**Supplementary Table 4: Complete list of mutations and copy number alterations detected by MSK-IMPACT in 45 LCNECs**

**Complete list of mutations**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sample ID** | **Gene** | **Protein Change** | **Type** | **Allele Freq** | **Copy #** |
| LCNEC-25 | ALK  | G689V  | Missense | 0.13 | Diploid |
| LCNEC-25 | ATM  | R221I  | Missense | 0.11 | Diploid |
| LCNEC-25 | CDK12  | E1171Q  | Missense | 0.25 | Diploid |
| LCNEC-25 | FAT1  | Q4085\*  | Nonsense | 0.09 | Diploid |
| LCNEC-25 | GRIN2A  | L1405fs  | Frameshift | 0.19 | Diploid |
| LCNEC-25 | HRAS  | G151E  | Missense | 0.26 | Diploid |
| LCNEC-25 | INPP4B  | L271I  | Missense | 0.13 | Diploid |
| LCNEC-25 | KDM5C  | R1069I  | Missense | 0.21 | NA |
| LCNEC-25 | KEAP1  | Q282\*  | Nonsense | 0.26 | Diploid |
| LCNEC-25 | KMT2C  | V375L  | Missense | 0.05 | Diploid |
| LCNEC-25 | MED12  | 2059\_2059Q>QQ  | Insertion | 0.22 | NA |
| LCNEC-25 | MITF  | V168I  | Missense | 0.18 | Diploid |
| LCNEC-25 | PIK3CB  | A524S  | Missense | 0.21 | Diploid |
| LCNEC-25 | POLE  | S193I  | Missense | 0.12 | Diploid |
| LCNEC-25 | REL  | Y6C  | Missense | 0.23 | Diploid |
| LCNEC-25 | TP53  | Y205C  | Missense | 0.29 | Diploid |
| LCNEC-25 | TSHR  | C408R  | Missense | 0.16 | Diploid |
| LCNEC-26 | BCOR  | A172fs  | Frameshift | 0.25 | NA |
| LCNEC-26 | ERCC2  | R343L  | Missense | 0.22 | Diploid |
| LCNEC-26 | NFE2L2  | G81C  | Missense | 0.34 | Diploid |
| LCNEC-26 | NOTCH4  | D1388N  | Missense | 0.32 | Diploid |
| LCNEC-26 | NTRK3  | G520R  | Missense | 0.2 | Diploid |
| LCNEC-27 | AKT3  | W463R  | Missense | 0.21 | Diploid |
| LCNEC-27 | CDKN2A  | G45S  | Missense | 0.49 | Diploid |
| LCNEC-27 | ERCC5  | K1171N  | Missense | 0.22 | Diploid |
| LCNEC-27 | IKZF1  | S105L  | Missense | 0.32 | Diploid |
| LCNEC-27 | PIK3C2G  | F1016L  | Missense | 0.24 | Diploid |
| LCNEC-27 | RB1  | N316fs  | Frameshift | 0.11 | Diploid |
| LCNEC-27 | TP53  | R249W  | Missense | 0.28 | Diploid |
| LCNEC-27 | TSC1  | E931\*  | Nonsense | 0.33 | Diploid |
| LCNEC-28 | AMER1  | D523Y  | Missense | 0.53 | NA |
| LCNEC-28 | FAT1  | D2220Y  | Missense | 0.22 | Diploid |
| LCNEC-28 | PAK7  | Y252N  | Missense | 0.32 | Diploid |
| LCNEC-28 | PALB2  | Q139L  | Missense | 0.36 | Diploid |
| LCNEC-28 | PDGFRA  | H920Y  | Missense | 0.39 | Diploid |
| LCNEC-28 | PTPN11  | G503V  | Missense | 0.43 | Diploid |
| LCNEC-28 | STK11  | C278fs  | Frameshift | 0.58 | Diploid |
| LCNEC-28 | TP53  | C238S  | Missense | 0.52 | Diploid |
| LCNEC-28 | TP53  | V157F  | Missense | 0.22 | Diploid |
| LCNEC-28 | WT1  | L79V  | Missense | 0.11 | Diploid |
| LCNEC-29 | ARID1A  | Q1342fs  | Frameshift | 0.24 | Diploid |
| LCNEC-29 | ATRX  | D163Y  | Missense | 0.31 | NA |
| LCNEC-29 | DNMT3A  | D811Y  | Missense | 0.14 | Diploid |
| LCNEC-29 | INSR  | R358L  | Missense | 0.18 | Diploid |
| LCNEC-29 | KMT2C  | A779G  | Missense | 0.06 | Diploid |
| LCNEC-29 | MDM2  | R189H  | Missense | 0.24 | Diploid |
| LCNEC-29 | NOTCH1  | P1442fs  | Frameshift | 0.29 | Diploid |
| LCNEC-29 | NOTCH3  | V1581fs  | Frameshift | 0.4 | Diploid |
| LCNEC-29 | NTRK3  | P415fs  | Frameshift | 0.14 | Diploid |
| LCNEC-29 | POLE  | Q1252\*  | Nonsense | 0.32 | Diploid |
| LCNEC-29 | RICTOR  | G326R  | Missense | 0.06 | Diploid |
| LCNEC-29 | ROS1  | S32I  | Missense | 0.06 | Diploid |
| LCNEC-29 | TP53  | E204\*  | Nonsense | 0.35 | Diploid |
| LCNEC-29 | TSC2  | M1I  | Missense | 0.36 | Diploid |
| [LCNEC-30](https://cbioportal.mskcc.org/case.do?sample_id=NR-lnet-030-P&cancer_study_id=lcnec_mskcc_rekhtman_2014) | TP53  | S166\*  | Nonsense | 0.87 | Diploid |
