

Gene	HGVS c. (Clinically Relevant)	Protein Change	Mutation Type	Count
ABL1	NM_007313.2:c.892G>A	p.E298K	missense	1
ABL1	NM_007313.2:c.805G>T	p.G269W	missense	1
ABL1	NM_007313.2:c.809G>A	p.G270D	missense	1
ABL1	NM_007313.2:c.797A>G	p.K266R	missense	1
ABL1	NM_007313.2:c.1230_1244delCACCTACACAGCCCA	p.T411_H415del	deletion	1
ABL1	NM_007313.2:c.835G>A	p.V279M	missense	1
ALK	NM_004304.4:c.3592C>T	p.L1198F	missense	1
APC	NM_000038.5:c.2626C>T	p.R876*	nonsense	1
APC	NM_000038.5:c.4456G>A	p.D1486N	missense	1
APC	NM_000038.5:c.3949G>C	p.E1317Q	missense	1
APC	NM_001904.3:c.101G>A	p.G34E	missense	1
ATM	NM_000051.3:c.9016G>A	p.A3006T	missense	1
ATM	NM_000051.3:c.8122G>A	p.D2708N	missense	1
ATM	NM_000051.3:c.7330G>C	p.E2444Q	missense	1
ATM	NM_000051.3:c.8842_8843delinsTA	p.I2948Y	missense	1
ATM	NM_000051.3:c.7334T>C	p.L2445P	missense	1
ATM	NM_000051.3:c.5071A>C	p.S1691R	missense	1
BRAF	NM_004333.4:c.1742A>T	p.N581I	missense	1
BRAF	NM_004333.4:c.1742A>C	p.N581T	missense	1
BRAF	NM_004333.4:c.1364G>T	p.G455V	missense	1
BRAF	NM_004333.4:c.1406G>C	p.G469A	missense	2
BRAF	NM_004333.4:c.1406G>T	p.G469V	missense	2
BRAF	NM_004333.4:c.1812G>A	p.W604*	nonsense	1
BRAF	NM_004333.4:c.1799T>A	p.V600E	missense	2
CDH1	NM_004360.4:c.214G>A	p.D72N	missense	1
CDKN2A	NM_000077.4:c.319C>T	p.R107C	missense	1
CDKN2A	NM_000077.4:c.382C>T	p.R128W	missense	1
CDKN2A	NM_000077.4:c.238C>T	p.R80*	nonsense	1
CDKN2A	NM_000077.4:c.322G>C	p.D108H	missense	1
CDKN2A	NM_000077.4:c.322G>T	p.D108Y	missense	1
CDKN2A	NM_000077.4:c.251A>G	p.D84G	missense	1
CTNNB1	NM_001904.3:c.101G>A	p.G34E	missense	1
CTNNB1	NM_001904.3:c.110C>T	p.S37F	missense	1
CTNNB1	NM_001904.3:c.134C>T	p.S45F	missense	1
EGFR	NM_005228.4:c.2235_2246delAGGAATTAAGAG	p.E746_A749del	deletion	1
EGFR	NM_005228.4:c.2236_2250delGAATTAAGAGAAGCA	p.E746_A750del	deletion	5
EGFR	NM_005228.4:c.2237_2251del AATTAAGAGAAGCAA	p.E746_T751del	deletion	1
EGFR	NM_005228.4:c.2236_2254delGAATTAAGAGAAGCAACAT	p.E746_S752del	deletion	1
EGFR	NM_005228.4:c.847G>A	p.G283S	missense	1
EGFR	NM_005228.4:c.2156G>C	p.G719A	missense	1
EGFR	NM_005228.4:c.2155G>A	p.G719S	missense	1

EGFR	NM_005228.4:c.2311_2319dupAACCCCCAC	p.H773_V774insNPH	insertion	1
EGFR	NM_005228.4:c.2609A>G	p.H870R	missense	1
EGFR	NM_005228.4:c.310C>A	p.L104M	missense	1
EGFR	NM_005228.4:c.2573T>G	p.L858R	missense	8
EGFR	NM_005228.4:c.1787C>T	p.P596L	missense	1
