	NM_012073.3
NC-631	TGFBR1	c.214A>G	p.I72V	EX2	22.9%	NM_004612.2
NC-631	BRCA2	c.9932C>A	p.P3311H	EX27	21.4%	NM_000059.3
NC-631	EPHA3	c.2075-2delA	.	IVS11	21.4%	NM_005233.5
NC-631	TP53	c.527G>A	p.C176Y	EX5	19.0%	NM_000546.5
NC-631	SDHB	c.784G>C	p.A262P	EX8	17.9%	NM_003000.2
NC-631	AKAP9	c.1168T>C	p.S390P	EX8	17.6%	NM_005751.4
NC-631	DNMT3A	c.1198G>T	p.E400*	EX10	16.1%	NM_022552.4
NC-631	OR2T4	c.932C>A	p.T311N	EX1	15.9%	NM_001004696.1
NC-631	EPAS1	c.622C>T	p.H208Y	EX6	15.7%	NM_001430.4
NC-631	HCLS1	c.484_485delGGinsTT	p.G162L	EX7	14.3%	NM_005335.4
NC-631	TBX3	c.1284G[2>1]	p.D429Tfs*203	EX7	13.3%	NM_016569.3
NC-632	MTOR	c.6130G>T	p.V2044L	EX44	27.3%	NM_004958.3
NC-632	SPEN	c.967C>T	p.L323F	EX4	12.6%	NM_015001.2
NC-632	MSH2	c.1757C>T	p.S586L	EX11	13.3%	NM_000251.2

NC-632	EPHA3	c.1903G>T	p.V635L	EX11	15.0%	NM_005233.5
NC-632	NSD1	c.658G>T	p.G220C	EX2	20.0%	NM_022455.4
NC-632	POT1	c.477G>A	p.M159I	EX8	14.2%	NM_015450.2
NC-632	PABPC1	c.503+1G>T	.	IVS3	12.9%	NM_002568.3
NC-632	BNC2	c.586G>C	p.V196L	EX5	17.2%	NM_017637.5
NC-632	NOTCH1	c.4222G>T	p.E1408*	EX25	18.9%	NM_017617.3
NC-632	WSCD2	c.505C>A	p.L169M	EX4	16.4%	NM_014653.2
NC-632	TP53	c.747_748delGCinsTT	p.R249_P250delinsSS	EX7	14.8%	NM_000546.5
NC-632	NCOR1	c.4952G>T	p.G1651V	EX34	18.4%	NM_006311.3
NC-633	LRP1B	c.13681G>T	p.V4561L	EX91E	2.5%	NM_018557.2
NC-633	KLHL6	c.1746G>T	p.E582D	EX7E	18.5%	NM_130446.2
NC-633	APC	c.4773A[6>5]	p.K1593Sfs*57	EX16E	23.6%	NM_000038.5
NC-633	HIST1H1E	c.205G>C	p.A69P	EX1E	18.9%	NM_005321.2
NC-633	EZH2	c.68A>T	p.Y23F	EX2	18.4%	NM_004456.4
NC-633	CDKN2A	c.83_100delTGCGGGCGCTGCTGGAGG	p.V28_E33del	EX1	11.3%	NM_000077.4
NC-633	KDM5A	c.3820G>T	p.A1274S	EX23	18.4%	NM_001042603.1
NC-633	KRAS	c.34G>T	p.G12C	EX2	20.5%	NM_033360.2
NC-633	POLE	c.4493C>T	p.A1498V	EX35	32.0%	NM_006231.2
NC-633	TP53	c.711G>A	p.M237I	EX7	21.0%	NM_000546.5
NC-633	STK11	c.966C[3>2]	p.P323Hfs*13	EX8	23.4%	NM_000455.4
NC-633	KEAP1	c.1350G>T	p.W450C	EX4	22.4%	NM_203500.1
NC-634	PPP2R1A	c.431G>A	p.R144H	EX4	3.5%	NM_014225.5
NC-634	ALK	c.4775C>T	p.P1592L	EX29E	31.6%	NM_004304.4
NC-634	XPO1	c.1876C>T	p.Q626*	EX16	12.0%	NM_003400.3
NC-634	MAGI2	c.706G>A	p.E236K	EX4	17.3%	NM_012301.3

NC-634	MLL3	c.2486C>A	p.A829D	EX14	5.4%	NM_170606.2
NC-634	CDKN2A	c.355G>T	p.E119*	EX2	46.4%	NM_000077.4
NC-634	TBX3	c.1022G>C	p.S341T	EX6	28.3%	NM_016569.3
NC-634	BRCA2	c.2794G>C	p.D932H	EX11	33.7%	NM_000059.3
NC-634	IRS2	c.3630_3655delGCCCCCTTTGGCACCGCAGGGCCGGC	p.P1211Vfs*105	EX1	9.3%	NM_003749.2
NC-634	IRS2	c.3032C>G	p.S1011C	EX1	21.3%	NM_003749.2
NC-634	FANCM	c.3242G>T	p.C1081F	EX14	15.0%	NM_020937.2
NC-634	DICER1	c.5362G>A	p.E1788K	EX25	40.0%	NM_030621.3
NC-634	TP53	c.892G>T	p.E298*	EX8	69.0%	NM_000546.5
NC-634	NF1	c.890A>T	p.K297M	EX9	32.2%	NM_000267.3
NC-634	AXIN2	c.1294G>A	p.E432K	EX6	24.3%	NM_004655.3
NC-635	SPRR3	c.287C>T	p.P96L	EX3E	36.0%	NM_005416.2
NC-635	DNMT3A	c.1667+1G>T	.	IVS14	30.2%	NM_022552.4
NC-635	ERCC3	c.1150A>G	p.I384V	EX8	7.2%	NM_000122.1
NC-635	FN1	c.2081G>C	p.R694P	EX14	26.0%	NM_212482.1
NC-635	FXR1	c.1295G>A	p.S432N	EX14	32.6%	NM_005087.3
NC-635	HNRPDL	c.391G>T	p.E131*	EX1	34.0%	NM_031372.3
NC-635	FAT1	c.7822A>G	p.S2608G	EX10	69.9%	NM_005245.3
NC-635	IL7R	c.173C>T	p.A58V	EX2	17.5%	NM_002185.3
NC-635	RICTOR	c.4631C>G	p.S1544*	EX34	50.4%	NM_152756.3
NC-635	ATM	c.7928-2A>T	.	IVS53	67.2%	NM_000051.3
NC-635	FLT1	c.1334C>A	p.P445Q	EX10	71.6%	NM_002019.4
NC-635	NTRK3	c.1659_1660delCCinsAT	p.F553L	EX15	33.3%	NM_001012338.2
NC-635	BLM	c.3940G>T	p.E1314*	EX21	32.2%	NM_000057.2

NC-635	CYLD	c.290C>T	p.T97I	EX3	49.5%	NM_001042355.1
NC-635	TP53	c.724T>C	p.C242R	EX7	69.8%	NM_000546.5
NC-635	SMARCA4	c.2346_2351delCCTGGG	p.L783_G784del	EX16	63.5%	NM_003072.3
NC-636	BARD1	c.1708C>A	p.L570I	EX8	6.0%	NM_000465.2
NC-636	FAT1	c.11431G>A	p.E3811K	EX20	9.2%	NM_005245.3
NC-636	HIST1H2BD	c.116C>T	p.S39L	EX1E	1.0%	NM_021063.3
NC-636	EGFR	c.2390G>C	p.C797S	EX20	6.2%	NM_005228.3
NC-636	EGFR	c.2573T>G	p.L858R	EX21	17.8%	NM_005228.3
NC-636	CDKN2A	c.143C>A	p.P48Q	EX1	12.2%	NM_000077.4
NC-636	MLL2	c.14659G>A	p.E4887K	EX48	1.0%	NM_003482.3
NC-636	TP53	c.941C[2>1]	p.S315Lfs*30	EX9	26.3%	NM_000546.5
NC-636	EP300	c.1202C>A	p.S401*	EX5	8.2%	NM_001429.3
NC-636	KDM6A	c.3003G>C	p.R1001S	EX20	9.3%	NM_021140.2
NC-637	MDC1	c.4795T>G	p.C1599G	EX10	4.7%	NM_014641.2
NC-637	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	2.6%	NM_005228.3
NC-637	PSMB5	c.40A>C	p.N14H	EX1	1.4%	NM_002797.3
NC-638	TP53	c.527G>T	p.C176F	EX5	52.6%	NM_000546.5
NC-638	TAF1	c.3734G>A	p.R1245Q	EX24	5.3%	NM_004606.3
NC-638	NPM1	c.23A>G	p.D8G	EX1	14.3%	NM_002520.6
NC-638	NSD1	c.2651C>T	p.P884L	EX5	6.8%	NM_022455.4
NC-638	EGFR	c.2573T>G	p.L858R	EX21	60.2%	NM_005228.3
NC-638	CTNNA2	c.1022C>T	p.A341V	EX7	3.6%	NM_004389.3
NC-639	CDKN1B	c.485C>T	p.T162I	EX2	1.7%	NM_004064.3
NC-639	KRAS	c.35G>A	p.G12D	EX2	3.5%	NM_033360.2

NC-639	GRIN2A	c.4090G>T	p.D1364Y	EX13E	1.5%	NM_001134407.1
NC-639	SNX29	c.865G>T	p.G289W	EX8	2.2%	NM_032167.3
NC-639	TP53	c.841G>T	p.D281Y	EX8	1.7%	NM_000546.5
NC-639	PMS2	c.-87-u32G>A	.	.	1.2%	NM_000535.5
NC-639	NRAS	c.538G>T	p.G180C	EX5	1.1%	NM_002524.4
NC-639	LRP1B	c.1883G>T	p.R628M	EX12	2.1%	NM_018557.2
NC-639	TET2	c.4044+1G>A	.	IVS8	3.3%	NM_001127208.2
NC-639	HCN1	c.2420C>A	p.T807N	EX8E	1.9%	NM_021072.3
NC-639	NSD1	c.3676T>G	p.C1226G	EX5	1.3%	NM_022455.4
NC-640	BRAF	c.1799T>A	p.V600E	EX15	13.8%	NM_004333.4
NC-640	SMAD4	c.1082G>A	p.R361H	EX9	6.2%	NM_005359.5
NC-640	TP53	c.97-2A>T	.	IVS3	6.1%	NM_000546.5
NC-640	TNFAIP3	c.457G>A	p.V153I	EX3	5.2%	NM_006290.3
NC-641	SETD2	c.323T>G	p.L108R	EX3	10.5%	NM_014159.6
NC-641	APC	c.4661A[6>7]	p.T1556Nfs*3	EX16E	13.0%	NM_000038.5
NC-641	ARID1B	c.980G>C	p.G327A	EX1	16.7%	NM_020732.3
NC-641	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	13.4%	NM_005228.3
NC-641	EGFR	c.2369C>T	p.T790M	EX20	5.6%	NM_005228.3
NC-641	EGFR	c.2390G>C	p.C797S	EX20	5.3%	NM_005228.3
NC-641	PIK3CG	c.928C>A	p.P310T	EX2	12.0%	NM_002649.2
NC-642	EGFR	c.2236_2251delGAATTAAGAGAAGCAAinsATAG	p.E746_T751delinsIA	EX19	14.7%	NM_005228.3
NC-642	EGFR	c.2369C>T	p.T790M	EX20	1.2%	NM_005228.3
NC-642	IFITM3	c.11C>T	p.T4I	EX1	3.5%	NM_021034.2

NC-642	TP53	c.595G[2>1]	p.G199Efs*48	EX6	41.4%	NM_000546.5
NC-642	MED12	c.5163_5186delGCGGTTGCTGCTCTACCACACACACA	p.Q1721_T1728del	EX37	23.7%	NM_005120.2
NC-643	TP63	c.1804C>A	p.L602M	EX14E	22.0%	NM_003722.4
NC-643	EMID2	c.256_257delCCinsAA	p.P86K	EX2	27.6%	NM_133457.2
NC-643	CDKN2A	c.43TGGC[2>1]	p.L16Pfs*9	EX1	38.5%	NM_000077.4
NC-643	HRAS	c.37G>C	p.G13R	EX2	56.3%	NM_001130442.1
NC-643	TSHR	c.1220C>A	p.P407Q	EX10E	30.5%	NM_000369.2
NC-643	STK11	c.710A>T	p.D237V	EX5	42.7%	NM_000455.4
NC-643	ATRX	c.6929C>T	p.P2310L	EX32	53.0%	NM_000489.3
NC-643	ATRX	c.6917C>G	p.T2306S	EX32	51.3%	NM_000489.3
NC-644	EPAS1	c.406C>T	p.H136Y	EX4	50.3%	NM_001430.4
NC-644	BARD1	c.642C>G	p.I214M	EX4	30.3%	NM_000465.2
NC-644	MITF	c.636G>A	p.M212I	EX4	34.2%	NM_198159.2
NC-644	APC	c.7030C>G	p.Q2344E	EX16E	16.3%	NM_000038.5
NC-644	EBF1	c.1385C>T	p.S462L	EX14	14.9%	NM_024007.3
NC-644	FANCF	c.1003C>T	p.Q335*	EX1E	55.8%	NM_022725.3
NC-644	POLE	c.2820G>A	p.M940I	EX24	31.3%	NM_006231.2
NC-644	BRCA2	c.5291C>G	p.S1764*	EX11	34.0%	NM_000059.3
NC-644	TP53	c.1009C>T	p.R337C	EX10	49.0%	NM_000546.5
NC-644	ERBB2	c.1819G>A	p.D607N	EX15	27.9%	NM_004448.2
NC-645	BRCA2	c.2624T>C	p.V875A	EX11	11.8%	NM_000059.3
NC-645	KDM5C	c.3242G>A	p.W1081*	EX21	5.3%	NM_004187.3
NC-645	RUNX1	c.990delC	p.F330Lfs*264	EX9E	5.0%	NM_001754.4
NC-645	CDH23	c.4045C>T	p.R1349C	EX32	1.5%	NM_022124.5

NC-645	KDM5C	c.3049C[3>2]	p.N1018Tfs*37	EX20	1.5%	NM_004187.3
NC-646	FOXP1	c.779C>T	p.S260F	EX7	29.8%	NM_001244814.1
NC-646	EPHA5	c.2276G>T	p.G759V	EX13	53.2%	NM_004439.5
NC-646	FGFR4	c.1391G>A	p.R464Q	EX10	19.5%	NM_213647.1
NC-646	EGFR	c.2573_2574delTGinsGT	p.L858R	EX21	84.4%	NM_005228.3
NC-646	ABCB1	c.1913A>C	p.E638A	EX17	27.2%	NM_000927.4
NC-646	MLL3	c.8028G>C	p.Q2676H	EX38	5.7%	NM_170606.2
NC-646	WT1	c.992G>T	p.G331V	EX5	29.3%	NM_024426.4
NC-646	DICER1	c.46C>G	p.L16V	EX3	37.2%	NM_030621.3
NC-646	SLX4	c.2848G>C	p.E950Q	EX12	22.9%	NM_032444.2
NC-646	RBM10	c.2696A>T	p.K899M	EX22	75.9%	NM_001204468.1
NC-647	PBRM1	c.116C>T	p.S39F	EX2	9.9%	NM_018313.4
NC-647	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	63.8%	NM_005228.3
NC-647	EGFR	c.3247G>A	p.D1083N	EX27	7.2%	NM_005228.3
NC-647	EGFR	c.3502G>T	p.D1168Y	EX28E	5.6%	NM_005228.3
NC-647	EGFR	c.3511G>A	p.D1171N	EX28E	5.5%	NM_005228.3
NC-647	TP53	c.148_161dupATTGAACAATGGTT	p.F54Lfs*74	EX4	8.8%	NM_000546.5
NC-649	MEN1	c.256_319dupATCGCCGCCCTCTATGCCCGCTTCACCGCCCAGATCCGAGGCGCCGTCGACCTGTCCCTCTATC	p.P107Hfs*31	EX2	17.1%	NM_130799.2

NC-649	NFKBIA	c.781_802delCCAAGCACCCGGATACAGCAGC	p.P261Sfs*5	EX5	6.0%	NM_020529.2
NC-649	SMAD4	c.916A>G	p.N306D	EX8	1.9%	NM_005359.5
NC-650	TP73	c.1695C>A	p.N565K	EX14E	21.5%	NM_005427.3
NC-650	BRAF	c.1781A>G	p.D594G	EX15	31.5%	NM_004333.4
NC-650	CDKN2A	c.83_100delTGCGGGCGCTGCTGGAGG	p.V28_E33del	EX1	9.9%	NM_000077.4
NC-650	ARID2	c.556G>C	p.E186Q	EX5	2.1%	NM_152641.2
NC-650	TP53	c.589_593delGTGGA	p.V197Rfs*10	EX6	16.6%	NM_000546.5
NC-650	NF1	c.2407C>T	p.Q803*	EX20	16.3%	NM_000267.3
NC-650	CDK12	c.3083T>A	p.M1028K	EX11	20.5%	NM_016507.2
NC-650	SMARCB1	c.91G>C	p.E31Q	EX1	3.6%	NM_003073.3
NC-650	ATRX	c.995A>G	p.D332G	EX9	38.3%	NM_000489.3
NC-651	FLG	c.8547C>A	p.D2849E	EX3E	3.9%	NM_002016.1
NC-651	FCRL4	c.155C>A	p.T52K	EX3	14.8%	NM_031282.2
NC-651	RNASEL	c.574G>C	p.G192R	EX2	8.1%	NM_021133.3
NC-651	KDR	c.2680C>A	p.H894N	EX19	4.9%	NM_002253.2
NC-651	FAT2	c.10415G>T	p.G3472V	EX17	8.1%	NM_001447.2
NC-651	ARID1B	c.4014-2A>T	.	IVS16	7.8%	NM_020732.3
NC-651	NOTCH1	c.2725G>T	p.D909Y	EX17	6.8%	NM_017617.3
NC-651	RB1	c.1961-1G>T	.	IVS19	8.0%	NM_000321.2
NC-651	BCL11B	c.2507G>T	p.S836I	EX4E	13.5%	NM_138576.2
NC-651	SLX4	c.1696G>A	p.E566K	EX8	7.1%	NM_032444.2
NC-651	ERBB2	c.2329G>T	p.V777L	EX20	9.1%	NM_004448.2
NC-651	RNF43	c.582+1G>A	.	IVS5	7.9%	NM_017763.4

NC-652	MTOR	c.5941A>G	p.K1981E	EX43	1.7%	NM_004958.3
NC-652	FCGR2A	c.25C>G	p.Q9E	EX1	4.6%	NM_021642.3
NC-652	PIK3CA	c.1624G>A	p.E542K	EX10	8.7%	NM_006218.2
NC-652	APC	c.6263C>G	p.S2088*	EX16E	6.2%	NM_000038.5
NC-652	EGFR	c.2127_2129delAAC	p.E709_T710delinsD	EX18	21.6%	NM_005228.3
NC-652	TSC1	c.926C>G	p.S309C	EX10	9.1%	NM_000368.4
NC-652	IFITM3	c.82G>A	p.E28K	EX1	1.5%	NM_021034.2
NC-652	SMAD3	c.1268G>A	p.S423N	EX9E	4.6%	NM_005902.3
NC-652	TP53	c.722C>T	p.S241F	EX7	1.2%	NM_000546.5
NC-652	CDK12	c.265T>G	p.F89V	EX1	1.4%	NM_016507.2
NC-653	MTOR	c.6647T>C	p.L2216P	EX47	1.7%	NM_004958.3
NC-653	MYCN	c.1073C>T	p.P358L	EX3E	1.3%	NM_005378.4
NC-653	MLH1	c.1874A>G	p.Y625C	EX16	2.2%	NM_000249.3
NC-653	EGFR	c.185T>G	p.L62R	EX2	13.5%	NM_005228.3
NC-653	EGFR	c.2237_2251delAATTAAGAGAAGCAA	p.E746_T751delinsA	EX19	15.0%	NM_005228.3
NC-653	LYN	c.1121T>C	p.L374P	EX11	2.6%	NM_002350.3
NC-653	TCF7L2	c.877T>A	p.F293I	EX9	1.7%	NM_001146274.1
NC-653	KRTAP5-5	c.137_138insCTCCGGCTGTGG	p.G46_G47insSGCG	EX1E	31.6%	NM_001001480.2
NC-653	ACIN1	c.3524G>A	p.R1175H	EX17	1.1%	NM_014977.3
NC-653	ZFHX3	c.1115G>T	p.R372L	EX2	6.0%	NM_006885.3
NC-653	TP53	c.438G>A	p.W146*	EX5	17.9%	NM_000546.5
NC-653	RBM10	c.328C>T	p.P110S	EX3	1.7%	NM_001204468.1
NC-654	IL6ST	c.1435C>T	p.R479C	EX11	1.2%	NM_002184.3
NC-654	ARID1B	c.2017G>A	p.E673K	EX5	13.9%	NM_020732.3

NC-654	EGFR	c.2573T>G	p.L858R	EX21	46.1%	NM_005228.3
NC-654	MET	c.1528-1G>A	.	IVS4	1.0%	NM_000245.2
NC-654	ATM	c.7921C>T	p.Q2641*	EX53	22.0%	NM_000051.3
NC-654	RB1	c.830T>G	p.L277R	EX8	63.2%	NM_000321.2
NC-654	ACIN1	c.1931G>A	p.R644H	EX6	5.4%	NM_014977.3
NC-654	TP53	c.811G>A	p.E271K	EX8	68.3%	NM_000546.5
NC-655	NFE2L2	c.125G>T	p.R42L	EX2	19.6%	NM_006164.4
NC-655	EPHA5	c.809A>T	p.E270V	EX3	16.9%	NM_004439.5
NC-655	FAT1	c.4690G>C	p.A1564P	EX9	93.6%	NM_005245.3
NC-655	FGFR4	c.796G>A	p.D266N	EX7	13.9%	NM_213647.1
NC-655	ASCL4	c.148delT	p.W50Gfs*40	EX1E	18.5%	NM_203436.2
NC-655	TP53	c.848G>C	p.R283P	EX8	92.4%	NM_000546.5
NC-655	CIC	c.4138G>C	p.A1380P	EX17	5.7%	NM_015125.3
NC-655	FAM123B	c.2739G>T	p.Q913H	EX2E	6.7%	NM_152424.3
NC-656	ALK	c.3698T>C	p.I1233T	EX24	14.3%	NM_004304.4
NC-656	TP63	c.447C>A	p.Y149*	EX4	5.5%	NM_003722.4
NC-656	NOTCH4	c.899G>A	p.C300Y	EX5	17.0%	NM_004557.3
NC-656	HSP90AA1	c.768C>G	p.F256L	EX4	11.4%	NM_001017963.2
NC-657	DDR2	c.1210T>A	p.C404S	EX11	26.0%	NM_006182.2
NC-657	LRP1B	c.8189A>T	p.Q2730L	EX51	25.2%	NM_018557.2
NC-657	LRP1B	c.1120G>A	p.A374T	EX8	51.0%	NM_018557.2
NC-657	ERBB4	c.2777C>A	p.T926K	EX23	79.3%	NM_005235.2
NC-657	FAT1	c.458C>G	p.S153*	EX2	76.3%	NM_005245.3
NC-657	IL7R	c.13G>A	p.G5S	EX1	52.9%	NM_002185.3
NC-657	NSD1	c.1701T>G	p.S567R	EX5	17.5%	NM_022455.4
NC-657	MET	c.2683A>T	p.T895S	EX12	25.8%	NM_000245.2

NC-657	BRAF	c.609-1G>C	.	IVS4	53.3%	NM_004333.4
NC-657	MLL3	c.2441C>G	p.T814R	EX14	12.8%	NM_170606.2
NC-657	CDKN2A	c.262G>T	p.E88*	EX2	77.9%	NM_000077.4
NC-657	RET	c.947G>T	p.S316I	EX5	52.2%	NM_020975.4
NC-657	MLL2	c.166C>T	p.Q56*	EX2	73.3%	NM_003482.3
NC-657	NAV3	c.1249T[4>5]	p.S418Ffs*2	EX8	37.8%	NM_014903.4
NC-657	TP53	c.725G>T	p.C242F	EX7	75.9%	NM_000546.5
NC-657	ASXL1	c.493A>T	p.T165S	EX7	23.0%	NM_015338.5
NC-658	ALK	c.3373_3375delGGCinsTGA	p.G1125*	EX21	1.5%	NM_004304.4
NC-658	LRP1B	c.12649T>A	p.C4217S	EX83	7.8%	NM_018557.2
NC-658	EGFR	c.2573T>G	p.L858R	EX21	17.1%	NM_005228.3
NC-658	RBM10	c.2416G>T	p.E806*	EX20	23.8%	NM_001204468.1
NC-659	SDHB	c.344G>A	p.R115Q	EX4	2.9%	NM_003000.2
NC-659	JAK2	c.3314G>A	p.C1105Y	EX25E	1.6%	NM_004972.3
NC-659	PTEN	c.989A>C	p.K330T	EX8	15.8%	NM_000314.4
NC-659	OR4A15	c.554T>G	p.L185W	EX1E	15.3%	NM_001005275.1
NC-659	ERBB2	c.1976_1977delTTinsAA	p.V659E	EX17	42.7%	NM_004448.2
NC-659	BRCA1	c.2802G>C	p.Q934H	EX10	12.4%	NM_007294.3
NC-659	BRCA1	c.763G>A	p.E255K	EX10	10.9%	NM_007294.3
NC-659	KEAP1	c.779G>T	p.R260L	EX3	34.9%	NM_203500.1
NC-660	EGFR	c.2239_2256delTTAAGAGAAGCAACATCT	p.L747_S752del	EX19	4.4%	NM_005228.3
NC-660	ATM	c.6925C>A	p.L2309M	EX47	6.2%	NM_000051.3
NC-661	ALK	c.4168C>A	p.P1390T	EX29E	22.5%	NM_004304.4
NC-661	FOXP1	c.1520C>T	p.A507V	EX13	31.7%	NM_001244814.1

NC-661	PIK3CA	c.1633G>A	p.E545K	EX10	60.8%	NM_006218.2
NC-661	FAT1	c.6396G[3>2]	p.G2133Vfs*5	EX10	61.4%	NM_005245.3
NC-661	PTPRD	c.1141G>A	p.A381T	EX21	45.6%	NM_002839.3
NC-661	MS4A1	c.767C>G	p.P256R	EX8E	48.8%	NM_152866.2
NC-661	TYR	c.865T>C	p.C289R	EX2	50.2%	NM_000372.4
NC-661	MLL2	c.697G>T	p.E233*	EX6	57.7%	NM_003482.3
NC-661	FLT1	c.1627A>G	p.T543A	EX12	24.5%	NM_002019.4
NC-661	DICER1	c.4945A>G	p.M1649V	EX24	17.3%	NM_030621.3
NC-661	TP53	c.536A>G	p.H179R	EX5	57.6%	NM_000546.5
NC-661	TP53	c.329G>T	p.R110L	EX4	19.4%	NM_000546.5
NC-661	NCOR1	c.5908A>T	p.S1970C	EX38	19.7%	NM_006311.3
NC-661	PTPRT	c.1106G>T	p.G369V	EX7	43.1%	NM_133170.3
NC-661	NF2	c.347dupA	p.H116Qfs*14	EX3	71.3%	NM_000268.3
NC-662	ARID1A	c.3166G>T	p.V1056L	EX11	3.2%	NM_006015.4
NC-662	LRP1B	c.8311T>A	p.S2771T	EX52	3.5%	NM_018557.2
NC-662	MST1R	c.4003A>T	p.R1335*	EX20E	5.0%	NM_002447.2
NC-662	ATR	c.6806C>G	p.T2269R	EX40	1.5%	NM_001184.3
NC-662	PIK3CA	c.2176G>A	p.E726K	EX14	4.4%	NM_006218.2
NC-662	FGFR3	c.767A>G	p.Q256R	EX7	1.0%	NM_000142.4
NC-662	SLIT2	c.1895T>C	p.V632A	EX19	3.6%	NM_004787.1
NC-662	FGFR4	c.1828C>T	p.H610Y	EX14	6.0%	NM_213647.1
NC-662	DUSP22	c.372T>A	p.C124*	EX6	2.3%	NM_020185.3
NC-662	MLL3	c.7088G>T	p.G2363V	EX36	3.1%	NM_170606.2
NC-662	CDKN1B	c.80C>A	p.S27*	EX1	6.4%	NM_004064.3
NC-662	CDKN1B	c.168C>A	p.S56R	EX1	5.9%	NM_004064.3
NC-662	KRAS	c.35G>C	p.G12A	EX2	6.5%	NM_033360.2

NC-662	MAX	c.179G[3>2]	p.A61Pfs*4	EX4	3.3%	NM_002382.4
NC-662	NF1	c.2683A>G	p.M895V	EX21	3.9%	NM_000267.3
NC-662	RAD51C	c.532C>G	p.Q178E	EX3	3.0%	NM_058216.1
NC-662	CRKL	c.898G>C	p.D300H	EX3E	2.9%	NM_005207.3
NC-663	MTOR	c.806A>G	p.N269S	EX6	38.9%	NM_004958.3
NC-663	MSH6	c.3938T>C	p.I1313T	EX9	42.2%	NM_000179.2
NC-663	EPHA5	c.2404G>T	p.A802S	EX14	37.9%	NM_004439.5
NC-663	ARID1B	c.4240_4242delCCGinsT	p.P1414*fs*1	EX18	1.4%	NM_020732.3
NC-663	CDKN2A	c.379G>C	p.A127P	EX2	44.6%	NM_000077.4
NC-663	PTEN	c.1003C>T	p.R335*	EX8	1.6%	NM_000314.4
NC-663	HNF1A	c.671C>T	p.P224L	EX3	35.2%	NM_000545.5
NC-663	RB1	c.2107-3_2122delTAGATTATGATGTGTTCCA	.	IVS20-EX21	50.2%	NM_000321.2
NC-663	TP53	c.734G>T	p.G245V	EX7	68.0%	NM_000546.5
NC-664	MYB	c.1882G>A	p.D628N	EX13	4.1%	NM_001130173.1
NC-664	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	17.9%	NM_005228.3
NC-664	POLE	c.1367C[2>1]	p.T457Rfs*15	EX14	11.1%	NM_006231.2
NC-665	DNMT3A	c.1825T>C	p.F609L	EX15	51.5%	NM_022552.4
NC-665	TET2	c.5636A>T	p.E1879V	EX11E	69.7%	NM_001127208.2
NC-665	FBXW7	c.1313C>T	p.S438F	EX9	76.4%	NM_033632.3
NC-665	TP53	c.796G>T	p.G266*	EX8	71.5%	NM_000546.5
NC-665	NF1	c.5624C>G	p.S1875*	EX38	70.2%	NM_000267.3
NC-665	KEAP1	c.1288G>A	p.G430S	EX3	71.4%	NM_203500.1
NC-666	CTNNB1	c.2336C>G	p.T779S	EX15E	1.0%	NM_001904.3

NC-666	EGFR	c.2573T>G	p.L858R	EX21	20.0%	NM_005228.3
NC-666	MS4A1	c.695C>G	p.A232G	EX8E	2.2%	NM_152866.2
NC-666	TP53	c.672+2T>C	.	IVS6	27.1%	NM_000546.5
NC-667	BARD1	c.682G>T	p.E228*	EX4	6.6%	NM_000465.2
NC-667	PPARG	c.130_131delGGinsTT	p.G44L	EX2	3.3%	NM_015869.4
NC-667	CTNNB1	c.110C>T	p.S37F	EX3	3.8%	NM_001904.3
NC-667	EGFR	c.2573T>G	p.L858R	EX21	10.7%	NM_005228.3
NC-667	ABCB1	c.2642G>A	p.G881E	EX22	8.9%	NM_000927.4
NC-667	SMO	c.2065C>T	p.P689S	EX12E	7.9%	NM_005631.4
NC-667	CYLD	c.2823G>T	p.M941I	EX18E	4.0%	NM_001042355.1
NC-667	TP53	c.535C>A	p.H179N	EX5	8.7%	NM_000546.5
NC-667	TOP1	c.608G>T	p.W203L	EX8	4.1%	NM_003286.2
NC-668	EGFR	c.2573T>G	p.L858R	EX21	23.5%	NM_005228.3
NC-669	NRAS	c.35G>T	p.G12V	EX2	1.7%	NM_002524.4
NC-669	ALK	c.2614G>A	p.G872S	EX15	14.0%	NM_004304.4
NC-669	BRAF	c.1742A>T	p.N581I	EX15	10.8%	NM_004333.4
NC-669	TSC2	c.3204delT	p.V1069*fs*1	EX28	8.6%	NM_000548.3
NC-669	TSC2	c.4728G[3>2]	p.G1577Afs*8	EX37	10.9%	NM_000548.3
NC-670	EGFR	c.2573T>G	p.L858R	EX21	13.9%	NM_005228.3
NC-670	MLL3	c.8821C>A	p.P2941T	EX38	1.5%	NM_170606.2
NC-670	ELAC2	c.1435C>T	p.Q479*	EX16	4.9%	NM_018127.6
NC-671	LRP1B	c.10736A>G	p.K3579R	EX69	2.1%	NM_018557.2
NC-671	SLC34A2	c.303_305delGAT	p.L101_I102delinsF	EX4	4.3%	NM_006424.2
NC-671	MET	c.611C>T	p.S204F	EX2	4.8%	NM_000245.2
NC-671	ARID2	c.4923-1G>C	.	IVS16	7.6%	NM_152641.2
NC-671	DICER1	c.5560G>T	p.V1854L	EX27	2.0%	NM_030621.3

NC-671	XRCC3	c.581T>A	p.V194E	EX8	5.6%	NM_001100119.1
NC-671	IGF1R	c.-50-u6_-49delTTTTTTTT	.	.-EX1	11.7%	NM_000875.3
NC-671	TP53	c.473G>T	p.R158L	EX5	9.5%	NM_000546.5
NC-672	CDA	c.47A>G	p.Q16R	EX1	14.9%	NM_001785.2
NC-672	KDR	c.674A>G	p.D225G	EX6	11.0%	NM_002253.2
NC-672	FBXW7	c.832C>T	p.R278*	EX5	43.5%	NM_033632.3
NC-672	MLL3	c.12239T>C	p.I4080T	EX48	30.1%	NM_170606.2
NC-672	TP53	c.920-1G>A	.	IVS8	47.1%	NM_000546.5
NC-672	ERBB2	c.700G>A	p.D234N	EX6	37.6%	NM_004448.2
NC-672	KEAP1	c.730G>A	p.E244K	EX3	38.1%	NM_203500.1
NC-673	EPHA2	c.2427G>T	p.E809D	EX14	32.8%	NM_004431.3
NC-673	NOTCH2	c.4595T>G	p.L1532R	EX26	33.7%	NM_024408.3
NC-673	TRIM58	c.662G>A	p.R221Q	EX3	33.1%	NM_015431.3
NC-673	PIK3CA	c.1633G>A	p.E545K	EX10	35.9%	NM_006218.2
NC-673	FGFR3	c.746C>G	p.S249C	EX7	40.0%	NM_000142.4
NC-673	MLL3	c.8440A[6>7]	p.S2816Ifs*6	EX38	30.6%	NM_170606.2
NC-673	NOTCH1	c.4906G>T	p.E1636*	EX26	51.6%	NM_017617.3
NC-673	MLL2	c.14644-2A>G	.	IVS47	33.8%	NM_003482.3
NC-673	TP53	c.796G>T	p.G266*	EX8	47.2%	NM_000546.5
NC-673	NCOR1	c.1048C>T	p.R350*	EX10	33.8%	NM_006311.3
NC-673	SMARCA4	c.721G>T	p.G241C	EX4	33.5%	NM_003072.3
NC-673	BCOR	c.250G>A	p.V84I	EX4	29.6%	NM_001123385.1
NC-674	APC	c.3684G>C	p.Q1228H	EX16E	10.4%	NM_000038.5
NC-674	FLT4	c.298G>T	p.E100*	EX3	1.0%	NM_182925.4
NC-674	PMS2	c.2240G>A	p.R747K	EX13	5.0%	NM_000535.5

NC-674	EGFR	c.2573T>G	p.L858R	EX21	29.4%	NM_005228.3
NC-674	TRRAP	c.2947G>A	p.A983T	EX22	1.5%	NM_001244580.1
NC-674	TSC1	c.1325G>A	p.R442K	EX13	9.6%	NM_000368.4
NC-674	IGF1R	c.3484G>C	p.E1162Q	EX19	2.7%	NM_000875.3
NC-674	IGF1R	c.3494A>G	p.Y1165C	EX19	2.6%	NM_000875.3
NC-674	CTCF	c.1390G>C	p.E464Q	EX8	3.3%	NM_006565.3
NC-674	TP53	c.488A>G	p.Y163C	EX5	24.0%	NM_000546.5
NC-674	JAK3	c.2402G>A	p.G801E	EX18	1.8%	NM_000215.3
NC-674	JAK3	c.2395C>T	p.R799C	EX18	7.5%	NM_000215.3
NC-675	ARID1A	c.5347delGinsAA	p.E1783Kfs*3	EX20E	16.1%	NM_006015.4
NC-675	CUL3	c.937A>G	p.M313V	EX7	10.9%	NM_003590.4
NC-675	SI	c.3117G>T	p.K1039N	EX27	25.0%	NM_001041.3
NC-675	TET2	c.1741C>T	p.R581C	EX3	11.0%	NM_001127208.2
NC-675	HCN1	c.2596G>T	p.A866S	EX8E	6.7%	NM_021072.3
NC-675	POM121L12	c.437G>A	p.R146H	EX1E	20.9%	NM_182595.3
NC-675	MLL3	c.271G>C	p.E91Q	EX3	19.2%	NM_170606.2
NC-675	NBN	c.200C>T	p.T67I	EX3	9.6%	NM_002485.4
NC-675	PTPRD	c.4332_4333delGGinsTT	p.W1444_E1445delinsC*	EX37	3.9%	NM_002839.3
NC-675	ATM	c.4969A>G	p.M1657V	EX33	12.0%	NM_000051.3
NC-675	KRAS	c.35G>A	p.G12D	EX2	21.4%	NM_033360.2
NC-675	FANCM	c.4223-1G>A	.	IVS14	10.2%	NM_020937.2
NC-675	TP53	c.722C>G	p.S241C	EX7	14.3%	NM_000546.5
NC-675	KDM6A	c.3337_3341delGTATC	p.V1113Sfs*36	EX23	1.7%	NM_021140.2
NC-676	PMS1	c.-20-1G>T	.	IVS1	8.0%	NM_000534.4
NC-676	MSH3	c.3384G>A	p.M1128I	EX24E	5.0%	NM_002439.4
NC-676	EZH2	c.2117T>C	p.M706T	EX19	2.6%	NM_004456.4

NC-676	CDKN2A	c.247C>G	p.H83D	EX2	14.1%	NM_000077.4
NC-676	KRAS	c.34G>T	p.G12C	EX2	9.8%	NM_033360.2
NC-676	BCL11B	c.2505G>T	p.Q835H	EX4E	11.7%	NM_138576.2
NC-676	GRIN2A	c.2216C>T	p.A739V	EX11	11.0%	NM_001134407.1
NC-676	CDH11	c.1087C>G	p.P363A	EX8	10.7%	NM_001797.2
NC-676	TP53	c.625A>T	p.R209*	EX6	12.5%	NM_000546.5
NC-676	SMARCA4	c.2766G>T	p.W922C	EX19	14.9%	NM_003072.3
NC-676	CBR3	c.674C>T	p.A225V	EX3E	11.6%	NM_001236.3
NC-677	ARID1A	c.973G>C	p.A325P	EX1	41.1%	NM_006015.4
NC-677	RAD54L	c.547G>A	p.D183N	EX8	22.2%	NM_001142548.1
NC-677	RAD54L	c.628G>A	p.E210K	EX8	20.9%	NM_001142548.1
NC-677	RAD54L	c.634G>A	p.D212N	EX8	21.0%	NM_001142548.1
NC-677	NRAS	c.307G>T	p.V103L	EX4	1.1%	NM_002524.4
NC-677	NOTCH2	c.3121G>T	p.V1041F	EX19	1.1%	NM_024408.3
NC-677	DNMT3A	c.1101A>T	p.K367N	EX9	60.0%	NM_022552.4
NC-677	ALK	c.4205G>T	p.G1402V	EX29E	1.0%	NM_004304.4
NC-677	SETD2	c.1589G>T	p.C530F	EX3	1.0%	NM_014159.6
NC-677	EPHA3	c.834C>A	p.Y278*	EX4	1.3%	NM_005233.5
NC-677	IRF2	c.951G>T	p.M317I	EX9E	1.1%	NM_002199.3
NC-677	SDHA	c.1308C>A	p.Y436*	EX10	1.3%	NM_004168.2
NC-677	APC	c.60C>A	p.N20K	EX2	1.2%	NM_000038.5
NC-677	RAD50	c.2486A>T	p.N829I	EX15	39.2%	NM_005732.3
NC-677	NPM1	c.268G>T	p.G90W	EX4	40.2%	NM_002520.6
NC-677	NPM1	c.738C>A	p.D246E	EX9	1.1%	NM_002520.6
NC-677	ERBB3	c.3898C>A	p.H1300N	EX28E	1.0%	NM_001982.3
NC-677	HNF1A	c.29C>A	p.T10K	EX1	1.2%	NM_000545.5