| [LCNEC-30](https://cbioportal.mskcc.org/case.do?sample_id=NR-lnet-030-P&cancer_study_id=lcnec_mskcc_rekhtman_2014) | NOTCH1  | Q1019\*  | Nonsense | 0.76 | Diploid |
| [LCNEC-30](https://cbioportal.mskcc.org/case.do?sample_id=NR-lnet-030-P&cancer_study_id=lcnec_mskcc_rekhtman_2014) | RB1  | T5fs  | Frameshift | 0.4 | Diploid |
| LCNEC-31 | BAP1  | R146\_splice  | Splice Site | 0.1 | Diploid |
| LCNEC-31 | BAP1  | R417\_splice  | Splice Site | 0.05 | Diploid |
| LCNEC-31 | ERBB4  | A877S  | Missense | 0.16 | Diploid |
| LCNEC-31 | ERCC2  | S630R  | Missense | 0.26 | Diploid |
| LCNEC-31 | FLT4  | S48F  | Missense | 0.11 | Diploid |
| LCNEC-31 | INSR  | G32A  | Missense | 0.42 | Diploid |
| LCNEC-31 | KMT2A  | H1955R  | Missense | 0.2 | Diploid |
| LCNEC-31 | KMT2A  | K1962E  | Missense | 0.17 | Diploid |
| LCNEC-31 | MAP2K1  | G128C  | Missense | 0.28 | Diploid |
| LCNEC-31 | NOTCH4  | P183fs  | Frameshift | 0.16 | Diploid |
| LCNEC-31 | NRAS  | Q150H  | Missense | 0.3 | Diploid |
| LCNEC-31 | PARK2  | A82S  | Missense | 0.16 | Diploid |
| LCNEC-31 | PARP1  | D770G  | Missense | 0.52 | Diploid |
| LCNEC-31 | PTPRT  | L552H  | Missense | 0.09 | Diploid |
| LCNEC-31 | STK11  | Q302\*  | Nonsense | 0.36 | Diploid |
| LCNEC-31 | TERT  | A423D  | Missense | 0.38 | Diploid |
| LCNEC-31 | TP53  | M237L  | Missense | 0.2 | Diploid |
| LCNEC-31 | TP53  | R280T  | Missense | 0.34 | Diploid |
| LCNEC-31 | XPO1  | V826G  | Missense | 0.12 | Diploid |
| LCNEC-32 | BRCA1  | C27\_splice  | Splice Site | 0.27 | Diploid |
| LCNEC-32 | EPHA5  | G189V  | Missense | 0.27 | Diploid |
| LCNEC-32 | GATA3  | S404R  | Missense | 0.14 | Diploid |
| LCNEC-32 | GNAS  | G432V  | Missense | 0.41 | Diploid |
| LCNEC-32 | KMT2C  | GPK3965del  | Deletion | 0.15 | Diploid |
| LCNEC-32 | KRAS  | G12C  | Missense | 0.36 | Diploid |
| LCNEC-32 | MDM4  | V52\_splice  | Splice Site | 0.13 | Diploid |
| LCNEC-32 | PAX5  | S168F  | Missense | 0.27 | Diploid |
| LCNEC-32 | PIK3C2G  | K400Q  | Missense | 0.04 | Diploid |
| LCNEC-32 | PIK3CD  | M793I  | Missense | 0.26 | Diploid |
| LCNEC-32 | PIK3R2  | V132L  | Missense | 0.11 | Diploid |
| LCNEC-32 | PTCH1  | S523I  | Missense | 0.29 | Diploid |
| LCNEC-32 | PTPRT  | A802S  | Missense | 0.37 | Diploid |
| LCNEC-32 | SMO  | R161L  | Missense | 0.21 | Diploid |
| LCNEC-32 | STK11  | V320fs  | Frameshift | 0.31 | Diploid |
| LCNEC-32 | TP53  | E68\*  | Nonsense | 0.23 | Diploid |
| LCNEC-32 | TP53  | R249M  | Missense | 0.2 | Diploid |
| LCNEC-32 | TP63  | S586C  | Missense | 0.27 | Diploid |
| LCNEC-33 | ARID2  | S1327\*  | Nonsense | 0.44 | Diploid |
| LCNEC-33 | ARID2  | E75\*  | Nonsense | 0.36 | Diploid |
| LCNEC-33 | BAP1  | C91W  | Missense | 0.29 | Diploid |
| LCNEC-33 | HRAS  | N26S  | Missense | 0.18 | Diploid |
| LCNEC-33 | KDM5C  | I444F  | Missense | 0.68 | NA |
| LCNEC-33 | KMT2D  | V1674L  | Missense | 0.45 | NA |
| LCNEC-33 | NTRK2  | Q596\*  | Nonsense | 0.59 | Diploid |
| LCNEC-33 | STK11  | A241P  | Missense | 0.82 | Diploid |
| LCNEC-33 | TSC2  | G1204\_splice  | Splice Site | 0.09 | Diploid |
| LCNEC-34 | APC  | A928fs  | Frameshift | 0.3 | Diploid |
| LCNEC-34 | BRCA2  | K1649I  | Missense | 0.38 | Diploid |
| LCNEC-34 | EPHA5  | S347Y  | Missense | 0.41 | Diploid |
| LCNEC-34 | GATA3  | S175\*  | Nonsense | 0.47 | Diploid |
| LCNEC-34 | IKZF1  | R360P  | Missense | 0.41 | Diploid |
| LCNEC-34 | KEAP1  | V369L  | Missense | 0.49 | Diploid |
| LCNEC-34 | KMT2C  | T4667I  | Missense | 0.2 | Diploid |
| LCNEC-34 | NOTCH1  | Y1716C  | Missense | 0.36 | Diploid |
| LCNEC-34 | NOTCH4  | L1101M  | Missense | 0.29 | Diploid |