EGFR	NM_005228.4:c.2255C>T	p.S752F	missense	1
EGFR	NM_005228.4:c.2303G>T	p.S768I	missense	1
EGFR	NM_005228.4:c.2369C>T	p.T790M	missense	3
EGFR	NM_005228.4:c.2308_2309insACC	p.V769_D770ins	insertion	1
ERBB2	NM_004448.3:c.2542G>T	p.A848S	missense	1
ERBB2	NM_004448.3:c.2332_2340dupGGCTCCCCA	p.P780_Y781insGSP	insertion	1
ERBB2	NM_004448.3:c.2557G>A	p.V853I	missense	1
ERBB4	NM_005235.2:c.841G>T	p.A281S	missense	1
ERBB4	NM_005235.2:c.2821C>T	p.Q941*	nonsense	1
ERBB4	NM_005235.2:c.1756G>A	p.G586S	missense	1
ERBB4	NM_005235.2:c.1818G>T	p.K606N	missense	1
FGFR3	NM_000142.4:c.1150T>C	p.F384L	missense	1
FLT3	NM_004119.2:c.2050T>C	p.S684P	missense	1
FLT3	NM_004119.2:c.1808G>A	p.W603*	nonsense	1
GNAS	NM_000516.5:c.2530C>T	p.R844C	missense	1
HRAS	NM_001130442:c.181C>A	p.Q61K	missense	1
KRAS	NM_004985.4:c.436G>A	p.A146T	missense	1
KRAS	NM_004985.4:c.183A>T	p.Q61H	missense	6
KRAS	NM_004985.4:c.344G>A	p.G115E	missense	1
KRAS	NM_004985.4:c.35G>C	p.G12A	missense	5
KRAS	NM_004985.4:c.35G>A	p.G12D	missense	7
KRAS	NM_004985.4:c.34G>T	p.G12C	missense	28
KRAS	NM_004985.4:c.34_35delinsTT	p.G12F	missense	3
KRAS	NM_004985.4:c.34G>A	p.G12S	missense	1
KRAS	NM_004985.4:c.35G>T	p.G12V	missense	19
KRAS	NM_004985.4:c.38G>A	p.G13D	missense	4
KRAS	NM_004985.4:c.37G>T	p.G13C	missense	5
MET	NM_001127500.2:c.2962C>T	p.R988C	missense	2
MET	NM_001127500.2:c.1124A>G	p.N375S	missense	1
MET	NM_001127500.2:c.504G>T	p.E168D	missense	1
MET	NM_001127500.2:c.486C>A	p.F162L	missense	1
MET	NM_001127500.2:c.3029C>T	p.T1010I	missense	3
NOTCH1	NM_017617.4:c.5035G>T	p.E1679*	nonsense	1
NRAS	NM_002524.4:c.182A>T	p.Q61L	missense	3
NRAS	NM_002524.4:c.181C>A	p.Q61K	missense	1
NRAS	NM_002524.4:c.434C>T	p.S145L	missense	1
PIK3CA	NM_006218.3:c.1624G>A	p.E542K	missense	4
PIK3CA	NM_006218.3:c.238G>A	p.E80K	missense	1

PIK3CA	NM_006218.3:c.3140A>G	p.H1047R	missense	1
PTPN11	NM_001330437.1:c.1520G>T	p.G507V	missense	1
PTPN11	NM_002834.4:c.1530G>T	p.Q510H	missense	1
PTPN11	NM_002834.4:c.1508G>A	p.G503E	missense	1
PTPN11	NM_002834.4:c.1508G>T	p.G503V	missense	1
RB1	NM_000321.2:c.1667G>A	p.R556Q	missense	1
RB1	NM_000321.2:c.1966C>T	p.R656W	missense	1
RB1	NM_000321.2:c.2242G>T	p.E748*	nonsense	2
RB1	NM_000321.2:c.1690C>A	p.L564I	missense	1
RB1	NM_000321.2:c.442_443delAT	p.M148Vfs*8	deletion	1
SMAD4	NM_005359.5:c.1397C>T	p.A466V	missense	1
SMAD4	NM_005359.5:c.1087T>G	p.C363G	missense	1