NC-677	RB1	c.2174dupT	p.T726Nfs*25	EX21	77.1%	NM_000321.2
NC-677	ZFHX3	c.251G>T	p.C84F	EX2	1.1%	NM_006885.3
NC-677	TP53	c.745A>G	p.R249G	EX7	77.8%	NM_000546.5
NC-677	EP300	c.1445C>A	p.T482K	EX6	1.2%	NM_001429.3
NC-677	CRLF2	c.577G>T	p.V193L	EX5	1.1%	NM_022148.2
NC-677	CDK13	c.1052A>G	p.Y351C	EX1	43.0%	NM_003718.4
NC-677	FANCG	c.919G>T	p.V307F	EX7	1.0%	NM_004629.1
NC-677	BRD3	c.622G>T	p.V208F	EX5	1.1%	NM_007371.3
NC-677	MLH3	c.3012G>T	p.M1004I	EX2	1.0%	NM_001040108.1
NC-677	MLH3	c.2763G>T	p.M921I	EX2	1.0%	NM_001040108.1
NC-677	CREBBP	c.4471C>G	p.Q1491E	EX27	85.3%	NM_004380.2
NC-677	CREBBP	c.4426C>A	p.P1476T	EX27	84.6%	NM_004380.2
NC-677	CREBBP	c.4413C>G	p.I1471M	EX27	84.8%	NM_004380.2
NC-677	BRIP1	c.518G>T	p.R173L	EX6	1.0%	NM_032043.2
NC-677	NOTCH3	c.4039G>T	p.G1347W	EX24	57.1%	NM_000435.2
NC-678	PAX3	c.988A>G	p.R330G	EX7	19.1%	NM_181457.3
NC-678	ARID1B	c.712G>T	p.A238S	EX1	16.1%	NM_020732.3
NC-678	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	16.0%	NM_005228.3
NC-678	EGFR	c.2369C>T	p.T790M	EX20	14.2%	NM_005228.3
NC-678	EGFR	c.2389T>A	p.C797S	EX20	14.2%	NM_005228.3
NC-678	USP8	c.1986C>G	p.I662M	EX15	15.1%	NM_001128611.1
NC-678	TP53	c.672G>T	p.E224D	EX6	47.7%	NM_000546.5
NC-678	SMAD4	c.316A[5>4]	p.N107Mfs*3	EX3	19.3%	NM_005359.5
NC-679	DNMT3A	c.134C>T	p.A45V	EX3	2.5%	NM_022552.4
NC-679	EGFR	c.2573T>G	p.L858R	EX21	6.7%	NM_005228.3

NC-679	TP53	c.817C>T	p.R273C	EX8	7.7%	NM_000546.5
NC-680	AKT3	c.1162C>T	p.R388C	EX10	2.6%	NM_005465.4
NC-680	KIT	c.687_706delCACAGTGACGTGCACAATAAinsT	p.T230Kfs*40	EX4	1.4%	NM_000222.2
NC-680	FLT4	c.2342G>A	p.G781D	EX16	1.3%	NM_182925.4
NC-680	EGFR	c.2300_2308dupCCAGCGTGG	p.A767_V769dup	EX20	42.0%	NM_005228.3
NC-680	HGF	c.665T>A	p.L222H	EX6	7.9%	NM_000601.4
NC-680	CREBBP	c.4039C>T	p.R1347W	EX24	6.0%	NM_004380.2
NC-680	TP53	c.839G>C	p.R280T	EX8	48.0%	NM_000546.5
NC-680	STAG2	c.3395T>G	p.L1132*	EX31	3.3%	NM_001042749.1
NC-681	OR6F1	c.805G>T	p.D269Y	EX1E	13.3%	NM_001005286.1
NC-681	LRP1B	c.64A>T	p.T22S	EX1	16.9%	NM_018557.2
NC-681	CTNNA1	c.2136C>G	p.I712M	EX15	18.6%	NM_001903.2
NC-681	ARID1B	c.5437A>C	p.N1813H	EX20E	16.9%	NM_020732.3
NC-681	EGFR	c.2369C>T	p.T790M	EX20	57.0%	NM_005228.3
NC-681	EGFR	c.2573T>G	p.L858R	EX21	74.1%	NM_005228.3
NC-681	EPHB6	c.1841T>G	p.V614G	EX12	16.0%	NM_004445.3
NC-681	FGFR1	c.407C>T	p.S136L	EX4	18.2%	NM_023110.2
NC-681	TGFBR1	c.1285T>C	p.Y429H	EX8	20.2%	NM_004612.2
NC-681	ERBB3	c.2722G>C	p.G908R	EX23	15.5%	NM_001982.3
NC-681	BRCA2	c.7188G>C	p.L2396F	EX14	15.2%	NM_000059.3
NC-681	MLH3	c.3496G>A	p.E1166K	EX5	18.5%	NM_001040108.1
NC-681	NTRK3	c.2127T>G	p.Y709*	EX17	10.0%	NM_001012338.2
NC-681	TP53	c.824G>A	p.C275Y	EX8	45.6%	NM_000546.5

NC-681	CRKL	c.686C>T	p.P229L	EX2	20.7%	NM_005207.3
NC-682	FOXP1	c.1475A>G	p.Y492C	EX13	29.6%	NM_001244814.1
NC-682	BRAF	c.1754A>G	p.H585R	EX15	1.3%	NM_004333.4
NC-682	ERBB2	c.2326_2327insTGT	p.G776delinsVC	EX20	40.9%	NM_004448.2
NC-682	BRD4	c.1267C>T	p.R423*	EX7	1.5%	NM_058243.2
NC-683	PIK3CA	c.1447G>T	p.V483L	EX9	2.9%	NM_006218.2
NC-683	KDR	c.2781C[2>1]	p.L928*fs*1	EX20	2.7%	NM_002253.2
NC-683	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	14.5%	NM_005228.3
NC-683	RUNX1T1	c.826G>T	p.D276Y	EX6	1.2%	NM_175635.2
NC-683	CDK12	c.3795G>T	p.R1265S	EX14E	4.0%	NM_016507.2
NC-683	SPOP	c.430G>C	p.D144H	EX5	1.6%	NM_001007228.1
NC-684	LRP1B	c.3940C>T	p.R1314W	EX24	8.2%	NM_018557.2
NC-684	HDAC4	c.361A>G	p.M121V	EX5	11.3%	NM_006037.3
NC-684	APC	c.4073C>T	p.A1358V	EX16E	1.9%	NM_000038.5
NC-684	PMS2	c.1825G>A	p.V609M	EX11	11.8%	NM_000535.5
NC-684	EGFR	c.1951G>T	p.V651L	EX17	36.1%	NM_005228.3
NC-684	EGFR	c.2573T>G	p.L858R	EX21	32.2%	NM_005228.3
NC-684	TP53	c.493C>T	p.Q165*	EX5	30.7%	NM_000546.5
NC-685	NOTCH2	c.3029C>A	p.S1010Y	EX19	28.0%	NM_024408.3
NC-685	FLG	c.8621T>G	p.V2874G	EX3E	10.8%	NM_002016.1
NC-685	BARD1	c.1472G>A	p.G491E	EX6	27.1%	NM_000465.2
NC-685	TP53	c.517G>A	p.V173M	EX5	37.6%	NM_000546.5
NC-686	SOX2	c.476G>A	p.S159N	EX1E	1.4%	NM_003106.3
NC-686	NOTCH4	c.2626G>T	p.G876W	EX17	1.3%	NM_004557.3
NC-686	BRAF	c.1799_1801delTGA	p.V600_K601delinsE	EX15	17.5%	NM_004333.4

NC-686	NTM	c.687G>T	p.K229N	EX5	6.3%	NM_001144058.1
NC-686	KDM5A	c.3400G>T	p.E1134*	EX23	6.4%	NM_001042603.1
NC-686	TP53	c.772G>T	p.E258*	EX7	17.0%	NM_000546.5
NC-686	BRCA1	c.3918G>T	p.L1306F	EX10	5.4%	NM_007294.3
NC-686	PIK3R2	c.1216C>T	p.R406C	EX10	8.9%	NM_005027.2
NC-686	BCOR	c.4376A>G	p.N1459S	EX10	10.3%	NM_001123385.1
NC-686	RBM10	c.913A>T	p.K305*	EX8	9.9%	NM_001204468.1
NC-687	MYCN	c.455C>T	p.A152V	EX2	2.7%	NM_005378.4
NC-687	ALK	c.972C>A	p.N324K	EX4	27.6%	NM_004304.4
NC-687	STAT1	c.1177G>A	p.E393K	EX14	37.5%	NM_007315.3
NC-687	APC	c.3650_3658delATACGTCCA	p.N1217_S1219del	EX16E	1.5%	NM_000038.5
NC-687	KAT6A	c.5354C>G	p.S1785C	EX18E	29.6%	NM_001099412.1
NC-687	PTPRD	c.5671G>A	p.D1891N	EX46E	15.4%	NM_002839.3
NC-687	CDKN2A	c.82_83insA	p.V28Dfs*16	EX1	42.2%	NM_000077.4
NC-687	TSC1	c.532G>T	p.V178F	EX7	30.4%	NM_000368.4
NC-687	PTEN	c.377C>T	p.A126V	EX5	5.9%	NM_000314.4
NC-687	C11orf30	c.452C>T	p.S151L	EX6	25.7%	NM_020193.3
NC-687	MLL	c.245C>T	p.S82L	EX1	28.4%	NM_001197104.1
NC-687	MLL2	c.15922-4_15927delACAGCTGCCC	.	IVS49-EX50	1.0%	NM_003482.3
NC-687	BRCA2	c.9090A[8>9]	p.T3033Nfs*11	EX23	36.6%	NM_000059.3
NC-687	DICER1	c.77C>A	p.P26H	EX3	33.8%	NM_030621.3
NC-687	TP53	c.404G>T	p.C135F	EX5	44.1%	NM_000546.5
NC-687	KCNQ2	c.1420G>A	p.E474K	EX13	33.9%	NM_172107.2

NC-688	FCGR2A	c.415A>G	p.M139V	EX4	1.1%	NM_021642.3
NC-688	EIF4A2	c.700C>T	p.R234*	EX7	1.4%	NM_001967.3
NC-688	SDHA	c.899T>C	p.I300T	EX8	1.6%	NM_004168.2
NC-688	TERT	c.-58-u13G>A	.	.	1.0%	NM_198253.2
NC-688	EGFR	c.2573T>G	p.L858R	EX21	14.9%	NM_005228.3
NC-688	CYP3A4	c.575A>G	p.N192S	EX7	1.4%	NM_017460.5
NC-688	MLL3	c.3931A>G	p.I1311V	EX25	1.3%	NM_170606.2
NC-688	NOTCH1	c.2047G>A	p.A683T	EX13	7.1%	NM_017617.3
NC-688	NF1	c.2507A>C	p.E836A	EX21	1.4%	NM_000267.3
NC-688	AURKA	c.959A>G	p.Y320C	EX8	1.1%	NM_003600.2
NC-688	RBM10	c.1231delG	p.A411Pfs*139	EX10	15.1%	NM_001204468.1
NC-689	APC	c.4661A[6>7]	p.T1556Nfs*3	EX16E	33.6%	NM_000038.5
NC-689	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	32.5%	NM_005228.3
NC-689	EPHB6	c.734C>T	p.T245M	EX7	9.6%	NM_004445.3
NC-689	PTEN	c.493-5_494delACCAGGG	.	IVS5-EX6	33.8%	NM_000314.4
NC-689	TP53	c.864_865insTTTCT	p.L289Ffs*58	EX8	27.5%	NM_000546.5
NC-690	NOTCH2	c.2309G>A	p.G770E	EX14	25.9%	NM_024408.3
NC-690	PIK3CA	c.1252G>A	p.E418K	EX8	2.0%	NM_006218.2
NC-690	PIK3CA	c.1633G>A	p.E545K	EX10	33.0%	NM_006218.2
NC-690	TET2	c.3802G>C	p.E1268Q	EX6	35.3%	NM_001127208.2
NC-690	CSF1R	c.1719G>C	p.E573D	EX12	25.1%	NM_005211.3
NC-690	ITK	c.1102G>A	p.E368K	EX12	4.4%	NM_005546.3
NC-690	DOCK2	c.4480C>T	p.P1494S	EX45	9.9%	NM_004946.2
NC-690	HIST1H1C	c.516G>C	p.K172N	EX1E	30.7%	NM_005319.3

NC-690	FYN	c.982G>T	p.A328S	EX7	30.3%	NM_153047.3
NC-690	EGFR	c.2327G>A	p.R776H	EX20	4.5%	NM_005228.3
NC-690	EGFR	c.2573T>G	p.L858R	EX21	46.8%	NM_005228.3
NC-690	MLL3	c.4111G>C	p.D1371H	EX27	18.8%	NM_170606.2
NC-690	TP53	c.395A>G	p.K132R	EX5	70.3%	NM_000546.5
NC-690	ERBB2	c.929C>A	p.S310Y	EX8	50.2%	NM_004448.2
NC-690	RARA	c.1154G>A	p.R385Q	EX8	5.3%	NM_000964.3
NC-690	EP300	c.3875-1G>C	.	IVS23	2.8%	NM_001429.3
NC-690	RBM10	c.2526_2531delCCAGCA	p.H842_Q843del	EX20	69.5%	NM_001204468.1
NC-690	CCNB3	c.2145G>C	p.E715D	EX5	16.6%	NM_033031.2
NC-690	TAF1	c.3595G>C	p.E1199Q	EX23	37.3%	NM_004606.3
NC-691	CDC73	c.757C>T	p.L253F	EX8	17.3%	NM_024529.4
NC-691	LRP1B	c.2449G>T	p.V817L	EX15	9.8%	NM_018557.2
NC-691	LRP1B	c.876G>T	p.W292C	EX7	12.4%	NM_018557.2
NC-691	PMS1	c.1234A>T	p.S412C	EX9	27.7%	NM_000534.4
NC-691	PBRM1	c.1042G>T	p.A348S	EX11	27.8%	NM_018313.4
NC-691	ROBO1	c.4609G>T	p.G1537*	EX29	29.6%	NM_002941.3
NC-691	XRCC2	c.332G>T	p.C111F	EX3	18.9%	NM_005431.1
NC-691	KRAS	c.34G>T	p.G12C	EX2	20.8%	NM_033360.2
NC-691	MLL2	c.14204G>T	p.R4735L	EX44	21.5%	NM_003482.3
NC-691	TP53	c.473G>T	p.R158L	EX5	27.3%	NM_000546.5
NC-691	CIC	c.230C>T	p.S77L	EX3	12.5%	NM_015125.3
NC-692	ARID1A	c.4635G>A	p.W1545*	EX18	13.3%	NM_006015.4
NC-692	LRP1B	c.9420A>T	p.Q3140H	EX59	14.1%	NM_018557.2
NC-692	EPHA5	c.1406C>G	p.P469R	EX6	8.6%	NM_004439.5

NC-692	CARD11	c.2284G>A	p.V762M	EX18	12.7%	NM_032415.4
NC-692	PIK3CG	c.690C>A	p.S230R	EX2	15.0%	NM_002649.2
NC-692	PTPRD	c.2455A>T	p.T819S	EX27	8.4%	NM_002839.3
NC-692	KRAS	c.38G>A	p.G13D	EX2	15.4%	NM_033360.2
NC-692	DICER1	c.353A>G	p.D118G	EX5	13.8%	NM_030621.3
NC-693	C1QA	c.238G>A	p.G80S	EX3E	11.0%	NM_015991.2
NC-693	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	15.7%	NM_005228.3
NC-693	TP53	c.743G>A	p.R248Q	EX7	15.3%	NM_000546.5
NC-693	ERG	c.1171G>A	p.D391N	EX10E	7.8%	NM_182918.3
NC-693	BCOR	c.622G>A	p.D208N	EX4	3.1%	NM_001123385.1
NC-693	MED12	c.5955delA	p.D1986Ifs*25	EX41	28.0%	NM_005120.2
NC-694	CDKN2A	c.202dupG	p.A68Gfs*52	EX2	14.6%	NM_000077.4
NC-695	TP53	c.468delC	p.V157Sfs*13	EX5	12.9%	NM_000546.5
NC-695	ZFHX3	c.7831A>G	p.M2611V	EX9	12.5%	NM_006885.3
NC-695	SMARCA4	c.3383-1_3406delGGAACCACGAAGGCGGAGGACCGGG	.	IVS24-EX25	5.9%	NM_003072.3
NC-695	FANCA	c.2518G>T	p.A840S	EX27	5.8%	NM_000135.2
NC-695	MITF	c.1132G>T	p.A378S	EX9	5.5%	NM_198159.2
NC-695	ARID2	c.3023C>T	p.S1008F	EX15	5.2%	NM_152641.2
NC-695	APC	c.8323G>A	p.G2775R	EX16	4.5%	NM_000038.5
NC-696	SDHA	c.617G>T	p.G206V	EX5	1.3%	NM_004168.2
NC-696	EXT1	c.1384C>G	p.L462V	EX5	3.0%	NM_000127.2
NC-696	ATM	c.5529delA	p.Y1844Tfs*2	EX37	8.2%	NM_000051.3

NC-696	ABCC11	c.3454G>T	p.D1152Y	EX25	15.9%	NM_032583.3
NC-696	TP53	c.461G>T	p.G154V	EX5	27.3%	NM_000546.5
NC-697	MNDA	c.593_594delGGinsTT	p.R198L	EX5	6.2%	NM_002432.1
NC-697	SRD5A2	c.674_675delGGinsC	p.G225Afs*54	EX4	12.9%	NM_000348.3
NC-697	LRP1B	c.10692G>T	p.Q3564H	EX69	11.8%	NM_018557.2
NC-697	LRP1B	c.3985G>T	p.V1329F	EX25	12.0%	NM_018557.2
NC-697	LRP1B	c.3958A>T	p.S1320C	EX24	1.4%	NM_018557.2
NC-697	TET2	c.822delC	p.N275Ifs*18	EX3	1.3%	NM_001127208.2
NC-697	IL7R	c.1297C>T	p.Q433*	EX8E	4.2%	NM_002185.3
NC-697	PDGFRB	c.386C>T	p.P129L	EX4	1.4%	NM_002609.3
NC-697	NOTCH1	c.5257G>T	p.G1753W	EX28	7.0%	NM_017617.3
NC-697	TCF7L2	c.1621G>C	p.A541P	EX14E	10.8%	NM_001146274.1
NC-697	C11orf30	c.56T>G	p.I19S	EX2	2.0%	NM_020193.3
NC-697	CDKN1B	c.487C>G	p.Q163E	EX2	1.2%	NM_004064.3
NC-697	KRAS	c.35G>A	p.G12D	EX2	37.8%	NM_033360.2
NC-697	NAV3	c.1777C>T	p.P593S	EX8	4.2%	NM_014903.4
NC-697	GRIN2A	c.2968G>C	p.E990Q	EX13E	4.8%	NM_001134407.1
NC-697	TP53	c.644G>A	p.S215N	EX6	21.5%	NM_000546.5
NC-697	STAG2	c.3460G>A	p.D1154N	EX31	1.2%	NM_001042749.1
NC-698	DPYD	c.1651G>T	p.A551S	EX13	19.4%	NM_000110.3
NC-698	DDR2	c.223G>C	p.E75Q	EX5	12.2%	NM_006182.2
NC-698	LRP1B	c.4252T>C	p.Y1418H	EX26	16.0%	NM_018557.2
NC-698	CPS1	c.3289G>T	p.D1097Y	EX26	33.6%	NM_001875.4
NC-698	PIK3CB	c.37G>T	p.D13Y	EX1	15.2%	NM_006219.2
NC-698	MECOM	c.1310G>C	p.G437A	EX8	6.6%	NM_004991.3
NC-698	FBXW7	c.1762G>T	p.E588*	EX11	25.2%	NM_033632.3

NC-698	CTNNA1	c.1322C>G	p.S441*	EX10	21.8%	NM_001903.2
NC-698	FAT2	c.914C>T	p.S305F	EX1	38.6%	NM_001447.2
NC-698	PRKDC	c.7898G>T	p.G2633V	EX58	20.2%	NM_006904.6
NC-698	EXT2	c.383G>T	p.R128L	EX2	34.7%	NM_207122.1
NC-698	MLL	c.3331G>A	p.D1111N	EX4	21.3%	NM_001197104.1
NC-698	RB1	c.709G>T	p.E237*	EX7	48.5%	NM_000321.2
NC-698	TP53	c.96+1G>T	.	IVS3	40.6%	NM_000546.5
NC-698	SMAD4	c.1550G>A	p.S517N	EX12E	13.6%	NM_005359.5
NC-698	SMAD4	c.1609G>T	p.D537Y	EX12E	10.3%	NM_005359.5
NC-699	KDR	c.2899A>G	p.T967A	EX21	6.2%	NM_002253.2
NC-699	EZH2	c.35C>T	p.P12L	EX2	5.3%	NM_004456.4
NC-699	BMPR1A	c.1161C>G	p.F387L	EX10	3.1%	NM_004329.2
NC-699	ATM	c.8624A>G	p.N2875S	EX59	4.5%	NM_000051.3
NC-699	KRAS	c.35G>C	p.G12A	EX2	11.4%	NM_033360.2
NC-699	GRIN2A	c.3226A>C	p.N1076H	EX13E	5.7%	NM_001134407.1
NC-699	TP53	c.736A>G	p.M246V	EX7	8.6%	NM_000546.5
NC-699	STK11	c.465-2A>T	.	IVS3	6.3%	NM_000455.4
NC-699	KEAP1	c.331T>A	p.F111I	EX2	18.5%	NM_203500.1
NC-700	MSH6	c.175C>A	p.P59T	EX1	1.4%	NM_000179.2
NC-700	TBL1XR1	c.345_347delAGC	p.A108[11>10]	EX5	11.9%	NM_024665.4
NC-701	VTCN1	c.515G>A	p.R172Q	EX4	1.3%	NM_024626.3
NC-701	EGFR	c.2573T>G	p.L858R	EX21	73.2%	NM_005228.3
NC-701	ABL1	c.1425T>A	p.C475*	EX9	2.2%	NM_005157.4
NC-701	RNF43	c.1820C>T	p.S607L	EX9	2.1%	NM_017763.4
NC-701	AXL	c.1472G>C	p.R491T	EX12	13.4%	NM_021913.3
NC-701	RUNX1	c.277G>C	p.D93H	EX4	7.9%	NM_001754.4

NC-702	PIK3CA	c.1633G>A	p.E545K	EX10	3.7%	NM_006218.2
NC-702	APC	c.3778C>T	p.Q1260*	EX16E	2.4%	NM_000038.5
NC-702	EGFR	c.2236_2251delGAATTAAGAGAAGCAAinsCTTT	p.E746_T751delinsLS	EX19	1.6%	NM_005228.3
NC-702	KRAS	c.183A>C	p.Q61H	EX3	5.5%	NM_033360.2
NC-702	SMAD4	c.1545A>T	p.R515S	EX12E	2.9%	NM_005359.5
NC-702	BRD4	c.2239C>A	p.Q747K	EX13	3.2%	NM_058243.2
NC-703	MLL	c.4408C>A	p.Q1470K	EX11	9.6%	NM_001197104.1
NC-703	NTM	c.772G>A	p.D258N	EX5	2.3%	NM_001144058.1
NC-703	KRAS	c.35G>T	p.G12V	EX2	52.3%	NM_033360.2
NC-703	MLL2	c.1270G>T	p.V424F	EX10	12.9%	NM_003482.3
NC-703	FANCA	c.1348G>C	p.D450H	EX14	1.9%	NM_000135.2
NC-703	TP53	c.434T>A	p.L145Q	EX5	46.5%	NM_000546.5
NC-703	PPM1D	c.1495G>C	p.V499L	EX6E	15.6%	NM_003620.3
NC-703	BRIP1	c.844A>G	p.T282A	EX7	13.7%	NM_032043.2
NC-703	NOTCH2	c.3147C>G	p.C1049W	EX19	11.4%	NM_024408.3
NC-703	OR2T4	c.881C>T	p.P294L	EX1E	15.3%	NM_001004696.1
NC-703	LRP1B	c.6743T>C	p.F2248S	EX41	28.6%	NM_018557.2
NC-703	LRP1B	c.4357C>A	p.L1453I	EX27	13.9%	NM_018557.2
NC-703	LRP1B	c.1573C>T	p.L525F	EX11	28.2%	NM_018557.2
NC-703	EPHA5	c.2275G>T	p.G759C	EX13	14.8%	NM_004439.5
NC-704	ZFP36L2	c.512G>A	p.G171D	EX2E	19.9%	NM_006887.4
NC-704	CBLB	c.1766C>A	p.P589H	EX12	23.8%	NM_170662.3
NC-704	PIK3CA	c.3062A>G	p.Y1021C	EX21E	26.2%	NM_006218.2
NC-704	FAT2	c.1537delA	p.I513Sfs*13	EX1	12.7%	NM_001447.2

NC-704	IMPG1	c.214G>A	p.A72T	EX2	19.8%	NM_001563.2
NC-704	GRM3	c.341G>A	p.R114K	EX2	25.4%	NM_000840.2
NC-704	PIK3CG	c.2652C>A	p.D884E	EX8	28.8%	NM_002649.2
NC-704	SMO	c.1425C>G	p.F475L	EX8	40.9%	NM_005631.4
NC-704	CDKN2A	c.222C[4>5]	p.A76Rfs*44	EX2	37.7%	NM_000077.4
NC-704	NOTCH1	c.1286G>C	p.C429S	EX8	37.5%	NM_017617.3
NC-704	SLX4	c.4554G>T	p.E1518D	EX12	28.5%	NM_032444.2
NC-704	TP53	c.480_481delGGinsAA	p.M160_A161delinsIT	EX5	20.4%	NM_000546.5
NC-704	TP53	c.473G>T	p.R158L	EX5	20.2%	NM_000546.5
NC-704	SOX9	c.791G>C	p.R264T	EX3E	74.7%	NM_000346.3
NC-705	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	24.0%	NM_005228.3
NC-705	POT1	c.766C>A	p.Q256K	EX10	4.0%	NM_015450.2
NC-705	FANCM	c.499G>A	p.E167K	EX1	19.7%	NM_020937.2
NC-705	RBM10	c.179G>A	p.R60Q	EX2	1.4%	NM_001204468.1
NC-705	ATRX	c.6557C>T	p.S2186F	EX30	3.4%	NM_000489.3
NC-706	EIF2C3	c.613C>T	p.Q205*	EX5	2.0%	NM_024852.3
NC-706	PTCH2	c.1962G>C	p.Q654H	EX14	1.7%	NM_001166292.1
NC-706	RNASEL	c.1669G>A	p.E557K	EX4	1.8%	NM_021133.3
NC-706	PIK3CA	c.1638G>C	p.Q546H	EX10	19.5%	NM_006218.2
NC-706	PIK3R1	c.761C>A	p.S254Y	EX6	19.2%	NM_181523.2
NC-706	EGFR	c.2573T>G	p.L858R	EX21	58.4%	NM_005228.3
NC-706	MET	c.1194T>A	p.F398L	EX2	3.5%	NM_000245.2
NC-706	FLT3	c.900G>A	p.M300I	EX8	34.9%	NM_004119.2
NC-706	GRIN2A	c.3721C>T	p.R1241W	EX13E	1.4%	NM_001134407.1
NC-706	GRIN2A	c.2332G>A	p.A778T	EX11	17.3%	NM_001134407.1

NC-706	TP53	c.1015G>T	p.E339*	EX10	50.8%	NM_000546.5
NC-706	NCOR1	c.6414G>T	p.E2138D	EX41	1.7%	NM_006311.3
NC-706	EP300	c.4307G>C	p.W1436S	EX27	1.8%	NM_001429.3
NC-707	CTNNB1	c.94G>T	p.D32Y	EX3	8.1%	NM_001904.3
NC-707	CDK12	c.2948G>A	p.R983Q	EX10	10.1%	NM_016507.2
NC-708	MLL	c.6200G>A	p.R2067H	EX25	3.2%	NM_001197104.1
NC-708	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	2.2%	NM_004448.2
NC-709	TP53	c.472C>G	p.R158G	EX5	19.1%	NM_000546.5
NC-710	AFF3	c.2000G>A	p.R667H	EX14	11.2%	NM_001025108.1
NC-710	EPHA5	c.659G>T	p.C220F	EX3	2.1%	NM_004439.5
NC-710	TET2	c.2542A>G	p.T848A	EX3	1.6%	NM_001127208.2
NC-710	PIK3R1	c.320A>T	p.D107V	EX2	17.7%	NM_181523.2
NC-710	CTNNA1	c.2484delT	p.V829Wfs*5	EX18E	18.0%	NM_001903.2
NC-710	FGFR4	c.767C>T	p.P256L	EX7	3.1%	NM_213647.1
NC-710	INHBA	c.641G>A	p.R214Q	EX3E	9.2%	NM_002192.2
NC-710	ABCA13	c.13602G>C	p.K4534N	EX51	1.8%	NM_152701.3
NC-710	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	32.4%	NM_005228.3
NC-710	POT1	c.1007-1G>A	.	IVS12	12.6%	NM_015450.2
NC-710	WRN	c.3616G>T	p.E1206*	EX31	7.7%	NM_000553.4
NC-710	TAF1L	c.4217C>T	p.S1406F	EX1E	1.9%	NM_153809.2
NC-710	XRCC3	c.925G>C	p.G309R	EX10E	1.4%	NM_001100119.1
NC-710	ZFHX3	c.10961C>T	p.S3654L	EX10E	11.9%	NM_006885.3
NC-710	TOP2A	c.3371C>A	p.T1124N	EX26	1.0%	NM_001067.3
NC-710	CEBPA	c.16T>G	p.F6V	EX1E	3.1%	NM_004364.3

NC-710	ATRX	c.4522G>T	p.A1508S	EX15	11.7%	NM_000489.3
NC-711	NOTCH3	c.668C>T	p.A223V	EX4	13.9%	NM_000435.2
NC-712	TP73	c.643A>T	p.I215F	EX6	1.2%	NM_005427.3
NC-712	FCGR2B	c.770G>T	p.G257V	EX6	3.8%	NM_004001.4
NC-712	GNA12	c.817T>G	p.S273A	EX4E	1.7%	NM_007353.2
NC-712	ABCA13	c.10235C>A	p.A3412E	EX30	24.3%	NM_152701.3
NC-712	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	36.1%	NM_005228.3
NC-712	TSC2	c.782G>A	p.R261Q	EX9	1.5%	NM_000548.3
NC-712	TP53	c.742C>T	p.R248W	EX7	18.7%	NM_000546.5
NC-713	BCL9	c.3112G>T	p.D1038Y	EX9	18.3%	NM_004326.2
NC-713	TERT	c.-58-u88C>T	.	.	9.7%	NM_198253.2
NC-713	TP53	c.523C>T	p.R175C	EX5	17.9%	NM_000546.5
NC-713	RUNX1	c.791AG[2>1]	p.Q266Dfs*333	EX7	15.2%	NM_001754.4
NC-713	EP300	c.842C>G	p.S281*	EX3	14.1%	NM_001429.3
NC-714	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	39.3%	NM_005228.3
NC-714	PTPRD	c.3245C>A	p.S1082*	EX30	1.7%	NM_002839.3
NC-714	MLL	c.3061_3062delAA	p.K1021Efs*17	EX3	1.0%	NM_001197104.1
NC-714	TP53	c.746G>C	p.R249T	EX7	45.4%	NM_000546.5
NC-714	BCL2L1	c.302A>T	p.Y101F	EX2	27.0%	NM_138578.1
NC-714	ATRX	c.7411C>G	p.P2471A	EX35E	12.7%	NM_000489.3
NC-715	TP73	c.1707C>G	p.I569M	EX14E	27.8%	NM_005427.3
NC-715	DDR2	c.1245C>G	p.I415M	EX11	8.6%	NM_006182.2
NC-715	CASP8	c.589-1G>A	.	IVS3	26.9%	NM_001080125.1
NC-715	SETD2	c.6088C>T	p.Q2030*	EX13	8.2%	NM_014159.6

NC-715	TET2	c.934A>C	p.N312H	EX3	25.0%	NM_001127208.2
NC-715	RAD50	c.617A>G	p.Y206C	EX5	14.4%	NM_005732.3
NC-715	EGFR	c.1880G>A	p.G627E	EX15	1.6%	NM_005228.3
NC-715	CDKN2B	c.256G>A	p.D86N	EX2E	24.0%	NM_004936.3
NC-715	CDKN2B	c.138C>A	p.F46L	EX1	20.9%	NM_004936.3
NC-715	ARID2	c.1716-1G>A	.	IVS13	24.9%	NM_152641.2
NC-715	ERBB3	c.3583G>C	p.E1195Q	EX28E	25.7%	NM_001982.3
NC-715	TP53	c.637C>T	p.R213*	EX6	29.2%	NM_000546.5
NC-715	ASXL1	c.2894G>A	p.R965Q	EX13E	18.3%	NM_015338.5
NC-715	KDM5C	c.115G>C	p.E39Q	EX1	45.5%	NM_004187.3
NC-716	JAK1	c.2338G>A	p.G780R	EX17	22.4%	NM_002227.2
NC-716	FCGR2A	c.403G>A	p.G135R	EX4	16.0%	NM_021642.3
NC-716	FAP	c.671C>A	p.A224E	EX9	16.5%	NM_004460.2
NC-716	FAT1	c.11413T>A	p.C3805S	EX20	22.6%	NM_005245.3
NC-716	PDGFRB	c.1085C>T	p.A362V	EX7	24.4%	NM_002609.3
NC-716	ARID1B	c.977G>C	p.G326A	EX1	8.1%	NM_020732.3
NC-716	EGFR	c.2015A>T	p.H672L	EX17	8.7%	NM_005228.3
NC-716	CDKN2A	c.384_394delGTACCTGCGCG	p.Y129Gfs*9	EX2	21.0%	NM_000077.4
NC-716	TCF7L2	c.137C>A	p.S46*	EX1	21.7%	NM_001146274.1
NC-716	WT1	c.841C>A	p.Q281K	EX3	8.0%	NM_024426.4
NC-716	MLL2	c.10753delC	p.Q3585Rfs*73	EX39	17.9%	NM_003482.3
NC-716	IDH2	c.871_875delGATGA	p.D291Hfs*20	EX7	6.1%	NM_002168.2
NC-716	TP53	c.811G>A	p.E271K	EX8	24.0%	NM_000546.5
NC-716	CDK12	c.3377_3378delAAinsCC	p.Q1126P	EX13	1.1%	NM_016507.2

NC-716	ROCK1	c.2731G>T	p.E911*	EX23	18.7%	NM_005406.2
NC-717	PMS2	c.-87-u195G>A	.	.	1.1%	NM_000535.5
NC-717	WRN	c.3857C>T	p.T1286I	EX33	1.1%	NM_000553.4
NC-717	MS4A1	c.440T>A	p.L147*	EX6	12.4%	NM_152866.2
NC-717	CHD4	c.3724G>A	p.E1242K	EX25	3.6%	NM_001273.2
NC-717	EP300	c.4166A>T	p.N1389I	EX25	1.0%	NM_001429.3
NC-718	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	5.0%	NM_005228.3
NC-719	PDCD1	c.586G>A	p.A196T	EX3	16.9%	NM_005018.2
NC-719	TET2	c.3395C>T	p.S1132F	EX3	13.0%	NM_001127208.2
NC-719	FAT2	c.11728G>A	p.E3910K	EX20	4.0%	NM_001447.2
NC-719	CARD11	c.3397C>T	p.R1133C	EX25E	1.6%	NM_032415.4
NC-719	EGFR	c.2240_2259delTAAGAGAAGCAACATCTCCGinsCT	p.L747_P753delinsS	EX19	20.8%	NM_005228.3
NC-719	EGFR	c.2369C>T	p.T790M	EX20	1.2%	NM_005228.3
NC-719	BRAF	c.1455G>T	p.L485F	EX12	3.9%	NM_004333.4
NC-719	CDH23	c.1234C>T	p.R412C	EX13	6.6%	NM_022124.5
NC-719	STAG2	c.1847T>C	p.I616T	EX20	1.4%	NM_001042749.1
NC-720	TGFBR2	c.316C>T	p.Q106*	EX3	1.0%	NM_001024847.2
NC-720	EGFR	c.2573T>G	p.L858R	EX21	7.1%	NM_005228.3
NC-720	RBM10	c.2426delG	p.R809Lfs*58	EX20	3.3%	NM_001204468.1
NC-721	INPP4B	c.1175G>C	p.R392T	EX15	7.3%	NM_001101669.1
NC-721	NOTCH1	c.981G>T	p.W327C	EX6	1.6%	NM_017617.3
NC-721	NTRK3	c.1668G>C	p.E556D	EX15	7.3%	NM_001012338.2
NC-721	TP53	c.736A>G	p.M246V	EX7	11.6%	NM_000546.5

NC-721	KEAP1	c.1413C[2>1]	p.L472Ffs*28	EX4	10.7%	NM_203500.1
NC-722	ERRFI1	c.98A>C	p.Y33S	EX2	25.9%	NM_018948.3
NC-722	DNMT3A	c.556C>T	p.P186S	EX6	21.6%	NM_022552.4
NC-722	EPAS1	c.2338C>G	p.L780V	EX15	24.8%	NM_001430.4
NC-722	CTNNB1	c.97T>G	p.S33A	EX3	31.6%	NM_001904.3
NC-722	SDHA	c.7G>T	p.G3W	EX1	7.5%	NM_004168.2
NC-722	EGFR	c.2247A>C	p.E749D	EX19	35.0%	NM_005228.3
NC-722	EGFR	c.2256_2276delTCCGAAAGCCAACAAGGAAATinsGGC	p.P753_I759delinsA	EX19	21.3%	NM_005228.3
NC-722	TSC1	c.2959G>T	p.E987*	EX22	35.3%	NM_000368.4
NC-722	ATM	c.566G>C	p.R189T	EX6	1.8%	NM_000051.3
NC-722	TP53	c.1036G>T	p.E346*	EX10	8.7%	NM_000546.5
NC-722	NCOR1	c.1496G>C	p.R499T	EX14	30.3%	NM_006311.3
NC-722	PRKAR1A	c.871G>A	p.E291K	EX9	1.0%	NM_212471.1
NC-722	SMAD4	c.1333C>T	p.R445*	EX11	37.4%	NM_005359.5
NC-723	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	25.7%	NM_005228.3
NC-723	SH3PXD2A	c.2241C>G	p.I747M	EX14E	9.5%	NM_014631.2
NC-723	HSP90AA1	c.1087A>G	p.K363E	EX6	6.3%	NM_001017963.2
NC-724	EGFR	c.2317_2322dupCACGTG	p.H773_V774dup	EX20	14.2%	NM_005228.3
NC-724	TP53	c.722C>T	p.S241F	EX7	5.7%	NM_000546.5
NC-724	TBX3	c.1405G>A	p.E469K	EX7	4.1%	NM_016569.3
NC-724	PDGFRB	c.2271G>A	p.M757I	EX16	4.0%	NM_002609.3
NC-724	TBX3	c.935A[6>7]	p.R314Kfs*13	EX5	3.7%	NM_016569.3

NC-725	MLL3	c.10126C>T	p.Q3376*	EX43	34.6%	NM_170606.2
NC-726	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	7.1%	NM_004448.2
NC-727	EP300	c.3991A[4>5]	p.T1332Nfs*33	EX24	18.1%	NM_001429.3
NC-728	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	9.4%	NM_005228.3
NC-728	TP53	c.725G>T	p.C242F	EX7	10.7%	NM_000546.5
NC-728	CRKL	c.733A[4>3]	p.R246Efs*13	EX2	5.4%	NM_005207.3
NC-729	TRIM58	c.595C>T	p.R199W	EX3	2.1%	NM_015431.3
NC-729	BRD2	c.1742C>T	p.P581L	EX9	13.2%	NM_001199455.1
NC-729	MET	c.3028G>C	p.D1010H	EX14	22.5%	NM_000245.2
NC-729	ZFHX3	c.6641C>T	p.P2214L	EX9	3.4%	NM_006885.3
NC-729	GNA13	c.1003C>T	p.R335W	EX4E	2.3%	NM_006572.4
NC-729	ASXL1	c.904C>A	p.R302S	EX10	1.3%	NM_015338.5
NC-730	EGFR	c.185T>G	p.L62R	EX2	15.3%	NM_005228.3
NC-730	EGFR	c.2573T>G	p.L858R	EX21	15.5%	NM_005228.3
NC-731	KDR	c.2948T>C	p.L983P	EX21	13.6%	NM_002253.2
NC-731	EPHB6	c.899G>A	p.R300H	EX7	13.5%	NM_004445.3
NC-731	TBX3	c.2176C>T	p.R726W	EX8E	1.9%	NM_016569.3
NC-731	TP53	c.166_167delGAinsT	p.E56*fs*1	EX4	11.5%	NM_000546.5
NC-732	EGFR	c.2573T>G	p.L858R	EX21	23.1%	NM_005228.3
NC-732	TP53	c.842dupA	p.D281Efs*25	EX8	39.0%	NM_000546.5
NC-732	DOT1L	c.1756G>C	p.E586Q	EX18	1.0%	NM_032482.2
NC-732	BRD4	c.2168C>T	p.P723L	EX12	1.1%	NM_058243.2
NC-732	STAG2	c.3265C>T	p.Q1089*	EX30	6.9%	NM_001042749.1
NC-733	NRAS	c.182A>T	p.Q61L	EX3	3.7%	NM_002524.4