| LCNEC-34 | NTRK3  | N259K  | Missense | 0.18 | Diploid |
| LCNEC-34 | STK11  | R297S  | Missense | 0.5 | Diploid |
| LCNEC-34 | TP53  | K139\*  | Nonsense | 0.47 | Diploid |
| LCNEC-35 | AR  | L295P  | Missense | 0.97 | NA |
| LCNEC-35 | BRCA2  | S2307L  | Missense | 0.18 | Diploid |
| LCNEC-35 | CD79B  | G72R  | Missense | 0.13 | Diploid |
| LCNEC-35 | CHEK2  | S49F  | Missense | 0.12 | Diploid |
| LCNEC-35 | DICER1  | T870I  | Missense | 0.13 | Diploid |
| LCNEC-35 | EPHA5  | G787\*  | Nonsense | 0.1 | Diploid |
| LCNEC-35 | FLT1  | G1096R  | Missense | 0.22 | Diploid |
| LCNEC-35 | INSR  | G1194R  | Missense | 0.17 | Diploid |
| LCNEC-35 | KEAP1  | K108N  | Missense | 0.24 | Diploid |
| LCNEC-35 | PARK2  | Q311\_splice  | Splice Site | 0.11 | Diploid |
| LCNEC-35 | PIK3C2G  | V201L  | Missense | 0.24 | Diploid |
| LCNEC-35 | TET2  | P874L  | Missense | 0.35 | Diploid |
| LCNEC-35 | TP53  | V272L  | Missense | 0.15 | Diploid |
| LCNEC-35 | TSC1  | E766\*  | Nonsense | 0.13 | Diploid |
| LCNEC-35 | TSHR  | D5G  | Missense | 0.14 | Diploid |
| [LCNEC-36](https://cbioportal.mskcc.org/case.do?sample_id=NR-lnet-036-P&cancer_study_id=lcnec_mskcc_rekhtman_2014) | GNAS  | Y216C  | Missense | 0.41 | Diploid |
| [LCNEC-36](https://cbioportal.mskcc.org/case.do?sample_id=NR-lnet-036-P&cancer_study_id=lcnec_mskcc_rekhtman_2014) | MEN1  | I575fs  | Frameshift | 0.79 | Diploid |
| LCNEC-37 | BRCA2  | Y2789H  | Missense | 0.78 | Diploid |
| LCNEC-37 | EGFR  | L90F  | Missense | 0.38 | Diploid |
| LCNEC-37 | EPHB1  | N67K  | Missense | 0.33 | Diploid |
| LCNEC-37 | ERCC5  | E491K  | Missense | 0.79 | Diploid |
| LCNEC-37 | ETV1  | G321L  | Missense | 0.46 | Diploid |
| LCNEC-37 | NFE2L2  | F37S  | Missense | 0.64 | Diploid |
| LCNEC-37 | RB1  | S463\_splice  | Splice Site | 0.68 | Diploid |
| LCNEC-37 | TP53  | Y126\_splice  | Splice Site | 0.85 | Diploid |
| LCNEC-38 | AMER1  | G98F  | Missense | 0.34 | NA |
| LCNEC-38 | ARID1A  | Q1519H  | Missense | 0.32 | Diploid |
| LCNEC-38 | ATM  | A1812P  | Missense | 0.52 | Diploid |
| LCNEC-38 | ATM  | T2902fs  | Frameshift | 0.18 | Diploid |
| LCNEC-38 | ESR1  | R151\_splice  | Splice Site | 0.59 | Diploid |
| LCNEC-38 | KEAP1  | G511\_splice  | Splice Site | 0.63 | Diploid |
| LCNEC-38 | KMT2A  | D2992N  | Missense | 0.58 | Diploid |
| LCNEC-38 | KRAS  | G12C  | Missense | 0.26 | Diploid |
| LCNEC-38 | MEF2B  | G158V  | Missense | 0.61 | Diploid |
| LCNEC-38 | RICTOR  | D1050Y  | Missense | 0.19 | Diploid |
| LCNEC-38 | RUNX1  | L44M  | Missense | 0.08 | Diploid |
| LCNEC-39 | ATM  | L1939V  | Missense | 0.21 | Diploid |
| LCNEC-39 | ATM  | A1950T  | Missense | 0.21 | Diploid |
| LCNEC-39 | ATM  | K1410\*  | Nonsense | 0.48 | Diploid |
| LCNEC-39 | ATRX  | A507D  | Missense | 0.22 | NA |
| LCNEC-39 | ATRX  | T1928K  | Missense | 0.24 | NA |
| LCNEC-39 | DNMT3B  | G434V  | Missense | 0.43 | Diploid |
| LCNEC-39 | KRAS  | Q61L  | Missense | 0.4 | Diploid |
| LCNEC-39 | PAK7  | N314I  | Missense | 0.35 | Diploid |
| LCNEC-39 | PIK3CG  | P534H  | Missense | 0.52 | Diploid |
| LCNEC-39 | POLE  | D2128Y  | Missense | 0.34 | Diploid |
| LCNEC-39 | RB1  | V434fs  | Frameshift | 0.64 | Diploid |
| LCNEC-39 | SF3B1  | G140R  | Missense | 0.26 | Diploid |
| LCNEC-39 | STAG2  | L203I  | Missense | 0.22 | NA |
| LCNEC-40 | ASXL1  | M1161I  | Missense | 0.44 | Diploid |
| LCNEC-40 | CARD11  | E213\*  | Nonsense | 0.33 | Diploid |
| LCNEC-40 | EPHA3  | K444\*  | Nonsense | 0.27 | Diploid |
| LCNEC-40 | HNF1A  | T152S  | Missense | 0.32 | Diploid |
| LCNEC-40 | NTRK3  | H658Q  | Missense | 0.37 | Diploid |
| LCNEC-40 | SETD2  | 1889\_1890MD>IY  | Missense | 0.2 | Diploid |