SMAD4	NM_005359.5:c.1094G>A	p.G365D	missense	1
SMAD4	NM_005359.5:c.1028C>G	p.S343*	nonsense	1
STK11	NM_000455.4:c.581A>T	p.D194V	missense	1
STK11	NM_000455.4:c.157delG	p.D53Tfs*11	deletion	1
STK11	NM_000455.4:c.833G>A	p.C278Y	missense	1
STK11	NM_00455.4:c.487G>T	p.G163C	missense	1
STK11	NM_000455.4:c.493G>T	p.E256*	nonsense	2
STK11	NM_000455.4:c.97G>T	p.E33*	nonsense	1
STK11	NM_000455.4:c.166G>T	p.G56W	missense	1
STK11	NM_000455.4:c.503A>G	p.H168R	missense	2
STK11	NM_000455.4:c.838_844delCCCCCGC	p.P280Sfs*5	deletion	1
STK11	NM_000455.4:c.842C>T	p.P281L	missense	1
STK11	NM_000455.4:c.971C>T	p.P324L	missense	1
STK11	NM_000455.4:c.180C>G	p.Y60*	nonsense	2
STK11	NM_000455.4:c.465-1G>T	splice_acceptor_variant	other	1
STK11	NM_000455.4:c.597+1G>T	splice_donor_variant	other	2
TP53	NM_000546.5:c.476C>T	p.A159V	missense	1
TP53	NM_000546.5:c.1063G>A	p.A355T	missense	1
TP53	NM_000546.5:c.329G>T	p.R110L	missense	1
TP53	NM_000546.5:c.473G>T	p.R158L	missense	2
TP53	NM_000546.5:c.471_473delinsTCC	p.R158P	missense	1
TP53	NM_000546.5:c.524G>A	p.R175H	missense	1
TP53	NM_000546.5:c.586C>T	p.R196*	nonsense	2
TP53	NM_000546.5:c.743G>T	p.R248L	missense	2
TP53	NM_000546.5:c.742C>T	p.R248W	missense	2
TP53	NM_000546.5:c.746G>T	p.R249M	missense	1
TP53	NM_000546.5:c.747G>C	p.R249S	missense	1
TP53	NM_000546.5:c.745A>T	p.R249W	missense	1
TP53	NM_000546.5:c.817C>T	p.R273C	missense	1
TP53	NM_000546.5:c.818G>A	p.R273H	missense	2
TP53	NM_000546.5:c.818G>T	p.R273L	missense	4

TP53	NM_000546.5:c.838A>G	p.R280G	missense	1
TP53	NM_000546.5:c.839G>A	p.R280K	missense	1
TP53	NM_000546.5:c.844C>G	p.R282G	missense	2
TP53	NM_000546.5:c.844C>T	p.R282W	missense	1
TP53	NM_000546.5:c.846delG	p.R283Afs*62	deletion	1
TP53	NM_000546.5:c.916C>T	p.R306*	nonsense	2
TP53	NM_000546.5:c.1010G>T	p.R337L	missense	1
TP53	NM_000546.5:c.1024C>T	p.R342*	nonsense	1
TP53	NM_000546.5:c.841G>A	p.D281N	missense	1
TP53	NM_000546.5:c.843C>A	p.D281E	missense	1
TP53	NM_000546.5:c.1054_1063delGATGCCAGG	p.D352Lfs*15	deletion	1
TP53	NM_000546.5:c.404G>A	p.C135Y	missense	1
TP53	NM_000546.5:c.527G>C	p.C176S	missense	1
TP53	NM_000546.5:c.824G>T	p.C275F	missense	5
TP53	NM_000546.5:c.830G>A	p.C277Y	missense	1
TP53	NM_000546.5:c.310C>T	p.Q104*	nonsense	1
TP53	NM_000546.5:c.512A>G	p.E171G	missense	1
TP53	NM_000546.5:c.610G>T	p.E204*	nonsense	1
TP53	NM_000546.5:c.772G>T	p.E258*	nonsense	1