NC-733	FOXL2	c.356G>A	p.G119D	EX1E	2.1%	NM_023067.3
NC-734	FAT1	c.10609G>A	p.E3537K	EX19	10.6%	NM_005245.3
NC-734	HIST1H2BC	c.10C>T	p.P4S	EX1E	12.4%	NM_003526.2
NC-734	EGFR	c.2369C>T	p.T790M	EX20	9.9%	NM_005228.3
NC-734	EGFR	c.2573T>G	p.L858R	EX21	45.6%	NM_005228.3
NC-734	RAD21	c.1603G>A	p.D535N	EX12	17.6%	NM_006265.2
NC-734	RB1	c.277C>T	p.Q93*	EX3	19.2%	NM_000321.2
NC-734	AKT1	c.502A>G	p.K168E	EX6	18.6%	NM_001014431.1
NC-734	TP53	c.817C>T	p.R273C	EX8	34.6%	NM_000546.5
NC-734	SPOP	c.295C>T	p.R99W	EX4	10.3%	NM_001007228.1
NC-734	BCOR	c.3510G>A	p.W1170*	EX8	3.5%	NM_001123385.1
NC-735	FLG	c.8556G>T	p.R2852S	EX3E	4.1%	NM_002016.1
NC-735	NFE2L2	c.235G>A	p.E79K	EX2	4.2%	NM_006164.4
NC-735	NFE2L2	c.85G>C	p.D29H	EX2	4.4%	NM_006164.4
NC-735	CASP8	c.1176C>G	p.I392M	EX8	3.9%	NM_001080125.1
NC-735	FAT1	c.4184-1G>T	.	IVS6	9.7%	NM_005245.3
NC-735	HOXA3	c.380C>T	p.P127L	EX3	14.4%	NM_153631.2
NC-735	CSMD3	c.11039_11040delCCinsAA	p.P3680Q	EX71E	9.2%	NM_198123.1
NC-735	CDKN2A	c.298_313delGCCGGGGCGCGGCTGG	p.A100Tfs*41	EX2	8.0%	NM_000077.4
NC-735	RET	c.1789G>T	p.G597W	EX10	7.8%	NM_020975.4
NC-735	CYP2C8	c.782G>C	p.R261P	EX5	9.8%	NM_000770.3
NC-735	TBX3	c.1398G>T	p.K466N	EX7	9.7%	NM_016569.3
NC-735	IGF1R	c.346G>A	p.A116T	EX2	2.0%	NM_000875.3
NC-735	ABCC11	c.3712C>G	p.P1238A	EX27	8.2%	NM_032583.3

NC-735	TP53	c.461G>T	p.G154V	EX5	10.3%	NM_000546.5
NC-735	SMARCB1	c.470G>T	p.G157V	EX4	8.9%	NM_003073.3
NC-735	CYP2D6	c.482G>C	p.C161S	EX3	2.5%	NM_000106.5
NC-736	MYO3A	c.3055T>A	p.C1019S	EX27	4.7%	NM_017433.4
NC-736	PCSK6	c.919G>A	p.G307R	EX7	16.0%	NM_002570.3
NC-736	TP53	c.769C>G	p.L257V	EX7	14.1%	NM_000546.5
NC-736	SMAD4	c.1064A>G	p.D355G	EX9	15.0%	NM_005359.5
NC-737	EGFR	c.2573T>G	p.L858R	EX21	26.4%	NM_005228.3
NC-738	PDGFRA	c.1364+2T>A	.	IVS9	17.1%	NM_006206.4
NC-738	PABPC1	c.494A>G	p.D165G	EX3	11.0%	NM_002568.3
NC-738	ABL1	c.3178G>A	p.G1060S	EX11E	3.9%	NM_005157.4
NC-738	ARID2	c.838G>A	p.D280N	EX8	6.2%	NM_152641.2
NC-738	ARID2	c.895G>A	p.E299K	EX8	6.9%	NM_152641.2
NC-738	ARID2	c.1103G>C	p.R368T	EX9	5.8%	NM_152641.2
NC-738	CDK8	c.620G>T	p.G207V	EX6	15.8%	NM_001260.1
NC-738	FANCM	c.4999A>G	p.I1667V	EX20	27.0%	NM_020937.2
NC-738	TP53	c.848G>C	p.R283P	EX8	33.8%	NM_000546.5
NC-738	NOTCH3	c.4762A>C	p.N1588H	EX26	16.1%	NM_000435.2
NC-738	CIC	c.2505_2529delGCTTCAGGTGGCACCTGCCCCAGCA	p.Q835Hfs*81	EX10	3.7%	NM_015125.3
NC-738	CYP2D6	c.876T>G	p.D292E	EX6	6.5%	NM_000106.5
NC-738	RBM10	c.133G>A	p.E45K	EX2	26.4%	NM_001204468.1
NC-739	EGFR	c.2573T>G	p.L858R	EX21	4.4%	NM_005228.3
NC-740	KRAS	c.34G>T	p.G12C	EX2	15.7%	NM_033360.2

NC-741	SF3B1	c.188_195+9delTTGAAGATGTAAGTTAC	.	EX2-IVS2	1.4%	NM_012433.2
NC-741	FAT2	c.10963C>A	p.L3655I	EX18	1.9%	NM_001447.2
NC-741	DOCK2	c.4559A>G	p.E1520G	EX45	1.2%	NM_004946.2
NC-741	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	53.8%	NM_005228.3
NC-741	WRN	c.3175C>G	p.Q1059E	EX26	37.1%	NM_000553.4
NC-741	CREBBP	c.6311G>A	p.R2104H	EX31E	8.7%	NM_004380.2
NC-741	TP53	c.713G>A	p.C238Y	EX7	52.3%	NM_000546.5
NC-741	DOT1L	c.753C>G	p.H251Q	EX9	16.8%	NM_032482.2
NC-742	TP53	c.310C>T	p.Q104*	EX4	49.1%	NM_000546.5
NC-742	KIT	c.1202C>A	p.A401D	EX7	42.2%	NM_000222.2
NC-742	EGFR	c.2156G>C	p.G719A	EX18	76.3%	NM_005228.3
NC-742	ABCC11	c.404G>A	p.R135H	EX5	27.9%	NM_032583.3
NC-743	MSH2	c.1511-2A>G	.	IVS9	11.5%	NM_000251.2
NC-743	XPO1	c.1390C>T	p.L464F	EX14	11.0%	NM_003400.3
NC-743	LRP1B	c.7811T>G	p.I2604S	EX48	9.2%	NM_018557.2
NC-743	ERBB4	c.2635G>T	p.G879*	EX21	9.0%	NM_005235.2
NC-743	ELMO1	c.1461G>T	p.Q487H	EX17	9.8%	NM_001206482.1
NC-743	EGFR	c.673G>T	p.G225C	EX6	3.2%	NM_005228.3
NC-743	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	55.6%	NM_005228.3
NC-743	HGF	c.589C>T	p.R197C	EX5	17.8%	NM_000601.4
NC-743	SUFU	c.724G>A	p.E242K	EX6	18.3%	NM_016169.3
NC-743	KDM5A	c.1894G>T	p.A632S	EX14	28.7%	NM_001042603.1
NC-743	ZFHX3	c.2935G>C	p.V979L	EX3	26.5%	NM_006885.3

NC-743	TP53	c.373A>C	p.T125P	EX4	20.6%	NM_000546.5
NC-743	RUNX1	c.965C>T	p.S322L	EX8	8.1%	NM_001754.4
NC-743	EP300	c.4429G>C	p.E1477Q	EX27	6.9%	NM_001429.3
NC-744	KDR	c.1207C[3>2]	p.I404Ffs*25	EX9	9.0%	NM_002253.2
NC-744	EGFR	c.2573T>G	p.L858R	EX21	18.9%	NM_005228.3
NC-744	TSC2	c.5269G>C	p.E1757Q	EX42E	6.6%	NM_000548.3
NC-745	H3F3A	c.23C>G	p.A8G	EX2	35.2%	NM_002107.4
NC-745	CUL3	c.754C>G	p.L252V	EX6	23.5%	NM_003590.4
NC-745	CTNNB1	c.133T>C	p.S45P	EX3	2.1%	NM_001904.3
NC-745	MSH3	c.1250G>A	p.R417Q	EX8	1.4%	NM_002439.4
NC-745	EIF1AX	c.245G>A	p.R82Q	EX4	3.5%	NM_001412.3
NC-746	ARID1A	c.6716_6726delTTGCCTTGGCC	p.L2239Qfs*35	EX20E	1.3%	NM_006015.4
NC-746	ERBB4	c.1177C>T	p.R393W	EX10	1.4%	NM_005235.2
NC-746	ATR	c.2582G>A	p.R861K	EX12	7.1%	NM_001184.3
NC-746	CDKN2A	c.247C>T	p.H83Y	EX2	18.2%	NM_000077.4
NC-746	TP53	c.733G>A	p.G245S	EX7	1.8%	NM_000546.5
NC-746	FAM123B	c.648C>A	p.C216*	EX2E	51.6%	NM_152424.3
NC-747	EPHB2	c.293G>A	p.S98N	EX3	2.0%	NM_017449.3
NC-747	MSH6	c.1730G>A	p.R577H	EX4	16.6%	NM_000179.2
NC-747	SF3B1	c.2815C>T	p.R939C	EX19	2.2%	NM_012433.2
NC-747	ERBB4	c.3595G>T	p.E1199*	EX28E	1.9%	NM_005235.2
NC-747	IL6ST	c.1949A>G	p.H650R	EX16	10.3%	NM_002184.3
NC-747	NSD1	c.2465C>G	p.S822C	EX5	13.7%	NM_022455.4
NC-747	ESR1	c.437C>G	p.P146R	EX2	16.8%	NM_001122740.1
NC-747	MLL3	c.2486C>A	p.A829D	EX14	2.4%	NM_170606.2

NC-747	PTPRD	c.5330A>T	p.Y1777F	EX43	27.2%	NM_002839.3
NC-747	KLF4	c.1244C>A	p.A415E	EX4	12.6%	NM_004235.4
NC-747	FGFR2	c.110-1G>T	.	IVS2	14.9%	NM_000141.4
NC-747	MLL	c.7555C>T	p.R2519W	EX27	2.2%	NM_001197104.1
NC-747	KRAS	c.35G>C	p.G12A	EX2	41.3%	NM_033360.2
NC-747	FLT3	c.1561G>A	p.G521S	EX12	15.0%	NM_004119.2
NC-747	C15orf23	c.29A>C	p.D10A	EX1	3.0%	NM_033286.3
NC-747	SLX4	c.4966C>T	p.P1656S	EX14	14.6%	NM_032444.2
NC-747	CREBBP	c.2643G>T	p.Q881H	EX14	14.6%	NM_004380.2
NC-747	CTCF	c.1069G>T	p.D357Y	EX5	18.5%	NM_006565.3
NC-747	RAD51D	c.510delG	p.H171Mfs*23	EX6	22.2%	NM_002878.3
NC-747	PPP2R1A	c.82delC	p.R28Afs*104	EX2	3.0%	NM_014225.5
NC-748	LRRC7	c.133G>A	p.E45K	EX1	22.2%	NM_020794.2
NC-748	ALK	c.2102G>T	p.C701F	EX12	24.3%	NM_004304.4
NC-748	FAT2	c.5569C>G	p.Q1857E	EX9	9.2%	NM_001447.2
NC-748	MLL2	c.3337G>A	p.D1113N	EX11	4.2%	NM_003482.3
NC-748	RB1	c.1351_1360delCGCTTGTATT	p.R451Tfs*3	EX14	23.5%	NM_000321.2
NC-748	TP53	c.391_400delAACAAGATGT	p.N131Ffs*36	EX5	27.4%	NM_000546.5
NC-748	NOTCH3	c.6132T>A	p.C2044*	EX33E	59.4%	NM_000435.2
NC-748	NOTCH3	c.4261G>C	p.V1421L	EX24	57.1%	NM_000435.2
NC-748	NF2	c.651C>G	p.Y217*	EX7	33.3%	NM_000268.3
NC-748	EP300	c.773C>A	p.T258N	EX3	38.0%	NM_001429.3
NC-749	ARID1A	c.5164C>T	p.R1722*	EX20E	1.6%	NM_006015.4
NC-749	BAP1	c.271T>A	p.C91S	EX5	8.5%	NM_004656.2

NC-749	KRAS	c.35G>A	p.G12D	EX2	14.2%	NM_033360.2
NC-749	TP53	c.857A>G	p.E286G	EX8	7.2%	NM_000546.5
NC-750	FCGR2A	c.94G>A	p.D32N	EX2	3.3%	NM_021642.3
NC-750	ELF3	c.220G>A	p.D74N	EX3	4.7%	NM_004433.4
NC-750	ELF3	c.292G>C	p.D98H	EX3	4.1%	NM_004433.4
NC-750	ELF3	c.999G>A	p.M333I	EX8	5.0%	NM_004433.4
NC-750	OBSCN	c.4727C>G	p.S1576C	EX16	3.5%	NM_052843.3
NC-750	SETD2	c.6325C>T	p.R2109*	EX15	2.9%	NM_014159.6
NC-750	SETD2	c.1102C>T	p.R368*	EX3	2.7%	NM_014159.6
NC-750	ATR	c.7018G>A	p.E2340K	EX41	5.1%	NM_001184.3
NC-750	PIK3CA	c.1624G>A	p.E542K	EX10	2.1%	NM_006218.2
NC-750	BRAF	c.1799T>A	p.V600E	EX15	3.4%	NM_004333.4
NC-750	TCF7L2	c.155C>G	p.S52*	EX1	3.2%	NM_001146274.1
NC-750	TP53	c.722C>T	p.S241F	EX7	3.3%	NM_000546.5
NC-751	ROBO2	c.139C>A	p.P47T	EX3	18.0%	NM_001128929.2
NC-751	ARID1B	c.527C>T	p.P176L	EX1	1.4%	NM_020732.3
NC-751	EGFR	c.2156G>C	p.G719A	EX18	26.1%	NM_005228.3
NC-751	EGFR	c.2327G>A	p.R776H	EX20	27.3%	NM_005228.3
NC-751	NAV3	c.1196C>A	p.P399H	EX8	13.5%	NM_014903.4
NC-751	FLT1	c.175C>A	p.H59N	EX3	39.5%	NM_002019.4
NC-751	FANCA	c.1028A>G	p.Q343R	EX12	17.6%	NM_000135.2
NC-751	CCNE1	c.327-1G>T	.	IVS5	26.5%	NM_001238.2
NC-752	MUTYH	c.1142G>T	p.G381V	EX12	19.8%	NM_001128425.1
NC-752	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.2%	NM_003921.4
NC-752	SLC16A1	c.1323G>T	p.M441I	EX5E	19.4%	NM_003051.3
NC-752	FCGR3A	c.173C>A	p.T58K	EX4	8.7%	NM_001127593.1

NC-752	PARP1	c.2517A>G	p.I839M	EX19	15.9%	NM_001618.3
NC-752	IL7R	c.1138C>A	p.P380T	EX8E	37.7%	NM_002185.3
NC-752	PIK3CG	c.368G>A	p.R123H	EX2	20.3%	NM_002649.2
NC-752	PTPRD	c.116G>T	p.G39V	EX13	47.5%	NM_002839.3
NC-752	ATM	c.8525C>T	p.P2842L	EX58	43.0%	NM_000051.3
NC-752	MLL	c.9299G>C	p.G3100A	EX27	30.0%	NM_001197104.1
NC-752	FLT1	c.1523G>T	p.R508L	EX11	22.7%	NM_002019.4
NC-752	MAX	c.64-2A>T	.	IVS2	48.0%	NM_002382.4
NC-752	ABCC11	c.200C>A	p.A67D	EX3	40.6%	NM_032583.3
NC-752	TP53	c.473G>T	p.R158L	EX5	47.3%	NM_000546.5
NC-752	STAT3	c.1919A>T	p.Y640F	EX21	1.0%	NM_139276.2
NC-752	JAK3	c.115C>A	p.Q39K	EX2	29.9%	NM_000215.3
NC-752	ASXL1	c.2729A>T	p.Q910L	EX13E	38.4%	NM_015338.5
NC-753	TET2	c.1105C>T	p.R369W	EX3	23.8%	NM_001127208.2
NC-753	PIK3C2A	c.4853C>T	p.T1618M	EX31	8.2%	NM_002645.2
NC-753	IL1RAPL1	c.1016G>A	p.G339E	EX8	20.3%	NM_014271.3
NC-754	AR	c.988A>C	p.S330R	EX1	85.6%	NM_000044.3
NC-754	MTHFR	c.629A>G	p.D210G	EX5	16.2%	NM_005957.4
NC-754	LRP1B	c.10387delGinsTT	p.A3463Ffs*11	EX66	11.7%	NM_018557.2
NC-754	PIK3CB	c.2828G>A	p.G943E	EX20	2.9%	NM_006219.2
NC-754	EPHA5	c.1528G>C	p.D510H	EX7	53.2%	NM_004439.5
NC-754	MET	c.3028+1437A>T	.	IVS14	46.2%	NM_000245.2
NC-754	CDH23	c.2986T>A	p.F996I	EX26	1.4%	NM_022124.5
NC-754	ATM	c.8989G>A	p.D2997N	EX63E	35.3%	NM_000051.3
NC-754	POLE	c.6493C>T	p.R2165C	EX46	38.2%	NM_006231.2
NC-754	B2M	c.37CT[4>3]	p.L15Ffs*41	EX1	12.9%	NM_004048.2

NC-754	TP53	c.673-2A>T	.	IVS6	72.7%	NM_000546.5
NC-754	STAT3	c.308G>T	p.R103L	EX4	10.6%	NM_139276.2
NC-754	BRSK1	c.1147G>A	p.D383N	EX12	70.7%	NM_032430.1
NC-755	ARID1A	c.6698G>A	p.R2233Q	EX20E	1.3%	NM_006015.4
NC-755	NRXN1	c.479C>T	p.P160L	EX2	12.7%	NM_001135659.1
NC-755	FLT1	c.2926A>G	p.S976G	EX21	1.0%	NM_002019.4
NC-755	IRS2	c.1475C>A	p.P492H	EX1	1.2%	NM_003749.2
NC-755	BCL2A1	c.301A>C	p.K101Q	EX1	12.7%	NM_001114735.1
NC-755	PALB2	c.2017G>A	p.E673K	EX5	10.4%	NM_024675.3
NC-755	AR	c.1823G>A	p.R608Q	EX3	2.4%	NM_000044.3
NC-756	EGFR	c.2573T>G	p.L858R	EX21	9.4%	NM_005228.3
NC-756	RBM10	c.1989_1990delCA	p.Y663*fs*1	EX17	16.0%	NM_001204468.1
NC-758	LRP1B	c.2250T>A	p.Y750*	EX14	13.9%	NM_018557.2
NC-758	FLT4	c.2842C>A	p.P948T	EX20	19.2%	NM_182925.4
NC-758	GFRAL	c.380G>T	p.G127V	EX5	13.5%	NM_207410.2
NC-758	POT1	c.704T[2>3]	p.G236Wfs*5	EX10	14.4%	NM_015450.2
NC-758	MLL3	c.13766C>T	p.T4589I	EX52	8.8%	NM_170606.2
NC-758	FGFR1	c.1010G>T	p.G337V	EX8	19.7%	NM_023110.2
NC-758	EPPK1	c.6982G>A	p.D2328N	EX1E	2.1%	NM_031308.1
NC-758	KRAS	c.34G>T	p.G12C	EX2	17.4%	NM_033360.2
NC-758	FANCM	c.249G>A	p.W83*	EX1	8.9%	NM_020937.2
NC-758	FANCA	c.919C>T	p.L307F	EX11	17.2%	NM_000135.2
NC-758	TP53	c.892G>T	p.E298*	EX8	18.7%	NM_000546.5
NC-758	NF1	c.4993G>T	p.V1665F	EX36	16.4%	NM_000267.3
NC-758	BRCA1	c.3409A>G	p.M1137V	EX10	2.9%	NM_007294.3
NC-758	RNF43	c.2329G>C	p.E777Q	EX10E	2.4%	NM_017763.4

NC-759	LRP1B	c.13096G>A	p.G4366R	EX85	12.7%	NM_018557.2
NC-759	LRP1B	c.7385G>T	p.S2462I	EX44	2.8%	NM_018557.2
NC-759	EPHA5	c.2556C>A	p.F852L	EX15	5.5%	NM_004439.5
NC-759	FAT1	c.3073G>C	p.V1025L	EX2	1.5%	NM_005245.3
NC-759	SEMA3E	c.1213G>A	p.A405T	EX11	3.7%	NM_012431.2
NC-759	TP53	c.796G>A	p.G266R	EX8	15.9%	NM_000546.5
NC-759	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	11.8%	NM_004448.2
NC-759	JAK3	c.2732G>A	p.R911H	EX20	1.6%	NM_000215.3
NC-760	EGFR	c.185T>G	p.L62R	EX2	6.8%	NM_005228.3
NC-760	EGFR	c.2573T>G	p.L858R	EX21	6.4%	NM_005228.3
NC-760	ATM	c.7942C[2>1]	p.P2648Qfs*12	EX54	2.7%	NM_000051.3
NC-760	BRCA1	c.770A>C	p.H257P	EX10	5.3%	NM_007294.3
NC-760	MED12	c.5175_5189delCTACCACACACACCT	p.Y1726_L1730del	EX37	1.7%	NM_005120.2
NC-761	SETD2	c.1828G>A	p.E610K	EX3	15.5%	NM_014159.6
NC-761	MET	c.4087G>A	p.A1363T	EX21	1.5%	NM_000245.2
NC-761	ABCC11	c.415G>C	p.E139Q	EX5	13.7%	NM_032583.3
NC-761	TP53	c.733G>A	p.G245S	EX7	25.2%	NM_000546.5
NC-762	EGFR	c.2573T>G	p.L858R	EX21	7.8%	NM_005228.3
NC-762	ARID2	c.3430C[3>2]	p.I1145Ffs*11	EX15	7.4%	NM_152641.2
NC-762	RBM10	c.628-1G>T	.	IVS4	10.8%	NM_001204468.1
NC-763	BCL10	c.207dupA	p.D70Rfs*15	EX2	19.3%	NM_003921.4
NC-764	APC	c.4654G>C	p.E1552Q	EX16E	2.1%	NM_000038.5
NC-764	APC	c.6103G>C	p.E2035Q	EX16E	2.7%	NM_000038.5
NC-764	EGFR	c.2303G>T	p.S768I	EX20	10.8%	NM_005228.3

NC-764	EGFR	c.2573T>G	p.L858R	EX21	11.0%	NM_005228.3
NC-764	MET	c.3029-1175G>A	.	IVS14	1.7%	NM_000245.2
NC-764	TP53	c.404G>T	p.C135F	EX5	3.1%	NM_000546.5
NC-764	CIC	c.4777C>T	p.Q1593*	EX20E	1.9%	NM_015125.3
NC-765	ERBB4	c.1565C>T	p.S522L	EX13	1.2%	NM_005235.2
NC-765	FAT2	c.9884G>A	p.R3295Q	EX14	1.4%	NM_001447.2
NC-766	TSC2	c.4613C>T	p.P1538L	EX36	10.1%	NM_000548.3
NC-766	NOTCH4	c.5281G>A	p.D1761N	EX29	9.4%	NM_004557.3
NC-766	LRP1B	c.5678C>T	p.P1893L	EX35	8.4%	NM_018557.2
NC-766	ELAC2	c.724G>A	p.A242T	EX8	2.2%	NM_018127.6
NC-766	TFE3	c.563G>A	p.R188H	EX4	2.0%	NM_006521.4
NC-766	ERBB2	c.3624C>A	p.H1208Q	EX27	1.9%	NM_004448.2
NC-766	PIK3CG	c.2696C>T	p.T899M	EX8	1.9%	NM_002649.2
NC-766	ASXL1	c.1843G>A	p.A615T	EX13	1.6%	NM_015338.5
NC-767	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	19.8%	NM_005228.3
NC-767	NOTCH1	c.3572C>G	p.P1191R	EX22	30.5%	NM_017617.3
NC-767	ATM	c.2720_2733delGTGTAACTACTGCT	p.C907Sfs*8	EX18	18.0%	NM_000051.3
NC-767	ARID2	c.1450C>T	p.Q484*	EX11	39.3%	NM_152641.2
NC-767	TP53	c.369T[2>3]	p.C124Lfs*25	EX4	34.4%	NM_000546.5
NC-767	AXL	c.2680G>C	p.A894P	EX20E	4.1%	NM_021913.3
NC-768	DICER1	c.3317C>A	p.S1106Y	EX22	20.2%	NM_030621.3
NC-768	TOP2A	c.2111T>C	p.I704T	EX18	36.6%	NM_001067.3
NC-768	EGFR	c.2369C>T	p.T790M	EX20	9.1%	NM_005228.3
NC-768	EGFR	c.2573T>G	p.L858R	EX21	36.2%	NM_005228.3

NC-768	MLL3	c.7443-2delA	.	IVS37	28.2%	NM_170606.2
NC-769	BARD1	c.152C>T	p.S51L	EX1	2.0%	NM_000465.2
NC-769	TET2	c.4394G>A	p.R1465Q	EX10	2.4%	NM_001127208.2
NC-769	POM121L12	c.583_584delCCinsGA	p.P195E	EX1E	4.0%	NM_182595.3
NC-769	GRIN2A	c.3373G>A	p.E1125K	EX13E	1.8%	NM_001134407.1
NC-769	TP53	c.358A>T	p.K120*	EX4	5.7%	NM_000546.5
NC-770	FUBP1	c.142G>A	p.D48N	EX2	26.7%	NM_003902.3
NC-770	LRP1B	c.8858G>T	p.C2953F	EX56	27.7%	NM_018557.2
NC-770	EGFR	c.2560A>G	p.T854A	EX21	39.4%	NM_005228.3
NC-770	EGFR	c.2573T>G	p.L858R	EX21	39.2%	NM_005228.3
NC-770	PIK3CG	c.820G>A	p.V274I	EX2	37.8%	NM_002649.2
NC-770	C8orf34	c.1021G>T	p.D341Y	EX7	14.8%	NM_052958.2
NC-770	PTPRD	c.3196C>T	p.R1066*	EX30	11.8%	NM_002839.3
NC-770	PTPRD	c.1330C>A	p.P444T	EX21	12.7%	NM_002839.3
NC-770	NUMA1	c.6137A>C	p.Q2046P	EX26	26.3%	NM_006185.2
NC-770	BLM	c.1442C>T	p.A481V	EX7	36.3%	NM_000057.2
NC-770	TP53	c.695T>G	p.I232S	EX7	43.3%	NM_000546.5
NC-770	CEBPA	c.313G>A	p.D105N	EX1E	39.9%	NM_004364.3
NC-771	HDAC4	c.3172G>A	p.A1058T	EX26	1.6%	NM_006037.3
NC-771	CTNNB1	c.110C>G	p.S37C	EX3	2.5%	NM_001904.3
NC-771	NOTCH4	c.2335G>T	p.G779W	EX15	5.6%	NM_004557.3
NC-771	ARID1B	c.1029_1043delCGCGGCGGCGGCGGC	p.A340[11>6]	EX1	11.1%	NM_020732.3
NC-771	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	34.5%	NM_005228.3
NC-771	TGFBR1	c.444C>A	p.C148*	EX3	4.9%	NM_004612.2

NC-772	EGFR	c.2239_2247delTTAAGAGAA	p.L747_E749del	EX19	33.5%	NM_005228.3
NC-772	EGFR	c.2260A>G	p.K754E	EX19	44.6%	NM_005228.3
NC-772	WT1	c.1373G>A	p.R458Q	EX9	3.6%	NM_024426.4
NC-772	TP53	c.799C>T	p.R267W	EX8	2.5%	NM_000546.5
NC-773	LRP1B	c.11362G>A	p.G3788R	EX74	1.2%	NM_018557.2
NC-773	APC	c.5511T[4>3]	p.F1838Lfs*25	EX16E	36.8%	NM_000038.5
NC-773	SMAD4	c.1148T>G	p.I383R	EX10	35.2%	NM_005359.5
NC-773	FAM123B	c.1083C>G	p.C361W	EX2E	2.3%	NM_152424.3
NC-774	ARID1A	c.6786_6788delGGTinsTTG	p.V2263*	EX20E	18.7%	NM_006015.4
NC-774	FANCM	c.3575A>G	p.D1192G	EX14	17.0%	NM_020937.2
NC-774	MAP2K4	c.821G>C	p.R274T	EX8	20.0%	NM_003010.2
NC-775	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	10.9%	NM_005228.3
NC-776	DDR2	c.967G>A	p.V323I	EX9	16.0%	NM_006182.2
NC-776	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	19.0%	NM_005228.3
NC-776	EGFR	c.2369C>T	p.T790M	EX20	13.4%	NM_005228.3
NC-776	EGFR	c.2573T>G	p.L858R	EX21	6.3%	NM_005228.3
NC-776	RELN	c.1034T>C	p.L345S	EX10	3.0%	NM_005045.3
NC-776	POT1	c.870G>T	p.K290N	EX11	2.3%	NM_015450.2
NC-776	CREBBP	c.1865A>T	p.K622M	EX9	3.2%	NM_004380.2
NC-776	TP53	c.844C>G	p.R282G	EX8	47.7%	NM_000546.5
NC-776	TP53	c.396G>T	p.K132N	EX5	6.4%	NM_000546.5
NC-777	BARD1	c.1594G>A	p.D532N	EX7	23.1%	NM_000465.2

NC-777	MYC	c.1121A>G	p.H374R	EX3E	16.8%	NM_002467.4
NC-777	RB1	c.2489+1G>C	.	IVS23	40.0%	NM_000321.2
NC-777	GRIN2A	c.4115G>T	p.R1372M	EX13E	2.6%	NM_001134407.1
NC-777	TP53	c.535C>T	p.H179Y	EX5	18.5%	NM_000546.5
NC-777	ASXL1	c.1976G>T	p.G659V	EX13E	1.5%	NM_015338.5
NC-778	KDR	c.2717_2718delCCinsTG	p.T906M	EX19	2.6%	NM_002253.2
NC-778	EGFR	c.2125G>A	p.E709K	EX18	27.4%	NM_005228.3
NC-778	EGFR	c.2155G>A	p.G719S	EX18	26.8%	NM_005228.3
NC-778	EXT1	c.1040T>A	p.F347Y	EX2	1.7%	NM_000127.2
NC-778	TP53	c.832C>T	p.P278S	EX8	23.7%	NM_000546.5
NC-779	MYD88	c.514_529delGAGCGTTTCGATGCCT	p.E172Sfs*15	EX3	7.8%	NM_002468.4
NC-779	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	45.7%	NM_005228.3
NC-779	CREB3L1	c.146A>G	p.D49G	EX2	3.6%	NM_052854.2
NC-779	TP53	c.542G>A	p.R181H	EX5	1.6%	NM_000546.5
NC-779	RBM10	c.913A>T	p.K305*	EX8	11.3%	NM_001204468.1
NC-780	EGFR	c.2237_2255delAATTAAGAGAAGCAACATCinsT	p.E746_S752delinsV	EX19	30.3%	NM_005228.3
NC-780	FANCA	c.1504_1505delAAinsCC	p.K502P	EX16	8.7%	NM_000135.2
NC-780	TP53	c.559+1G>A	.	IVS5	38.8%	NM_000546.5
NC-780	DHX35	c.1187G>A	p.R396H	EX12	5.4%	NM_021931.3
NC-781	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	19.3%	NM_005228.3

NC-781	PTEN	c.741dupA	p.P248Tfs*5	EX7	41.3%	NM_000314.4
NC-781	RB1	c.1216-2A>G	.	IVS12	60.1%	NM_000321.2
NC-781	TP53	c.530_535delCCCACC	p.P177_H178del	EX5	46.7%	NM_000546.5
NC-782	CUL3	c.1112C>A	p.A371E	EX8	1.3%	NM_003590.4
NC-782	EPHA3	c.1141C>T	p.R381C	EX5	8.6%	NM_005233.5
NC-782	EGFR	c.2573T>G	p.L858R	EX21	28.5%	NM_005228.3
NC-782	BRAF	c.1406G>T	p.G469V	EX11	31.5%	NM_004333.4
NC-782	MLL3	c.8512G>A	p.E2838K	EX38	1.2%	NM_170606.2
NC-782	GNAQ	c.825G>C	p.K275N	EX6	2.1%	NM_002072.3
NC-782	BRCA2	c.754G>A	p.D252N	EX9	21.9%	NM_000059.3
NC-782	TP53	c.332T>C	p.L111P	EX4	26.1%	NM_000546.5
NC-782	CIC	c.283G>A	p.E95K	EX3	1.2%	NM_015125.3
NC-783	ARID1A	c.4510_4511dupAT	p.M1504Ifs*2	EX18	10.6%	NM_006015.4
NC-783	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	52.2%	NM_005228.3
NC-783	TSC1	c.1396C>G	p.L466V	EX14	3.9%	NM_000368.4
NC-783	CCNE1	c.1167C[4>3]	p.S391Vfs*111	EX12E	8.7%	NM_001238.2
NC-783	CCNE1	c.1173T>G	p.S391R	EX12E	9.7%	NM_001238.2
NC-783	FAM123B	c.2918C>T	p.A973V	EX2E	15.6%	NM_152424.3
NC-783	MED12	c.6004C>T	p.Q2002*	EX41	57.1%	NM_005120.2
NC-784	CDKN2A	c.52_57dupACGGCC	p.T18_A19dup	EX1	8.7%	NM_000077.4
NC-784	POLE	c.6317A>G	p.K2106R	EX45	1.0%	NM_006231.2
NC-784	POLE	c.3923G>A	p.R1308Q	EX31	1.0%	NM_006231.2
NC-784	TP53	c.524G>A	p.R175H	EX5	13.6%	NM_000546.5
NC-784	SERPINB3	c.929G>C	p.G310A	EX8E	1.0%	NM_006919.2
NC-784	MAPK1	c.964G>A	p.E322K	EX7	9.6%	NM_002745.4

NC-784	MED12	c.3835_3836delGCinsTG	p.A1279C	EX27	22.4%	NM_005120.2
NC-785	EPHA5	c.2933A>C	p.K978T	EX17	2.3%	NM_004439.5
NC-785	HIST1H2AG	c.169G>A	p.E57K	EX1E	1.4%	NM_021064.4
NC-785	DDR1	c.797G>T	p.G266V	EX9	1.4%	NM_001954.4
NC-785	CARD11	c.11G>A	p.G4E	EX3	2.7%	NM_032415.4
NC-785	AKAP9	c.1287G>C	p.K429N	EX8	3.3%	NM_005751.4
NC-785	RINT1	c.1289C>G	p.S430*	EX9	1.9%	NM_021930.4
NC-785	MYC	c.430A>G	p.I144V	EX2	1.7%	NM_002467.4
NC-785	TSHR	c.850T>C	p.C284R	EX9	3.8%	NM_000369.2
NC-785	TCF12	c.1896G>C	p.L632F	EX19	3.2%	NM_207037.1
NC-785	MAP2K4	c.487C>T	p.Q163*	EX4	2.4%	NM_003010.2
NC-785	BRCA1	c.1543G>C	p.E515Q	EX10	3.1%	NM_007294.3
NC-785	BRCA1	c.1465G>A	p.E489K	EX10	3.2%	NM_007294.3
NC-785	DOT1L	c.2482C>T	p.Q828*	EX21	4.1%	NM_032482.2
NC-785	CCNE1	c.121G>C	p.D41H	EX4	2.5%	NM_001238.2
NC-785	BCORL1	c.2566C>T	p.Q856*	EX3	6.2%	NM_021946.4
NC-786	HIST3H3	c.218G>A	p.R73H	EX1E	1.7%	NM_003493.2
NC-786	DIS3L2	c.1912G>A	p.G638R	EX15	8.3%	NM_152383.4
NC-786	FOXP1	c.231A>T	p.Q77H	EX3	2.0%	NM_001244814.1
NC-786	EGFR	c.2573T>G	p.L858R	EX21	15.1%	NM_005228.3
NC-786	GNAQ	c.496C>T	p.R166C	EX4	1.0%	NM_002072.3
NC-786	CDH23	c.2804G>A	p.R935H	EX25	2.4%	NM_022124.5
NC-786	FLT1	c.558_559delGGinsAC	p.W186*	EX5	10.7%	NM_002019.4
NC-786	TP53	c.844C>G	p.R282G	EX8	23.3%	NM_000546.5
NC-786	CYP2D6	c.976G>A	p.D326N	EX6	9.3%	NM_000106.5
NC-786	RBM10	c.2168G>A	p.W723*	EX18	26.3%	NM_001204468.1

NC-787	JAK2	c.1691G>A	p.R564Q	EX13	16.3%	NM_004972.3
NC-787	ROBO3	c.4075C>T	p.R1359W	EX27	7.3%	NM_022370.3
NC-787	TP53	c.817C>T	p.R273C	EX8	22.6%	NM_000546.5
NC-787	EGFR	c.2252_2276delCATCTCCGAAAGCCAACAAGGAAATinsA	p.T751_I759delinsN	EX19	11.5%	NM_005228.3
NC-788	EGFR	c.2252_2276delinsA	p.T751_I759delinsN	EX19	10.2%	NM_005228.3
NC-788	TP53	c.592G>T	p.E198*	EX6	8.8%	NM_000546.5
NC-788	ATR	c.3921G>C	p.L1307F	EX21	2.8%	NM_001184.3
NC-789	OR4A15	c.593G>A	p.G198E	EX1E	45.2%	NM_001005275.1
NC-789	JAK3	c.362G>A	p.R121H	EX4	26.9%	NM_000215.3
NC-789	CHD6	c.788T>A	p.I263N	EX5	39.5%	NM_032221.3
NC-789	KDM6A	c.3784C>T	p.Q1262*	EX26	53.5%	NM_021140.2
NC-790	ZMAT3	c.86G>A	p.G29E	EX2	3.8%	NM_022470.3
NC-790	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	45.2%	NM_005228.3
NC-790	EGFR	c.2369C>T	p.T790M	EX20	13.2%	NM_005228.3
NC-790	TP53	c.733G>A	p.G245S	EX7	39.5%	NM_000546.5
NC-790	BRCA1	c.4789A>G	p.T1597A	EX15	14.7%	NM_007294.3
NC-791	ALK	c.4080_4082dupGAT	p.R1360_I1361insM	EX28	19.6%	NM_004304.4
NC-791	INPP4B	c.816C>A	p.H272Q	EX12	23.8%	NM_001101669.1
NC-791	HGF	c.1859C>A	p.T620N	EX16	22.8%	NM_000601.4
NC-791	PRKDC	c.8116G>T	p.G2706C	EX59	21.9%	NM_006904.6
NC-791	KRAS	c.35G>T	p.G12V	EX2	41.9%	NM_033360.2
NC-791	SMAD4	c.1188T>A	p.D396E	EX10	25.7%	NM_005359.5