| LCNEC-40 | STK11  | H107L  | Missense | 0.47 | Diploid |
| LCNEC-40 | TP53  | M246V  | Missense | 0.7 | Diploid |
| LCNEC-40 | WT1  | S496\*  | Nonsense | 0.17 | Diploid |
| LCNEC-669 | ARID1A  | Q479\*  | Nonsense | 0.34 | Diploid |
| LCNEC-669 | BRAF  | Q257H  | Missense | 0.29 | Diploid |
| LCNEC-669 | CDC73  | L253I  | Missense | 0.29 | Diploid |
| LCNEC-669 | FLT3  | E236\*  | Nonsense | 0.4 | Diploid |
| LCNEC-669 | FLT3  | A450E  | Missense | 0.23 | Diploid |
| LCNEC-669 | KEAP1  | W591L  | Missense | 0.75 | Diploid |
| LCNEC-669 | KMT2D  | R3099L  | Missense | 0.45 | NA |
| LCNEC-669 | MSH2  | R99I  | Missense | 0.24 | Diploid |
| LCNEC-669 | NOTCH4  | G1278S  | Missense | 0.54 | Diploid |
| LCNEC-669 | NTRK3  | I83\_splice  | Splice Site | 0.7 | Diploid |
| LCNEC-669 | PARP1  | D307N  | Missense | 0.39 | Diploid |
| LCNEC-669 | PIK3C2G  | E671\*  | Nonsense | 0.53 | Diploid |
| LCNEC-669 | PTPRD  | A1113fs  | Frameshift | 0.43 | Diploid |
| LCNEC-669 | RB1  | G581\*  | Nonsense | 0.67 | Diploid |
| LCNEC-669 | RNF43  | 661\_662SE>F\*  | Nonsense | 0.2 | Diploid |
| LCNEC-669 | SDHB  | D181\_splice  | Splice Site | 0.42 | Diploid |
| LCNEC-669 | SETD2  | H2514L  | Missense | 0.57 | Diploid |
| LCNEC-669 | TMPRSS2  | G439\_splice  | Splice Site | 0.46 | Diploid |
| LCNEC-669 | TP53  | G279\*  | Nonsense | 0.66 | Diploid |
| LCNEC-637 | ARID1A  | V1561fs  | Frameshift | 0.5 | Diploid |
| LCNEC-637 | EPHA5  | C603R  | Missense | 0.54 | Diploid |
| LCNEC-637 | ERBB4  | W823C  | Missense | 0.27 | Diploid |
| LCNEC-637 | ERBB4  | P224L  | Missense | 0.28 | Diploid |
| LCNEC-637 | ERCC5  | S947F  | Missense | 0.8 | Diploid |
| LCNEC-637 | KEAP1  | G332S  | Missense | 0.8 | Diploid |
| LCNEC-637 | NOTCH1  | Q1076H  | Missense | 0.28 | Diploid |
| LCNEC-637 | PAX5  | T386N  | Missense | 0.79 | Diploid |
| LCNEC-637 | PTPRD  | Y803\*  | Nonsense | 0.75 | Diploid |
| LCNEC-637 | PTPRT  | A413S  | Missense | 0.41 | Diploid |
| LCNEC-637 | RB1  | L523fs  | Frameshift | 0.77 | Diploid |
| LCNEC-637 | SF3B1  | G83\*  | Nonsense | 0.28 | Diploid |
| LCNEC-637 | SMO  | A250D  | Missense | 0.46 | Diploid |
| LCNEC-637 | TET1  | P490T  | Missense | 0.38 | Diploid |
| LCNEC-637 | TP53  | R249S  | Missense | 0.84 | Diploid |
| LCNEC-897 | ARID1B  | M1361I  | Missense | 0.39 | Diploid |
| LCNEC-897 | ATRX  | H2260N  | Missense | 0.27 | Diploid |
| LCNEC-897 | CDC73  | E144D  | Missense | 0.4 | Diploid |
| LCNEC-897 | DDR2  | S50N  | Missense | 0.35 | Diploid |
| LCNEC-897 | EPHA5  | P653Q  | Missense | 0.34 | Diploid |
| LCNEC-897 | ERBB4  | S479I  | Missense | 0.37 | Diploid |
| LCNEC-897 | IDH2  | A101P  | Missense | 0.41 | Diploid |
| LCNEC-897 | KEAP1  | G603V  | Missense | 0.59 | Diploid |
| LCNEC-897 | KIT  | G387R  | Missense | 0.44 | Diploid |
| LCNEC-897 | KRAS  | G12C  | Missense | 0.38 | Diploid |
| LCNEC-897 | PIK3CD  | R636W  | Missense | 0.37 | Diploid |
| LCNEC-897 | RAD50  | R196L  | Missense | 0.72 | Diploid |
| LCNEC-897 | STK11  | Q214\*  | Nonsense | 0.63 | Diploid |
| LCNEC-897 | TP53  | E224\_splice  | Splice Site | 0.61 | Diploid |
| LCNEC-462 | ATM  | R1249\_splice  | Splice Site | 0.39 | Diploid |
| LCNEC-462 | CDK6  | G165V  | Missense | 0.33 | Diploid |
| LCNEC-462 | FAT1  | D4244A  | Missense | 0.17 | Diploid |
| LCNEC-462 | POLE  | E1377\*  | Nonsense | 0.23 | Diploid |
| LCNEC-462 | PTEN  | N292fs  | Frameshift | 0.64 | Diploid |
| LCNEC-462 | SMARCB1  | D169H  | Missense | 0.59 | Diploid |
| LCNEC-462 | TP53  | S215I  | Missense | 0.68 | Diploid |
| LCNEC-299 | FLT1  | M996T  | Missense | 0.08 | Diploid |
| LCNEC-299 | KRAS  | G12C  | Missense | 0.17 | Diploid |