TP53	NM_000546.5:c.854A>T	p.E285V	missense	1
TP53	NM_000546.5:c.856G>T	p.E286*	nonsense	1
TP53	NM_000546.5:c.1006del	p.E336Sfs*9	deletion	1
TP53	NM_000546.5:c.1015G>T	p.E339*	nonsense	1
TP53	NM_000546.5:c.456del	p.G154Afs*16	deletion	1
TP53	NM_000546.5:c.461G>T	p.G154V	missense	3
TP53	NM_000546.5:c.733G>T	p.G245C	missense	1
TP53	NM_000546.5:c.734G>T	p.G245V	missense	1
TP53	NM_000546.5:c.796G>T	p.G266*	nonsense	1
TP53	NM_000546.5:c.797G>T	p.G266V	missense	1
TP53	NM_000546.5:c.1000G>T	p.G334W	missense	1
TP53	NM_000546.5:c.503A>C	p.H168P	missense	1
TP53	NM_000546.5:c.534A>G	p.H179R	missense	1
TP53	NM_000546.5:c.535C>T	p.H179Y	missense	3
TP53	NM_000546.5:c.577C>T	p.H193Y	missense	1
TP53	NM_000546.5:c.584T>C	p.I195T	missense	1
TP53	NM_000546.5:c.752T>A	p.I251N	missense	1
TP53	NM_000546.5:c.750delC	p.I251Sfs*94	deletion	1
TP53	NM_000546.5:c.332T>C	p.L111P	missense	1
TP53	NM_000546.5:c.581T>G	p.L194R	missense	1
TP53	NM_000546.5:c.874A>T	p.K292*	nonsense	1
TP53	NM_000546.5:c.711G>A	p.M237I	missense	2
TP53	NM_000546.5:c.729_731delinsTTT	p.M243_G244delinsIF	delins	1
TP53	NM_000546.5:c.452C>G	p.P151R	missense	1

TP53	NM_000546.5:c.451C>T	p.P151S	missense	2
TP53	NM_000546.5:c.454C>T	p.P152S	missense	1
TP53	NM_000546.5:c.530C>T	p.P177L	missense	1
TP53	NM_000546.5:c.572_574delCTC	p.P191del	deletion	1
TP53	NM_000546.5:c.655C>T	p.P219S	missense	1
TP53	NM_000546.5:c.749C>T	p.P250L	missense	1
TP53	NM_000546.5:c.832C>G	p.P278A	missense	1
TP53	NM_000546.5:c.59C>T	p.S20L	missense	1
TP53	NM_000546.5:c.644G>T	p.S215I	missense	1
TP53	NM_000546.5:c.464C>T	p.T155I	missense	1
TP53	NM_000546.5:c.692C>T	p.T231I	missense	1
TP53	NM_000546.5:c.273G>A	p.W91*	nonsense	1
TP53	NM_000546.5:c.659A>G	p.Y220C	missense	1
TP53	NM_000546.5:c.700T>C	p.Y234H	missense	1
TP53	NM_000546.5:c.909T>C	p.Y236C	missense	1
TP53	NM_000546.5:c.469G>T	p.V157F	missense	3
TP53	NM_000546.5:c.517G>A	p.V173M	missense	1
TP53	NM_000546.5:c.815T>G	p.V272G	missense	1
TP53	NM_000546.5:c.814G>T	p.V272L	missense	2
TP53	NM_000546.5:c.578A>T	p.H193L	missense	1
TP53	NM_000546.5:c.376-1G>A	splice_acceptor	other	1
TP53	NM_000546.5:c.376-2A>T	splice_acceptor	other	2
TP53	NM_000546.5:c.376-2A>T	splice_acceptor	other	1
TP53	NM_000546.5:c.673-2A>G	splice_acceptor	other	1
TP53	NM_000546.5:c.560-1G>A	splice_acceptor	other	1

**Supplemental Table 1:** Mutation count of mutations detected in study cohort