NC-791	STK11	c.414_430delAATGCTGGACAGCGTGC	p.E138Dfs*19	EX3	20.2%	NM_000455.4
NC-791	KEAP1	c.1708G>A	p.G570R	EX5	31.7%	NM_203500.1
NC-792	ERBB4	c.3416G>A	p.R1139Q	EX27	4.8%	NM_005235.2
NC-792	APC	c.2178A[2>1]	p.R727Gfs*34	EX16E	5.1%	NM_000038.5
NC-792	KCNJ5	c.473C>G	p.T158R	EX2	1.3%	NM_000890.3
NC-792	PALB2	c.1523C>T	p.P508L	EX4	3.5%	NM_024675.3
NC-792	ZFHX3	c.8287G>A	p.D2763N	EX9	5.2%	NM_006885.3
NC-792	RARA	c.1201G>C	p.E401Q	EX9E	1.3%	NM_000964.3
NC-792	CIC	c.2726C>T	p.P909L	EX11	5.0%	NM_015125.3
NC-793	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	8.8%	NM_005228.3
NC-793	TP53	c.497C>G	p.S166*	EX5	14.5%	NM_000546.5
NC-794	EXT2	c.2089G>A	p.D697N	EX14E	2.5%	NM_207122.1
NC-795	CDC73	c.1428C>A	p.F476L	EX16	2.1%	NM_024529.4
NC-795	FGF3	c.474C>G	p.N158K	EX3E	9.7%	NM_005247.2
NC-795	EP300	c.3194T>A	p.L1065H	EX17	2.9%	NM_001429.3
NC-796	MTOR	c.5365-2A>T	.	IVS38	9.0%	NM_004958.3
NC-796	ABL2	c.1948G>A	p.G650R	EX12E	25.0%	NM_007314.3
NC-796	LRP1B	c.13268G>T	p.G4423V	EX87	13.5%	NM_018557.2
NC-796	ATR	c.1534A>G	p.M512V	EX6	8.7%	NM_001184.3
NC-796	FBXW7	c.881C>A	p.S294*	EX6	28.6%	NM_033632.3
NC-796	GRM3	c.2005A>G	p.I669V	EX4	8.4%	NM_000840.2
NC-796	MS4A1	c.841G>T	p.E281*	EX8E	9.0%	NM_152866.2
NC-796	TP53	c.96+1G>T	.	IVS3	20.9%	NM_000546.5
NC-796	NCOR1	c.5060C>T	p.T1687I	EX34	4.0%	NM_006311.3

NC-796	KEAP1	c.109G>A	p.E37K	EX2	19.1%	NM_203500.1
NC-796	STAG2	c.382A>T	p.K128*	EX6	6.5%	NM_001042749.1
NC-797	SETD2	c.1426C>T	p.H476Y	EX3	7.0%	NM_014159.6
NC-797	EGFR	c.2311_2319dupAACCCCCAC	p.N771_H773dup	EX20	6.6%	NM_005228.3
NC-797	HGF	c.1504C>T	p.R502*	EX13	10.3%	NM_000601.4
NC-797	GRIN2A	c.74C>T	p.A25V	EX2	5.8%	NM_001134407.1
NC-798	AKT3	c.1016T>A	p.M339K	EX10	63.9%	NM_005465.4
NC-798	CNTNAP5	c.3766G>A	p.G1256S	EX24E	2.8%	NM_130773.2
NC-798	NFE2L2	c.101G>C	p.R34P	EX2	60.0%	NM_006164.4
NC-798	FXR1	c.1267T>A	p.S423T	EX14	15.2%	NM_005087.3
NC-798	EPHA5	c.1904T>C	p.M635T	EX10	28.7%	NM_004439.5
NC-798	G3BP2	c.1303G>C	p.G435R	EX12E	13.3%	NM_203505.2
NC-798	FGFR4	c.341C>A	p.T114N	EX3	30.6%	NM_213647.1
NC-798	KAT6A	c.5461A>G	p.M1821V	EX18E	26.5%	NM_001099412.1
NC-798	ZFPM2	c.1031C>T	p.A344V	EX8E	25.5%	NM_012082.3
NC-798	CDKN2A	c.355G>T	p.E119*	EX2	50.8%	NM_000077.4
NC-798	CTNND1	c.1327A>G	p.N443D	EX7	3.5%	NM_001085458.1
NC-798	TP53	c.332T>C	p.L111P	EX4	42.3%	NM_000546.5
NC-798	BRCA1	c.2269G>A	p.V757I	EX10	29.6%	NM_007294.3
NC-798	BRD4	c.3820C>T	p.R1274W	EX19	15.7%	NM_058243.2
NC-798	PIK3R2	c.1305GGA[2>1]	p.E436del	EX11	4.4%	NM_005027.2
NC-798	CRLF2	c.418G>T	p.D140Y	EX4	3.9%	NM_022148.2
NC-799	EPHB2	c.1766-1G>T	.	IVS9	8.8%	NM_017449.3
NC-799	RBM10	c.2314C>T	p.Q772*	EX19	6.8%	NM_001204468.1
NC-799	EGFR	c.2573T>G	p.L858R	EX21	6.7%	NM_005228.3

NC-799	EGFR	c.2369C>T	p.T790M	EX20	3.1%	NM_005228.3
NC-800	KRAS	c.34G>T	p.G12C	EX2	59.4%	NM_033360.2
NC-800	FGFR1	c.266G>A	p.R89Q	EX4	55.4%	NM_001174067.1
NC-800	TP53	c.920-1G>T	.	IVS8	51.5%	NM_000546.5
NC-800	EXT2	c.367A>G	p.S123G	EX2	49.5%	NM_207122.1
NC-800	RB1	c.2053C>T	p.Q685*	EX20	47.2%	NM_000321.2
NC-800	ELF3	c.249C>G	p.N83K	EX3	28.5%	NM_004433.4
NC-800	ELF3	c.246G>C	p.K82N	EX3	28.4%	NM_004433.4
NC-800	MAP3K1	c.4030T>A	p.S1344T	EX17	21.1%	NM_005921.1
NC-800	POT1	c.1511A>G	p.K504R	EX16	17.2%	NM_015450.2
NC-801	HIST3H3	c.220G>A	p.E74K	EX1E	12.1%	NM_003493.2
NC-801	PIK3CA	c.1633G>A	p.E545K	EX10	1.7%	NM_006218.2
NC-801	TRIO	c.2067G>T	p.E689D	EX12	1.0%	NM_007118.2
NC-801	NSD1	c.6773C>G	p.T2258S	EX23E	2.3%	NM_022455.4
NC-801	TBX3	c.2152A>G	p.T718A	EX8E	1.1%	NM_016569.3
NC-801	TBX3	c.155C>T	p.A52V	EX1	7.6%	NM_016569.3
NC-801	CREBBP	c.2199G>C	p.Q733H	EX12	5.4%	NM_004380.2
NC-801	ABCC1	c.533A>G	p.Y178C	EX5	1.5%	NM_004996.3
NC-801	TP53	c.832C>G	p.P278A	EX8	11.8%	NM_000546.5
NC-801	MAP2K4	c.112C>T	p.Q38*	EX1	13.0%	NM_003010.2
NC-801	STK11	c.716G>A	p.W239*	EX5	5.5%	NM_000455.4
NC-801	EP300	c.1612A>C	p.N538H	EX7	2.8%	NM_001429.3
NC-801	ATRX	c.5769C>G	p.S1923R	EX24	11.9%	NM_000489.3
NC-802	EPHA2	c.203C>T	p.S68F	EX3	26.1%	NM_004431.3
NC-802	GABRA6	c.1308C>A	p.Y436*	EX9E	2.7%	NM_000811.2
NC-802	EGFR	c.2156G>C	p.G719A	EX18	22.3%	NM_005228.3

NC-802	FAS	c.781G>A	p.E261K	EX9E	2.2%	NM_000043.4
NC-802	GRIN2A	c.2541C>A	p.F847L	EX12	12.5%	NM_001134407.1
NC-802	ABCC11	c.2827G>C	p.V943L	EX21	1.2%	NM_032583.3
NC-802	TP53	c.376-1G>A	.	IVS4	43.5%	NM_000546.5
NC-802	RBM10	c.2537C>G	p.S846*	EX20	50.9%	NM_001204468.1
NC-803	CTNNB1	c.506A>G	p.N169S	EX5	21.5%	NM_001904.3
NC-803	ABCB1	c.1466G>A	p.R489H	EX14	8.2%	NM_000927.4
NC-803	ZFHX3	c.4525G>A	p.D1509N	EX9	10.1%	NM_006885.3
NC-803	TP53	c.768_779delACTGGAAGACTC	p.L257_S260del	EX7	8.7%	NM_000546.5
NC-803	RARA	c.338G>A	p.R113H	EX4	12.1%	NM_000964.3
NC-804	BRAF	c.1801A>G	p.K601E	EX15	7.6%	NM_004333.4
NC-804	NF1	c.142A[3>2]	p.K48Nfs*8	EX2	2.6%	NM_000267.3
NC-805	IKZF1	c.1449C[2>1]	p.H484Tfs*26	EX8E	5.7%	NM_006060.4
NC-805	EGFR	c.2573T>G	p.L858R	EX21	22.9%	NM_005228.3
NC-805	ZNF804B	c.268C>T	p.Q90*	EX3	8.0%	NM_181646.2
NC-805	CDKN2A	c.305C>T	p.A102V	EX2	15.6%	NM_000077.4
NC-805	SLX4	c.1827C>G	p.H609Q	EX8	4.9%	NM_032444.2
NC-805	CREBBP	c.6055G>A	p.G2019R	EX31E	10.5%	NM_004380.2
NC-806	FLG	c.8570G>A	p.R2857H	EX3E	3.4%	NM_002016.1
NC-806	PBRM1	c.692A>C	p.K231T	EX7	2.5%	NM_018313.4
NC-806	PIK3CA	c.2740G>A	p.G914R	EX19	6.4%	NM_006218.2
NC-806	EGFR	c.2240_2257delTAAGAGAAGCAACATCTC	p.L747_P753delinsS	EX19	12.5%	NM_005228.3
NC-806	TP53	c.637C>T	p.R213*	EX6	21.0%	NM_000546.5
NC-808	CIC	c.4007C>G	p.P1336R	EX16	6.6%	NM_015125.3

NC-809	JAK1	c.455C>T	p.A152V	EX5	8.6%	NM_002227.2
NC-809	EGFR	c.2239_2256delTTAAGAGAAGCAACATCT	p.L747_S752del	EX19	32.8%	NM_005228.3
NC-809	EGFR	c.2369C>T	p.T790M	EX20	18.0%	NM_005228.3
NC-809	MYC	c.1275G>C	p.E425D	EX3E	23.5%	NM_002467.4
NC-809	GATA3	c.1169C>T	p.S390L	EX6E	11.9%	NM_002051.2
NC-809	FANCM	c.401C>T	p.S134L	EX1	27.0%	NM_020937.2
NC-809	TP53	c.422G>A	p.C141Y	EX5	41.9%	NM_000546.5
NC-809	KDM6A	c.917C>T	p.S306F	EX11	47.7%	NM_021140.2
NC-809	KDM6A	c.1213C>A	p.P405T	EX13	83.6%	NM_021140.2
NC-809	KDM6A	c.1367C>G	p.S456*	EX14	70.3%	NM_021140.2
NC-810	MCL1	c.367G>A	p.E123K	EX1	6.2%	NM_021960.4
NC-810	PARP1	c.568G>T	p.E190*	EX4	5.6%	NM_001618.3
NC-810	NFE2L2	c.72G>C	p.W24C	EX2	8.8%	NM_006164.4
NC-810	CSNK1A1	c.613G>C	p.E205Q	EX6	6.4%	NM_001025105.1
NC-810	DUSP22	c.430C>T	p.H144Y	EX6	3.1%	NM_020185.3
NC-810	POM121L12	c.493G>A	p.A165T	EX1E	1.7%	NM_182595.3
NC-810	DICER1	c.2660C>G	p.S887C	EX18	1.3%	NM_030621.3
NC-810	TSC2	c.1108C>A	p.Q370K	EX11	2.9%	NM_000548.3
NC-810	SNX29	c.814G>A	p.E272K	EX8	1.1%	NM_032167.3
NC-810	SERPINB3	c.1084G>C	p.E362Q	EX8E	3.6%	NM_006919.2
NC-811	ALK	c.359C>A	p.A120D	EX1	35.8%	NM_004304.4
NC-811	LRP1B	c.4335-1G>T	.	IVS26	33.9%	NM_018557.2
NC-811	NFE2L2	c.72G>C	p.W24C	EX2	22.7%	NM_006164.4
NC-811	HCLS1	c.1220C>G	p.S407C	EX12	14.1%	NM_005335.4
NC-811	FBXW7	c.1177C>T	p.R393*	EX8	57.4%	NM_033632.3

NC-811	IL6ST	c.939G>C	p.W313C	EX8	32.2%	NM_002184.3
NC-811	APC	c.7020C>A	p.N2340K	EX16E	8.2%	NM_000038.5
NC-811	MLL3	c.7771G>A	p.G2591R	EX38	19.9%	NM_170606.2
NC-811	MLL2	c.1526C>A	p.S509*	EX10	57.1%	NM_003482.3
NC-811	POLE	c.2285G>T	p.R762L	EX20	36.0%	NM_006231.2
NC-811	ACIN1	c.2846C>G	p.P949R	EX13	35.1%	NM_014977.3
NC-811	CIITA	c.1616G>A	p.R539Q	EX11	2.0%	NM_000246.3
NC-811	TP53	c.701A>G	p.Y234C	EX7	59.6%	NM_000546.5
NC-812	FAT1	c.11720A>G	p.N3907S	EX22	12.9%	NM_005245.3
NC-812	IL7R	c.617G>A	p.R206Q	EX5	2.2%	NM_002185.3
NC-813	PBRM1	c.3354_3357delAGGT	p.G1119Afs*14	EX22	4.3%	NM_018313.4
NC-813	PBRM1	c.1948A[6>7]	p.S652Ifs*13	EX17	5.3%	NM_018313.4
NC-813	SDHA	c.1432G>A	p.G478R	EX10	4.7%	NM_004168.2
NC-814	SPEN	c.10193G>A	p.G3398E	EX12	15.5%	NM_015001.2
NC-814	SETD2	c.2650C>T	p.Q884*	EX3	21.8%	NM_014159.6
NC-814	RINT1	c.1585A>G	p.R529G	EX11	24.5%	NM_021930.4
NC-814	MET	c.3028+981T>C	.	IVS14	10.8%	NM_000245.2
NC-815	EGFR	c.2573T>G	p.L858R	EX21	20.3%	NM_005228.3
NC-815	RBM10	c.1060C>T	p.Q354*	EX9	17.5%	NM_001204468.1
NC-815	FAT2	c.6604C>T	p.R2202W	EX9	9.4%	NM_001447.2
NC-815	TSC1	c.585C>A	p.Y195*	EX7	5.1%	NM_000368.4
NC-815	TSC2	c.2978C>A	p.T993K	EX27	1.7%	NM_000548.3
NC-816	CASQ2	c.1090G>A	p.D364N	EX11E	12.7%	NM_001232.3
NC-816	FH	c.32C>G	p.S11W	EX1	10.5%	NM_000143.3
NC-816	LRP1B	c.7872C>A	p.N2624K	EX48	13.6%	NM_018557.2
NC-816	BARD1	c.1831G>T	p.G611C	EX9	12.5%	NM_000465.2

NC-816	SETD2	c.4040C>T	p.S1347F	EX3	15.1%	NM_014159.6
NC-816	SI	c.3139_3140delCCinsAA	p.P1047K	EX27	8.7%	NM_001041.3
NC-816	PDGFRA	c.128C>T	p.S43L	EX3	13.0%	NM_006206.4
NC-816	INPP4B	c.831G>T	p.L277F	EX12	14.2%	NM_001101669.1
NC-816	NOTCH4	c.5506G>C	p.E1836Q	EX30E	14.5%	NM_004557.3
NC-816	BRAF	c.1799T>A	p.V600E	EX15	23.5%	NM_004333.4
NC-816	PAX5	c.968G>T	p.G323V	EX8	13.2%	NM_016734.1
NC-816	CDH23	c.2110T>A	p.Y704N	EX20	13.4%	NM_022124.5
NC-816	IFITM3	c.204G>A	p.M68I	EX1	13.8%	NM_021034.2
NC-816	TP53	c.659A>G	p.Y220C	EX6	16.4%	NM_000546.5
NC-817	ERBB2	c.2326G>A	p.G776S	EX20	59.2%	NM_004448.2
NC-817	ERBB2	c.2332_2333insCGG	p.V777_G778insA	EX20	53.1%	NM_004448.2
NC-817	TP53	c.274C[4>3]	p.L93Cfs*30	EX4	47.0%	NM_000546.5
NC-817	RB1	c.1960G>A	p.V654M	EX19	40.8%	NM_000321.2
NC-817	NOTCH1	c.2704C>T	p.R902C	EX17	1.5%	NM_017617.3
NC-817	CREBBP	c.5125G>A	p.E1709K	EX30	1.3%	NM_004380.2
NC-818	RAF1	c.770C>T	p.S257L	EX7	19.5%	NM_002880.3
NC-818	TERT	c.-58-u66C>T	.	.	13.3%	NM_198253.2
NC-818	TP53	c.329G>T	p.R110L	EX4	21.2%	NM_000546.5
NC-818	ERBB2	c.2331_2339dupGGGCTCCCC	p.G778_P780dup	EX20	17.3%	NM_004448.2
NC-819	HSP90AA1	c.2340TG[2>1]	p.V781Efs*9	EX11	3.9%	NM_001017963.2
NC-819	SMAD3	c.1154G>A	p.R385K	EX8	3.1%	NM_005902.3
NC-819	GRIN2A	c.2186_2187delTCinsCA	p.I729T	EX11	1.2%	NM_001134407.1
NC-819	TP53	c.747G>C	p.R249S	EX7	39.3%	NM_000546.5

NC-819	NF1	c.1457C>G	p.T486R	EX13	24.7%	NM_000267.3
NC-819	KDM5C	c.748C>A	p.L250I	EX6	9.7%	NM_004187.3
NC-819	EGFR	c.2153T>A	p.L718Q	EX18	56.0%	NM_005228.3
NC-819	EGFR	c.2573T>G	p.L858R	EX21	84.8%	NM_005228.3
NC-819	SETD2	c.7276G>C	p.G2426R	EX18	1.2%	NM_014159.6
NC-819	FOXP1	c.1316A>C	p.Y439S	EX11	1.8%	NM_001244814.1
NC-819	PMS2	c.1185_1200delCATGGTAGAAAAGCAG	p.M396Ifs*6	EX11	13.8%	NM_000535.5
NC-820	HSD3B1	c.497T>C	p.V166A	EX4E	10.1%	NM_000862.2
NC-820	ALK	c.3700G>A	p.A1234T	EX24	13.2%	NM_004304.4
NC-820	BRD2	c.1780G[5>4]	p.G595Vfs*6	EX9	23.9%	NM_001199455.1
NC-820	EGFR	c.2573T>G	p.L858R	EX21	82.6%	NM_005228.3
NC-820	RBM10	c.1996C>T	p.Q666*	EX17	24.4%	NM_001204468.1
NC-821	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	15.7%	NM_004448.2
NC-821	ARAF	c.970G>A	p.V324M	EX10	1.0%	NM_001654.4
NC-821	ARID2	c.95C>A	p.S32*	EX2	2.6%	NM_152641.2
NC-822	PMS2	c.182A>G	p.Y61C	EX3	9.8%	NM_000535.5
NC-822	RELN	c.955G>A	p.A319T	EX10	9.5%	NM_005045.3
NC-822	TP53	c.808T>A	p.F270I	EX8	26.6%	NM_000546.5
NC-822	TOP2A	c.2180G>A	p.R727K	EX19	7.7%	NM_001067.3
NC-823	BRAF	c.1799T>A	p.V600E	EX15	20.0%	NM_004333.4
NC-823	ROBO3	c.3990C>A	p.S1330R	EX27	9.3%	NM_022370.3
NC-824	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	6.8%	NM_005228.3
NC-825	YY1AP1	c.1273G>A	p.A425T	EX8	12.3%	NM_001198903.1

NC-825	CNTNAP5	c.3725-9_3729delTCTCTCCAGGGGTG	.	IVS23-EX24E	2.7%	NM_130773.2
NC-825	ESR1	c.1144G>T	p.A382S	EX6	7.0%	NM_001122740.1
NC-825	NFE2L3	c.856C>T	p.P286S	EX4E	5.7%	NM_004289.6
NC-825	GRIN2A	c.127delA	p.S43Afs*4	EX2	7.8%	NM_001134407.1
NC-825	TP53	c.1009C>T	p.R337C	EX10	7.5%	NM_000546.5
NC-825	TP53	c.725G>T	p.C242F	EX7	7.4%	NM_000546.5
NC-826	TPR	c.5098A>G	p.M1700V	EX36	15.3%	NM_003292.2
NC-826	BRD2	c.1537G>A	p.E513K	EX8	7.4%	NM_001199455.1
NC-826	EGFR	c.2573T>G	p.L858R	EX21	23.5%	NM_005228.3
NC-826	KRAS	c.35G>C	p.G12A	EX2	1.1%	NM_033360.2
NC-826	ARID2	c.2651C>G	p.P884R	EX15	8.7%	NM_152641.2
NC-826	MAP2K1	c.296_310delTTCATCTGGAGATCAinsGTC	p.I99_K104delinsSQ	EX3	7.7%	NM_002755.3
NC-827	MDM4	c.1127C>T	p.A376V	EX11E	13.0%	NM_002393.4
NC-827	MSH6	c.3254C[8>9]	p.F1088Lfs*5	EX5	25.5%	NM_000179.2
NC-827	LRP1B	c.3571_3572delCCinsAA	p.P1191N	EX23	29.0%	NM_018557.2
NC-827	TMEM132D	c.656C>A	p.P219Q	EX2	34.0%	NM_133448.2
NC-827	TP53	c.659A>G	p.Y220C	EX6	56.9%	NM_000546.5
NC-828	CDC73	c.264A>T	p.R88S	EX3	2.9%	NM_024529.4
NC-828	NFE2L2	c.85G>A	p.D29N	EX2	35.2%	NM_006164.4
NC-828	NFE2L2	c.79G>A	p.D27N	EX2	35.7%	NM_006164.4
NC-828	BARD1	c.386G>C	p.R129T	EX4	44.7%	NM_000465.2
NC-828	EPHA3	c.2140C>A	p.H714N	EX13	44.8%	NM_005233.5

NC-828	ATR	c.5555T>C	p.V1852A	EX32	8.6%	NM_001184.3
NC-828	FBXW7	c.1275G>C	p.W425C	EX9	9.8%	NM_033632.3
NC-828	SMO	c.350G>T	p.R117L	EX2	26.6%	NM_005631.4
NC-828	MLL3	c.8920A>C	p.T2974P	EX38	10.2%	NM_170606.2
NC-828	PREX2	c.1925A>G	p.D642G	EX18	9.4%	NM_024870.2
NC-828	CDKN2A	c.244_267delGTGCACGACGCTGCCCGGGAGGGC	p.V82_G89del	EX2	24.0%	NM_000077.4
NC-828	BRD3	c.1639G>T	p.G547C	EX9	11.8%	NM_007371.3
NC-828	OR4A15	c.545T>A	p.L182H	EX1E	16.7%	NM_001005275.1
NC-828	ATM	c.5603G>C	p.G1868A	EX37	4.0%	NM_000051.3
NC-828	TSHR	c.1709T>G	p.L570R	EX10E	42.2%	NM_000369.2
NC-828	GRIN2A	c.2167G>T	p.G723W	EX10	1.0%	NM_001134407.1
NC-828	TP53	c.437G>A	p.W146*	EX5	49.0%	NM_000546.5
NC-828	KDM6A	c.460_472delCAGGAGGTGCTTT	p.Q154Mfs*22	EX6	3.0%	NM_021140.2
NC-829	CTNNB1	c.110C>G	p.S37C	EX3	1.6%	NM_001904.3
NC-829	SOX2	c.271A>G	p.I91V	EX1E	20.2%	NM_003106.3
NC-829	INPP4B	c.1537C>T	p.H513Y	EX17	1.8%	NM_001101669.1
NC-829	FAT1	c.9070G>A	p.E3024K	EX11	4.1%	NM_005245.3
NC-829	MAP3K1	c.157G>C	p.E53Q	EX1	3.3%	NM_005921.1
NC-829	APC	c.6223G>T	p.D2075Y	EX16E	3.7%	NM_000038.5
NC-829	ARID1B	c.4993_5003delGACAGCACTGT	p.D1665Cfs*20	EX19	2.3%	NM_020732.3
NC-829	PABPC1	c.397G>C	p.D133H	EX3	1.4%	NM_002568.3
NC-829	WT1	c.521C>A	p.A174D	EX1	4.0%	NM_024426.4

NC-829	KRAS	c.35G>C	p.G12A	EX2	24.9%	NM_033360.2
NC-829	PTPN11	c.1282G>A	p.V428M	EX11	1.0%	NM_002834.3
NC-829	MAX	c.200C[2>1]	p.T68Qfs*102	EX4	22.6%	NM_002382.4
NC-829	ZFHX3	c.2861C>T	p.T954M	EX3	17.1%	NM_006885.3
NC-829	TP53	c.658T>C	p.Y220H	EX6	38.9%	NM_000546.5
NC-829	TP53	c.491_494delAGCA	p.K164Sfs*5	EX5	2.0%	NM_000546.5
NC-829	SMAD4	c.1576G>T	p.E526*	EX12E	18.2%	NM_005359.5
NC-830	ARID1B	c.4571C>T	p.S1524L	EX18	18.5%	NM_020732.3
NC-830	MLL2	c.9961C>T	p.R3321*	EX34	11.3%	NM_003482.3
NC-830	IGF1R	c.1904C>G	p.S635C	EX9	14.5%	NM_000875.3
NC-830	CYLD	c.2290A>T	p.K764*	EX15	53.7%	NM_001042355.1
NC-831	TNFRSF14	c.647G>T	p.C216F	EX6	1.0%	NM_003820.2
NC-831	PTCH2	c.2356C>T	p.R786C	EX15	2.7%	NM_001166292.1
NC-831	AKT3	c.793G>A	p.G265R	EX8	1.1%	NM_005465.4
NC-831	PBRM1	c.2176G>C	p.E726Q	EX17	7.1%	NM_018313.4
NC-831	ARID1B	c.3285G>T	p.K1095N	EX12	16.3%	NM_020732.3
NC-831	EGFR	c.2573T>G	p.L858R	EX21	26.7%	NM_005228.3
NC-831	TP53	c.809T>C	p.F270S	EX8	28.2%	NM_000546.5
NC-831	NF1	c.5071C>A	p.P1691T	EX36	7.2%	NM_000267.3
NC-831	MED12	c.5455G>A	p.D1819N	EX38	7.8%	NM_005120.2
NC-832	KIT	c.395C>T	p.T132M	EX3	16.1%	NM_000222.2
NC-832	KRAS	c.35G>T	p.G12V	EX2	56.2%	NM_033360.2
NC-832	TP53	c.1044G[2>1]	p.E349Nfs*21	EX10	14.1%	NM_000546.5
NC-833	INHBA	c.551G>A	p.G184D	EX3E	5.1%	NM_002192.2
NC-833	CDKN2A	c.238C>T	p.R80*	EX2	5.4%	NM_000077.4
NC-833	EXT2	c.284G>A	p.R95H	EX2	5.5%	NM_207122.1

NC-833	ETV6	c.1186A>G	p.R396G	EX7	5.7%	NM_001987.4
NC-833	KRAS	c.35G>A	p.G12D	EX2	4.4%	NM_033360.2
NC-833	ZFHX3	c.9118C>T	p.R3040C	EX9	4.3%	NM_006885.3
NC-833	SMAD4	c.1351_1375delGCGGCTACTGCACAAGCTGCAGCAG	p.A451Lfs*17	EX11	2.4%	NM_005359.5
NC-834	LRP1B	c.8248G>A	p.D2750N	EX51	13.9%	NM_018557.2
NC-834	C3orf70	c.564G>T	p.E188D	EX2E	41.7%	NM_001025266.1
NC-834	SLIT2	c.1898G>C	p.R633P	EX19	19.2%	NM_004787.1
NC-834	NOTCH4	c.4907C>A	p.T1636N	EX27	13.1%	NM_004557.3
NC-834	EGFR	c.2314_2319dupCCCCACC	p.P772_H773dup	EX20	51.4%	NM_005228.3
NC-834	HGF	c.1361C>T	p.T454M	EX11	30.4%	NM_000601.4
NC-834	FGF23	c.535C>T	p.R179W	EX3E	9.5%	NM_020638.2
NC-834	FANCM	c.1079A>C	p.E360A	EX6	24.9%	NM_020937.2
NC-834	TCF12	c.1960C>G	p.L654V	EX19	18.1%	NM_207037.1
NC-834	TP53	c.673-50_698del	.	IVS6-EX7	20.7%	NM_000546.5
NC-835	JAK1	c.381G>T	p.W127C	EX5	9.7%	NM_002227.2
NC-835	LRP1B	c.1104G>C	p.K368N	EX8	13.4%	NM_018557.2
NC-835	EPHA3	c.670G>T	p.V224L	EX3	15.5%	NM_005233.5
NC-835	EGFR	c.2238_2248delATTAAGAGAAGinsGC	p.L747_A750delinsP	EX19	19.0%	NM_005228.3
NC-835	ATRX	c.680G>A	p.G227E	EX9	2.8%	NM_000489.3
NC-836	ELF3	c.958A>T	p.K320*	EX8	74.6%	NM_004433.4
NC-836	TGFBR2	c.1574T>G	p.I525S	EX7	3.5%	NM_001024847.2
NC-836	ATR	c.588G>T	p.L196F	EX4	13.8%	NM_001184.3

NC-836	KRAS	c.35G>A	p.G12D	EX2	48.6%	NM_033360.2
NC-836	FANCM	c.2684C>G	p.P895R	EX14	35.2%	NM_020937.2
NC-837	MLL2	c.8088GC[2>3]	p.N2698Afs*36	EX32	11.3%	NM_003482.3
NC-837	NFKBIA	c.435_436dupTA	p.T146Ifs*19	EX3	13.2%	NM_020529.2
NC-837	TP53	c.584T>C	p.I195T	EX6	27.2%	NM_000546.5
NC-838	BCL10	c.129A[8>7]	p.I46Yfs*24	EX2	3.1%	NM_003921.4
NC-838	LRP1B	c.13098_13099delGGinsTT	p.G4367W	EX85	9.6%	NM_018557.2
NC-838	ERBB4	c.3305T>G	p.F1102C	EX27	1.2%	NM_005235.2
NC-838	CARD11	c.1940+1G>T	.	IVS15	30.4%	NM_032415.4
NC-838	EGFR	c.2573T>G	p.L858R	EX21	55.1%	NM_005228.3
NC-838	MLL3	c.8068G>T	p.D2690Y	EX38	1.8%	NM_170606.2
NC-838	RECQL4	c.2621T>G	p.V874G	EX15	8.2%	NM_004260.3
NC-838	COL5A1	c.4820G>C	p.G1607A	EX62	7.1%	NM_000093.3
NC-838	GAB2	c.154G>T	p.D52Y	EX2	7.8%	NM_080491.2
NC-838	ZNF384	c.853A>G	p.S285G	EX7	11.0%	NM_001135734.2
NC-838	BRCA2	c.6109G>C	p.E2037Q	EX11	9.4%	NM_000059.3
NC-838	NTHL1	c.829G>C	p.E277Q	EX6E	1.3%	NM_002528.5
NC-838	TP53	c.659A>G	p.Y220C	EX6	23.8%	NM_000546.5
NC-838	CEBPA	c.445C>G	p.R149G	EX1E	8.6%	NM_004364.3
NC-838	POLD1	c.2414G>T	p.S805I	EX20	13.3%	NM_002691.3
NC-839	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	9.8%	NM_005228.3
NC-840	ARID1B	c.986C>G	p.A329G	EX1	10.3%	NM_020732.3
NC-840	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	9.3%	NM_005228.3

NC-841	PIK3CB	c.994C>T	p.P332S	EX6	12.6%	NM_006219.2
NC-841	KRAS	c.35G>T	p.G12V	EX2	12.8%	NM_033360.2
NC-842	FBXW7	c.1513C>G	p.R505G	EX10	47.0%	NM_033632.3
NC-842	NSD1	c.2363G>A	p.R788Q	EX5	1.2%	NM_022455.4
NC-842	BRAF	c.2249C>T	p.S750F	EX18E	28.6%	NM_004333.4
NC-842	CDKN2A	c.250G>A	p.D84N	EX2	44.4%	NM_000077.4
NC-842	ERBB3	c.889G>T	p.D297Y	EX8	29.4%	NM_001982.3
NC-842	DICER1	c.184G>A	p.V62I	EX4	25.6%	NM_030621.3
NC-842	TP53	c.392A>T	p.N131I	EX5	60.4%	NM_000546.5
NC-842	MAP2K4	c.251C>G	p.S84*	EX3	9.3%	NM_003010.2
NC-842	CIC	c.3895C>G	p.P1299A	EX16	28.9%	NM_015125.3
NC-843	PIK3CA	c.1624G>A	p.E542K	EX10	6.2%	NM_006218.2
NC-843	TET2	c.88C>G	p.L30V	EX3	38.1%	NM_001127208.2
NC-843	APC	c.2569G[2>1]	p.G857Efs*4	EX16E	37.6%	NM_000038.5
NC-843	EEF1A1	c.142G>A	p.E48K	EX2	4.3%	NM_001402.5
NC-843	EXT1	c.783G>C	p.K261N	EX1	27.9%	NM_000127.2
NC-843	MS4A1	c.566_573+5delTGTTCTTGGTAAG	.	EX6-IVS6	3.1%	NM_152866.2
NC-843	KRAS	c.38G>A	p.G13D	EX2	32.6%	NM_033360.2
NC-843	FLT3	c.1586T>G	p.L529*	EX12	23.3%	NM_004119.2
NC-843	STK11	c.735-11_742delTCGAAATGAAGCTACAACA	.	IVS5-EX6	27.8%	NM_000455.4
NC-844	PTPRF	c.5653G>C	p.E1885Q	EX33	2.2%	NM_002840.3
NC-844	FLG	c.8606G>C	p.R2869T	EX3	1.8%	NM_002016.1
NC-844	CASP8	c.457G>A	p.G153S	EX2	13.0%	NM_001080125.1

NC-844	PBRM1	c.4426C[5>4]	p.P1477Lfs*12	EX29	28.9%	NM_018313.4
NC-844	PIK3CG	c.1202C>T	p.P401L	EX2	1.5%	NM_002649.2
NC-844	CASP1	c.98G>C	p.R33T	EX2	5.3%	NM_033292.3
NC-844	SLX4	c.1894G>C	p.G632R	EX8	4.5%	NM_032444.2
NC-844	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	15.7%	NM_004448.2
NC-844	TOP2A	c.1897A>T	p.R633*	EX16	2.7%	NM_001067.3
NC-844	RNF43	c.788G>A	p.G263E	EX7	1.6%	NM_017763.4
NC-845	BRAF	c.1799T>A	p.V600E	EX15	11.2%	NM_004333.4
NC-845	NOTCH1	c.5716G>T	p.A1906S	EX31	11.1%	NM_017617.3
NC-845	IRS2	c.2352C>G	p.F784L	EX1	15.2%	NM_003749.2
NC-845	TP53	c.524G>A	p.R175H	EX5	17.7%	NM_000546.5
NC-845	CEBPA	c.3G>A	p.0?	EX1E	12.7%	NM_004364.3
NC-846	LRP1B	c.5669G>T	p.R1890M	EX35	7.3%	NM_018557.2
NC-846	LRP1B	c.3163G>A	p.G1055R	EX21	19.5%	NM_018557.2
NC-846	EPHA5	c.1702G>A	p.D568N	EX8	14.5%	NM_004439.5
NC-846	EGFR	c.1351C>T	p.R451C	EX12	1.6%	NM_005228.3
NC-846	EGFR	c.2573T>G	p.L858R	EX21	37.6%	NM_005228.3
NC-847	ARID1A	c.6795dupG	p.L2266Vfs*12	EX20E	16.8%	NM_006015.4
NC-847	PIK3CA	c.3140A>G	p.H1047R	EX21E	16.0%	NM_006218.2
NC-847	RSPO2	c.556_557delCTinsAC	p.L186T	EX5	12.1%	NM_178565.4
NC-847	CDKN2A	c.172C>T	p.R58*	EX2	19.8%	NM_000077.4
NC-847	PTCH1	c.154C>G	p.R52G	EX1	5.9%	NM_000264.3
NC-847	ARID2	c.5035C>T	p.R1679W	EX17	12.3%	NM_152641.2
NC-847	SLX4	c.823G>A	p.E275K	EX4	15.2%	NM_032444.2
NC-847	TP53	c.473G>T	p.R158L	EX5	18.0%	NM_000546.5

NC-848	PAX7	c.1324T>A	p.Y442N	EX8	15.6%	NM_001135254.1
NC-848	DHX9	c.3520A>T	p.R1174*	EX28E	27.0%	NM_001357.4
NC-848	LRP1B	c.12497G>T	p.R4166L	EX81	12.7%	NM_018557.2
NC-848	LRP1B	c.2077A>T	p.K693*	EX13	28.2%	NM_018557.2
NC-848	EGFR	c.1960C>G	p.L654V	EX17	12.2%	NM_005228.3
NC-848	HGF	c.738G>T	p.L246F	EX6	32.6%	NM_000601.4
NC-848	MLL3	c.4393A>T	p.T1465S	EX29	34.4%	NM_170606.2
NC-848	PTEN	c.493-1G>T	.	IVS5	46.8%	NM_000314.4
NC-848	ATM	c.4532A>G	p.D1511G	EX30	3.0%	NM_000051.3
NC-848	ARID2	c.238A>T	p.R80*	EX3	49.2%	NM_152641.2
NC-848	BRCA2	c.7819A>T	p.T2607S	EX17	2.1%	NM_000059.3
NC-848	TP53	c.999_1003delTGGGC	p.G334*fs*1	EX10	39.4%	NM_000546.5
NC-848	NF1	c.2557C>T	p.Q853*	EX21	48.9%	NM_000267.3
NC-849	ALK	c.3212T>G	p.M1071R	EX20	3.2%	NM_004304.4
NC-849	SETD2	c.3970C>T	p.Q1324*	EX3	1.7%	NM_014159.6
NC-849	TP53	c.637C>T	p.R213*	EX6	2.8%	NM_000546.5
NC-849	AXL	c.692T>A	p.L231H	EX6	1.8%	NM_021913.3
NC-850	EGFR	c.2573T>G	p.L858R	EX21	8.1%	NM_005228.3
NC-850	GRM3	c.504G>T	p.Q168H	EX3	1.6%	NM_000840.2
NC-850	BRAF	c.1799T>A	p.V600E	EX15	1.6%	NM_004333.4
NC-850	IFITM3	c.11C>T	p.T4I	EX1	4.2%	NM_021034.2
NC-850	TP53	c.946C[4>3]	p.Q317Sfs*28	EX9	5.2%	NM_000546.5
NC-850	SMARCA4	c.4682G>A	p.R1561Q	EX33	1.6%	NM_003072.3
NC-850	BCOR	c.1544G>A	p.S515N	EX4	2.5%	NM_001123385.1
NC-851	PMS1	c.2567C>A	p.A856D	EX12	13.7%	NM_000534.4

NC-851	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	29.1%	NM_005228.3
NC-851	TP53	c.527G>A	p.C176Y	EX5	16.6%	NM_000546.5
NC-852	TERT	c.-58-u139C>T	.	.	54.0%	NM_198253.2
NC-852	BRAF	c.1480C>T	p.Q494*	EX12	19.0%	NM_004333.4
NC-852	ATM	c.5237G>C	p.G1746A	EX35	16.2%	NM_000051.3
NC-852	CDH1	c.2519C>T	p.S840F	EX16E	2.3%	NM_004360.3
NC-852	MAF	c.755C>G	p.A252G	EX1E	1.5%	NM_001031804.2
NC-853	BCOR	c.4376A>G	p.N1459S	EX10	15.2%	NM_001123385.1
NC-853	MTOR	c.4556C>T	p.A1519V	EX31	12.3%	NM_004958.3
NC-853	XPO1	c.1165T>A	p.S389T	EX12	1.6%	NM_003400.3
NC-853	FOXP1	c.293C>T	p.S98L	EX4	11.8%	NM_001244814.1
NC-853	EPHA3	c.942C>A	p.D314E	EX4	17.3%	NM_005233.5
NC-853	HNRPDL	c.311C>A	p.A104E	EX1	5.4%	NM_031372.3
NC-853	TET2	c.3813C>G	p.C1271W	EX7	1.8%	NM_001127208.2
NC-853	EGFR	c.2237_2251delAATTAAGAGAAGCAA	p.E746_T751delinsA	EX19	25.9%	NM_005228.3
NC-853	PTEN	c.493-2A>G	.	IVS5	5.7%	NM_000314.4
NC-854	ATR	c.7700A>C	p.K2567T	EX46	11.0%	NM_001184.3
NC-854	FAT1	c.10218C>G	p.Y3406*	EX17	24.1%	NM_005245.3
NC-854	FAT1	c.3116A[4>5]	p.T1042Dfs*19	EX2	49.2%	NM_005245.3
NC-854	ARID1B	c.5179G>A	p.D1727N	EX20E	21.7%	NM_020732.3
NC-854	ATRX	c.6734A>G	p.K2245R	EX31	70.3%	NM_000489.3
NC-855	DHX9	c.3533C>G	p.S1178C	EX28E	3.2%	NM_001357.4
NC-855	FNDC4	c.550A>T	p.I184F	EX6	20.4%	NM_022823.2
NC-855	HGF	c.1480C>T	p.R494*	EX13	5.5%	NM_000601.4