| LCNEC-299 | NF1  | I1824V  | Missense | 0.13 | Diploid |
| LCNEC-299 | SDHB  | D64A  | Missense | 0.16 | Diploid |
| LCNEC-299 | STK11  | H174D  | Missense | 0.18 | Diploid |
| LCNEC-913 | MEN1  | S313\*  | Nonsense | 0.89 | Diploid |
| LCNEC-41 | AKT3  | P50T  | Missense | 0.41 | Diploid |
| LCNEC-41 | AKT3  | S210F  | Missense | 0.21 | Diploid |
| LCNEC-41 | CDKN2A  | Y129\*  | Nonsense | 0.43 | NA |
| LCNEC-41 | CIC  | E1237K  | Missense | 0.37 | Diploid |
| LCNEC-41 | EPHA3  | G783V  | Missense | 0.22 | Diploid |
| LCNEC-41 | EPHB1  | F699Y  | Missense | 0.4 | Diploid |
| LCNEC-41 | EPHB1  | E475G  | Missense | 0.15 | Diploid |
| LCNEC-41 | GRIN2A  | L1277F  | Missense | 0.35 | Diploid |
| LCNEC-41 | IGF1R  | X1100\_splice  | Splice Site | 0.33 | Diploid |
| LCNEC-41 | KEAP1  | G509V  | Missense | 0.46 | Diploid |
| LCNEC-41 | NF1  | D2545H  | Missense | 0.52 | Diploid |
| LCNEC-41 | NF1  | X1612\_splice  | Splice Site | 0.42 | Diploid |
| LCNEC-41 | PDGFRA  | G51E  | Missense | 0.22 | Diploid |
| LCNEC-41 | PTPRT  | S419R  | Missense | 0.07 | Diploid |
| LCNEC-41 | SMARCA4  | S1079A  | Missense | 0.42 | Diploid |
| LCNEC-41 | SMARCA4  | S1079L  | Missense | 0.41 | Diploid |
| LCNEC-41 | TP53  | R248W  | Missense | 0.47 | Diploid |
| LCNEC-42 | CCND2  | K148Q  | Missense | 0.14 | Diploid |
| LCNEC-42 | DIS3  | L473P  | Missense | 0.34 | Diploid |
| LCNEC-42 | FGFR2  | G583V  | Missense | 0.22 | Diploid |
| LCNEC-42 | FLT4  | Y853\*  | Nonsense | 0.1 | Diploid |
| LCNEC-42 | INPP4A  | G688A  | Missense | 0.35 | Diploid |
| LCNEC-42 | IRS1  | R360Q  | Missense | 0.21 | Diploid |
| LCNEC-42 | KDM6A  | Q435H  | Missense | 0.21 | Diploid |
| LCNEC-42 | KEAP1  | E611\*  | Nonsense | 0.17 | Diploid |
| LCNEC-42 | NOTCH3  | D711N  | Missense | 0.21 | Diploid |
| LCNEC-42 | PIK3CA  | I910M  | Missense | 0.13 | Diploid |
| LCNEC-42 | PIK3CG  | T81N  | Missense | 0.22 | Diploid |
| LCNEC-42 | PTPRD  | S384T  | Missense | 0.12 | Diploid |
| LCNEC-42 | PTPRT  | L1373I  | Missense | 0.17 | Diploid |
| LCNEC-42 | ROS1  | S1577Y  | Missense | 0.15 | Diploid |
| LCNEC-42 | ROS1  | X587\_splice  | Splice Site | 0.13 | Diploid |
| LCNEC-42 | STK11  | X97\_splice  | Splice Site | 0.46 | Diploid |
| LCNEC-42 | TET1  | G390V  | Missense | 0.19 | Diploid |
| LCNEC-42 | TP53  | R248L  | Missense | 0.16 | Diploid |
| LCNEC-42 | TP53  | E171\*  | Nonsense | 0.25 | Diploid |
| LCNEC-43 | CDK12  | K852Q  | Missense | 0.24 | Diploid |
| LCNEC-43 | EPHA3  | K735N  | Missense | 0.2 | Diploid |
| LCNEC-43 | GATA1  | Y98\*  | Nonsense | 0.78 | Diploid |
| LCNEC-43 | KIT  | A402S  | Missense | 0.53 | Diploid |
| LCNEC-43 | KRAS  | G13D  | Missense | 0.64 | Diploid |
| LCNEC-43 | PAK7  | Q692\*  | Nonsense | 0.41 | Diploid |
| LCNEC-43 | PTPRD  | Q475K  | Missense | 0.36 | Diploid |
| LCNEC-43 | SOX2  | Y227F  | Missense | 0.47 | Diploid |
| LCNEC-43 | STK11  | L245F  | Missense | 0.65 | Diploid |
| LCNEC-43 | TP53  | R158L  | Missense | 0.3 | Diploid |
| LCNEC-43 | TP53  | C277F  | Missense | 0.32 | Diploid |
| LCNEC-43 | TP53  | M243I  | Missense | 0.25 | Diploid |
| LCNEC-43 | TSC2  | G1551R  | Missense | 0.4 | Diploid |
| LCNEC-43 | WT1  | P232T  | Missense | 0.38 | Diploid |
| LCNEC-44 | AMER1  | Q1042R  | Missense | 0.42 | Diploid |
| LCNEC-44 | ARID1A  | Q492H  | Missense | 0.26 | Diploid |
| LCNEC-44 | BRCA1  | E515G  | Missense | 0.13 | Diploid |
| LCNEC-44 | CBL  | V478L  | Missense | 0.28 | Diploid |
| LCNEC-44 | CBL  | X478\_splice  | Splice Site | 0.27 | Diploid |
| LCNEC-44 | EPHA3  | E471D  | Missense | 0.25 | Diploid |
| LCNEC-44 | FAT1  | P1351A  | Missense | 0.06 | Diploid |