NC-855	ABCC11	c.3159G>C	p.M1053I	EX23	5.1%	NM_032583.3
NC-855	CIC	c.3341C>T	p.A1114V	EX14	9.1%	NM_015125.3
NC-855	EP300	c.1339C>T	p.Q447*	EX6	5.1%	NM_001429.3
NC-855	EIF1AX	c.16G>C	p.G6R	EX1	5.5%	NM_001412.3
NC-856	GNAS	c.313-1G>C	.	IVS4	12.4%	NM_000516.4
NC-856	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	11.7%	NM_005228.3
NC-856	MTOR	c.6045G>C	p.E2015D	EX44	11.2%	NM_004958.3
NC-856	CUL3	c.2206C>A	p.P736T	EX16	3.4%	NM_003590.4
NC-856	CREBBP	c.5149C>T	p.R1717C	EX30	3.0%	NM_004380.2
NC-856	FGFR4	c.1712A>G	p.D571G	EX13	2.7%	NM_213647.1
NC-856	ABCB1	c.1973C>T	p.S658L	EX17	2.5%	NM_000927.4
NC-857	KRAS	c.35G>C	p.G12A	EX2	5.7%	NM_033360.2
NC-857	STK11	c.487G>C	p.G163R	EX4	11.9%	NM_000455.4
NC-857	KEAP1	c.295G>T	p.V99L	EX2	11.3%	NM_203500.1
NC-858	MYCN	c.1252G>A	p.A418T	EX3E	14.8%	NM_005378.4
NC-858	MLL2	c.2528C[6>5]	p.R845Gfs*85	EX10	18.1%	NM_003482.3
NC-858	POLE	c.299A>G	p.Y100C	EX4	18.9%	NM_006231.2
NC-858	TP53	c.376-2A>C	.	IVS4	39.8%	NM_000546.5
NC-858	TOP2A	c.3574_3575delGGinsTT	p.G1192L	EX28	22.5%	NM_001067.3
NC-858	TOP2A	c.3556A>G	p.K1186E	EX28	23.7%	NM_001067.3
NC-858	SMAD2	c.15G>T	p.L5F	EX2	10.5%	NM_001003652.3
NC-858	MLH1	c.121G>C	p.D41H	EX2	32.8%	NM_000249.3
NC-858	MLH1	c.1366T>C	p.S456P	EX12	18.1%	NM_000249.3
NC-858	NR1I2	c.287C>G	p.A96G	EX3	48.6%	NM_003889.3
NC-858	MAP3K1	c.3490G>A	p.D1164N	EX14	14.8%	NM_005921.1

NC-858	MET	c.3028+632G>C	.	IVS14	14.9%	NM_000245.2
NC-858	IGF1R	c.685G>A	p.E229K	EX3	15.3%	NM_000875.3
NC-858	ASXL1	c.1972G>T	p.G658*	EX13E	17.1%	NM_015338.5
NC-858	TMPRSS2	c.436A>C	p.M146L	EX4	19.5%	NM_001135099.1
NC-859	EPHA3	c.1535G>T	p.R512L	EX7	10.3%	NM_005233.5
NC-859	CBLB	c.1383G>A	p.M461I	EX10	1.3%	NM_170662.3
NC-859	NSD1	c.3818G>A	p.R1273H	EX6	1.1%	NM_022455.4
NC-859	EGFR	c.2573T>G	p.L858R	EX21	43.9%	NM_005228.3
NC-859	KDM5A	c.995A>G	p.K332R	EX8	12.8%	NM_001042603.1
NC-859	MDM2	c.1153GAT[2>1]	p.D385[2>1]	EX11E	14.7%	NM_002392.4
NC-859	POLE	c.4381G>C	p.E1461Q	EX34	2.6%	NM_006231.2
NC-859	TP53	c.736A>G	p.M246V	EX7	24.8%	NM_000546.5
NC-859	TMPRSS2	c.985G>T	p.V329L	EX9	2.2%	NM_001135099.1
NC-860	MCL1	c.61_72delTTGGGGGCCGGC	p.L21_G24del	EX1	2.0%	NM_021960.4
NC-860	EGFR	c.2235_2256delGGAATTAAGAGAAGCAACATCTinsAATC	p.E746_S752delinsI	EX19	29.7%	NM_005228.3
NC-860	MLL3	c.7120G>C	p.A2374P	EX36	21.0%	NM_170606.2
NC-860	NUP93	c.528C>G	p.S176R	EX6	11.9%	NM_014669.4
NC-860	TP53	c.395A>T	p.K132M	EX5	12.5%	NM_000546.5
NC-861	MPL	c.392-1G>C	.	IVS3	6.3%	NM_005373.2
NC-861	NTRK1	c.2153G>A	p.W718*	EX16	11.7%	NM_002529.3
NC-861	CDH18	c.2066G>A	p.R689K	EX13E	8.5%	NM_004934.3
NC-861	FAT2	c.1261A>C	p.M421L	EX1	3.8%	NM_001447.2
NC-861	TBX3	c.1876C>G	p.H626D	EX8E	12.6%	NM_016569.3

NC-861	FLT1	c.830C>T	p.S277F	EX7	5.9%	NM_002019.4
NC-861	TP53	c.488A>G	p.Y163C	EX5	17.2%	NM_000546.5
NC-861	NF1	c.1468_1469delAA	p.K490Vfs*20	EX13	13.3%	NM_000267.3
NC-861	SMARCA4	c.3470G>T	p.R1157L	EX25	7.5%	NM_003072.3
NC-862	EPHA5	c.832G>A	p.A278T	EX3	47.6%	NM_004439.5
NC-862	MLL2	c.15398G>T	p.C5133F	EX48	43.9%	NM_003482.3
NC-862	MLL2	c.11454_11462delGGGCCCCCAinsT	p.L3818Ffs*191	EX39	36.7%	NM_003482.3
NC-863	EGFR	c.2573T>G	p.L858R	EX21	36.0%	NM_005228.3
NC-863	CDKN2A	c.188T>G	p.L63R	EX2	16.4%	NM_000077.4
NC-863	TP53	c.527G>T	p.C176F	EX5	17.3%	NM_000546.5
NC-864	TP53	c.461G>T	p.G154V	EX5	9.7%	NM_000546.5
NC-864	AR	c.1581G>A	p.W527*	EX1	8.2%	NM_000044.3
NC-864	KEAP1	c.1318G>T	p.V440L	EX3	7.7%	NM_203500.1
NC-864	MET	c.2888-15_2888-1delTCTCTCTGTTTTAAG	.	IVS13	5.5%	NM_000245.2
NC-864	FGFR3	c.329G>T	p.R110L	EX3	4.4%	NM_000142.4
NC-864	TP73	c.1808_1819delGCGGCGGCCCTG	p.G603_P606del	EX14	4.2%	NM_005427.3
NC-864	MET	c.2913C>A	p.Y971*	EX14	4.1%	NM_000245.2
NC-864	EPHB1	c.2284G>A	p.D762N	EX12	2.0%	NM_004441.4
NC-864	MLL3	c.7070G>A	p.G2357E	EX36	1.0%	NM_170606.2
NC-865	PIK3CA	c.1357G>A	p.E453K	EX8	9.8%	NM_006218.2
NC-865	HIST1H3B	c.151G>C	p.E51Q	EX1E	1.2%	NM_003537.3
NC-865	GRM3	c.2305A>G	p.K769E	EX4	8.3%	NM_000840.2

NC-865	GNAQ	c.651A>G	p.I217M	EX5	1.5%	NM_002072.3
NC-865	BRD3	c.1513G>T	p.E505*	EX9	8.5%	NM_007371.3
NC-865	CREBBP	c.3676G>A	p.A1226T	EX19	16.1%	NM_004380.2
NC-865	ABCC11	c.1727A>T	p.Y576F	EX13	7.6%	NM_032583.3
NC-865	CBFB	c.196C>T	p.L66F	EX3	9.2%	NM_022845.2
NC-865	TP53	c.747G>T	p.R249S	EX7	18.3%	NM_000546.5
NC-865	STK11	c.837C[6>5]	p.P281Rfs*6	EX6	16.0%	NM_000455.4
NC-865	RBL1	c.2270C>T	p.S757L	EX16	6.7%	NM_002895.2
NC-866	NOTCH2	c.3005G>C	p.C1002S	EX19	12.2%	NM_024408.3
NC-866	SDHC	c.492G>A	p.M164I	EX6E	21.0%	NM_003001.3
NC-866	EPHB6	c.889G[5>6]	p.C299Lfs*25	EX7	8.2%	NM_004445.3
NC-866	MLL	c.5348A>G	p.N1783S	EX18	27.3%	NM_001197104.1
NC-866	KRAS	c.34G>T	p.G12C	EX2	18.9%	NM_033360.2
NC-866	NAV3	c.1809A>T	p.Q603H	EX8	25.9%	NM_014903.4
NC-866	SOCS1	c.504G>T	p.Q168H	EX2E	12.4%	NM_003745.1
NC-866	TP53	c.925C[3>2]	p.N310Tfs*35	EX9	29.0%	NM_000546.5
NC-866	JAK3	c.2605C>T	p.Q869*	EX19	11.5%	NM_000215.3
NC-866	CCNE1	c.195T>G	p.N65K	EX5	8.2%	NM_001238.2
NC-866	CCNE1	c.370G>A	p.E124K	EX6	8.1%	NM_001238.2
NC-866	RBM10	c.1096+1G>C	.	IVS9	24.3%	NM_001204468.1
NC-867	LRP1B	c.3338C>A	p.A1113E	EX22	33.7%	NM_018557.2
NC-867	CPS1	c.3166G>A	p.V1056I	EX26	16.4%	NM_001875.4
NC-867	ERBB4	c.1013G>T	p.G338V	EX9	16.9%	NM_005235.2
NC-867	FAT1	c.11483-1G>T	.	IVS20	21.9%	NM_005245.3
NC-867	GFRAL	c.384G>T	p.M128I	EX5	34.5%	NM_207410.2
NC-867	ROS1	c.6942T>A	p.D2314E	EX43E	37.8%	NM_002944.2

NC-867	CARD11	c.3280G>T	p.E1094*	EX25E	35.1%	NM_032415.4
NC-867	MLL3	c.903A>T	p.K301N	EX7	1.4%	NM_170606.2
NC-867	ZFPM2	c.1024T>C	p.Y342H	EX8E	14.9%	NM_012082.3
NC-867	RB1	c.838G>T	p.E280*	EX8	48.3%	NM_000321.2
NC-867	NTRK3	c.1716G>C	p.K572N	EX15	22.8%	NM_001012338.2
NC-867	TP53	c.880G>T	p.E294*	EX8	47.8%	NM_000546.5
NC-867	ROCK1	c.1133A[2>1]	p.E379Kfs*17	EX10	15.6%	NM_005406.2
NC-867	ASXL1	c.663_664delCGinsA	p.E222Rfs*10	EX8	18.1%	NM_015338.5
NC-868	TET2	c.2735C>T	p.A912V	EX3	1.2%	NM_001127208.2
NC-868	EGFR	c.2573T>G	p.L858R	EX21	9.7%	NM_005228.3
NC-868	MLL3	c.1463G>A	p.C488Y	EX10	2.9%	NM_170606.2
NC-868	ARID2	c.5149C>T	p.Q1717*	EX19	13.6%	NM_152641.2
NC-868	TP53	c.581T>G	p.L194R	EX6	6.3%	NM_000546.5
NC-869	EGFR	c.2237_2255delAATTAAGAGAAGCAACATCinsT	p.E746_S752delinsV	EX19	5.3%	NM_005228.3
NC-869	TP53	c.752T>C	p.I251T	EX7	1.7%	NM_000546.5
NC-869	TP53	c.729G[3>2]	p.G244Afs*3	EX7	5.6%	NM_000546.5
NC-869	CRLF2	c.94A>G	p.I32V	EX2	9.8%	NM_022148.2
NC-869	KDM5C	c.4373G>A	p.R1458Q	EX26E	7.8%	NM_004187.3
NC-870	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	8.0%	NM_005228.3
NC-870	HRAS	c.379T>A	p.S127T	EX4	2.4%	NM_001130442.1
NC-870	PCK1	c.1154C>T	p.S385F	EX7	2.9%	NM_002591.3
NC-870	PCK1	c.1211C>T	p.S404L	EX8	3.4%	NM_002591.3
NC-871	ALK	c.4652C>A	p.P1551Q	EX29E	2.5%	NM_004304.4

NC-871	LRP1B	c.10687G>T	p.G3563C	EX69	1.3%	NM_018557.2
NC-871	EPHA3	c.2314G>A	p.E772K	EX13	1.3%	NM_005233.5
NC-871	TERT	c.-58-u66C>T	.	.	7.6%	NM_198253.2
NC-871	CDH18	c.2180C>A	p.P727H	EX13E	8.6%	NM_004934.3
NC-871	MSH3	c.3365G>T	p.W1122L	EX24E	2.0%	NM_002439.4
NC-871	CSF1R	c.985C>A	p.P329T	EX7	2.9%	NM_005211.3
NC-871	KRAS	c.183A>C	p.Q61H	EX3	2.2%	NM_033360.2
NC-871	GRIN2A	c.2415C>A	p.N805K	EX12	1.7%	NM_001134407.1
NC-871	TP53	c.743G>T	p.R248L	EX7	2.1%	NM_000546.5
NC-871	JAK3	c.2845G>T	p.D949Y	EX21	2.5%	NM_000215.3
NC-871	JAK3	c.1743C>A	p.Y581*	EX13	3.3%	NM_000215.3
NC-872	TP53	c.722C>A	p.S241Y	EX7	67.0%	NM_000546.5
NC-872	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	54.4%	NM_005228.3
NC-872	MED12	c.47_55delGGCCGCGGC	p.R16_R18del	EX1	32.1%	NM_005120.2
NC-872	FAT2	c.3802G>T	p.A1268S	EX4	22.2%	NM_001447.2
NC-872	TSC2	c.1096G>A	p.E366K	EX11	16.0%	NM_000548.3
NC-872	EGFR	c.2369C>T	p.T790M	EX20	14.5%	NM_005228.3
NC-873	FNDC4	c.643C>T	p.Q215*	EX6	22.4%	NM_022823.2
NC-873	RECQL4	c.1576C>T	p.L526F	EX9	2.1%	NM_004260.3
NC-873	GNAQ	c.868G>A	p.D290N	EX6	1.1%	NM_002072.3
NC-873	MAX	c.28_30delGAGinsAAA	p.E10K	EX1	16.2%	NM_002382.4
NC-873	MAP2K1	c.304_309delGAGATC	p.E102_I103del	EX3	23.9%	NM_002755.3
NC-873	NF2	c.115-1G>A	.	IVS1	32.5%	NM_000268.3
NC-874	LRP1B	c.1934C>T	p.S645F	EX12	18.0%	NM_018557.2

NC-874	MLL2	c.5919G>A	p.W1973*	EX28	18.9%	NM_003482.3
NC-875	HOXD13	c.544G>C	p.E182Q	EX1	2.5%	NM_000523.3
NC-875	EGFR	c.2573T>G	p.L858R	EX21	13.8%	NM_005228.3
NC-875	KDM5A	c.241G>A	p.E81K	EX2	8.5%	NM_001042603.1
NC-875	TP53	c.713G>A	p.C238Y	EX7	13.6%	NM_000546.5
NC-876	EGFR	c.2573T>G	p.L858R	EX21	1.0%	NM_005228.3
NC-876	MLL2	c.14366C>G	p.S4789C	EX45	3.2%	NM_003482.3
NC-876	ACVR1B	c.1123C>T	p.R375*	EX7	4.0%	NM_020328.3
NC-876	TP53	c.994-1G>C	.	IVS9	2.3%	NM_000546.5
NC-876	MAP2K4	c.851A>G	p.Y284C	EX8	2.7%	NM_003010.2
NC-876	RBM10	c.320G>A	p.R107H	EX3	1.1%	NM_001204468.1
NC-876	RBM10	c.1292_1298delTGCACCC	p.L431Hfs*117	EX11	1.3%	NM_001204468.1
NC-877	BAP1	c.808_809dupCT	p.I271*fs*1	EX10	22.2%	NM_004656.2
NC-878	ARID1A	c.4465_4489delGCTGAGGTTGCTCAGCAAGGCACCA	p.A1489Cfs*8	EX18	10.3%	NM_006015.4
NC-878	FAT1	c.10748A>C	p.D3583A	EX19	13.6%	NM_005245.3
NC-878	FLT4	c.3538G>C	p.E1180Q	EX27	12.0%	NM_182925.4
NC-878	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	11.1%	NM_005228.3
NC-878	TP53	c.659A>G	p.Y220C	EX6	12.4%	NM_000546.5
NC-878	BRIP1	c.1252G>T	p.A418S	EX9	14.4%	NM_032043.2
NC-878	SMAD4	c.687G[6>5]	p.G231Afs*10	EX6	18.9%	NM_005359.5
NC-879	WNT5A	c.303C>G	p.I101M	EX3	22.4%	NM_003392.4

NC-879	STAG1	c.514_529delAAAAAATTTCGTTCAAinsTC	p.K172Sfs*4	EX7	11.0%	NM_005862.2
NC-879	ATR	c.7394C>G	p.S2465*	EX44	18.4%	NM_001184.3
NC-879	PMS2	c.1376C>T	p.S459L	EX11	32.6%	NM_000535.5
NC-879	POLE	c.1916G>A	p.R639H	EX17	1.5%	NM_006231.2
NC-879	RB1	c.949C>G	p.L317V	EX10	21.5%	NM_000321.2
NC-879	TSHR	c.1225G>A	p.E409K	EX10E	3.3%	NM_000369.2
NC-879	ZFHX3	c.2282G>T	p.G761V	EX2	1.4%	NM_006885.3
NC-879	TAF15	c.1422_1445delCCGAGGAGGTGGCTATGGAGGAGA	p.G454_G461[4>3]	EX15	16.1%	NM_139215.2
NC-879	AFF2	c.118G>A	p.E40K	EX2	18.6%	NM_002025.3
NC-880	CTNNB1	c.98C>G	p.S33C	EX3	9.3%	NM_001904.3
NC-880	EGFR	c.2573T>G	p.L858R	EX21	14.3%	NM_005228.3
NC-880	MLL2	c.7439A>T	p.K2480M	EX31	1.2%	NM_003482.3
NC-880	SMARCA4	c.3626G>A	p.S1209N	EX26	8.9%	NM_003072.3
NC-880	FAM123B	c.1105G[4>3]	p.E370Rfs*21	EX2E	4.9%	NM_152424.3
NC-881	EGFR	c.2127_2129delAAC	p.E709_T710delinsD	EX18	11.0%	NM_005228.3
NC-881	RNF43	c.2279C>T	p.P760L	EX9	1.0%	NM_017763.4
NC-882	MCL1	c.362C>T	p.S121L	EX1	6.5%	NM_021960.4
NC-882	DDR2	c.1867C>G	p.L623V	EX15	6.5%	NM_006182.2
NC-882	LRP1B	c.9120+2T>A	.	IVS57	13.5%	NM_018557.2
NC-882	CTNNB1	c.134C>T	p.S45F	EX3	34.1%	NM_001904.3
NC-882	TRIO	c.1969C>G	p.Q657E	EX11	6.8%	NM_007118.2
NC-882	RICTOR	c.418G>A	p.E140K	EX6	5.6%	NM_152756.3
NC-882	CTNNA1	c.398C>G	p.S133C	EX4	5.9%	NM_001903.2

NC-882	NSD1	c.2672C>G	p.S891C	EX5	6.1%	NM_022455.4
NC-882	NSD1	c.2721C>G	p.F907L	EX5	6.4%	NM_022455.4
NC-882	PMS2	c.1518C>A	p.F506L	EX11	6.5%	NM_000535.5
NC-882	EGFR	c.2125G>A	p.E709K	EX18	64.7%	NM_005228.3
NC-882	EGFR	c.2156G>C	p.G719A	EX18	65.2%	NM_005228.3
NC-882	ELN	c.1622G>A	p.R541Q	EX25	8.7%	NM_000501.2
NC-882	TP53	c.469G>T	p.V157F	EX5	33.6%	NM_000546.5
NC-882	ERBB2	c.3458G>T	p.R1153L	EX27E	17.0%	NM_004448.2
NC-882	BPTF	c.2083A>G	p.I695V	EX6	8.2%	NM_182641.3
NC-883	PABPC1	c.394T>G	p.C132G	EX3	11.7%	NM_002568.3
NC-883	TP53	c.722C>G	p.S241C	EX7	23.9%	NM_000546.5
NC-883	PCK1	c.673C>A	p.R225S	EX5	14.6%	NM_002591.3
NC-883	IL7R	c.1195C>T	p.H399Y	EX8E	6.5%	NM_002185.3
NC-883	EGFR	c.2573T>G	p.L858R	EX21	25.3%	NM_005228.3
NC-883	MET	c.3281A>T	p.H1094L	EX16	15.8%	NM_000245.2
NC-883	MET	c.3682G>C	p.D1228H	EX19	8.6%	NM_000245.2
NC-883	SMO	c.61C>G	p.L21V	EX1	21.1%	NM_005631.4
NC-884	PREX2	c.1955T>C	p.V652A	EX18	20.5%	NM_024870.2
NC-884	RECQL	c.1771A>G	p.T591A	EX14	26.4%	NM_002907.3
NC-884	ERBB3	c.707C>T	p.S236L	EX6	25.4%	NM_001982.3
NC-884	TP53	c.832C>T	p.P278S	EX8	36.8%	NM_000546.5
NC-884	ROS1	c.438_438+1delGGinsTT	.	EX5-IVS5	29.4%	NM_002944.2
NC-884	MTOR	c.3929A>G	p.Y1310C	EX26	14.0%	NM_004958.3
NC-884	LRP1B	c.11494G>A	p.G3832R	EX75	29.5%	NM_018557.2
NC-885	EGFR	c.2573T>G	p.L858R	EX21	5.6%	NM_005228.3
NC-885	TP53	c.204G[2>1]	p.A69Lfs*54	EX4	3.9%	NM_000546.5

NC-886	PBRM1	c.1351G>T	p.D451Y	EX13	11.8%	NM_018313.4
NC-886	TSC1	c.2041+2T>C	.	IVS16	1.5%	NM_000368.4
NC-887	FANCC	c.1024C[2>1]	p.P342Lfs*27	EX11	3.5%	NM_000136.2
NC-887	TP53	c.844C>T	p.R282W	EX8	1.5%	NM_000546.5
NC-887	TP53	c.722C>A	p.S241Y	EX7	6.3%	NM_000546.5
NC-887	TP53	c.492_495delGCAG	p.K164Nfs*5	EX5	1.7%	NM_000546.5
NC-887	TP53	c.376T>A	p.Y126N	EX5	1.5%	NM_000546.5
NC-888	LRP1B	c.3274A>G	p.I1092V	EX21	13.5%	NM_018557.2
NC-888	IDH1	c.211G>T	p.V71F	EX4	14.4%	NM_005896.2
NC-888	FN1	c.1958G>A	p.R653H	EX14	3.6%	NM_212482.1
NC-888	PAX3	c.1094G>C	p.S365T	EX7	3.2%	NM_181457.3
NC-888	PBRM1	c.2890G>A	p.V964I	EX19	1.0%	NM_018313.4
NC-888	ABCA13	c.13769G>A	p.R4590Q	EX52	4.2%	NM_152701.3
NC-888	CDKN2A	c.358G>T	p.E120*	EX2	15.6%	NM_000077.4
NC-888	TGFBR1	c.789A>G	p.I263M	EX4	10.0%	NM_004612.2
NC-888	NOTCH1	c.215_242delGGACATGCCACGTGGTGGACCGCAGAGG	p.G72Afs*19	EX3	4.8%	NM_017617.3
NC-888	MLL2	c.12698A>G	p.Q4233R	EX39	14.2%	NM_003482.3
NC-888	MLL2	c.4635G[2>1]	p.A1546Qfs*16	EX17	7.1%	NM_003482.3
NC-888	AXIN1	c.1801G>T	p.A601S	EX7	7.4%	NM_003502.3
NC-888	ASXL1	c.1219C>T	p.H407Y	EX12	10.8%	NM_015338.5
NC-888	MED12	c.3761G>T	p.G1254V	EX27	15.0%	NM_005120.2
NC-889	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	62.1%	NM_005228.3
NC-889	SMARCA4	c.3563A>T	p.D1188V	EX26	57.8%	NM_003072.3

NC-889	TP53	c.523C>G	p.R175G	EX5	55.7%	NM_000546.5
NC-889	HDAC4	c.2315G>A	p.R772H	EX18	16.4%	NM_006037.3
NC-890	KRAS	c.38G>A	p.G13D	EX2	1.7%	NM_033360.2
NC-890	ARID2	c.2387T>C	p.V796A	EX15	7.0%	NM_152641.2
NC-890	NKX2-1	c.1139dupT	p.N381Efs*58	EX3E	14.3%	NM_001079668.2
NC-890	TP53	c.376T>C	p.Y126H	EX5	15.0%	NM_000546.5
NC-891	DDR2	c.1005_1006delGGinsTT	p.V336L	EX9	35.9%	NM_006182.2
NC-891	DNMT3A	c.1803G>A	p.W601*	EX15	38.2%	NM_022552.4
NC-891	ALK	c.1648-1G>T	.	IVS8	40.2%	NM_004304.4
NC-891	LRP1B	c.12037C>A	p.L4013M	EX78	36.8%	NM_018557.2
NC-891	LRP1B	c.11131G>T	p.V3711F	EX72	36.6%	NM_018557.2
NC-891	TCF7L2	c.1259G>C	p.R420P	EX11	1.5%	NM_001146274.1
NC-891	HRAS	c.182A>T	p.Q61L	EX3	41.2%	NM_001130442.1
NC-891	NTM	c.719C>T	p.T240I	EX5	38.2%	NM_001144058.1
NC-891	POLE	c.1736G>T	p.R579L	EX16	1.2%	NM_006231.2
NC-891	TP53	c.473G>T	p.R158L	EX5	68.0%	NM_000546.5
NC-892	ERCC3	c.979A>T	p.M327L	EX7	11.2%	NM_000122.1
NC-892	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	74.3%	NM_005228.3
NC-892	TP53	c.129_130delGA	p.L43Ffs*8	EX4	58.7%	NM_000546.5
NC-893	LRP1B	c.13764G>T	p.K4588N	EX91E	20.1%	NM_018557.2
NC-893	LRP1B	c.7949C>A	p.S2650*	EX49	27.7%	NM_018557.2
NC-893	HSPD1	c.167G>A	p.G56E	EX2	10.2%	NM_199440.1
NC-893	APC	c.834+1G>A	.	IVS8	1.1%	NM_000038.5
NC-893	FAT2	c.8099C>T	p.A2700V	EX9	13.8%	NM_001447.2
NC-893	KRAS	c.35G>C	p.G12A	EX2	27.1%	NM_033360.2

NC-893	TBX3	c.1442C>T	p.P481L	EX7	25.9%	NM_016569.3
NC-893	PDILT	c.1711C>A	p.P571T	EX12E	11.7%	NM_174924.1
NC-893	STK11	c.222_226delGAGGG	p.R74Sfs*87	EX1	24.7%	NM_000455.4
NC-893	KEAP1	c.994G>A	p.G332S	EX3	37.3%	NM_203500.1
NC-894	CARD11	c.3301C>A	p.R1101S	EX25E	27.0%	NM_032415.4
NC-894	CDKN2A	c.115A[2>3]	p.N39Kfs*5	EX1	38.1%	NM_000077.4
NC-894	KRAS	c.34G>T	p.G12C	EX2	70.8%	NM_033360.2
NC-894	TP53	c.815T>G	p.V272G	EX8	52.6%	NM_000546.5
NC-894	STK11	c.714_734+17delCTGGTCGGCTGGGGTCACCCTGTAAGTGCCCCGCCCCC	.	EX5-IVS5	8.5%	NM_000455.4
NC-895	MLH1	c.1055T>C	p.L352P	EX12	9.0%	NM_000249.3
NC-895	EGFR	c.2573T>G	p.L858R	EX21	8.3%	NM_005228.3
NC-895	RBM10	c.2372delG	p.R791Qfs*76	EX20	16.0%	NM_001204468.1
NC-896	LRP1B	c.2132G>T	p.W711L	EX13	12.6%	NM_018557.2
NC-896	FAT2	c.12784C>T	p.R4262C	EX23E	5.6%	NM_001447.2
NC-896	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	19.0%	NM_005228.3
NC-896	CDH23	c.6869C>T	p.T2290M	EX50	5.7%	NM_022124.5
NC-896	FLT3	c.2146G>C	p.E716Q	EX17	5.4%	NM_004119.2
NC-896	RB1	c.1215+1G>A	.	IVS12	2.8%	NM_000321.2
NC-896	NTRK3	c.1132C>G	p.L378V	EX10	5.9%	NM_001012338.2
NC-896	BLM	c.1971G>T	p.K657N	EX8	3.3%	NM_000057.2
NC-896	MED12	c.1617G>T	p.E539D	EX11	34.1%	NM_005120.2
NC-897	EGFR	c.2530C>G	p.L844V	EX21	35.0%	NM_005228.3

NC-897	EGFR	c.2573T>G	p.L858R	EX21	34.7%	NM_005228.3
NC-897	EXT1	c.167C>T	p.P56L	EX1	4.5%	NM_000127.2
NC-897	FGFR2	c.1809G>T	p.L603F	EX13	25.2%	NM_000141.4
NC-897	RARA	c.860C>T	p.S287L	EX7	3.7%	NM_000964.3
NC-898	PMS2	c.1665G>C	p.Q555H	EX11	53.2%	NM_000535.5
NC-898	TP53	c.314G>T	p.G105V	EX4	76.6%	NM_000546.5
NC-898	SMARCA4	c.4000A>T	p.K1334*	EX29	78.3%	NM_003072.3
NC-899	NSD1	c.5518G>A	p.E1840K	EX17	16.6%	NM_022455.4
NC-899	EGFR	c.2239_2252delTTAAGAGAAGCAACinsCA	p.L747_T751delinsQ	EX19	15.8%	NM_005228.3
NC-899	RB1	c.129TC[2>1]	p.L44Rfs*4	EX1	51.1%	NM_000321.2
NC-899	TP53	c.580C>T	p.L194F	EX6	45.3%	NM_000546.5
NC-899	ACACA	c.4513A>C	p.K1505Q	EX43	32.0%	NM_198839.1
NC-900	EGFR	c.2573T>G	p.L858R	EX21	72.0%	NM_005228.3
NC-900	ROBO3	c.173G>C	p.G58A	EX2	5.4%	NM_022370.3
NC-900	ERBB2	c.829G>C	p.D277H	EX7	15.4%	NM_004448.2
NC-901	DDR2	c.2110C>G	p.L704V	EX16	9.1%	NM_006182.2
NC-901	ELF3	c.858_859delGGinsTT	p.E287*	EX8	11.7%	NM_004433.4
NC-901	FANCD2	c.2952T>G	p.I984M	EX30	14.1%	NM_033084.3
NC-901	EGFR	c.2573T>G	p.L858R	EX21	40.3%	NM_005228.3
NC-901	GRIN2A	c.1342G>C	p.E448Q	EX6	1.0%	NM_001134407.1
NC-901	TP53	c.1024C>T	p.R342*	EX10	56.6%	NM_000546.5
NC-902	NFE2L2	c.86A>G	p.D29G	EX2	6.9%	NM_006164.4
NC-902	EPHA3	c.1388C>A	p.P463H	EX6	22.5%	NM_005233.5
NC-902	PIK3CB	c.2719_2722delGGCT	p.G907Tfs*3	EX19	4.0%	NM_006219.2

NC-902	TET2	c.955_977delCCAGAACAACTACAACAACAAAA	p.P319Ifs*4	EX3	11.5%	NM_001127208.2
NC-902	FAT1	c.7667G>T	p.R2556L	EX10	22.3%	NM_005245.3
NC-902	MSH3	c.2814G>T	p.R938S	EX21	18.4%	NM_002439.4
NC-902	ABCA13	c.10247G>T	p.R3416L	EX30	19.3%	NM_152701.3
NC-902	MLL3	c.1025C>G	p.A342G	EX8	2.1%	NM_170606.2
NC-902	PTEN	c.951ACTT[2>1]	p.T319*fs*1	EX8	19.5%	NM_000314.4
NC-902	MS4A1	c.508G>T	p.A170S	EX6	25.2%	NM_152866.2
NC-902	RB1	c.1772CT[2>1]	p.L592*fs*1	EX18	21.3%	NM_000321.2
NC-902	RB1	c.1777A>T	p.N593Y	EX18	23.4%	NM_000321.2
NC-902	GRIN2A	c.4264GT[2>1]	p.I1424Ffs*11	EX13E	24.2%	NM_001134407.1
NC-902	TP53	c.743G>T	p.R248L	EX7	29.0%	NM_000546.5
NC-902	RARA	c.799G>T	p.D267Y	EX6	18.8%	NM_000964.3
NC-902	KDM5C	c.4217G>A	p.G1406E	EX25	45.8%	NM_004187.3
NC-903	INPP4B	c.2583G>C	p.L861F	EX25	8.7%	NM_001101669.1
NC-903	EGFR	c.2303G>T	p.S768I	EX20	27.4%	NM_005228.3
NC-903	EGFR	c.2573T>G	p.L858R	EX21	24.5%	NM_005228.3
NC-903	MLL3	c.917A>G	p.Y306C	EX7	3.3%	NM_170606.2
NC-903	CDKN2A	c.231TC[2>1]	p.L78Hfs*41	EX2	16.5%	NM_000077.4
NC-903	FGF23	c.607C>A	p.P203T	EX3E	14.2%	NM_020638.2
NC-903	P4HB	c.994G>C	p.E332Q	EX7	6.1%	NM_000918.3
NC-903	CHEK2	c.342G>T	p.W114C	EX3	1.3%	NM_007194.3
NC-904	ERBB4	c.767G>A	p.G256E	EX7	2.7%	NM_005235.2
NC-904	ARID1B	c.6590G>A	p.R2197K	EX20E	3.9%	NM_020732.3
NC-904	ARID2	c.4511_4515delGGTCT	p.R1504Hfs*18	EX15	11.6%	NM_152641.2

NC-904	TP53	c.742C>T	p.R248W	EX7	12.1%	NM_000546.5
NC-904	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	24.2%	NM_004448.2
NC-905	MSH6	c.1522G>C	p.V508L	EX4	6.3%	NM_000179.2
NC-905	PMS1	c.374G>C	p.G125A	EX4	5.9%	NM_000534.4
NC-905	SLIT2	c.4050C>A	p.S1350R	EX35	5.8%	NM_004787.1
NC-905	EPHA5	c.2453A>T	p.D818V	EX14	1.5%	NM_004439.5
NC-905	APC	c.7777A>T	p.N2593Y	EX16E	7.4%	NM_000038.5
NC-905	NOTCH4	c.1187G>A	p.C396Y	EX7	3.6%	NM_004557.3
NC-905	ROS1	c.5254G>C	p.V1752L	EX32	6.4%	NM_002944.2
NC-905	ZNF804B	c.353T>A	p.L118Q	EX3	6.3%	NM_181646.2
NC-905	PIK3CG	c.1243G>C	p.E415Q	EX2	3.5%	NM_002649.2
NC-905	EPHB6	c.122G>T	p.G41V	EX6	3.5%	NM_004445.3
NC-905	GALNT12	c.1101G>T	p.K367N	EX6	3.1%	NM_024642.4
NC-905	RXRA	c.481C>T	p.R161W	EX4	3.5%	NM_002957.4
NC-905	SLIT1	c.1910G>A	p.R637H	EX19	6.8%	NM_003061.2
NC-905	MLL2	c.10634_10653delAGCAGCGCACTGCCAAAAAA	p.K3545Sfs*4	EX38	3.1%	NM_003482.3
NC-905	SLX4	c.4496G>T	p.G1499V	EX12	7.0%	NM_032444.2
NC-905	TP53	c.797G>T	p.G266V	EX8	7.1%	NM_000546.5
NC-905	RPTOR	c.787T>C	p.F263L	EX6	3.5%	NM_020761.2
NC-905	ROCK1	c.2066A>G	p.N689S	EX18	6.3%	NM_005406.2
NC-906	BAP1	c.422A>G	p.H141R	EX6	19.8%	NM_004656.2
NC-906	APC	c.847C>T	p.R283*	EX9	13.5%	NM_000038.5
NC-906	ARID2	c.3580C>T	p.Q1194*	EX15	11.2%	NM_152641.2

NC-907	NSD1	c.1358A>G	p.E453G	EX5	18.3%	NM_022455.4
NC-907	MET	c.3763C>A	p.L1255M	EX19	36.1%	NM_000245.2
NC-907	SNTG1	c.680G>T	p.R227L	EX11	34.3%	NM_018967.2
NC-907	LRP4	c.2092+1G>A	.	IVS15	25.7%	NM_002334.3
NC-907	ZNF384	c.762delG	p.K254Nfs*165	EX7	28.8%	NM_001135734.2
NC-907	KRAS	c.34G>T	p.G12C	EX2	27.2%	NM_033360.2
NC-907	TBX3	c.1010A>C	p.D337A	EX6	22.2%	NM_016569.3
NC-907	TP53	c.454_466delCCGCCCGGCACCC	p.P152Afs*14	EX5	24.6%	NM_000546.5
NC-907	SERPINB3	c.1113C>A	p.F371L	EX8E	27.2%	NM_006919.2
NC-907	COL5A3	c.728G>C	p.R243P	EX6	38.2%	NM_015719.3
NC-907	KEAP1	c.932A>G	p.H311R	EX3	39.3%	NM_203500.1
NC-907	SMARCA4	c.2204C[3>2]	p.H736Mfs*38	EX15	37.3%	NM_003072.3
NC-908	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	19.1%	NM_005228.3
NC-908	FGF23	c.602C>T	p.P201L	EX3E	4.7%	NM_020638.2
NC-908	EP300	c.4471A>G	p.T1491A	EX28	11.9%	NM_001429.3
NC-908	MED12	c.1721T>A	p.L574Q	EX12	17.7%	NM_005120.2
NC-909	FAT1	c.1784A>C	p.D595A	EX2	10.4%	NM_005245.3
NC-909	APC	c.7041G>T	p.R2347S	EX16	8.1%	NM_000038.5
NC-909	RAD50	c.1362G>T	p.Q454H	EX9	2.7%	NM_005732.3
NC-909	DDR1	c.2065G>A	p.A689T	EX16	5.1%	NM_001954.4
NC-909	EGFR	c.2573T>G	p.L858R	EX21	59.5%	NM_005228.3
NC-909	MLH3	c.4043C>T	p.T1348I	EX11	3.3%	NM_001040108.1
NC-909	TP53	c.734G>A	p.G245D	EX7	26.2%	NM_000546.5
NC-910	PTCH2	c.2143G>C	p.D715H	EX15	14.2%	NM_001166292.1

NC-910	TGFBR2	c.1397C>A	p.S466Y	EX6	20.9%	NM_001024847.2
NC-910	MST1R	c.1630G>T	p.G544C	EX4	21.9%	NM_002447.2
NC-910	EPHA3	c.2554G>T	p.A852S	EX15	17.4%	NM_005233.5
NC-910	KDR	c.1256-1G>A	.	IVS9	17.0%	NM_002253.2
NC-910	AFF1	c.265G>T	p.A89S	EX4	16.4%	NM_001166693.1
NC-910	MSH3	c.3151G>T	p.D1051Y	EX23	21.8%	NM_002439.4
NC-910	VEGFA	c.607A>G	p.K203E	EX7	16.3%	NM_001171623.1
NC-910	ROS1	c.5263A>G	p.K1755E	EX32	18.6%	NM_002944.2
NC-910	ESR1	c.214G>T	p.V72F	EX2	16.7%	NM_001122740.1
NC-910	CSMD3	c.11108T>A	p.V3703D	EX71E	23.5%	NM_198123.1
NC-910	CDH23	c.8572G>A	p.D2858N	EX60	19.0%	NM_022124.5
NC-910	C1S	c.185C>T	p.S62L	EX3	17.8%	NM_001734.3
NC-910	ARID2	c.3281G>A	p.S1094N	EX15	20.2%	NM_152641.2
NC-910	TP53	c.740A>T	p.N247I	EX7	22.0%	NM_000546.5
NC-910	ROCK1	c.440G>A	p.R147H	EX5	3.1%	NM_005406.2
NC-911	MLLT3	c.471CAG[10>11]	p.S149[42>43]	EX5	17.9%	NM_004529.2
NC-911	AHNAK	c.8123C>A	p.S2708Y	EX5E	1.3%	NM_001620.1
NC-911	ERBB2	c.2313_2324dupATACGTGATGGC	p.Y772_A775dup	EX20	3.4%	NM_004448.2
NC-912	EGFR	c.2573T>G	p.L858R	EX21	90.7%	NM_005228.3
NC-912	MLL3	c.8092G>A	p.E2698K	EX38	1.0%	NM_170606.2
NC-912	TP53	c.817C>T	p.R273C	EX8	53.0%	NM_000546.5
NC-912	AKT2	c.1379G>A	p.G460D	EX14E	14.9%	NM_001626.4
NC-913	NFE2L2	c.70T>C	p.W24R	EX2	4.3%	NM_006164.4
NC-913	CUL3	c.473G[3>2]	p.D159Ifs*10	EX4	3.3%	NM_003590.4
NC-913	FOXL2	c.655C>G	p.Q219E	EX1E	1.1%	NM_023067.3

NC-913	C3orf70	c.545C>T	p.S182F	EX2E	2.3%	NM_001025266.1
NC-913	MSH3	c.1597G>A	p.E533K	EX11	4.2%	NM_002439.4
NC-913	ROS1	c.63G>T	p.W21C	EX1	2.2%	NM_002944.2
NC-913	PMS2	c.-87-u430C>G	.	.	9.8%	NM_000535.5
NC-913	MLL3	c.8059G>T	p.E2687*	EX38	2.8%	NM_170606.2
NC-913	CDKN2A	c.202G>C	p.A68P	EX2	7.6%	NM_000077.4
NC-913	RET	c.944C>G	p.T315R	EX5	4.6%	NM_020975.4
NC-913	HRAS	c.181C>A	p.Q61K	EX3	2.2%	NM_001130442.1
NC-913	MLL	c.181G>T	p.A61S	EX1	6.6%	NM_001197104.1
NC-913	ROBO3	c.592G>A	p.V198M	EX3	7.7%	NM_022370.3
NC-913	ROBO3	c.2997C>G	p.I999M	EX21	2.6%	NM_022370.3
NC-913	ARID2	c.3676G>T	p.G1226*	EX15	7.1%	NM_152641.2
NC-913	ZFHX3	c.1277G>T	p.S426I	EX2	9.9%	NM_006885.3
NC-913	TP53	c.672+1G>C	.	IVS6	11.4%	NM_000546.5
NC-913	POLD1	c.3153C>G	p.F1051L	EX26	3.3%	NM_002691.3
NC-913	KDM6A	c.2194A>T	p.R732W	EX17	20.9%	NM_021140.2
NC-914	EPHA3	c.1040G>T	p.W347L	EX5	2.7%	NM_005233.5
NC-914	FOXL2	c.196G>A	p.A66T	EX1E	4.3%	NM_023067.3
NC-914	PDGFRA	c.2364A>T	p.E788D	EX17	19.1%	NM_006206.4
NC-914	TERT	c.-58-u6G>C	.	.	21.9%	NM_198253.2
NC-914	DDR1	c.1391C>G	p.S464C	EX13	1.1%	NM_001954.4
NC-914	EGFR	c.2573T>G	p.L858R	EX21	65.7%	NM_005228.3
NC-914	MLL3	c.11647G>T	p.D3883Y	EX44	3.3%	NM_170606.2
NC-914	GATA3	c.283C>A	p.P95T	EX3	4.4%	NM_002051.2
NC-914	RET	c.2081G>A	p.R694Q	EX11	14.5%	NM_020975.4
NC-914	WT1	c.1108C>A	p.R370S	EX7	4.2%	NM_024426.4

NC-914	ERBB3	c.2233G>C	p.E745Q	EX19	2.2%	NM_001982.3
NC-914	RB1	c.460A>T	p.K154*	EX4	21.8%	NM_000321.2
NC-914	TP53	c.812A>T	p.E271V	EX8	22.6%	NM_000546.5
NC-914	RBM10	c.1355+1G>T	.	IVS11	36.7%	NM_001204468.1
NC-915	MSH2	c.481G>A	p.V161I	EX3	12.3%	NM_000251.2
NC-915	EGFR	c.2573T>G	p.L858R	EX21	8.6%	NM_005228.3
NC-915	TP53	c.569C>T	p.P190L	EX6	1.7%	NM_000546.5
NC-916	ALK	c.2830T>C	p.S944P	EX17	14.9%	NM_004304.4
NC-917	MAP2K1	c.304_309delGAGATC	p.E102_I103del	EX3	14.2%	NM_002755.3
NC-917	NCOR1	c.172dupC	p.Q58Pfs*23	EX3	15.2%	NM_006311.3
NC-918	DPYD	c.1300G>T	p.V434F	EX11	7.3%	NM_000110.3
NC-918	EGFR	c.2235_2249delGGAATTAAGAGAAGC	p.E746_A750del	EX19	49.6%	NM_005228.3
NC-918	TP53	c.515T>A	p.V172D	EX5	9.7%	NM_000546.5
NC-919	CUL3	c.2153A>T	p.Q718L	EX15	25.3%	NM_003590.4
NC-919	IMPG1	c.230G>T	p.G77V	EX2	14.2%	NM_001563.2
NC-919	EGFR	c.2573T>G	p.L858R	EX21	10.4%	NM_005228.3
NC-919	TP53	c.329G>T	p.R110L	EX4	61.1%	NM_000546.5
NC-920	FCGR2A	c.349A>G	p.T117A	EX3	15.0%	NM_021642.3
NC-920	LRP1B	c.8653A>G	p.K2885E	EX54	23.0%	NM_018557.2
NC-921	TGFBR3	c.1783G>A	p.E595K	EX13	1.3%	NM_001195684.1
NC-921	CDKN2A	c.172C>T	p.R58*	EX2	10.4%	NM_000077.4
NC-921	KRAS	c.35G>T	p.G12V	EX2	23.0%	NM_033360.2
NC-922	SETD2	c.4283G>T	p.R1428I	EX3	16.1%	NM_014159.6
NC-922	EGFR	c.2240_2254delTAAGAGAAGCAACAT	p.L747_T751del	EX19	7.4%	NM_005228.3

NC-924	EXT1	c.1777C>G	p.P593A	EX9	23.1%	NM_000127.2
NC-924	KRAS	c.37G>T	p.G13C	EX2	17.5%	NM_033360.2
NC-924	TP53	c.623A>T	p.D208V	EX6	16.6%	NM_000546.5
NC-924	PDGFRA	c.1630G>T	p.V544F	EX11	13.1%	NM_006206.4
NC-924	LRP1B	c.4865G>T	p.W1622L	EX29	12.5%	NM_018557.2
NC-924	LRP1B	c.11810G>C	p.W3937S	EX77	12.3%	NM_018557.2
NC-924	LRP1B	c.5570G>A	p.R1857K	EX34	12.1%	NM_018557.2
NC-924	FANCM	c.2287C>T	p.Q763*	EX13	12.1%	NM_020937.2
NC-924	INPP4B	c.559G>T	p.G187W	EX10	10.8%	NM_001101669.1
NC-924	FGFR2	c.1361C>T	p.T454M	EX10	3.2%	NM_000141.4
NC-924	RNF43	c.1361G>A	p.R454H	EX9	1.2%	NM_017763.4
NC-925	NOTCH4	c.5988C>A	p.N1996K	EX30E	6.4%	NM_004557.3
NC-925	EGFR	c.2573T>G	p.L858R	EX21	15.8%	NM_005228.3
NC-925	MAP2K4	c.4G>C	p.A2P	EX1	10.8%	NM_003010.2
NC-925	TFE3	c.569A>G	p.H190R	EX4	6.1%	NM_006521.4
NC-926	SPTA1	c.6727G>A	p.D2243N	EX48	3.7%	NM_003126.2
NC-926	HIST1H1D	c.125C>T	p.S42F	EX1E	4.8%	NM_005320.2
NC-926	ATM	c.8576C>T	p.S2859F	EX58	3.9%	NM_000051.3
NC-926	KRAS	c.35G>A	p.G12D	EX2	17.0%	NM_033360.2
NC-927	ERBB4	c.710G>A	p.G237D	EX6	20.1%	NM_005235.2
NC-927	NOTCH3	c.2653G>A	p.A885T	EX17	10.9%	NM_000435.2
NC-927	CRKL	c.448C>G	p.L150V	EX2	12.5%	NM_005207.3
NC-928	LRP1B	c.1693G>A	p.A565T	EX11	1.9%	NM_018557.2
NC-928	CTNNB1	c.110C>T	p.S37F	EX3	17.3%	NM_001904.3
NC-928	EGFR	c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	EX19	14.9%	NM_005228.3

NC-928	POT1	c.517G>A	p.E173K	EX8	4.9%	NM_015450.2
NC-928	MLL3	c.11081C>T	p.P3694L	EX43	2.8%	NM_170606.2
NC-928	MLL3	c.1573G>T	p.D525Y	EX11	14.4%	NM_170606.2
NC-928	BRCA1	c.2513A>T	p.N838I	EX10	17.3%	NM_007294.3
NC-928	KLK1	c.730G>A	p.A244T	EX5E	13.8%	NM_002257.2
NC-928	ADAMTS5	c.412G>A	p.G138S	EX1	7.4%	NM_007038.3
NC-928	MED12	c.5444C>T	p.T1815I	EX38	13.1%	NM_005120.2
NC-929	NOTCH2	c.7_8delGCinsTT	p.A3F	EX1	11.8%	NM_024408.3
NC-929	LRP1B	c.1684G>T	p.D562Y	EX11	24.0%	NM_018557.2
NC-929	FAT2	c.4895C>T	p.A1632V	EX9	17.5%	NM_001447.2
NC-929	ARID1B	c.5668G>C	p.E1890Q	EX20E	18.5%	NM_020732.3
NC-929	ABCB1	c.1468T>G	p.Y490D	EX14	19.1%	NM_000927.4
NC-929	MLL3	c.26T>C	p.V9A	EX1	2.2%	NM_170606.2
NC-929	PRKDC	c.8258G>A	p.R2753Q	EX60	10.3%	NM_006904.6
NC-929	CDH23	c.8263G>A	p.D2755N	EX58	17.8%	NM_022124.5
NC-929	KRAS	c.35G>A	p.G12D	EX2	18.9%	NM_033360.2
NC-929	TBX3	c.1715G>T	p.G572V	EX7	19.7%	NM_016569.3
NC-929	TP53	c.818G>T	p.R273L	EX8	23.4%	NM_000546.5
NC-929	NF1	c.3656_3658delGAG	p.G1219del	EX27	8.4%	NM_000267.3
NC-929	RARA	c.1154G>A	p.R385Q	EX8	20.7%	NM_000964.3
NC-929	TOP2A	c.1412C>G	p.S471*	EX12	6.4%	NM_001067.3
NC-929	SOX9	c.1181G>A	p.R394Q	EX3E	18.8%	NM_000346.3
NC-929	SMARCA4	c.3703G>T	p.D1235Y	EX26	20.2%	NM_003072.3
NC-929	KDM6A	c.460C>T	p.Q154*	EX6	41.5%	NM_021140.2
NC-930	EPHB2	c.2423A>T	p.D808V	EX13	45.9%	NM_017449.3
NC-930	NFE2L2	c.101G>A	p.R34Q	EX2	10.7%	NM_006164.4

NC-930	KIT	c.2610_2621delTCCTGGAATGCC	p.Y870*	EX19	23.0%	NM_000222.2
NC-930	KDR	c.1157T>C	p.M386T	EX9	20.8%	NM_002253.2
NC-930	INPP4B	c.1321G>C	p.D441H	EX16	84.0%	NM_001101669.1
NC-930	APC	c.8098_8099delAAinsTT	p.N2700F	EX16E	84.3%	NM_000038.5
NC-930	NOTCH1	c.4222G>T	p.E1408*	EX25	41.2%	NM_017617.3
NC-930	PTEN	c.518G>C	p.R173P	EX6	74.3%	NM_000314.4
NC-930	MLL2	c.1840G>T	p.E614*	EX10	88.6%	NM_003482.3
NC-930	POLE	c.3730G>A	p.D1244N	EX30	45.0%	NM_006231.2
NC-930	TP53	c.524G>A	p.R175H	EX5	87.2%	NM_000546.5
NC-931	CTNNB1	c.98C>T	p.S33F	EX3	1.7%	NM_001904.3
NC-931	ATR	c.2848C[2>1]	p.P950Rfs*23	EX14	2.7%	NM_001184.3
NC-931	TNFAIP3	c.1729C>T	p.H577Y	EX7	1.7%	NM_006290.3
NC-931	EGFR	c.2369C>T	p.T790M	EX20	19.4%	NM_005228.3
NC-931	EGFR	c.2573T>G	p.L858R	EX21	22.8%	NM_005228.3
NC-931	SMO	c.1653-2A>T	.	IVS9	1.0%	NM_005631.4
NC-931	MLL3	c.13055G>A	p.W4352*	EX52	3.6%	NM_170606.2
NC-931	TSC1	c.2577C>G	p.N859K	EX20	17.1%	NM_000368.4
NC-932	EGFR	c.2369C>T	p.T790M	EX20	14.1%	NM_005228.3
NC-932	EGFR	c.2573T>G	p.L858R	EX21	41.3%	NM_005228.3
NC-932	RBM10	c.389_398delGTGCGGAGGA	p.S130Ifs*66	EX3	12.8%	NM_001204468.1
NC-933	EGFR	c.2573T>G	p.L858R	EX21	19.8%	NM_005228.3
NC-933	CDH23	c.6845A>G	p.N2282S	EX50	22.8%	NM_022124.5
NC-933	TSC2	c.4810G>A	p.G1604S	EX37	19.9%	NM_000548.3
NC-933	RBM10	c.1986C>A	p.Y662*	EX17	24.6%	NM_001204468.1

Table SIII. Somatic copy number variants detected in hypermutant and non-hypermutant samples.

Patient ID	Gene symbol	Gain/Loss	Copy number ratio	Chromosome
HC-001	CEBPA	gain	3.4	chr19
HC-001	TERC	gain	4.1	chr3
HC-001	SOX2	gain	3.7	chr3
HC-003	EGFR	gain	2.6	chr7
HC-004	ERBB2	gain	5.5	chr17
HC-006	CCND1	gain	3.2	chr11
HC-006	FGF19	gain	3.0	chr11
HC-006	FGF4	gain	3.0	chr11
HC-006	FGF3	gain	3.0	chr11
HC-006	EGFR	gain	5.2	chr7
HC-008	EGFR	gain	15.1	chr7
HC-010	CRKL	gain	3.1	chr22
HC-011	MLL2	gain	1.9	chr12
HC-011	POLD1	gain	2.2	chr19
HC-012	NFKBIA	gain	2.5	chr14
HC-012	NKX2-1	gain	2.7	chr14
HC-012	PTPRD	gain	1.9	chr9
HC-012	FANCG	gain	2.2	chr9
HC-012	PAX5	gain	2.1	chr9
HC-015	CCND1	gain	3.6	chr11
HC-015	FGF19	gain	3.5	chr11
HC-015	FGF4	gain	3.3	chr11
HC-015	FGF3	gain	3.3	chr11
HC-017	PDK1	gain	2.3	chr2
HC-017	NFE2L2	gain	2.1	chr2
HC-017	SF3B1	gain	1.9	chr2
HC-017	CASP8	gain	2.5	chr2
HC-021	CDK4	gain	2.0	chr12
HC-021	PIK3CA	gain	1.8	chr3
HC-021	MAP3K1	loss	0.4	chr5
HC-021	EGFR	gain	1.5	chr7
HC-021	CDK6	gain	2.2	chr7
HC-021	FGFR1	gain	2.4	chr8
HC-021	NBN	gain	1.9	chr8
HC-021	EXT1	gain	2.0	chr8
HC-021	MYC	gain	2.0	chr8
HC-021	CDKN2A	loss	0.1	chr9
HC-021	CDKN2B	loss	0.1	chr9
HC-025	CDK6	gain	3.0	chr7

HC-026	CCND1	gain	3.7	chr11
HC-026	C11orf30	gain	2.0	chr11
HC-026	ZMAT3	gain	2.5	chr3
HC-026	PIK3CA	gain	2.5	chr3
HC-026	SOX2	gain	3.1	chr3
HC-026	MYC	gain	1.7	chr8
HC-027	CCND1	gain	2.1	chr11
HC-027	EGFR	gain	2.6	chr7
HC-027	FGFR1	gain	2.3	chr8
HC-028	ZMAT3	gain	2.2	chr3
HC-028	PIK3CA	gain	1.9	chr3
HC-028	SOX2	gain	3.0	chr3
HC-028	SDHA	gain	1.8	chr5
HC-028	FANCG	gain	2.3	chr9
HC-028	PAX5	gain	2.4	chr9
HC-030	FOXA1	gain	7.8	chr14
HC-030	MYC	gain	9.4	chr8
HC-031	MYC	gain	2.7	chr8
HC-032	IRS2	gain	3.1	chr13
HC-033	MCL1	gain	2.1	chr1
HC-033	ARID2	gain	2.1	chr12
HC-033	CCND3	gain	2.1	chr6
HC-033	VEGFA	gain	2.2	chr6
HC-035	IFNG	gain	3.3	chr12
HC-035	MDM2	gain	3.2	chr12
HC-038	EGFR	gain	3.3	chr7
HC-047	RECQL	gain	4.9	chr12
HC-047	KRAS	gain	3.9	chr12
HC-051	CCND1	gain	2.0	chr11
HC-051	ROS1	loss	0.3	chr6
HC-051	IFNGR1	loss	0.3	chr6
HC-051	TNFAIP3	loss	0.4	chr6
HC-051	ESR1	loss	0.4	chr6
HC-051	ARID1B	loss	0.4	chr6
HC-054	MET	gain	2.1	chr7
HC-054	CDKN2A	loss	0.3	chr9
HC-054	CDKN2B	loss	0.3	chr9
HC-056	TERC	gain	2.1	3
HC-056	SOX2	gain	4.4	3
HC-058	GNA11	gain	3.4	chr19
HC-061	MYC	gain	6.4	chr8
HC-063	FGFR1	gain	2.2	chr8
HC-065	SOX2	gain	6.4	chr3
NC-005	FGFR1	gain	2.1	chr8

NC-006	PTPRD	loss	0.3	9
NC-007	MYCL1	gain	6.3	chr1
NC-007	MPL	gain	4.7	chr1
NC-007	SDHA	gain	5.0	chr5
NC-007	EGFR	gain	2.0	chr7
NC-007	JAK2	loss	0.6	chr9
NC-007	CDKN2A	loss	0.4	chr9
NC-007	CDKN2B	loss	0.4	chr9
NC-011	CCND2	gain	2.0	chr12
NC-011	BRCA2	loss	0.6	chr13
NC-011	ERCC5	loss	0.6	chr13
NC-011	ERBB2	gain	1.7	chr17
NC-011	PIK3CA	gain	2.0	chr3
NC-011	JAK2	loss	0.6	chr9
NC-011	KDM6A	loss	0.3	chrX
NC-013	EGFR	gain	9.3	chr7
NC-014	CDK4	gain	2.0	chr12
NC-014	IFNG	gain	3.2	chr12
NC-014	MDM2	gain	2.9	chr12
NC-017	PIK3CB	gain	1.8	chr3
NC-023	SMAD2	loss	0.3	chr18
NC-023	SOX2	gain	3.1	chr3
NC-023	PAX5	gain	3.2	chr9
NC-027	SDHB	gain	1.8	chr1
NC-027	BRCA2	loss	0.6	chr13
NC-027	RB1	loss	0.6	chr13
NC-027	ERCC5	loss	0.6	chr13
NC-027	IRS2	loss	0.5	chr13
NC-027	SLX4	gain	1.8	chr16
NC-030	IFNG	gain	3.3	chr12
NC-030	MDM2	gain	3.5	chr12
NC-032	EGFR	gain	3.1	chr7
NC-033	GNAS	gain	2.6	chr20
NC-034	CDKN2A	loss	0.2	chr9
NC-034	CDKN2B	loss	0.3	chr9
NC-035	CCNE1	gain	2.5	chr19
NC-035	EGFR	gain	1.7	chr7
NC-038	NFKBIA	gain	2.3	chr14
NC-038	NKX2-1	gain	2.5	chr14
NC-038	RINT1	gain	2.0	chr7
NC-038	PIK3CG	gain	2.1	chr7
NC-038	MET	gain	1.8	chr7
NC-041	KRAS	gain	6.0	chr12
NC-041	CDK4	gain	5.7	chr12

NC-042	B2M	loss	0.4	chr15
NC-045	MET	gain	2.6	chr7
NC-048	KRAS	gain	7.6	chr12
NC-048	TERC	gain	3.7	chr3
NC-048	CDKN2A	loss	0.2	chr9
NC-048	CDKN2B	loss	0.2	chr9
NC-050	GAB2	gain	2.9	chr11
NC-056	KDM5A	gain	3.7	chr12
NC-056	CDK12	gain	3.2	chr17
NC-056	ERBB2	gain	4.3	chr17
NC-056	RARA	gain	4.5	chr17
NC-056	CCND3	gain	4.0	chr6
NC-056	VEGFA	gain	4.1	chr6
NC-056	MYC	gain	11.5	chr8
NC-057	CDK12	gain	3.9	chr17
NC-057	ERBB2	gain	5.8	chr17
NC-057	RARA	gain	3.3	chr17
NC-060	MYC	gain	1.6	chr8
NC-060	RECQL4	gain	2.6	chr8
NC-061	PCK1	gain	2.3	chr20
NC-061	GNAS	gain	2.3	chr20
NC-063	EGFR	gain	8.2	chr7
NC-063	CDKN2A	loss	0.2	chr9
NC-063	CDKN2B	loss	0.4	chr9
NC-065	EGFR	gain	2.0	chr7
NC-066	IFNG	gain	4.4	chr12
NC-066	MDM2	gain	4.0	chr12
NC-076	NFKBIA	gain	3.3	chr14
NC-076	NKX2-1	gain	2.6	chr14
NC-079	MCL1	gain	2.0	chr1
NC-079	CCNE1	gain	13.4	chr19
NC-079	SDHA	gain	3.4	chr5
NC-081	FGFR1	gain	11.0	chr8
NC-085	EGFR	gain	4.3	chr7
NC-087	SOX2	gain	3.1	chr3
NC-088	EGFR	gain	2.8	chr7
NC-090	IFNG	gain	3.5	chr12
NC-090	MDM2	gain	3.7	chr12
NC-090	NKX2-1	gain	3.1	chr14
NC-090	FOXA1	gain	2.9	chr14
NC-091	EGFR	gain	2.4	chr7
NC-094	MET	gain	1.6	chr7
NC-096	MYC	gain	5.2	chr8
NC-097	KRAS	gain	3.5	chr12

NC-097	CEBPA	gain	2.4	chr19
NC-097	AKT2	gain	3.9	chr19
NC-106	EGFR	gain	1.7	chr7
NC-107	CCND2	gain	2.9	chr12
NC-107	MDM2	gain	2.7	chr12
NC-107	NFKBIA	gain	6.5	chr14
NC-107	NKX2-1	gain	10.1	chr14
NC-107	FOXA1	gain	10.8	chr14
NC-109	CDK4	gain	3.5	chr12
NC-109	EGFR	gain	2.5	chr7
NC-110	RET	loss	0.7	chr10
NC-110	PTEN	loss	0.6	chr10
NC-110	ATM	loss	0.7	chr11
NC-110	RB1	loss	0.5	chr13
NC-110	SDHA	gain	2.5	chr5
NC-110	IL7R	gain	2.8	chr5
NC-114	IL7R	gain	1.8	chr5
NC-114	RICTOR	gain	2.4	chr5
NC-120	SDHA	gain	2.7	chr5
NC-120	IL7R	gain	1.9	chr5
NC-120	RICTOR	gain	2.2	chr5
NC-120	FGFR1	gain	4.9	chr8
NC-120	BTK	gain	4.1	chrX
NC-121	MYC	gain	4.1	chr8
NC-122	CDK4	gain	3.7	chr12
NC-122	IFNG	gain	5.5	chr12
NC-122	MDM2	gain	6.4	chr12
NC-122	EGFR	gain	3.3	chr7
NC-134	EGFR	gain	1.6	chr7
NC-135	MET	gain	2.5	chr7
NC-136	ERBB3	gain	4.2	chr12
NC-136	CDK4	gain	4.4	chr12
NC-136	IFNG	gain	11.9	chr12
NC-136	MDM2	gain	11.2	chr12
NC-136	CCND3	gain	5.1	chr6
NC-142	PDGFRA	gain	3.5	chr4
NC-142	KIT	gain	3.8	chr4
NC-142	KDR	gain	3.8	chr4
NC-142	EGFR	gain	4.2	chr7
NC-144	CDK4	gain	3.9	chr12
NC-144	IFNG	gain	7.6	chr12
NC-144	MDM2	gain	5.8	chr12
NC-144	NFKBIA	gain	6.5	chr14
NC-144	NKX2-1	gain	5.7	chr14

NC-148	EGFR	gain	4.9	chr7
NC-150	CDK4	gain	4.3	chr12
NC-150	MDM2	gain	3.4	chr12
NC-150	NFKBIA	gain	4.5	chr14
NC-150	NKX2-1	gain	3.6	chr14
NC-151	MDM2	gain	2.0	chr12
NC-152	RB1	loss	0.3	chr13
NC-152	EGFR	gain	2.4	chr7
NC-156	CIC	gain	1.8	chr19
NC-156	ERCC1	gain	1.9	chr19
NC-157	EGFR	gain	2.6	chr7
NC-166	EGFR	gain	1.8	chr7
NC-166	MYC	gain	3.1	chr8
NC-167	AURKA	gain	1.9	chr20
NC-169	IFNG	gain	6.5	chr12
NC-169	MDM2	gain	6.6	chr12
NC-169	PCK1	gain	2.4	chr20
NC-169	GNAS	gain	1.8	chr20
NC-169	SDHA	gain	2.0	chr5
NC-170	CCND1	gain	4.2	chr11
NC-170	FGF19	gain	3.6	chr11
NC-170	FGF4	gain	4.0	chr11
NC-170	FGF3	gain	3.9	chr11
NC-170	EGFR	gain	3.5	chr7
NC-177	CCNE1	gain	5.7	chr19
NC-177	CEBPA	gain	4.7	chr19
NC-177	SMARCB1	gain	3.2	chr22
NC-177	EPHA3	gain	3.8	chr3
NC-177	EGFR	gain	5.7	chr7
NC-179	CDK4	gain	17.9	chr12
NC-179	EGFR	gain	4.0	chr7
NC-182	CRKL	gain	5.5	chr22
NC-182	MAPK1	gain	3.2	chr22
NC-182	FANCG	gain	5.0	chr9
NC-184	FGFR2	gain	3.0	chr10
NC-187	CDKN2A	loss	0.4	chr9
NC-187	CDKN2B	loss	0.4	chr9
NC-189	MCL1	gain	2.3	1
NC-190	CDK4	gain	5.7	chr12
NC-190	EGFR	gain	4.8	chr7
NC-191	MDM2	gain	3.0	chr12
NC-191	MITF	gain	2.1	chr3
NC-191	EGFR	gain	2.0	chr7
NC-194	NKX2-1	gain	5.8	chr14

NC-194	EGFR	gain	2.9	chr7
NC-197	EGFR	gain	3.7	chr7
NC-198	MYC	gain	3.2	chr8
NC-198	RECQL4	gain	5.5	chr8
NC-201	EGFR	gain	1.7	7
NC-201	MAX	gain	2.0	14
NC-201	RAD51B	gain	2.0	14
NC-202	EGFR	gain	1.8	chr7
NC-203	CDK4	gain	3.8	chr12
NC-203	NFKBIA	gain	2.8	chr14
NC-203	NKX2-1	gain	3.8	chr14
NC-203	FOXA1	gain	3.7	chr14
NC-203	EXT1	gain	1.9	chr8
NC-203	MYC	gain	2.9	chr8
NC-205	EGFR	gain	4.1	chr7
NC-206	CCND1	gain	2.6	chr11
NC-206	FGF19	gain	2.4	chr11
NC-206	FGF4	gain	2.8	chr11
NC-206	FGF3	gain	2.7	chr11
NC-208	MET	gain	2.3	chr7
NC-214	FGFR1	gain	1.6	8
NC-214	IRS2	gain	6.1	13
NC-214	CCNE1	gain	2.1	19
NC-217	BRCA2	loss	0.7	chr13
NC-217	FGFR1	gain	1.6	chr8
NC-219	CCND1	gain	1.9	chr11
NC-219	EGFR	gain	1.7	chr7
NC-220	EPHB1	gain	1.9	chr3
NC-220	RECQL4	gain	1.9	chr8
NC-221	GAB2	gain	2.0	chr11
NC-221	MDM2	gain	1.9	chr12
NC-222	MET	gain	2.0	chr7
NC-222	POT1	gain	1.8	chr7
NC-223	ZMAT3	gain	2.0	chr3
NC-223	SDHA	gain	1.9	chr5
NC-223	MYC	gain	6.7	chr8
NC-223	STAG2	gain	1.9	chrX
NC-224	MYC	gain	2.8	chr8
NC-225	CDKN2A	loss	0.4	chr9
NC-225	CDKN2B	loss	0.5	chr9
NC-226	NOTCH2	gain	8.9	chr1
NC-226	CCND1	gain	5.0	chr11
NC-226	FGFR1	gain	3.3	chr8
NC-228	CCND1	gain	1.9	chr11

NC-228	IFNG	gain	2.8	chr12
NC-228	MDM2	gain	2.7	chr12
NC-228	EGFR	gain	3.1	chr7
NC-234	CDK4	gain	3.6	chr12
NC-234	IFNG	gain	3.4	chr12
NC-234	MDM2	gain	5.0	chr12
NC-236	FGFR1	gain	3.6	chr8
NC-237	CCNE1	gain	2.0	chr19
NC-238	FOXA1	gain	3.8	chr14
NC-238	FANCM	gain	2.7	chr14
NC-238	DICER1	gain	1.9	chr14
NC-238	SDHA	gain	2.2	chr5
NC-238	EGFR	gain	5.4	chr7
NC-238	MET	gain	6.8	chr7
NC-238	CDKN2A	loss	0.3	chr9
NC-238	CDKN2B	loss	0.3	chr9
NC-239	RB1	loss	0.4	chr13
NC-239	CEBPA	gain	5.2	chr19
NC-239	AKT2	gain	4.0	chr19
NC-239	PRDM1	gain	5.1	chr6
NC-239	EGFR	gain	2.6	chr7
NC-239	WRN	loss	0.3	chr8
NC-240	PDGFRA	gain	3.5	chr4
NC-240	KIT	gain	3.6	chr4
NC-240	KDR	gain	3.5	chr4
NC-243	KRAS	gain	2.3	chr12
NC-244	EXT1	gain	2.3	chr8
NC-244	MYC	gain	2.1	chr8
NC-245	FOXA1	gain	10.3	chr14
NC-245	ERBB2	gain	1.8	chr17
NC-256	NKX2-1	gain	2.2	chr14
NC-256	AKT2	gain	2.5	chr19
NC-257	NFKBIA	gain	2.1	chr14
NC-257	NKX2-1	gain	2.2	chr14
NC-257	FOXA1	gain	1.8	chr14
NC-259	CRKL	gain	4.9	chr22
NC-259	EGFR	gain	2.3	chr7
NC-261	EGFR	gain	4.7	chr7
NC-263	SDHA	gain	2.6	chr5
NC-263	IL7R	gain	2.8	chr5
NC-264	CCNE1	gain	2.0	chr19
NC-264	AKT2	gain	2.0	chr19
NC-264	PDK1	gain	1.9	chr2
NC-264	TERC	gain	2.8	chr3

NC-264	ZMAT3	gain	2.8	chr3
NC-264	PIK3CA	gain	2.3	chr3
NC-264	SOX2	gain	3.3	chr3
NC-265	IFNG	gain	2.1	chr12
NC-265	MDM2	gain	3.0	chr12
NC-265	SDHA	gain	1.9	chr5
NC-266	CCND1	gain	1.6	chr11
NC-266	SOX9	gain	1.8	chr17
NC-266	GNAS	gain	2.2	chr20
NC-266	MYC	gain	1.7	chr8
NC-266	RECQL4	gain	1.9	chr8
NC-267	CDK4	gain	3.7	chr12
NC-267	NFKBIA	gain	2.0	chr14
NC-267	AKT1	gain	2.0	chr14
NC-270	EGFR	gain	6.2	chr7
NC-271	EGFR	gain	6.0	chr7
NC-276	NFKBIA	gain	3.0	chr14
NC-276	NKX2-1	gain	2.6	chr14
NC-276	FOXA1	gain	2.7	chr14
NC-278	RUNX1	gain	1.9	chr21
NC-278	FGFR1	gain	3.2	chr8
NC-278	EXT1	gain	1.8	chr8
NC-278	RECQL4	gain	2.1	chr8
NC-281	EGFR	gain	3.4	chr7
NC-283	MYCN	gain	14.5	chr2
NC-285	CCND1	gain	3.2	chr11
NC-285	CDK4	gain	3.4	chr12
NC-285	IFNG	gain	4.2	chr12
NC-285	MDM2	gain	4.1	chr12
NC-287	MYC	gain	4.6	chr8
NC-289	CCND3	gain	3.3	chr6
NC-292	CDKN2A	loss	0.2	chr9
NC-292	CDKN2B	loss	0.2	chr9
NC-296	CDK6	gain	3.1	chr7
NC-297	MYCL1	gain	35.0	chr1
NC-297	IRS2	gain	6.0	chr13
NC-300	EGFR	gain	6.8	chr7
NC-301	CDK4	gain	2.0	chr12
NC-301	MDM2	gain	15.1	chr12
NC-301	NFKBIA	gain	2.4	chr14
NC-301	NKX2-1	gain	2.8	chr14
NC-301	MAX	gain	2.3	chr14
NC-301	CARD11	gain	2.3	chr7
NC-301	PMS2	gain	2.2	chr7

NC-301	RAC1	gain	2.3	chr7
NC-301	IKZF1	gain	2.3	chr7
NC-301	EGFR	gain	1.9	chr7
NC-301	RBM10	gain	2.1	chrX
NC-302	FGFR1	gain	2.3	chr8
NC-303	RICTOR	gain	3.5	chr5
NC-307	MYC	gain	4.5	chr8
NC-308	PTEN	loss	0.7	chr10
NC-308	IFNG	gain	3.5	chr12
NC-308	MDM2	gain	3.2	chr12
NC-308	BRCA2	loss	0.7	chr13
NC-308	KDR	gain	2.0	chr4
NC-308	SDHA	gain	2.3	chr5
NC-308	IL7R	gain	2.1	chr5
NC-308	RICTOR	gain	2.0	chr5
NC-308	EGFR	gain	1.6	chr7
NC-309	ARAF	gain	1.9	chrX
NC-309	KDM5C	gain	2.0	chrX
NC-316	RB1	loss	0.6	chr13
NC-316	EGFR	gain	3.2	chr7
NC-317	EGFR	gain	2.3	chr7
NC-318	MYC	gain	5.1	chr8
NC-322	EGFR	gain	1.9	7
NC-322	CDK4	gain	2.5	12
NC-327	ASXL1	gain	3.0	chr20
NC-327	CDKN2A	loss	0.1	chr9
NC-327	CDKN2B	loss	0.5	chr9
NC-328	MYCN	gain	4.5	chr2
NC-332	CCND1	gain	6.2	chr11
NC-332	FGF19	gain	6.2	chr11
NC-332	FGF4	gain	6.0	chr11
NC-332	FGF3	gain	6.2	chr11
NC-332	FGFR1	gain	1.7	chr8
NC-332	MYC	gain	2.1	chr8
NC-335	XRCC3	gain	3.3	chr14
NC-335	AKT1	gain	5.0	chr14
NC-335	FGFR3	gain	5.3	chr4
NC-335	FLT4	gain	4.3	chr5
NC-335	EGFR	gain	11.1	chr7
NC-337	SDHA	gain	1.9	chr5
NC-339	MDM2	gain	2.5	chr12
NC-340	CDKN2A	loss	0.1	chr9
NC-340	CDKN2B	loss	0.2	chr9
NC-348	EGFR	gain	1.6	chr7

NC-348	MET	gain	1.6	chr7
NC-349	EGFR	gain	1.8	chr7
NC-352	ATM	gain	3.2	chr11
NC-352	CCND3	gain	2.2	chr6
NC-352	AR	gain	2.2	chrX
NC-353	EGFR	gain	2.3	chr7
NC-356	EGFR	gain	10.1	chr7
NC-356	FGFR1	gain	3.1	chr8
NC-357	MYC	gain	6.2	chr8
NC-360	CCND1	gain	7.3	chr11
NC-360	CDK4	gain	3.8	chr12
NC-361	NFKBIA	gain	4.1	chr14
NC-361	NKX2-1	gain	4.5	chr14
NC-362	IFNGR1	loss	0.3	chr6
NC-362	TNFAIP3	loss	0.3	chr6
NC-362	CDKN2A	loss	0.3	chr9
NC-362	CDKN2B	loss	0.3	chr9
NC-363	IFNG	gain	3.4	chr12
NC-363	MDM2	gain	3.6	chr12
NC-363	ERBB2	gain	2.4	chr17
NC-364	CCND1	gain	4.5	chr11
NC-365	SDHA	gain	2.9	chr5
NC-365	IL7R	gain	2.6	chr5
NC-365	RICTOR	gain	2.4	chr5
NC-365	EGFR	gain	1.6	chr7
NC-366	ERBB2	gain	1.6	chr17
NC-370	MYC	gain	3.1	chr8
NC-378	PIK3CA	gain	5.6	chr3
NC-378	SOX2	gain	14.0	chr3
NC-379	CDK4	gain	3.2	chr12
NC-379	MDM2	gain	3.5	chr12
NC-379	NFKBIA	gain	5.4	chr14
NC-380	CDK4	gain	4.5	chr12
NC-380	IFNG	gain	8.5	chr12
NC-380	MDM2	gain	6.5	chr12
NC-380	SDHA	gain	5.6	chr5
NC-382	CCND1	gain	8.3	chr11
NC-386	RB1	loss	0.3	chr13
NC-386	FOXA1	gain	3.3	chr14
NC-386	EGFR	gain	4.7	chr7
NC-394	CDKN2A	loss	0.4	chr9
NC-394	CDKN2B	loss	0.4	chr9
NC-396	TERC	gain	4.3	chr3
NC-396	ZMAT3	gain	2.4	chr3

NC-396	PIK3CA	gain	2.6	chr3
NC-396	SOX2	gain	3.8	chr3
NC-401	MET	gain	1.8	chr7
NC-411	MYCL1	gain	7.3	chr1
NC-411	BARD1	loss	0.4	chr2
NC-411	KDM6A	loss	0.1	chrX
NC-412	NTRK1	gain	1.9	chr1
NC-412	SDHC	gain	3.1	chr1
NC-412	FCGR2A	gain	3.6	chr1
NC-412	FCGR3A	gain	3.7	chr1
NC-415	CCND1	gain	3.0	chr11
NC-415	FGF19	gain	2.9	chr11
NC-415	FGF4	gain	3.0	chr11
NC-415	FGF3	gain	3.3	chr11
NC-416	CCND1	gain	3.1	chr11
NC-416	FGF3	gain	3.0	chr11
NC-417	MET	gain	6.2	chr7
NC-418	BRCA2	loss	0.5	chr13
NC-418	TSC2	loss	0.7	chr16
NC-418	NF1	loss	0.6	chr17
NC-418	FBXW7	loss	0.6	chr4
NC-419	CDK4	gain	4.3	chr12
NC-419	MDM2	gain	1.9	chr12
NC-422	CCND1	gain	1.7	chr11
NC-422	MYC	gain	2.0	chr8
NC-423	CCND1	gain	3.4	chr11
NC-423	KIT	gain	2.3	chr4
NC-423	KDR	gain	2.4	chr4
NC-423	EGFR	gain	3.1	chr7
NC-424	FGFR1	gain	2.1	chr8
NC-426	EGFR	gain	4.9	chr7
NC-427	FLT4	loss	0.4	chr5
NC-427	MYC	gain	3.4	chr8
NC-434	RB1	loss	0.1	chr13
NC-434	NKX2-1	gain	3.4	chr14
NC-441	FGFR1	gain	1.9	chr8
NC-443	NOTCH2	gain	3.4	chr1
NC-443	KRAS	gain	7.5	chr12
NC-443	CD274	gain	4.4	chr9
NC-443	PDCD1LG2	gain	3.4	chr9
NC-446	KDM5A	loss	0.4	chr12
NC-446	CCND2	loss	0.4	chr12
NC-446	CDKN1B	loss	0.4	chr12
NC-446	KRAS	loss	0.4	chr12