| LCNEC-44 | FAT1  | A3913P  | Missense | 0.39 | Diploid |
| LCNEC-44 | FAT1  | A3091D  | Missense | 0.28 | Diploid |
| LCNEC-44 | FH  | P26A  | Missense | 0.17 | Diploid |
| LCNEC-44 | FLT3  | A914D  | Missense | 0.08 | Diploid |
| LCNEC-44 | FLT3  | R933L  | Missense | 0.1 | Diploid |
| LCNEC-44 | IRF4  | E389Q  | Missense | 0.31 | Diploid |
| LCNEC-44 | KEAP1  | C171S  | Missense | 0.49 | Diploid |
| LCNEC-44 | KMT2A  | S3204F  | Missense | 0.07 | Diploid |
| LCNEC-44 | KMT2A  | Q3047H  | Missense | 0.15 | Diploid |
| LCNEC-44 | MED12  | A1775D  | Missense | 0.18 | Diploid |
| LCNEC-44 | MRE11A  | S119\*  | Nonsense | 0.17 | Diploid |
| LCNEC-44 | NF1  | H1576P  | Missense | 0.33 | Diploid |
| LCNEC-44 | NOTCH1  | G1258C  | Missense | 0.65 | Diploid |
| LCNEC-44 | NOTCH4  | C205\*  | Nonsense | 0.18 | Diploid |
| LCNEC-44 | NTRK3  | X410\_splice  | Splice Site | 0.36 | Diploid |
| LCNEC-44 | PDGFRB  | G920R  | Missense | 0.35 | Diploid |
| LCNEC-44 | RB1  | R320L  | Missense | 0.29 | Diploid |
| LCNEC-44 | RB1  | K319Nfs\*13  | Frameshift | 0.27 | Diploid |
| LCNEC-44 | STAG2  | Y775\*  | Nonsense | 0.27 | Diploid |
| LCNEC-44 | TGFBR2  | V188A  | Missense | 0.29 | Diploid |
| LCNEC-44 | TP53  | V73Rfs\*76  | Frameshift | 0.38 | Diploid |
| LCNEC-45 | ATM  | Q2066L  | Missense | 0.22 | Diploid |
| LCNEC-45 | BCOR  | K219E  | Missense | 0.15 | Diploid |
| LCNEC-45 | CCND2  | W149\*  | Nonsense | 0.06 | Diploid |
| LCNEC-45 | DIS3  | S4C  | Missense | 0.16 | Diploid |
| LCNEC-45 | DNMT3A  | A121S  | Missense | 0.29 | Diploid |
| LCNEC-45 | KMT2D  | T4028Rfs\*11  | Frameshift | 0.12 | NA |
| LCNEC-45 | KMT2D  | P941T  | Missense | 0.34 | NA |
| LCNEC-45 | MYCN  | R383P  | Missense | 0.3 | Diploid |
| LCNEC-45 | NF1  | X1444\_splice  | Splice Site | 0.45 | Diploid |
| LCNEC-45 | SMARCA4  | Q941H  | Missense | 0.6 | Diploid |
| LCNEC-45 | SMARCA4  | Q756Vfs\*67  | Frameshift | 0.53 | Diploid |
| LCNEC-45 | TP53  | Y163C  | Missense | 0.54 | Diploid |
| LCNEC-46 | BAP1  | X13\_splice  | Splice Site | 0.3 | Diploid |
| LCNEC-46 | PARK2  | E370Q  | Missense | 0.19 | Diploid |
| LCNEC-46 | PARP1  | D243Y  | Missense | 0.11 | Diploid |
| LCNEC-46 | PDGFRA  | T152A  | Missense | 0.21 | Diploid |
| LCNEC-46 | PDGFRA  | E951\*  | Nonsense | 0.18 | Diploid |
| LCNEC-46 | PTEN  | R173C  | Missense | 0.06 | Diploid |
| LCNEC-46 | PTPRD  | P695R  | Missense | 0.22 | Diploid |
| LCNEC-46 | PTPRD  | S1554C  | Missense | 0.26 | Diploid |
| LCNEC-46 | PTPRT  | Y961N  | Missense | 0.25 | Diploid |
| LCNEC-46 | RARA  | Y100C  | Missense | 0.22 | Diploid |
| LCNEC-46 | RB1  | Q444L  | Missense | 0.34 | Diploid |
| LCNEC-46 | ROS1  | M1805V  | Missense | 0.07 | Diploid |
| LCNEC-46 | SMARCA4  | G1585C  | Missense | 0.17 | Diploid |
| LCNEC-46 | STAG2  | X676\_splice  | Splice Site | 0.43 | Diploid |
| LCNEC-46 | TGFBR2  | W529C  | Missense | 0.29 | Diploid |
| LCNEC-46 | TP53  | X261\_splice  | Splice Site | 0.28 | Diploid |
| LCNEC-46 | TSC2  | D416N  | Missense | 0.29 | Diploid |
| LCNEC-47  | ATRX  | D2326Y  | Missense | 0.33 | Diploid |
| LCNEC-47  | FLT3  | X402\_splice  | Splice Site | 0.61 | Diploid |
| LCNEC-47  | IL7R  | L340I  | Missense | 0.32 | Diploid |
| LCNEC-47  | IL7R  | L340H  | Missense | 0.33 | Diploid |
| LCNEC-47  | JUN  | G237V  | Missense | 0.37 | Diploid |
| LCNEC-47  | MRE11A  | R707G  | Missense | 0.48 | Diploid |
| LCNEC-47  | NF1  | M1981I  | Missense | 0.65 | Diploid |
| LCNEC-47  | NOTCH3  | G878V  | Missense | 0.82 | Diploid |
| LCNEC-47  | PBRM1  | K1247I  | Missense | 0.37 | Diploid |
| LCNEC-47  | RB1  | X127\_splice  | Splice Site | 0.77 | Diploid |