NC-446	BRCA2	loss	0.4	chr13
NC-446	RB1	loss	0.4	chr13
NC-446	SMAD4	gain	1.8	chr18
NC-446	BCL2	gain	1.9	chr18
NC-446	SERPINB4	gain	1.8	chr18
NC-446	MYCN	loss	0.7	chr2
NC-447	ERBB2	gain	2.0	chr17
NC-448	FLT3	loss	0.6	chr13
NC-448	FLT1	loss	0.7	chr13
NC-448	BRCA2	loss	0.6	chr13
NC-448	SERPINB4	loss	0.6	chr18
NC-448	SERPINB3	loss	0.6	chr18
NC-448	AKT2	loss	0.7	chr19
NC-448	JAK2	loss	0.6	chr9
NC-448	CDKN2A	loss	0.4	chr9
NC-448	CDKN2B	loss	0.4	chr9
NC-451	EGFR	gain	9.7	chr7
NC-452	CDK12	gain	7.6	chr17
NC-452	ERBB2	gain	7.2	chr17
NC-452	IL7R	gain	3.3	chr5
NC-452	MYC	gain	4.0	chr8
NC-452	CDKN2A	loss	0.3	chr9
NC-452	CDKN2B	loss	0.3	chr9
NC-459	ERBB2	gain	3.8	chr17
NC-463	IKZF1	gain	4.9	chr7
NC-463	EGFR	gain	6.1	chr7
NC-463	EXT1	gain	1.8	chr8
NC-463	MYC	gain	1.9	chr8
NC-466	SOX2	gain	3.5	chr3
NC-466	KIT	gain	2.0	chr4
NC-466	EGFR	gain	4.9	chr7
NC-466	FGFR1	gain	2.1	chr8
NC-468	IFNG	gain	3.6	chr12
NC-468	MDM2	gain	2.8	chr12
NC-468	CCNE1	gain	2.2	chr19
NC-468	CEBPA	gain	2.7	chr19
NC-469	EGFR	gain	1.6	chr7
NC-470	EGFR	gain	1.7	chr7
NC-471	EGFR	gain	3.2	chr7
NC-476	FOXA1	gain	8.0	chr14
NC-480	EGFR	gain	1.7	chr7
NC-483	MET	gain	2.1	chr7
NC-485	ATR	gain	1.8	chr3
NC-485	TERC	gain	2.0	chr3

NC-485	ZMAT3	gain	2.2	chr3
NC-485	PIK3CA	gain	2.2	chr3
NC-485	SOX2	gain	2.0	chr3
NC-485	NPM1	gain	1.6	chr5
NC-485	FGFR4	gain	1.7	chr5
NC-485	NSD1	gain	1.8	chr5
NC-485	FLT4	gain	1.8	chr5
NC-486	ZMAT3	gain	3.0	3
NC-486	PIK3CA	gain	3.3	3
NC-486	SOX2	gain	10.3	3
NC-486	EGFR	gain	5.2	7
NC-487	CDKN2A	loss	0.4	chr9
NC-487	CDKN2B	loss	0.4	chr9
NC-488	FGFR1	gain	4.0	chr8
NC-490	IKBKE	gain	2.1	chr1
NC-490	EGFR	gain	1.6	chr7
NC-492	TP53	loss	0.5	chr17
NC-492	AURKB	loss	0.5	chr17
NC-492	MAP2K4	loss	0.5	chr17
NC-492	ELAC2	loss	0.5	chr17
NC-492	NCOR1	loss	0.5	chr17
NC-492	CDK12	gain	9.1	chr17
NC-492	ERBB2	gain	6.4	chr17
NC-493	FAT2	loss	0.3	chr5
NC-493	FGFR1	gain	2.7	chr8
NC-493	NBN	gain	3.4	chr8
NC-493	MYC	gain	3.3	chr8
NC-498	CCNE1	gain	4.6	19
NC-499	RAC1	gain	2.0	chr7
NC-499	EGFR	gain	1.7	chr7
NC-500	EGFR	gain	2.0	chr7
NC-506	CCND1	gain	7.8	chr11
NC-506	LRP1B	loss	0.3	chr2
NC-506	TET2	loss	0.3	chr4
NC-506	FGFR1	gain	3.5	chr8
NC-506	BTK	gain	4.5	chrX
NC-509	NFKBIA	gain	2.3	chr14
NC-509	NKX2-1	gain	3.1	chr14
NC-509	FOXA1	gain	2.4	chr14
NC-509	EGFR	gain	1.6	chr7
NC-516	MET	gain	7.7	chr7
NC-519	CCND1	gain	8.0	chr11
NC-519	FGF19	gain	8.0	chr11
NC-519	FGF4	gain	7.1	chr11

NC-519	FGF3	gain	7.7	chr11
NC-519	FGFR1	gain	3.8	chr8
NC-519	JAK2	loss	0.3	chr9
NC-519	CDKN2A	loss	0.2	chr9
NC-519	CDKN2B	loss	0.2	chr9
NC-521	GAB2	gain	12.6	chr11
NC-522	VEGFA	gain	3.4	chr6
NC-522	EGFR	gain	10.6	chr7
NC-522	MYC	gain	2.3	chr8
NC-526	ERBB2	gain	1.6	chr17
NC-527	ATM	loss	0.7	chr11
NC-527	MLL	loss	0.7	chr11
NC-527	BRCA2	loss	0.6	chr13
NC-527	FANCM	loss	0.6	chr14
NC-527	MLH1	loss	0.7	chr3
NC-527	FOXP1	loss	0.7	chr3
NC-527	FAM175A	loss	0.7	chr4
NC-527	INPP4B	loss	0.7	chr4
NC-527	FBXW7	loss	0.6	chr4
NC-527	FAT1	loss	0.7	chr4
NC-529	BCL2L1	gain	9.0	chr20
NC-529	MYC	gain	6.9	chr8
NC-529	JAK2	gain	10.8	chr9
NC-529	CD274	gain	11.8	chr9
NC-531	CCND1	gain	9.9	chr11
NC-531	GAB2	gain	9.0	chr11
NC-532	EGFR	gain	3.6	chr7
NC-534	FOXA1	gain	8.6	chr14
NC-540	EGFR	gain	3.2	chr7
NC-540	EXT1	gain	2.2	chr8
NC-540	MYC	gain	10.7	chr8
NC-540	RBM10	gain	3.1	chrX
NC-541	ERBB2	gain	2.7	chr17
NC-542	CCND1	gain	10.0	chr11
NC-542	FGF19	gain	10.2	chr11
NC-542	FGF4	gain	10.4	chr11
NC-542	FGF3	gain	11.0	chr11
NC-542	SDHA	gain	2.0	chr5
NC-542	IL7R	gain	2.2	chr5
NC-542	RICTOR	gain	2.2	chr5
NC-542	EGFR	gain	8.2	chr7
NC-542	MET	gain	1.5	chr7
NC-542	POT1	gain	2.0	chr7
NC-543	CDK12	gain	9.9	chr17

NC-543	ERBB2	gain	4.6	chr17
NC-544	EGFR	gain	2.3	chr7
NC-546	SDHA	gain	2.0	chr5
NC-546	MYC	gain	3.2	chr8
NC-548	MCL1	gain	5.8	chr1
NC-548	CCND1	gain	10.2	chr11
NC-548	FGF19	gain	3.1	chr11
NC-550	FGFR1	gain	2.5	8
NC-554	TERC	gain	3.9	chr3
NC-554	SOX2	gain	7.0	chr3
NC-554	FGFR1	gain	2.2	chr8
NC-554	MYC	gain	2.2	chr8
NC-555	NOTCH2	gain	4.8	chr1
NC-555	RET	gain	1.9	chr10
NC-557	FGFR3	gain	1.7	chr4
NC-560	CDKN2A	loss	0.4	chr9
NC-560	CDKN2B	loss	0.4	chr9
NC-564	EGFR	gain	2.4	chr7
NC-571	EGFR	gain	1.4	chr7
NC-571	MET	gain	1.4	chr7
NC-572	CDK4	gain	2.3	chr12
NC-572	IFNG	gain	3.3	chr12
NC-572	MDM2	gain	3.4	chr12
NC-572	CCND3	gain	4.2	chr6
NC-572	VEGFA	gain	2.8	chr6
NC-573	ZMAT3	gain	2.8	chr3
NC-573	PIK3CA	gain	2.5	chr3
NC-573	SOX2	gain	3.3	chr3
NC-575	TBX3	gain	3.2	chr12
NC-576	FLT3	loss	0.7	chr13
NC-576	BRCA2	loss	0.7	chr13
NC-576	RB1	loss	0.7	chr13
NC-576	FANCM	loss	0.7	chr14
NC-576	NCOR1	loss	0.7	chr17
NC-576	FANCD2	loss	0.7	chr3
NC-576	MLH1	loss	0.7	chr3
NC-576	SETD2	loss	0.7	chr3
NC-576	PBRM1	loss	0.7	chr3
NC-576	EPHA3	loss	0.7	chr3
NC-576	TET2	loss	0.7	chr4
NC-576	INPP4B	loss	0.7	chr4
NC-576	FAT1	loss	0.7	chr4
NC-576	MAP3K1	loss	0.7	chr5
NC-576	MSH3	loss	0.7	chr5

NC-576	APC	loss	0.7	chr5
NC-576	RAD50	loss	0.7	chr5
NC-576	CSF1R	loss	0.7	chr5
NC-576	PDGFRB	loss	0.6	chr5
NC-576	FAT2	loss	0.7	chr5
NC-576	FLT4	loss	0.7	chr5
NC-576	MLL3	loss	0.7	chr7
NC-576	JAK2	loss	0.7	chr9
NC-576	CD274	loss	0.7	chr9
NC-576	SYK	loss	0.7	chr9
NC-576	TSC1	loss	0.5	chr9
NC-577	ERBB2	gain	13.5	chr17
NC-577	IL7R	gain	3.2	chr5
NC-578	EGFR	gain	2.5	7
NC-579	CARD11	gain	2.6	chr7
NC-579	PMS2	gain	2.2	chr7
NC-579	RAC1	gain	2.6	chr7
NC-579	IKZF1	gain	2.5	chr7
NC-579	EGFR	gain	6.5	chr7
NC-581	EGFR	gain	2.0	chr7
NC-582	MET	gain	2.8	chr7
NC-582	POT1	gain	2.1	chr7
NC-583	CCND1	gain	3.4	chr11
NC-584	MTOR	gain	1.8	chr1
NC-584	ARID1A	gain	2.0	chr1
NC-584	MUTYH	gain	1.8	chr1
NC-584	EGFR	gain	1.7	chr7
NC-587	FGFR1	gain	5.9	chr8
NC-594	EGFR	gain	2.3	chr7
NC-597	EGFR	gain	2.2	chr7
NC-603	NCOR1	loss	0.7	chr17
NC-603	NF1	loss	0.7	chr17
NC-605	IFNG	gain	2.7	chr12
NC-605	MDM2	gain	2.4	chr12
NC-609	EGFR	gain	5.6	chr7
NC-618	RAC1	gain	3.2	chr7
NC-618	IKZF1	gain	2.5	chr7
NC-618	EGFR	gain	2.2	chr7
NC-620	FCGR2A	gain	3.1	chr1
NC-624	EGFR	gain	3.4	chr7
NC-630	CCND1	gain	3.7	chr11
NC-631	CCND1	gain	5.8	11
NC-631	FGFR1	gain	5.4	8
NC-634	SOX2	gain	11.0	chr3

NC-635	RET	gain	2.4	chr10
NC-635	CDKN2A	loss	0.3	chr9
NC-635	CDKN2B	loss	0.3	chr9
NC-636	EGFR	gain	2.4	chr7
NC-638	NFKBIA	gain	6.1	chr14
NC-638	NKX2-1	gain	4.0	chr14
NC-638	EGFR	gain	2.8	chr7
NC-639	MYC	gain	1.9	chr8
NC-642	CCNE1	gain	4.5	chr19
NC-642	CEBPA	gain	4.3	chr19
NC-642	AKT2	gain	4.3	chr19
NC-643	MYC	gain	2.7	chr8
NC-644	KRAS	gain	7.0	chr12
NC-646	CDK12	gain	3.2	chr17
NC-646	ERBB2	gain	2.3	chr17
NC-646	CCND3	gain	2.7	chr6
NC-646	VEGFA	gain	2.8	chr6
NC-646	EGFR	gain	5.1	chr7
NC-646	EZH2	gain	3.6	chr7
NC-646	RHEB	gain	3.9	chr7
NC-646	EXT1	gain	2.4	chr8
NC-646	MYC	gain	2.6	chr8
NC-646	CDKN2A	loss	0.3	chr9
NC-646	CDKN2B	loss	0.3	chr9
NC-647	EGFR	gain	6.8	chr7
NC-652	SDHA	gain	2.5	chr5
NC-654	CCNE1	gain	4.8	chr19
NC-654	CEBPA	loss	0.3	chr19
NC-655	PTEN	loss	0.3	chr10
NC-655	CDKN2A	loss	0.05	chr9
NC-655	CDKN2B	loss	0.05	chr9
NC-657	CCND1	gain	4.5	chr11
NC-657	CYLD	loss	0.3	chr16
NC-657	ERBB2	gain	3.3	chr17
NC-657	EPHA3	loss	0.1	chr3
NC-657	ZMAT3	gain	5.7	chr3
NC-657	PIK3CA	gain	4.9	chr3
NC-657	SOX2	gain	6.1	chr3
NC-657	JAK2	loss	0.3	chr9
NC-661	FOXA1	gain	2.0	chr14
NC-661	SDHA	gain	2.2	chr5
NC-661	IL7R	gain	2.1	chr5
NC-661	RICTOR	gain	2.0	chr5
NC-661	MYC	gain	4.0	chr8

NC-664	CDK4	gain	2.6	chr12
NC-664	IFNG	gain	2.2	chr12
NC-664	MDM2	gain	1.8	chr12
NC-664	FOXA1	gain	5.7	chr14
NC-664	CYLD	gain	2.6	chr16
NC-664	POLD1	gain	2.0	chr19
NC-665	NFKBIA	gain	2.4	chr14
NC-665	RAC1	gain	2.3	chr7
NC-665	FANCG	gain	2.0	chr9
NC-672	PIK3CA	gain	3.1	chr3
NC-673	SDHA	gain	1.8	chr5
NC-673	IL7R	gain	1.9	chr5
NC-673	FGFR1	gain	1.8	chr8
NC-673	CDKN2A	loss	0.6	chr9
NC-673	CDKN2B	loss	0.5	chr9
NC-678	KDM6A	gain	3.4	chrX
NC-680	PDGFRA	gain	2.1	chr4
NC-680	KIT	gain	2.4	chr4
NC-680	KDR	gain	2.3	chr4
NC-680	EGFR	gain	2.3	chr7
NC-680	MYC	gain	2.3	chr8
NC-681	PDGFRA	gain	2.4	chr4
NC-681	KIT	gain	2.6	chr4
NC-681	EGFR	gain	2.8	chr7
NC-682	NFKBIA	gain	16.3	chr14
NC-682	NKX2-1	gain	16.3	chr14
NC-682	FOXA1	gain	9.9	chr14
NC-682	MYC	gain	1.7	chr8
NC-684	CDK4	gain	26.9	chr12
NC-684	ERBB2	gain	7.2	chr17
NC-684	CCND3	gain	13.3	chr6
NC-689	AURKA	gain	2.2	chr20
NC-689	PCK1	gain	2.6	chr20
NC-689	GNAS	gain	2.8	chr20
NC-689	EGFR	gain	1.7	chr7
NC-689	MET	gain	1.5	chr7
NC-689	EXT1	gain	2.7	chr8
NC-689	MYC	gain	1.6	chr8
NC-690	CDKN1B	loss	0.2	chr12
NC-690	KRAS	loss	0.5	chr12
NC-690	FLT3	loss	0.5	chr13
NC-690	FLT1	loss	0.5	chr13
NC-690	BRCA2	loss	0.5	chr13
NC-690	RB1	loss	0.5	chr13

NC-690	IRS2	loss	0.6	chr13
NC-690	FANCM	loss	0.5	chr14
NC-690	FAM123B	gain	2.2	chrX
NC-694	SDHA	gain	1.8	chr5
NC-697	CCND2	gain	2.0	chr12
NC-698	PIK3CA	gain	3.1	chr3
NC-698	SOX2	gain	3.0	chr3
NC-701	MDM2	gain	2.0	chr12
NC-701	ERCC4	gain	2.1	chr16
NC-701	EGFR	gain	3.9	chr7
NC-703	FGFR1	gain	3.0	chr8
NC-704	CCND1	gain	9.1	chr11
NC-704	EGFR	gain	9.9	chr7
NC-705	MYC	gain	2.1	chr8
NC-705	RECQL4	gain	1.9	chr8
NC-710	EGFR	gain	1.8	chr7
NC-712	EGFR	gain	1.7	chr7
NC-714	PIK3CB	gain	4.2	chr3
NC-714	MYC	gain	5.1	chr8
NC-716	EGFR	gain	3.8	chr7
NC-722	SDHA	gain	3.2	chr5
NC-729	CDK4	gain	3.7	chr12
NC-729	MDM2	gain	4.3	chr12
NC-730	EXT1	gain	2.9	8
NC-730	MYC	gain	2.9	8
NC-730	RECQL4	gain	2.3	8
NC-734	NFKBIA	gain	2.3	chr14
NC-734	CCNE1	gain	4.6	chr19
NC-734	SDHA	gain	2.1	chr5
NC-734	IL7R	gain	2.3	chr5
NC-738	CCND1	gain	3.2	chr11
NC-738	ERBB2	gain	2.5	chr17
NC-741	EGFR	gain	4.6	chr7
NC-741	MYC	gain	2.2	chr8
NC-741	RECQL4	gain	2.5	chr8
NC-742	EGFR	gain	4.3	chr7
NC-743	EGFR	gain	4.9	chr7
NC-747	SDHA	gain	3.3	chr5
NC-748	CRKL	gain	8.5	chr22
NC-748	FGFR1	gain	2.6	chr8
NC-751	CDKN2A	loss	0.4	chr9
NC-751	CDKN2B	loss	0.4	chr9
NC-754	SOX2	gain	8.1	chr3
NC-754	FGFR1	gain	3.5	chr8

NC-765	FANCG	gain	1.9	9
NC-766	CDK4	gain	4.3	chr12
NC-766	MDM2	gain	2.7	chr12
NC-768	CDK4	gain	1.8	chr12
NC-768	IFNG	gain	8.1	chr12
NC-768	MDM2	gain	11.5	chr12
NC-768	NFKBIA	gain	2.3	chr14
NC-768	NKX2-1	gain	2.1	chr14
NC-768	FOXA1	gain	1.9	chr14
NC-768	NBN	gain	2.0	chr8
NC-768	EXT1	gain	1.8	chr8
NC-768	MYC	gain	1.8	chr8
NC-770	SDHA	gain	1.9	chr5
NC-770	EGFR	gain	1.8	chr7
NC-770	RINT1	gain	1.9	chr7
NC-770	PIK3CG	gain	1.9	chr7
NC-770	MET	gain	1.9	chr7
NC-770	EXT1	gain	2.0	chr8
NC-770	MYC	gain	2.1	chr8
NC-773	CDKN2A	loss	0.5	chr9
NC-773	CDKN2B	loss	0.5	chr9
NC-776	NFKBIA	gain	3.1	chr14
NC-776	NKX2-1	gain	4.2	chr14
NC-779	CDK4	gain	4.2	chr12
NC-779	MDM2	gain	4.6	chr12
NC-779	CEBPA	gain	3.1	chr19
NC-779	EGFR	gain	2.7	chr7
NC-780	EGFR	gain	1.7	chr7
NC-783	FANCE	gain	3.3	chr6
NC-783	CDKN1A	gain	4.1	chr6
NC-783	CCND3	gain	2.7	chr6
NC-783	VEGFA	gain	2.5	chr6
NC-783	CARD11	gain	2.4	chr7
NC-783	PMS2	gain	2.4	chr7
NC-783	RAC1	gain	2.5	chr7
NC-783	IKZF1	gain	2.5	chr7
NC-783	EGFR	gain	2.5	chr7
NC-784	FGFR1	gain	2.0	chr8
NC-786	EGFR	gain	5.8	chr7
NC-787	CCND3	gain	1.9	chr6
NC-787	VEGFA	gain	2.0	chr6
NC-789	SERPINB4	loss	0.7	chr18
NC-789	SERPINB3	loss	0.7	chr18
NC-797	MDM2	gain	5.8	chr12

NC-797	CDK6	gain	11.1	chr7
NC-805	IFNG	gain	2.1	chr12
NC-805	MDM2	gain	3.0	chr12
NC-815	CDK4	gain	3.2	chr12
NC-819	EGFR	gain	4.8	chr7
NC-820	IFNG	gain	4.4	chr12
NC-820	MDM2	gain	5.8	chr12
NC-820	EGFR	gain	5.0	chr7
NC-820	GNAQ	gain	2.8	chr9
NC-822	CCND1	gain	11.6	chr11
NC-822	FGF19	gain	11.5	chr11
NC-822	FGF4	gain	12.3	chr11
NC-822	FGF3	gain	12.7	chr11
NC-825	CCND1	gain	3.1	chr11
NC-826	CDK4	gain	5.1	chr12
NC-826	MDM2	gain	4.8	chr12
NC-826	SDHA	gain	3.1	chr5
NC-827	TERC	gain	4.2	chr3
NC-827	ZMAT3	gain	6.8	chr3
NC-827	PIK3CA	gain	5.6	chr3
NC-827	SOX2	gain	12.9	chr3
NC-828	FANCG	gain	1.8	chr9
NC-828	PAX5	gain	2.1	chr9
NC-832	KRAS	gain	2.2	chr12
NC-834	EGFR	gain	3.1	chr7
NC-835	TOP1	gain	2.1	chr20
NC-838	KRAS	gain	7.7	chr12
NC-838	MYC	gain	2.6	chr8
NC-842	FGFR1	gain	1.8	chr8
NC-844	FOXA1	gain	3.8	chr14
NC-847	IRS2	gain	5.5	chr13
NC-847	EGFR	gain	1.9	chr7
NC-853	AURKA	gain	2.7	chr20
NC-853	PCK1	gain	2.7	chr20
NC-853	SDHA	gain	2.3	chr5
NC-854	DICER1	gain	3.1	chr14
NC-854	NOTCH3	gain	3.9	chr19
NC-854	BRD4	gain	3.9	chr19
NC-854	PDGFRA	gain	3.6	chr4
NC-854	KIT	gain	3.4	chr4
NC-854	KDR	gain	4.0	chr4
NC-860	ERBB2	gain	6.8	chr17
NC-867	MYCN	gain	14.9	chr2
NC-872	EGFR	gain	4.1	chr7

NC-872	CDKN2A	loss	0.2	chr9
NC-878	MCL1	gain	1.8	chr1
NC-878	MET	gain	1.6	chr7
NC-882	EGFR	gain	4.0	chr7
NC-888	PIK3CA	gain	2.0	chr3
NC-889	EGFR	gain	6.8	chr7
NC-889	CDKN2A	loss	0.3	chr9
NC-890	CCNE1	gain	3.2	chr19
NC-892	EGFR	gain	9.5	chr7
NC-897	JAK2	loss	0.7	chr9
NC-898	PTEN	loss	0.2	chr10
NC-898	FGFR1	gain	3.8	chr8
NC-899	PTEN	loss	0.6	chr10
NC-899	LRP1B	loss	0.6	chr2
NC-899	SDHA	gain	2.2	chr5
NC-899	PDGFRB	loss	0.7	chr5
NC-899	FAT2	loss	0.6	chr5
NC-899	FGFR1	loss	0.6	chr8
NC-899	EXT1	loss	0.6	chr8
NC-900	CDK4	gain	3.4	chr12
NC-900	MDM2	gain	3.6	chr12
NC-900	EGFR	gain	3.9	chr7
NC-901	MET	gain	2.7	chr7
NC-909	EGFR	gain	3.5	chr7
NC-912	EGFR	gain	8.4	chr7
NC-914	EGFR	gain	2.8	chr7
NC-918	EGFR	gain	4.6	chr7
NC-918	MYC	gain	5.6	chr8
NC-919	EGFR	gain	2.6	chr7
NC-930	MYC	gain	11.3	chr8
NC-932	CDK4	gain	4.5	chr12
NC-932	IFNG	gain	6.7	chr12
NC-932	MDM2	gain	10.9	chr12
NC-932	FOXA1	gain	3.4	chr14
NC-933	CDK4	gain	3.9	chr12
NC-933	MDM2	gain	5.6	chr12

Table SIV. Somatic structural variants detected in hypermutant and non-hypermutant samples.

Patient ID	Fusion gene	Fusion region	Allele frequency	Detailed information
HC-008	FLJ45974-EGFR	EX4:EX17	1.4%	FLJ45974(PMT..IVS4)_EGFR(EX17..END)
HC-009	TOP2A-LACE1	EX35E:EX8	27.9%	TOP2A(PMT..EX35E)_LACE1(IVS7..END)
HC-065	MAD1L1-RET	EX12:EX12	12.9%	MAD1L1(PMT..IVS12)_RET(IVS11..END)
HC-065	EML4-ROBO2	EX21:EX25	6.2%	EML4(END..IVS20)_ROBO2(IVS24..END)
NC-404	EML4-ALK	EX13:EX20	12.0%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-449	LRIG3-ROS1	EX16:EX35	9.9%	LRIG3(PMT..IVS16)_ROS1(IVS34..END)
NC-606	SLC34A2-ROS1	EX13E:EX32	3.6%	SLC34A2(PMT..EX13E)_ROS1(IVS31..END)
NC-766	EML4-ALK	EX6:EX20	3.6%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-648	CCDC6-RET	EX1:EX12	18.5%	CCDC6(PMT..IVS1)_RET(IVS11..END)
NC-216	EML4-ALK	EX6:EX20	10.0%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-082	EML4-ALK	EX20:EX20	2.5%	EML4(PMT..IVS20)_ALK(IVS19..END)
NC-656	SLC34A2-ROS1	EX13E:EX32	7.8%	SLC34A2(PMT..EX13E)_ROS1(IVS31..END)
NC-153	BRD4-C15orf55	EX11:Promoter	28.4%	BRD4(PMT..IVS11)_C15orf55(PMT..END)
NC-185	EML4-ALK	EX17:EX20	5.9%	EML4(PMT..IVS17)_ALK(IVS19..END)
NC-099	EML4-ALK	EX20:EX20	11.9%	EML4(PMT..IVS20)_ALK(IVS19..END)
NC-645	CHMP4B-ALK	EX2:EX20	5.2%	CHMP4B(PMT..IVS2)_ALK(IVS19..END)
NC-645	EML4-ALK	EX6:EX20	7.9%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-196	KIF5B-RET	EX15:EX12	6.3%	KIF5B(PMT..IVS15)_RET(IVS11..END)
NC-571	EML4-ALK	EX6:EX20	21.7%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-920	EML4-ALK	EX6:EX20	14.6%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-003	EML4-ALK	EX13:EX20	12.4%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-290	EML4-ALK	EX13:EX20	44.3%	EML4(PMT..IVS13)_ALK(IVS19..END)

NC-607	KIF5B-RET	EX15:EX12	9.5%	KIF5B(PMT..IVS15)_RET(IVS11..END)
NC-559	CD74-ROS1	EX7:EX33	21.8%	CD74(PMT..IVS7)_ROS1(IVS32..END)
NC-559	ROS1-VCP	EX32:EX14	21.4%	ROS1(PMT..IVS32)_VCP(IVS13..END)
NC-106	AHNAK2-AKT1	EX1:EX10	13.9%	AHNAK2(PMT..IVS1)_AKT1(EX10..END)
NC-242	ALK-MYOF	EX19:EX44	17.1%	ALK(PMT..IVS19)_MYOF(IVS43..END)
NC-242	EML4-ALK	EX18:EX20	13.1%	EML4(PMT..IVS18)_ALK(IVS19..END)
NC-700	EML4-ALK	EX6:EX20	5.6%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-249	KIF5B-RET	EX23:EX12	13.1%	KIF5B(PMT..IVS23)_RET(IVS11..END)
NC-266	EML4-ALK	EX13:EX20	13.7%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-736	CCDC6-RET	EX1:EX12	11.2%	CCDC6(PMT..IVS1)_RET(IVS11..END)
NC-736	RET-HPSE2	EX11:EX4	11.2%	RET(PMT..IVS11)_HPSE2(IVS3..END)
NC-635	LOC255025-RET	EX2:EX19	13.6%	LOC255025(END..IVS1)_RET(IVS18..END)
NC-460	EML4-ALK	EX13:EX20	20.2%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-803	EML4-ALK	EX13:EX20	8.7%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-143	ALK-ITGB5	EX20:EX6	3.1%	ALK(END..IVS19)_ITGB5(IVS5..END)
NC-301	FAM169B-NTRK3	Promoter:EX4	26.2%	FAM169B(END..PMT)_NTRK3(IVS3..END)
NC-585	EML4-ALK	EX13:EX20	5.9%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-295	EML4-ALK	EX13:EX20	10.5%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-260	EML4-ALK	EX13:EX20	12.5%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-812	SLC34A2-ROS1	EX13E:EX32	8.3%	SLC34A2(PMT..EX13E)_ROS1(IVS31..END)
NC-795	EML4-ALK	EX18:EX20	8.8%	EML4(PMT..IVS18)_ALK(IVS19..END)
NC-849	ALK-GREB1	EX19:EX17	2.5%	ALK(PMT..IVS19)_GREB1(IVS17..PMT)
NC-849	EML4-ALK	EX13:EX20	1.7%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-901	MET-IMMP2L	EX1:EX7	7.7%	MET(PMT..IVS1)_IMMP2L(IVS6..END)
NC-546	EML4-ALK	EX13:EX20	26.9%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-034	ALK-DPYD	EX19:EX1	15.3%	ALK(PMT..IVS19)_DPYD(IVS1..PMT)

NC-357	CCDC6-RET	EX1:EX12	6.7%	CCDC6(PMT..IVS1)_RET(IVS11..END)
NC-458	EML4-ALK	EX18:EX20	21.1%	EML4(PMT..IVS18)_ALK(IVS19..END)
NC-497	EML4-ALK	EX6:EX20	9.3%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-209	EML4-ALK	EX13:EX20	5.0%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-713	SDC4-ROS1	EX2:EX32	41.2%	SDC4(PMT..IVS2)_ROS1(IVS31..END)
NC-391	CD74-ROS1	EX6:EX34	14.6%	CD74(PMT..IVS6)_ROS1(IVS33..END)
NC-617	EML4-ALK	EX13:EX20	9.1%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-789	EML4-ALK	EX6:EX20	15.4%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-923	DCTN1-ALK	EX27:EX20	5.1%	DCTN1(PMT..EX27)_ALK(IVS19..END)
NC-694	EML4-ALK	EX13:EX20	10.8%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-225	CD74-ROS1	EX7:EX34	25.6%	CD74(PMT..IVS7)_ROS1(IVS33..END)
NC-570	PARD3-RET	EX5:EX9	7.3%	PARD3(PMT..IVS5)_RET(IVS8..END)
NC-397	CD74-ROS1	EX6:EX33	24.1%	CD74(PMT..IVS6)_ROS1(IVS32..END)
NC-054	BACE2-TMPRSS2	EX1:EX3	1.7%	BACE2(PMT..IVS1)_TMPRSS2(IVS2..END)
NC-006	chr2 52986032-ALK	chr2 52986032:EX20	31.2%	chr2 52986032(PMT..EX0)_ALK(IVS19..END)
NC-757	SLC34A2-ROS1	EX13E:EX32	21.1%	SLC34A2(PMT..EX13E)_ROS1(IVS31..END)
NC-761	EML4-ALK	EX18:EX20	13.7%	EML4(PMT..IVS18)_ALK(IVS19..END)
NC-026	EML4-ALK	EX13:EX20	19.6%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-050	KIF5B-RET	EX15:EX12	3.0%	KIF5B(PMT..IVS15)_RET(IVS11..END)
NC-111	EML4-ALK	EX6:EX20	14.1%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-807	EML4-ALK	EX13:EX20	7.6%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-059	EML4-ALK	EX13:EX20	6.5%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-138	EML4-ALK	EX13:EX20	11.9%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-634	ZDHHC22-CTNNA1	Promoter:EX18E	5.4%	ZDHHC22(PMT..PMT)_CTNNA1(EX18E..END)
NC-380	SEPT4-TOP2A	Promoter:EX12	29.2%	SEPT4(PMT..PMT)_TOP2A(IVS11..END)
NC-611	EML4-ALK	EX6:EX20	7.3%	EML4(PMT..IVS6)_ALK(IVS19..END)

NC-725	BRD4-C15orf55	EX11:Promoter	14.3%	BRD4(PMT..IVS11)_C15orf55(PMT..END)
NC-715	EML4-ALK	EX6:EX20	20.6%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-813	MET-CTNNA1	EX21E:EX8	15.0%	MET(PMT..EX21E)_CTNNA1(IVS7..END)
NC-118	KIF5B-RET	EX15:EX12	6.4%	KIF5B(PMT..IVS15)_RET(IVS11..END)
NC-024	EML4-ALK	EX14:EX20	5.0%	EML4(PMT..EX14)_ALK(IVS19..END)
NC-597	C21orf119-ERG	Promoter:EX2	3.3%	C21orf119(PMT..PMT)_ERG(EX2..END)
NC-464	NKAIN2-ROS1	EX1:EX35	3.2%	NKAIN2(PMT..IVS1)_ROS1(IVS34..END)
NC-096	JAK3-CLTC	EX23:EX2	21.7%	JAK3(PMT..IVS23)_CLTC(IVS1..END)
NC-421	KIF5B-RET	EX15:EX12	13.3%	KIF5B(PMT..IVS15)_RET(IVS11..END)
NC-369	KIF5B-RET	EX15:EX12	11.1%	KIF5B(PMT..IVS15)_RET(IVS11..END)
NC-435	KIF5B-RET	EX15:EX12	33.1%	RET(PMT..IVS11)_KIF5B(IVS15..END)
NC-603	EZR-ROS1	EX9:EX32	34.4%	EZR(PMT..IVS9)_ROS1(EX32..END)
NC-629	EML4-ALK	EX21:EX20	11.9%	EML4(PMT..IVS21)_ALK(IVS19..END)
NC-717	SLC34A2-ROS1	EX13E:EX32	10.2%	SLC34A2(PMT..EX13E)_ROS1(IVS31..END)
NC-598	CD74-ROS1	EX6:EX33	1.1%	ROS1(PMT..IVS32)_CD74(IVS6..END)
NC-038	EML4-ALK	EX13:EX20	24.6%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-326	HAS2-ROS1	EX2:EX33	7.5%	HAS2(PMT..IVS2)_ROS1(IVS33..PMT)
NC-326	CD74-ROS1	EX7:EX34	1.9%	CD74(PMT..IVS7)_ROS1(IVS33..END)
NC-537	EML4-ALK	EX13:EX20	29.3%	ALK(PMT..IVS19)_EML4(IVS13..END)
NC-100	KIF5B-RET	EX15:EX12	15.4%	KIF5B(PMT..IVS15)_RET(IVS11..END)
NC-288	EML4-ALK	EX6:EX20	7.2%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-822	EML4-ALK	EX20:EX20	33.5%	EML4(PMT..IVS20)_ALK(IVS19..END)
NC-286	EML4-ALK	EX13:EX20	17.9%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-887	EML4-ALK	EX20:EX20	21.3%	EML4(PMT..IVS20)_ALK(IVS19..END)
NC-381	CLIP4-ALK	EX2:EX20	6.8%	CLIP4(PMT..IVS2)_ALK(IVS19..END)
NC-268	CD74-ROS1	EX6:EX33	15.4%	CD74(PMT..IVS6)_ROS1(IVS32..END)

NC-147	EML4-ALK	EX6:EX20	24.1%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-746	EML4-ALK	EX6:EX20	14.4%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-343	EML4-ALK	EX13:EX20	7.1%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-567	EML4-ALK	EX6:EX20	5.9%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-384	SDC4-ROS1	EX2:EX32	22.2%	SDC4(PMT..IVS2)_ROS1(IVS31..END)
NC-370	KLC1-ALK	EX9:EX20	6.3%	KLC1(PMT..IVS9)_ALK(IVS19..END)
NC-604	CD74-ROS1	EX7:EX33	18.9%	CD74(PMT..IVS7)_ROS1(IVS32..END)
NC-002	CD74-ROS1	EX7:EX33	7.3%	CD74(PMT..IVS7)_ROS1(IVS32..END)
NC-810	CD74-ROS1	EX6:EX34	33.6%	CD74(PMT..IVS6)_ROS1(IVS33..END)
NC-879	EML4-ALK	EX13:EX20	62.9%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-925	HDAC9-ETV1	EX2:EX8	41.5%	HDAC9(PMT..IVS2)_ETV1(IVS7..END)
NC-588	CD74-ROS1	EX6:EX32	11.4%	CD74(PMT..IVS6)_ROS1(IVS31..END)
NC-763	EML4-ALK	EX6:EX20	17.8%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-735	FGFR3-TACC3	EX17:EX8	10.1%	FGFR3(PMT..IVS17)_TACC3(IVS7..END)
NC-539	CNTNAP2-BRAF	EX13:EX9	5.6%	CNTNAP2(PMT..IVS13)_BRAF(IVS8..END)
NC-852	EML4-ALK	EX6:EX20	15.2%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-184	CD74-ROS1	EX6:EX34	2.3%	CD74(PMT..IVS6)_ROS1(IVS33..END)
NC-605	CSGALNACT2-RET	EX3:EX12	18.6%	CSGALNACT2(END..IVS2)_RET(IVS11..END)
NC-794	EML4-ALK	EX13:EX20	7.7%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-792	EML4-ALK	EX6:EX20	6.0%	EML4(PMT..IVS6)_ALK(IVS19..END)
NC-927	EML4-ALK	EX13:EX20	18.7%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-855	chr5 149780950-ROS1	chr5 149780950:EX34	11.0%	Unknown(PMT..EX0)_ROS1(IVS33..END)
NC-745	EML4-ALK	EX13:EX20	45.8%	EML4(PMT..IVS13)_ALK(IVS19..END)
NC-814	EML4-ALK	EX2:EX20	15.1%	EML4(PMT..IVS2)_ALK(IVS19..END)
NC-312	EML4-ALK	EX6:EX20	20.8%	EML4(PMT..IVS6)_ALK(IVS19..END)

Table SV. MSI and TMB status in hypermutant and non-hypermutant samples.