| LCNEC-47  | SMARCA4  | K1237\*  | Nonsense | 0.8 | Diploid |
| LCNEC-47  | TP53  | Y205\*  | Nonsense | 0.82 | Diploid |
| LCNEC-48  | BCOR  | D1279Y  | Missense | 0.28 | Diploid |
| LCNEC-48  | ESR1  | Y459N  | Missense | 0.57 | Diploid |
| LCNEC-48  | FAT1  | Q3679\*  | Nonsense | 0.58 | Diploid |
| LCNEC-48  | FGFR1  | R285L  | Missense | 0.39 | Diploid |
| LCNEC-48  | INPP4A  | K123N  | Missense | 0.37 | Diploid |
| LCNEC-48  | IRS2  | G1308V  | Missense | 0.64 | Diploid |
| LCNEC-48  | JAK3  | P975L  | Missense | 0.61 | Diploid |
| LCNEC-48  | KMT2A  | E2898D  | Missense | 0.19 | Diploid |
| LCNEC-48  | MED12  | G2041A  | Missense | 0.35 | Diploid |
| LCNEC-48  | MED12  | K1673N  | Missense | 0.31 | Diploid |
| LCNEC-48  | MTOR  | I94M  | Missense | 0.35 | Diploid |
| LCNEC-48  | RB1  | W681\*  | Nonsense | 0.59 | Diploid |
| LCNEC-48  | STAG2  | W315C  | Missense | 0.31 | Diploid |
| LCNEC-48  | TP53  | R283P  | Missense | 0.71 | Diploid |
| LCNEC-49 | AR  | G473dup  | Insertion | 0.08 | Diploid |
| LCNEC-49 | ETV6  | I406S  | Missense | 0.33 | Diploid |
| LCNEC-49 | KRAS  | G12C  | Missense | 0.27 | Diploid |
| LCNEC-49 | STK11  | H168R  | Missense | 0.28 | Diploid |
| LCNEC-49 | TET1  | R3L  | Missense | 0.18 | Diploid |
| LCNEC-49 | TET2  | R1202I  | Missense | 0.17 | Diploid |
| LCNEC-50 | CREBBP  | G292V  | Missense | 0.15 | Diploid |
| LCNEC-50 | ETV1  | G274C  | Missense | 0.09 | Diploid |
| LCNEC-50 | FLT1  | S68N  | Missense | 0.1 | Diploid |
| LCNEC-50 | IL7R  | G103\*  | Nonsense | 0.07 | Diploid |
| LCNEC-50 | MAP3K1  | S923I  | Missense | 0.1 | Diploid |
| LCNEC-50 | MED12  | C1078G  | Missense | 0.13 | Diploid |
| LCNEC-50 | NBN  | Q286H  | Missense | 0.2 | Diploid |
| LCNEC-50 | STK11  | E138\*  | Nonsense | 0.21 | Diploid |
| LCNEC-51  | DICER1  | R1851H  | Missense | 0.11 | Diploid |
| LCNEC-51  | FUBP1  | V217L  | Missense | 0.52 | Diploid |
| LCNEC-51  | NOTCH1  | R1784W  | Missense | 0.05 | DeepDel |
| LCNEC-51  | NOTCH2  | D1874Y  | Missense | 0.29 | Diploid |
| LCNEC-51  | NOTCH3  | G2076V  | Missense | 0.24 | Diploid |
| LCNEC-51  | TP53  | V157F  | Missense | 0.63 | Diploid |
| LCNEC-52  | CREBBP  | P814A  | Missense | 0.16 | Diploid |
| LCNEC-52  | FBXW7  | D550Mfs\*6  | Frameshift | 0.65 | Diploid |
| LCNEC-52  | KMT2C  | N1575K  | Missense | 0.49 | Diploid |
| LCNEC-52  | KMT2D  | E225\*  | Nonsense | 0.29 | NA |
| LCNEC-52  | KRAS  | G13D  | Missense | 0.64 | Diploid |
| LCNEC-52  | ROS1  | F923I  | Missense | 0.3 | Diploid |
| LCNEC-52  | SMARCA4  | X531\_splice  | Splice Site | 0.71 | Diploid |
| LCNEC-52  | TP53  | H179L  | Missense | 0.69 | Diploid |
| LCNEC-53 | APC  | C207\*  | Nonsense | 0.34 | Diploid |
| LCNEC-53 | EGFR  | X210\_splice  | Splice Site | 0.33 | Diploid |
| LCNEC-53 | GATA3  | D98E  | Missense | 0.21 | Diploid |
| LCNEC-53 | MET  | E25D  | Missense | 0.06 | Diploid |
| LCNEC-53 | PIK3CD  | A688T  | Missense | 0.24 | Diploid |
| LCNEC-53 | RB1  | X350\_splice  | Splice Site | 0.31 | Diploid |
| LCNEC-53 | TP53  | H179R  | Missense | 0.42 | Diploid |
| LCNEC-55 | EZH2  | P577L  | Missense | 0.4 | Diploid |
| LCNEC-55 | KMT2D  | Q4235\*  | Nonsense | 0.34 | NA |
| LCNEC-55 | SF3B1  | I1004L  | Missense | 0.39 | Diploid |
| LCNEC-55 | TP53  | Y220H  | Missense | 0.66 | Diploid |
| LCNEC-56 | ARID1A  | Y551Tfs\*68  | Frameshift | 0.23 | Diploid |
| LCNEC-56 | BRCA2  | V348L  | Missense | 0.51 | Diploid |
| LCNEC-56 | CDK8  | G56Efs\*12  | Frameshift | 0.51 | Diploid |
| LCNEC-56 | CIC  | D93V  | Missense | 0.27 | Diploid |
| LCNEC-56 | E2F3  | R121L  | Missense | 0.47 | Diploid |
| LCNEC-56 | FGFR1  | X4\_splice  | Splice Site | 0.32 | Diploid |