Patient ID	MSI	TMB (muts/Mb)
HC-001	MSS	19.2
HC-002	MSS	17.28
HC-003	MSS	18
HC-004	MSS	24
HC-005	MSS	43.2
HC-006	MSS	19.2
HC-007	MSS	18
HC-008	MSS	19
HC-009	MSS	35
HC-010	MSS	20.16
HC-011	MSS	19.2
HC-012	MSS	30.72
HC-013	MSS	22
HC-014	MSS	17.28
HC-015	MSS	19.2
HC-016	MSS	26
HC-017	MSS	20.16
HC-018	MSS	18
HC-019	MSI-H	41
HC-020	MSS	21
HC-021	MSS	33
HC-022	MSS	27
HC-023	MSS	17.28
HC-024	MSS	20.16
HC-025	MSS	19.2
HC-026	MSS	19
HC-027	MSS	18.24
HC-028	MSS	30
HC-029	MSS	29.76
HC-030	MSS	18
HC-031	MSI-H	46
HC-032	MSS	19.2
HC-033	MSS	49
HC-034	MSS	23
HC-035	MSS	22.08
HC-036	MSS	29
HC-037	MSS	31
HC-038	MSS	25.92
HC-039	MSS	21.12

HC-040	MSS	21.12
HC-041	MSS	80
HC-042	MSS	21.12
HC-043	MSS	36
HC-044	MSS	22
HC-045	MSS	18.24
HC-046	MSS	19
HC-047	MSS	22.08
HC-048	MSI-H	21.12
HC-049	MSS	33.6
HC-050	MSS	23
HC-051	MSS	39
HC-052	MSS	33
HC-053	MSI-H	17.28
HC-054	MSS	25
HC-055	MSS	30
HC-056	MSS	18.24
HC-057	MSS	25
HC-058	MSS	40
HC-059	MSI-H	25
HC-060	MSS	23
HC-061	MSS	17.28
HC-062	MSS	17.28
HC-063	MSS	19
HC-064	MSS	28
HC-065	MSI-H	24.96
HC-066	MSS	43.2
HC-067	MSS	17.28
NC-001	MSS	8.64
NC-002	MSS	3.84
NC-003	MSS	2
NC-004	MSI-U	0.96
NC-005	MSS	13.44
NC-006	MSS	0.96
NC-007	MSS	4
NC-008	MSS	6.72
NC-009	MSS	2.88
NC-010	MSS	2.88
NC-011	MSS	11.52

NC-012	MSS	9
NC-013	MSS	3
NC-014	MSS	1.92
NC-015	MSS	4
NC-016	MSS	13.44
NC-017	MSS	11
NC-018	MSS	6.72
NC-019	MSS	4.8
NC-020	MSS	13.44
NC-021	MSS	1
NC-022	MSI-U	1
NC-023	MSS	10.56
NC-024	MSS	0
NC-025	MSS	7.68
NC-026	MSS	3
NC-027	MSS	4.8
NC-028	MSS	6
NC-029	MSS	2.88
NC-030	MSS	3.84
NC-031	MSS	9.6
NC-032	MSS	7.68
NC-033	MSS	3
NC-034	MSS	1.92
NC-035	MSS	4
NC-036	MSI-U	3
NC-037	MSS	1.92
NC-038	MSS	4.8
NC-039	MSS	13.44
NC-040	MSS	6
NC-041	MSS	0.96
NC-042	MSS	11.52
NC-043	MSS	6
NC-044	MSS	10
NC-045	MSS	4
NC-046	MSS	4.8
NC-047	MSS	2
NC-048	MSS	5.76
NC-049	MSS	7.68
NC-050	MSS	2
NC-051	MSS	2.88
NC-052	MSI-U	2

NC-053	MSS	0.96
NC-054	MSI-U	0
NC-055	MSS	2.88
NC-056	MSS	3
NC-057	MSS	7.68
NC-058	MSS	4.8
NC-059	MSS	1
NC-060	MSS	4.8
NC-061	MSS	4.8
NC-062	MSS	8
NC-063	MSS	3.84
NC-064	MSS	3.84
NC-065	MSS	2.88
NC-066	MSS	3.84
NC-067	MSS	8
NC-068	MSS	7.68
NC-069	MSS	14.4
NC-070	MSS	9.6
NC-071	MSS	0.96
NC-072	MSS	10
NC-073	MSS	7
NC-074	MSS	14
NC-075	MSS	6
NC-076	MSS	4.8
NC-077	MSS	16
NC-078	MSS	4
NC-079	MSS	1.92
NC-080	MSS	12
NC-081	MSS	5
NC-082	MSI-U	0
NC-083	MSS	2
NC-084	MSS	10
NC-085	MSS	3
NC-086	MSS	1.86
NC-087	MSS	5
NC-088	MSS	4.8
NC-089	MSS	14.4
NC-090	MSS	5.76
NC-091	MSS	3
NC-092	MSS	12
NC-093	MSS	1.92
NC-094	MSS	6

NC-095	MSS	6
NC-096	MSS	10
NC-097	MSS	13.44
NC-098	MSS	0.96
NC-099	MSS	2
NC-100	MSS	6.72
NC-101	MSS	12.48
NC-102	MSS	5.76
NC-103	MSS	7.68
NC-104	MSS	9
NC-105	MSS	3.84
NC-106	MSS	8
NC-107	MSS	3.84
NC-108	MSS	2.88
NC-109	MSS	6.72
NC-110	MSS	5.76
NC-111	MSS	7
NC-112	MSS	4.8
NC-113	MSS	13
NC-114	MSS	0.96
NC-115	MSS	4
NC-116	MSS	4
NC-117	MSS	9
NC-118	MSS	3
NC-119	MSS	2.88
NC-120	MSS	7
NC-121	MSS	1.92
NC-122	MSS	9.6
NC-123	MSS	3.84
NC-124	MSS	2.88
NC-125	MSS	1.92
NC-126	MSS	2.88
NC-127	MSS	2
NC-128	MSS	3
NC-129	MSS	5
NC-130	MSS	10.56
NC-131	MSS	9.6
NC-132	MSS	10
NC-133	MSS	11
NC-134	MSS	9.6
NC-135	MSS	4
NC-136	MSS	1
NC-137	MSS	2
NC-138	MSS	3

NC-139	MSS	7.68
NC-140	MSS	6.72
NC-141	MSS	2
NC-142	MSS	10
NC-143	MSS	0
NC-144	MSS	5.76
NC-145	MSS	12
NC-146	MSS	7
NC-147	MSS	2.88
NC-148	MSS	7
NC-149	MSS	6.72
NC-150	MSS	4.8
NC-151	MSS	0.96
NC-152	MSS	3.84
NC-153	MSS	4
NC-154	MSS	4.8
NC-155	MSS	0.96
NC-156	MSS	5.76
NC-157	MSS	3.84
NC-158	MSS	16.32
NC-159	MSS	8
NC-160	MSS	2
NC-161	MSS	6
NC-162	MSS	10.56
NC-163	MSS	3.84
NC-164	MSS	8.64
NC-165	MSS	15
NC-166	MSS	7
NC-167	MSS	1.92
NC-168	MSS	2
NC-169	MSS	7
NC-170	MSS	3.84
NC-171	MSS	1.92
NC-172	MSS	6
NC-173	MSS	2
NC-174	MSS	6
NC-175	MSS	16
NC-176	MSS	4.8
NC-177	MSS	5
NC-178	MSS	4
NC-179	MSS	8
NC-180	MSS	4.8
NC-181	MSS	10.56
NC-182	MSS	9.6

NC-183	MSS	4
NC-184	MSS	0
NC-185	MSS	2
NC-186	MSS	4
NC-187	MSS	3.84
NC-188	MSS	6
NC-189	MSS	16.32
NC-190	MSS	7
NC-191	MSS	2.88
NC-192	MSS	2
NC-193	MSS	13
NC-194	MSS	3.84
NC-195	MSI-U	15
NC-196	MSS	2
NC-197	MSS	4.8
NC-198	MSS	5.76
NC-199	MSS	6.72
NC-200	MSS	12
NC-201	MSS	3.84
NC-202	MSS	8.64
NC-203	MSS	5.76
NC-204	MSS	3.84
NC-205	MSS	10
NC-206	MSS	7.68
NC-207	MSS	10.56
NC-208	MSS	7
NC-209	MSS	1.92
NC-210	MSS	3
NC-211	MSS	0.96
NC-212	MSS	0.96
NC-213	MSS	4.8
NC-214	MSS	9.6
NC-215	MSS	11
NC-216	MSS	9
NC-217	MSS	9.6
NC-218	MSS	1
NC-219	MSS	4
NC-220	MSS	4.8
NC-221	MSS	3
NC-222	MSS	5
NC-223	MSS	9.6
NC-224	MSS	7.68
NC-225	MSS	2.88

NC-226	MSS	8
NC-227	MSS	7.68
NC-228	MSS	5
NC-229	MSS	10
NC-230	MSS	5.58
NC-231	MSS	15.36
NC-232	MSS	3
NC-233	MSS	2
NC-234	MSS	2.88
NC-235	MSS	2.88
NC-236	MSS	6
NC-237	MSS	4.8
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NC-239	MSS	4.8
NC-240	MSS	2
NC-241	MSI-U	1.92
NC-242	MSS	0
NC-243	MSS	0.96
NC-244	MSS	3
NC-245	MSS	17
NC-246	MSS	9
NC-247	MSS	7.68
NC-248	MSS	2
NC-249	MSS	0
NC-250	MSS	14
NC-251	MSS	9
NC-252	MSS	6
NC-253	MSS	6.72
NC-254	MSS	9
NC-255	MSS	5.76
NC-256	MSS	3.84
NC-257	MSS	7.68
NC-258	MSS	5.76
NC-259	MSS	5
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NC-261	MSS	4
NC-262	MSS	2
NC-263	MSS	13.44
NC-264	MSS	13.44
NC-265	MSS	3.84
NC-266	MSS	0.96
NC-267	MSS	3.84
NC-268	MSS	1.92

NC-269	MSS	2.88
NC-270	MSS	8
NC-271	MSS	4.8
NC-272	MSS	6
NC-273	MSS	7
NC-274	MSI-U	3.84
NC-275	MSS	0.96
NC-276	MSS	5.76
NC-277	MSS	4.8
NC-278	MSS	12.48
NC-279	MSS	4
NC-280	MSS	7.68
NC-281	MSS	4
NC-282	MSS	1.92
NC-283	MSS	8.64
NC-284	MSS	1.86
NC-285	MSS	9
NC-286	MSS	4.8
NC-287	MSS	4.8
NC-288	MSS	0.96
NC-289	MSS	12
NC-290	MSS	3
NC-291	MSS	9
NC-292	MSS	2
NC-293	MSS	3.84
NC-294	MSS	12.48
NC-295	MSS	0.96
NC-296	MSS	1.92
NC-297	MSS	2.88
NC-298	MSS	5.76
NC-299	MSS	4.8
NC-300	MSS	12
NC-301	MSS	6.72
NC-302	MSS	11
NC-303	MSS	11
NC-304	MSS	1
NC-305	MSS	9.6
NC-306	MSS	9
NC-307	MSS	5.76
NC-308	MSS	7
NC-309	MSS	9.6
NC-310	MSS	2.88

NC-311	MSI-U	1
NC-312	MSS	1.92
NC-313	MSS	10.56
NC-314	MSS	7
NC-315	MSS	4.8
NC-316	MSS	5.76
NC-317	MSS	5.76
NC-318	MSS	1.92
NC-319	MSS	4
NC-320	MSS	3
NC-321	MSS	5
NC-322	MSS	4.8
NC-323	MSS	15
NC-324	MSS	2
NC-325	MSS	1.86
NC-326	MSS	0.96
NC-327	MSS	3.84
NC-328	MSS	12
NC-329	MSS	4.8
NC-330	MSS	4.8
NC-331	MSS	2.88
NC-332	MSS	16.32
NC-333	MSS	1.92
NC-334	MSS	6.72
NC-335	MSS	5
NC-336	MSS	15
NC-337	MSS	5.76
NC-338	MSS	7
NC-339	MSS	8
NC-340	MSS	5.76
NC-341	MSS	8.64
NC-342	MSS	4
NC-343	MSS	2.88
NC-344	MSS	5.76
NC-345	MSS	4
NC-346	MSS	3
NC-347	MSS	4.8
NC-348	MSS	10.56
NC-349	MSS	2
NC-350	MSS	1.92
NC-351	MSS	5
NC-352	MSS	8
NC-353	MSS	12.48

NC-354	MSS	2
NC-355	MSI-U	2
NC-356	MSS	11
NC-357	MSS	0
NC-358	MSS	15
NC-359	MSS	14.4
NC-360	MSI-H	14.4
NC-361	MSS	6.72
NC-362	MSS	0
NC-363	MSS	7
NC-364	MSS	13
NC-365	MSS	3
NC-366	MSS	10.56
NC-367	MSS	3
NC-368	MSS	2.88
NC-369	MSS	4.8
NC-370	MSS	0.96
NC-371	MSS	2.88
NC-372	MSS	3.72
NC-373	MSS	13.44
NC-374	MSS	2.88
NC-375	MSS	2
NC-376	MSS	13.44
NC-377	MSS	6.72
NC-378	MSS	3.84
NC-379	MSS	1.92
NC-380	MSS	7
NC-381	MSS	0
NC-382	MSS	5
NC-383	MSS	2.88
NC-384	MSS	1.92
NC-385	MSS	2.88
NC-386	MSS	7.44
NC-387	MSS	7.68
NC-388	MSS	2.88
NC-389	MSS	4.8
NC-390	MSS	15.36
NC-391	MSS	1.92
NC-392	MSS	6
NC-393	MSI-U	0.96
NC-394	MSS	5

NC-395	MSS	10
NC-396	MSS	3.84
NC-397	MSS	3.84
NC-398	MSS	3.84
NC-399	MSS	2
NC-400	MSS	7.68
NC-401	MSS	3.84
NC-402	MSS	1.92
NC-403	MSS	7
NC-404	MSS	4
NC-405	MSI-U	2
NC-406	MSS	6.72
NC-407	MSS	7
NC-408	MSS	8.64
NC-409	MSS	8
NC-410	MSS	3.84
NC-411	MSS	10.56
NC-412	MSS	14
NC-413	MSS	7
NC-414	MSS	8.64
NC-415	MSS	3.84
NC-416	MSS	14.4
NC-417	MSS	13.44
NC-418	MSS	2.88
NC-419	MSS	4
NC-420	MSS	1.92
NC-421	MSS	1.86
NC-422	MSS	8.64
NC-423	MSS	10.56
NC-424	MSS	15.36
NC-425	MSS	4.8
NC-426	MSS	7.68
NC-427	MSS	5
NC-428	MSS	0.96
NC-429	MSS	14
NC-430	MSS	16.32
NC-431	MSS	5
NC-432	MSS	12
NC-433	MSS	2.88
NC-434	MSS	3.84
NC-435	MSS	7.68
NC-436	MSS	3
NC-437	MSS	2.88

NC-438	MSS	14.4
NC-439	MSS	3.84
NC-440	MSS	4.8
NC-441	MSS	12
NC-442	MSS	6.72
NC-443	MSS	4.8
NC-444	MSS	4.8
NC-445	MSS	2.88
NC-446	MSS	13
NC-447	MSS	5
NC-448	MSS	5
NC-449	MSS	3
NC-450	MSS	13.44
NC-451	MSS	6
NC-452	MSS	3.84
NC-453	MSS	6.72
NC-454	MSS	3.84
NC-455	MSS	8.64
NC-456	MSS	9.6
NC-457	MSS	6.72
NC-458	MSS	0.96
NC-459	MSS	4.8
NC-460	MSS	0.96
NC-461	MSS	4.8
NC-462	MSS	6.72
NC-463	MSS	4.65
NC-464	MSS	4
NC-465	MSS	4.8
NC-466	MSS	10
NC-467	MSI-U	1
NC-468	MSS	2
NC-469	MSS	5
NC-470	MSS	5.76
NC-471	MSS	0.96
NC-472	MSS	7
NC-473	MSS	12.48
NC-474	MSS	9.6
NC-475	MSS	10.56
NC-476	MSS	4
NC-477	MSS	4.8
NC-478	MSS	8
NC-479	MSS	0.96
NC-480	MSS	8.64

NC-481	MSS	0.96
NC-482	MSS	8.64
NC-483	MSS	6
NC-484	MSS	4
NC-485	MSS	11.52
NC-486	MSS	5.76
NC-487	MSS	8
NC-488	MSS	6
NC-489	MSS	0.96
NC-490	MSS	5.76
NC-491	MSS	3
NC-492	MSS	6
NC-493	MSS	10.56
NC-494	MSS	1.92
NC-495	MSS	3.84
NC-496	MSS	5
NC-497	MSS	3.84
NC-498	MSS	8.64
NC-499	MSS	5.76
NC-500	MSS	9
NC-501	MSS	10
NC-502	MSS	5.76
NC-503	MSS	0.96
NC-504	MSS	4.8
NC-505	MSS	2.88
NC-506	MSS	10.56
NC-507	MSS	9
NC-508	MSS	5.76
NC-509	MSS	3.84
NC-510	MSI-U	2.88
NC-511	MSS	11.52
NC-512	MSS	1.92
NC-513	MSS	0.96
NC-514	MSS	0.96
NC-515	MSS	3.84
NC-516	MSS	4
NC-517	MSS	13
NC-518	MSS	4.8
NC-519	MSS	13.44
NC-520	MSS	2.88
NC-521	MSS	4
NC-522	MSS	6.72
NC-523	MSS	5

NC-524	MSS	7.44
NC-525	MSI-U	4
NC-526	MSS	5
NC-527	MSS	1
NC-528	MSS	5.76
NC-529	MSS	17
NC-530	MSS	5.76
NC-531	MSS	3
NC-532	MSS	7
NC-533	MSS	6
NC-534	MSS	4
NC-535	MSS	3.84
NC-536	MSS	17
NC-537	MSS	1.92
NC-538	MSS	12
NC-539	MSS	1.92
NC-540	MSS	4
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NC-542	MSS	7.68
NC-543	MSS	7.68
NC-544	MSS	5
NC-545	MSS	9
NC-546	MSS	1.92
NC-547	MSS	2.88
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NC-553	MSS	10.56
NC-554	MSS	3.84
NC-555	MSS	11.52
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NC-557	MSS	5
NC-558	MSS	2.88
NC-559	MSS	2
NC-560	MSS	3
NC-561	MSS	3
NC-562	MSI-U	0.96
NC-563	MSS	2
NC-564	MSS	3.84
NC-565	MSS	2.88

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NC-568	MSS	7.68
NC-569	MSS	1
NC-570	MSS	4.8
NC-571	MSS	0
NC-572	MSS	1.92
NC-573	MSS	14
NC-574	MSS	3
NC-575	MSS	7
NC-576	MSS	8
NC-577	MSS	11.52
NC-578	MSS	8.64
NC-579	MSS	3.84
NC-580	MSS	4
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NC-583	MSS	9
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NC-593	MSS	4.8
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NC-596	MSS	3.84
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NC-601	MSS	4
NC-602	MSS	1.92
NC-603	MSS	3.84
NC-604	MSS	0.96
NC-605	MSS	0.96
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NC-607	MSS	7
NC-608	MSS	7

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NC-612	MSS	7.68
NC-613	MSS	2.88
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NC-617	MSS	1.92
NC-618	MSS	4.8
NC-619	MSS	6.72
NC-620	MSS	5
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NC-622	MSS	15
NC-623	MSS	2.88
NC-624	MSS	2.88
NC-625	MSS	17
NC-626	MSS	3.84
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NC-632	MSS	12
NC-633	MSS	11
NC-634	MSS	15
NC-635	MSS	15.36
NC-636	MSS	8
NC-637	MSI-U	0.96
NC-638	MSS	5.76
NC-639	MSS	2
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NC-641	MSS	7
NC-642	MSS	4
NC-643	MSS	7.68
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NC-645	MSS	3
NC-646	MSS	10
NC-647	MSS	5.76
NC-648	MSS	0
NC-649	MSS	1.92
NC-650	MSS	7.68
NC-651	MSS	11.52

NC-652	MSS	5.76
NC-653	MSS	5
NC-654	MSS	6
NC-655	MSS	8
NC-656	MSS	4
NC-657	MSS	16
NC-658	MSS	3
NC-659	MSS	5.76
NC-660	MSS	2
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NC-664	MSS	3
NC-665	MSS	5.76
NC-666	MSS	1.92
NC-667	MSS	9
NC-668	MSS	0.96
NC-669	MSS	3.84
NC-670	MSS	2
NC-671	MSS	6
NC-672	MSS	6.72
NC-673	MSS	11.52
NC-674	MSS	6.72
NC-675	MSS	13
NC-676	MSS	10
NC-677	MSS	13.44
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NC-679	MSS	2
NC-680	MSS	5
NC-681	MSS	14.4
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NC-690	MSS	16.32
NC-691	MSS	11
NC-692	MSS	7.68
NC-693	MSS	6
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NC-695	MSS	7

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NC-700	MSS	1
NC-701	MSS	2.88
NC-702	MSS	2.88
NC-703	MSS	12
NC-704	MSS	14
NC-705	MSS	3.72
NC-706	MSS	6.72
NC-707	MSS	1.92
NC-708	MSI-U	0.96
NC-709	MSS	1
NC-710	MSS	10.56
NC-711	MSS	0.96
NC-712	MSS	4
NC-713	MSS	3.84
NC-714	MSS	3.84
NC-715	MSS	13
NC-716	MSS	14
NC-717	MSS	1.92
NC-718	MSS	1
NC-719	MSS	5.76
NC-720	MSS	2
NC-721	MSS	3.84
NC-722	MSS	11
NC-723	MSS	3
NC-724	MSS	5
NC-725	MSS	1
NC-726	MSS	0.96
NC-727	MSS	0.96
NC-728	MSS	3
NC-729	MSS	2.88
NC-730	MSS	1.92
NC-731	MSS	3
NC-732	MSS	2.88
NC-733	MSI-U	1
NC-734	MSS	9.6
NC-735	MSS	13.44
NC-736	MSS	3.84
NC-737	MSS	0.96

NC-738	MSS	13
NC-739	MSI-U	1
NC-740	MSS	1
NC-741	MSS	4.8
NC-742	MSS	3.84
NC-743	MSS	14
NC-744	MSS	2.88
NC-745	MSS	2.88
NC-746	MSS	2.88
NC-747	MSS	14.4
NC-748	MSS	9.6
NC-749	MSS	3
NC-750	MSS	9
NC-751	MSS	6.72
NC-752	MSS	15.36
NC-753	MSS	3
NC-754	MSS	10.56
NC-755	MSS	3
NC-756	MSS	1.92
NC-757	MSS	0
NC-758	MSS	11
NC-759	MSS	5
NC-760	MSS	3
NC-761	MSS	3
NC-762	MSS	2.88
NC-763	MSS	0.96
NC-764	MSS	3
NC-765	MSS	0
NC-766	MSS	3
NC-767	MSS	6
NC-768	MSS	4.8
NC-769	MSS	2
NC-770	MSS	11.52
NC-771	MSS	4
NC-772	MSS	2.88
NC-773	MSS	1.92
NC-774	MSS	2.88
NC-775	MSS	2
NC-776	MSS	7.68
NC-777	MSS	4
NC-778	MSS	2.88
NC-779	MSS	4
NC-780	MSS	4

NC-781	MSS	4
NC-782	MSS	4.8
NC-783	MSS	6.72
NC-784	MSS	3.84
NC-785	MSS	6.72
NC-786	MSS	5.76
NC-787	MSS	3.84
NC-788	MSS	2
NC-789	MSS	3.84
NC-790	MSS	5
NC-791	MSS	8
NC-792	MSS	4.8
NC-793	MSS	1.92
NC-794	MSS	0
NC-795	MSS	0.96
NC-796	MSS	10.56
NC-797	MSS	4
NC-798	MSS	15
NC-799	MSS	4
NC-800	MSS	9
NC-801	MSS	6.72
NC-802	MSS	4.8
NC-803	MSS	4.8
NC-804	MSS	1
NC-805	MSS	5.76
NC-806	MSS	3.84
NC-807	MSS	0
NC-808	MSS	1
NC-809	MSS	9.6
NC-810	MSS	5.76
NC-811	MSS	11.52
NC-812	MSS	0.96
NC-813	MSS	3
NC-814	MSS	3.84
NC-815	MSS	4
NC-816	MSS	14
NC-817	MSS	4
NC-818	MSS	3
NC-819	MSS	7.68
NC-820	MSS	5
NC-821	MSS	0.96
NC-822	MSS	3.84
NC-823	MSS	1.92
NC-824	MSS	0.96

NC-825	MSS	6
NC-826	MSS	5
NC-827	MSS	4.8
NC-828	MSS	15.36
NC-829	MSS	9.6
NC-830	MSS	3.84
NC-831	MSS	5.76
NC-832	MSS	2.88
NC-833	MSS	5.76
NC-834	MSS	10
NC-835	MSS	3.84
NC-836	MSS	5
NC-837	MSS	2.88
NC-838	MSS	11.52
NC-839	MSS	1
NC-840	MSS	2
NC-841	MSS	2
NC-842	MSS	8
NC-843	MSS	8.64
NC-844	MSS	5
NC-845	MSS	4.8
NC-846	MSS	4
NC-847	MSS	7.68
NC-848	MSS	12
NC-849	MSI-U	0.96
NC-850	MSS	2.88
NC-851	MSS	2.88
NC-852	MSS	1.92
NC-853	MSS	7
NC-854	MSS	4.8
NC-855	MSS	6.72
NC-856	MSS	5
NC-857	MSS	2.88
NC-858	MSS	15
NC-859	MSS	4.8
NC-860	MSS	3.84
NC-861	MSS	9
NC-862	MSS	2.88
NC-863	MSS	3
NC-864	MSI-U	7
NC-865	MSS	9
NC-866	MSS	11.52

NC-867	MSS	13
NC-868	MSS	2.88
NC-869	MSS	4
NC-870	MSS	1.92
NC-871	MSS	1.92
NC-872	MSS	6
NC-873	MSS	3.84
NC-874	MSS	2
NC-875	MSS	2.88
NC-876	MSI-U	1.92
NC-877	MSS	1
NC-878	MSS	6.72
NC-879	MSS	7.68
NC-880	MSS	4
NC-881	MSS	0.96
NC-882	MSS	16
NC-883	MSS	7.68
NC-884	MSS	6.72
NC-885	MSS	2
NC-886	MSS	1
NC-887	MSS	1.92
NC-888	MSS	13
NC-889	MSS	4
NC-890	MSS	2.88
NC-891	MSS	8
NC-892	MSS	3
NC-893	MSS	9
NC-894	MSS	5
NC-895	MSS	2.88
NC-896	MSS	8
NC-897	MSS	4.8
NC-898	MSS	3
NC-899	MSS	4.8
NC-900	MSS	3
NC-901	MSS	4.8
NC-902	MSS	15
NC-903	MSS	6.72
NC-904	MSS	3.84
NC-905	MSS	16.32
NC-906	MSS	3
NC-907	MSS	12
NC-908	MSS	4
NC-909	MSS	6

NC-910	MSS	15.36
NC-911	MSS	1.92
NC-912	MSS	3
NC-913	MSS	12
NC-914	MSS	10
NC-915	MSS	1.92
NC-916	MSS	0.96
NC-917	MSS	1.92
NC-918	MSS	2.88
NC-919	MSS	4
NC-920	MSS	2
NC-921	MSS	2
NC-922	MSS	2
NC-923	MSS	0
NC-924	MSS	10
NC-925	MSS	3.84
NC-926	MSS	3.84
NC-927	MSS	2.88
NC-928	MSS	8
NC-929	MSS	16
NC-930	MSS	11
NC-931	MSS	4
NC-932	MSS	3
NC-933	MSS	3.84

MSI, microsatellite instability; TMB, tumor mutation burden; muts, mutations; MSS, microsatellite stability.

Table SVI. Effects of various clinical variables on tumor mutation burden in Cox multivariate regression analyses.

Variables	Odds ratio	95% CI	P-value
Sex	0.825	0.694-0.981	0.029
Smoking history	0.505	0.426-0.600	<0.001
Histological subtype	0.848	0.848-0.757	0.005
Age at diagnosis	0.915	0.915-0.806	0.173

Table SVII. Genes involved in the DNA damage repair pathway that have been reported to be positively associated with the efficacy of immune checkpoint inhibitors.

Gene symbol	Refs.
ATM	(20,38)
ATR	(20,38)
BAP1	(20)
BLM	(38)
BRCA1	(20,38)
BRCA2	(20,38)
BRIP1	(38)
CHEK1	(20,38)
CHEK2	(20,38)
ERCC2	(38)
ERCC3	(38)
ERCC4	(20,38)
ERCC5	(38)
FANCA	(20,38)
FANCC	(20,38)
MLH1	(20,38)
MRE11A	(38)
MSH2	(20,38)
MSH6	(20,38)
NBN	(38)
PMS2	(38)
POLD1	(39)
POLE	(20,38)
RAD50	(20,38)
RAD51	(20,38)
RAD51B	(20,38)

RAD51D	(20,38)
RAD54L	(20,38)

Table SVIII. Genes with alterations enriched in the hypermutant and non-hypermutant cohorts.

Gene	Hypermutant cohort	Non-hypermutant cohort	P-value
TP53	0.895522388	0.002388725	$3.36x10^{-07}$
LRP1B	0.671641791	0.000838848	$1.20x10^{-20}$
FAT1	0.328358209	0.000375126	$7.15x10^{-10}$
MLL2	0.298507463	0.000346578	$4.42x10^{-07}$
EPHA5	0.298507463	0.000331934	$1.09x10^{-11}$
MLL3	0.28358209	0.000327733	$8.71x10^{-07}$
NOTCH1	0.268656716	0.00029975	$1.63x10^{-09}$
CDKN2A	0.253731343	0.000303778	0.001000888
FAT2	0.253731343	0.000288248	$7.54x10^{-07}$
EPHA3	0.23880597	0.000266751	$8.14x10^{-08}$
EGFR	0.223880597	0.000469131	$2.15x10^{-05}$
ARID1A	0.223880597	0.000252054	$2.62x10^{-06}$
EPHB6	0.223880597	0.000244351	$1.19x10^{-10}$
SMARCA4	0.208955224	0.000231861	$4.24x10^{-07}$
KRAS	0.194029851	0.000232039	0.039815113
PIK3CA	0.194029851	0.000223744	0.001344312
NTRK3	0.194029851	0.000213879	$3.54x10^{-07}$
CDH23	0.194029851	0.000213644	$2.49x10^{-07}$
RB1	0.179104478	0.000208946	0.012197145
KEAP1	0.179104478	0.000201427	0.000163329
NF1	0.179104478	0.0002012	0.000135457
ZFHX3	0.179104478	0.000199408	$2.48x10^{-05}$
ERBB4	0.179104478	0.000199187	$1.95x10^{-05}$
PIK3CG	0.179104478	0.000199187	$1.95x10^{-05}$
PTPRD	0.179104478	0.000198745	$1.18x10^{-05}$
ARID1B	0.164179104	0.00018423	0.000430262
ATM	0.164179104	0.000182794	0.000110121
APC	0.149253731	0.000168811	0.004141786
ATRX	0.149253731	0.000164169	$3.38x10^{-05}$
SLX4	0.149253731	0.000163092	$4.68x10^{-06}$
POLD1	0.149253731	0.000161679	$1.01x10^{-07}$
ROS1	0.134328358	0.000150908	0.005702791
MLL	0.134328358	0.000148243	0.000349312
RET	0.134328358	0.000147917	0.000217026
PDGFRA	0.134328358	0.000147592	0.000129415
ABCC11	0.134328358	0.000146785	$2.84x10^{-05}$
IRS2	0.134328358	0.000146625	$2.00x10^{-05}$
CIC	0.134328358	0.000146465	$1.38x10^{-05}$
SERPINB3	0.134328358	0.000145988	$3.95x10^{-06}$
SETD2	0.119402985	0.000133245	0.007786192

EP300	0.119402985	0.000133096	0.006759787
CREBBP	0.119402985	0.000132358	0.003080211
MED12	0.119402985	0.000132358	0.003080211
NOTCH4	0.119402985	0.000132066	0.002155232
HGF	0.119402985	0.000131774	0.001464982
CDK12	0.119402985	0.000131339	0.000770881
NTRK1	0.119402985	0.000130052	5.87×10^{-05}
ROBO3	0.119402985	0.000130052	5.87×10^{-05}
ARID2	0.104477612	0.000117114	0.03581534
BRAF	0.104477612	0.000116202	0.015939499
BRCA2	0.104477612	0.000115559	0.007752307
NOTCH2	0.104477612	0.000115432	0.006591753
TBX3	0.104477612	0.000115432	0.006591753
NOTCH3	0.104477612	0.00011505	0.003880704
SOX2	0.104477612	0.000114671	0.002116907
DICER1	0.104477612	0.000114295	0.001049684
NFE2L2	0.104477612	0.000114295	0.001049684
FLT1	0.104477612	0.00011417	0.000809814
AR	0.104477612	0.000114046	0.000615559
MSH3	0.104477612	0.000114046	0.000615559
BARD1	0.104477612	0.000113797	0.000338078
BTK	0.104477612	0.000113303	7.84×10^{-05}
FAM123B	0.104477612	0.000113303	7.84×10^{-05}
ESR1	0.104477612	0.000113181	5.06×10^{-05}
MSH6	0.104477612	0.000113181	5.06×10^{-05}
CCND1	0.089552239	9.9272×10^{-5}	0.032132978
RICTOR	0.089552239	9.8943×10^{-5}	0.021803975
MTOR	0.089552239	9.86161×10^{-5}	0.01400675
NSD1	0.089552239	9.86161×10^{-5}	0.01400675
TSC1	0.089552239	9.83994×10^{-5}	0.010055285
BRCA1	0.089552239	9.82914×10^{-5}	0.008412862
PMS2	0.089552239	9.82914×10^{-5}	0.008412862
POT1	0.089552239	9.82914×10^{-5}	0.008412862
TSC2	0.089552239	9.81836×10^{-5}	0.006973392
FANCA	0.089552239	9.80761×10^{-5}	0.005722039
FLT4	0.089552239	9.79688×10^{-5}	0.004643804
STAG2	0.089552239	9.79688×10^{-5}	0.004643804
FLT3	0.089552239	9.77549×10^{-5}	0.002946624
PCK1	0.089552239	9.75419×10^{-5}	0.001763493
EPHA2	0.089552239	9.73299×10^{-5}	0.000981805
FOXL2	0.089552239	9.68039×10^{-5}	0.000142233
PAX5	0.089552239	9.64909×10^{-5}	2.57×10^{-05}
PTCH1	0.089552239	9.63871×10^{-5}	1.23×10^{-05}
POLE	0.074626866	8.2091×10^{-5}	0.039184011

CARD11	0.074626866	8.17314×10^{-5}	0.021599932
INPP4B	0.074626866	8.15528×10^{-5}	0.015190985
MAP3K1	0.074626866	8.11978×10^{-5}	0.006478006
IGF1R	0.074626866	8.11096×10^{-5}	0.005031638
ABL2	0.074626866	8.09337×10^{-5}	0.002850826
BCOR	0.074626866	8.09337×10^{-5}	0.002850826
CSF1R	0.074626866	8.0846×10^{-5}	0.002066364
PMS1	0.074626866	8.0846×10^{-5}	0.002066364
WT1	0.074626866	8.0846×10^{-5}	0.002066364
NBN	0.074626866	8.07585×10^{-5}	0.001452449
FGF4	0.074626866	8.06712×10^{-5}	0.000984515
FGFR2	0.074626866	8.06712×10^{-5}	0.000984515
HCN1	0.074626866	8.06712×10^{-5}	0.000984515
GATA3	0.074626866	8.04972×10^{-5}	0.000392972
HDAC1	0.074626866	8.04972×10^{-5}	0.000392972
FCGR2B	0.074626866	8.04104×10^{-5}	0.000226041
IDH1	0.074626866	8.04104×10^{-5}	0.000226041
MITF	0.074626866	8.03239×10^{-5}	0.000119191
SLIT2	0.074626866	8.03239×10^{-5}	0.000119191
ZFPM2	0.074626866	8.02375×10^{-5}	5.59×10^{-05}
PDGFRB	0.059701493	6.51721×10^{-5}	0.046337709
CUL3	0.059701493	6.5101×10^{-5}	0.03945508
DDR2	0.059701493	6.5101×10^{-5}	0.03945508
FGFR4	0.059701493	6.50301×10^{-5}	0.033202921
JAK2	0.059701493	6.50301×10^{-5}	0.033202921
RUNX1	0.059701493	6.50301×10^{-5}	0.033202921
HDAC4	0.059701493	6.49593×10^{-5}	0.027576623
TERT	0.059701493	6.49593×10^{-5}	0.027576623
PALB2	0.059701493	6.48887×10^{-5}	0.022566627
RECQL4	0.059701493	6.48887×10^{-5}	0.022566627
RNF43	0.059701493	6.48887×10^{-5}	0.022566627
ABCB1	0.059701493	6.48887×10^{-5}	0.022566627
TOP1	0.059701493	6.48183×10^{-5}	0.018158214
BRIP1	0.059701493	6.4748×10^{-5}	0.014331367
SMO	0.059701493	6.4748×10^{-5}	0.014331367
POM121L12	0.059701493	6.46778×10^{-5}	0.011060699
ARAF	0.059701493	6.46078×10^{-5}	0.008315485
AXL	0.059701493	6.46078×10^{-5}	0.008315485
AXIN1	0.059701493	6.4538×10^{-5}	0.006059802
RPTOR	0.059701493	6.4538×10^{-5}	0.006059802
CBL	0.059701493	6.44683×10^{-5}	0.004252817
CCND2	0.059701493	6.44683×10^{-5}	0.004252817
ERCC5	0.059701493	6.44683×10^{-5}	0.004252817
FANCG	0.059701493	6.44683×10^{-5}	0.004252817

JAK1	0.059701493	6.44683×10^{-5}	0.004252817
RAD51C	0.059701493	6.44683×10^{-5}	0.004252817
FH	0.059701493	6.43988×10^{-5}	0.002849237
PRDM1	0.059701493	6.43988×10^{-5}	0.002849237
SERPINB4	0.059701493	6.43988×10^{-5}	0.002849237
HOXB13	0.059701493	6.43294×10^{-5}	0.001799959
RAD21	0.059701493	6.42601×10^{-5}	0.001052951
SUFU	0.059701493	6.42601×10^{-5}	0.001052951
ANKRD30B	0.059701493	6.4191×10^{-5}	0.00055441
CDK6	0.059701493	6.4191×10^{-5}	0.00055441
ABL1	0.044776119	4.84567×10^{-5}	0.04088191
ACIN1	0.044776119	4.84567×10^{-5}	0.04088191
EXT2	0.044776119	4.84567×10^{-5}	0.04088191
FANCD2	0.044776119	4.84567×10^{-5}	0.04088191
NTRK2	0.044776119	4.84567×10^{-5}	0.04088191
TP73	0.044776119	4.84567×10^{-5}	0.04088191
MLH1	0.044776119	4.84043×10^{-5}	0.032176383
STAT3	0.044776119	4.84043×10^{-5}	0.032176383
XPO1	0.044776119	4.84043×10^{-5}	0.032176383
ACVR1B	0.044776119	4.8352×10^{-5}	0.024560865
AFF3	0.044776119	4.8352×10^{-5}	0.024560865
AKT3	0.044776119	4.8352×10^{-5}	0.024560865
BRD2	0.044776119	4.8352×10^{-5}	0.024560865
CDC73	0.044776119	4.8352×10^{-5}	0.024560865
CTNNA2	0.044776119	4.8352×10^{-5}	0.024560865
HCLS1	0.044776119	4.8352×10^{-5}	0.024560865
IL6ST	0.044776119	4.8352×10^{-5}	0.024560865
RAF1	0.044776119	4.8352×10^{-5}	0.024560865
RNASEL	0.044776119	4.8352×10^{-5}	0.024560865
CRLF2	0.044776119	4.82998×10^{-5}	0.018047376
MEN1	0.044776119	4.82998×10^{-5}	0.018047376
NRAS	0.044776119	4.82998×10^{-5}	0.018047376
WSCD2	0.044776119	4.82998×10^{-5}	0.018047376
BRD3	0.044776119	4.82478×10^{-5}	0.01263157
LRRC7	0.044776119	4.82478×10^{-5}	0.01263157
MAP2K2	0.044776119	4.82478×10^{-5}	0.01263157
SOX9	0.044776119	4.82478×10^{-5}	0.01263157
B2M	0.044776119	4.81959×10^{-5}	0.008289588
EPPK1	0.044776119	4.81959×10^{-5}	0.008289588
DAXX	0.044776119	4.8144×10^{-5}	0.004974512
NRXN1	0.044776119	4.8144×10^{-5}	0.004974512
SPEN	0.044776119	4.8144×10^{-5}	0.004974512
U2AF1	0.044776119	4.8144×10^{-5}	0.004974512
ASCL4	0.044776119	4.80923×10^{-5}	0.002612371

PDCD1LG2	0.044776119	4.80923×10^{-5}	0.002612371
TLX3	0.044776119	4.80923×10^{-5}	0.002612371
ANKRD30A	0.044776119	4.80407×10^{-5}	0.001097658
PDILT	0.044776119	4.80407×10^{-5}	0.001097658
FAT3	0.044776119	4.79893×10^{-5}	0.000288294
ITGB3	0.044776119	4.79893×10^{-5}	0.000288294
MAML2	0.044776119	4.79893×10^{-5}	0.000288294
AURKB	0.029850746	3.20965×10^{-5}	0.038771291
H3F3C	0.029850746	3.20965×10^{-5}	0.038771291
IMPG1	0.029850746	3.20965×10^{-5}	0.038771291
RHOA	0.029850746	3.20965×10^{-5}	0.038771291
TRIM58	0.029850746	3.20965×10^{-5}	0.038771291
ZFP36L1	0.029850746	3.20965×10^{-5}	0.038771291
CBFB	0.029850746	3.20621×10^{-5}	0.024307723
EPHA7	0.029850746	3.20621×10^{-5}	0.024307723
MPL	0.029850746	3.20621×10^{-5}	0.024307723
NCAM2	0.029850746	3.20621×10^{-5}	0.024307723
PTPN11	0.029850746	3.20621×10^{-5}	0.024307723
RUNX1T1	0.029850746	3.20621×10^{-5}	0.024307723
SI	0.029850746	3.20621×10^{-5}	0.024307723
TLR4	0.029850746	3.20621×10^{-5}	0.024307723
TNN	0.029850746	3.20621×10^{-5}	0.024307723
USH2A	0.029850746	3.20621×10^{-5}	0.024307723
AFF2	0.029850746	3.20277×10^{-5}	0.012702691
CD5L	0.029850746	3.20277×10^{-5}	0.012702691
FAM135B	0.029850746	3.20277×10^{-5}	0.012702691
KEL	0.029850746	3.20277×10^{-5}	0.012702691
MYD88	0.029850746	3.20277×10^{-5}	0.012702691
NCSTN	0.029850746	3.20277×10^{-5}	0.012702691
OR11G2	0.029850746	3.20277×10^{-5}	0.012702691
TAF15	0.029850746	3.20277×10^{-5}	0.012702691
TAL1	0.029850746	3.20277×10^{-5}	0.012702691
USP8	0.029850746	3.20277×10^{-5}	0.012702691
CYP1A1	0.029850746	3.19933×10^{-5}	0.004426426
DNAH6	0.029850746	3.19933×10^{-5}	0.004426426
PDGFB	0.029850746	3.19933×10^{-5}	0.004426426
RYR2	0.029850746	3.19933×10^{-5}	0.004426426
SETBP1	0.029850746	3.19933×10^{-5}	0.004426426
TCL1A	0.029850746	3.19933×10^{-5}	0.004426426
ZBTB16	0.029850746	3.19933×10^{-5}	0.004426426