| LCNEC-56 | GRIN2A  | S304A  | Missense | 0.1 | Diploid |
| LCNEC-56 | GRIN2A  | G354C  | Missense | 0.26 | Diploid |
| LCNEC-56 | KEAP1  | G364S  | Missense | 0.6 | Diploid |
| LCNEC-56 | MSH6  | A64V  | Missense | 0.33 | Diploid |
| LCNEC-56 | NTRK3  | S672Y  | Missense | 0.35 | Diploid |
| LCNEC-56 | SMARCA4  | G168V  | Missense | 0.55 | Diploid |
| LCNEC-56 | TP53  | V157F  | Missense | 0.63 | Diploid |
| LCNEC-56 | TSC1  | M736I  | Missense | 0.51 | Diploid |
| LCNEC-56 | YAP1  | V212F  | Missense | 0.47 | Diploid |
| LCNEC-57 | BCL6  | D63N  | Missense | 0.34 | Diploid |
| LCNEC-57 | BRCA2  | G2063E  | Missense | 0.22 | Diploid |
| LCNEC-57 | CSF1R  | A273S  | Missense | 0.37 | Diploid |
| LCNEC-57 | EPHA3  | M674I  | Missense | 0.29 | Diploid |
| LCNEC-57 | EPHA5  | G1033R  | Missense | 0.41 | Diploid |
| LCNEC-57 | ERBB4  | K812N  | Missense | 0.14 | Diploid |
| LCNEC-57 | ETV1  | V388I  | Missense | 0.22 | Diploid |
| LCNEC-57 | FLT1  | K300E  | Missense | 0.21 | Diploid |
| LCNEC-57 | KDM5C  | V58M  | Missense | 0.51 | Diploid |
| LCNEC-57 | KRAS  | G12C  | Missense | 0.27 | Diploid |
| LCNEC-57 | MDM4  | Q68R  | Missense | 0.14 | Diploid |
| LCNEC-57 | NF1  | Y2162F  | Missense | 0.52 | Diploid |
| LCNEC-57 | NOTCH4  | L953I  | Missense | 0.29 | Diploid |
| LCNEC-57 | PAK7  | C708\*  | Nonsense | 0.51 | Diploid |
| LCNEC-57 | PAX5  | E121Q  | Missense | 0.71 | Diploid |
| LCNEC-57 | PDGFRA  | V140L  | Missense | 0.37 | Diploid |
| LCNEC-57 | PIK3R1  | S231G  | Missense | 0.48 | Diploid |
| LCNEC-57 | SMAD4  | G80R  | Missense | 0.27 | Diploid |
| LCNEC-57 | TNFAIP3  | E297K  | Missense | 0.4 | Diploid |
| LCNEC-57 | TP53  | R158L  | Missense | 0.3 | Diploid |
| LCNEC-57 | TP53  | V217L  | Missense | 0.5 | Diploid |
| LCNEC-57 | TP53  | V218Gfs\*4  | Frameshift | 0.47 | Diploid |
| LCNEC-58 | APC  | E190\*  | Nonsense | 0.71 | Diploid |
| LCNEC-58 | EPHA3  | P325R  | Missense | 0.53 | Diploid |
| LCNEC-58 | EPHA5  | W117C  | Missense | 0.31 | Diploid |
| LCNEC-58 | ERBB4  | Q44E  | Missense | 0.15 | Diploid |
| LCNEC-58 | GATA3  | G248A  | Missense | 0.59 | DeepDel |
| LCNEC-58 | IKZF1  | S101I  | Missense | 0.75 | Diploid |
| LCNEC-58 | IRS1  | G174C  | Missense | 0.23 | Diploid |
| LCNEC-58 | IRS1  | G947V  | Missense | 0.16 | Diploid |
| LCNEC-58 | IRS2  | G1304V  | Missense | 0.27 | Diploid |
| LCNEC-58 | PAK7  | G84C  | Missense | 0.79 | Diploid |
| LCNEC-58 | POLE  | E2036\*  | Nonsense | 0.38 | Diploid |
| LCNEC-58 | PTPRT  | L1432R  | Missense | 0.43 | Diploid |
| LCNEC-58 | SMARCA4  | D602Mfs\*11  | Frameshift | 0.51 | Diploid |
| LCNEC-58 | STK11  | I35Lfs\*127  | Frameshift | 0.72 | Diploid |
| LCNEC-58 | STK11  | Y36D  | Missense | 0.73 | Diploid |
| LCNEC-59 | GRIN2A  | D1398Y  | Missense | 0.24 | Diploid |
| LCNEC-59 | KRAS  | G12D  | Missense | 0.26 | Diploid |
| LCNEC-59 | PTEN  | C218\*  | Nonsense | 0.34 | Diploid |
| LCNEC-59 | TP53  | R267W  | Missense | 0.29 | Diploid |
| LCNEC-60 | ABL1  | K596\*  | Nonsense | 0.05 | Diploid |
| LCNEC-60 | BRCA2  | D438Y  | Missense | 0.05 | Diploid |
| LCNEC-60 | CBL  | W408L  | Missense | 0.17 | Diploid |
| LCNEC-60 | CDK12  | V39L  | Missense | 0.09 | Diploid |
| LCNEC-60 | CREBBP  | X1204\_splice  | Splice Site | 0.15 | Diploid |
| LCNEC-60 | EGFR  | D1014V  | Missense | 0.23 | Diploid |
| LCNEC-60 | FLT3  | C184\*  | Nonsense | 0.18 | Diploid |
| LCNEC-60 | INPP4A  | E857\*  | Nonsense | 0.21 | Diploid |
| LCNEC-60 | MAPK1  | A9S  | Missense | 0.36 | Diploid |
| LCNEC-60 | MET  | D824Y  | Missense | 0.09 | Diploid |
| LCNEC-60 | NOTCH1  | C438S  | Missense | 0.19 | Diploid |
| LCNEC-60 | PTCH1  | E1120Sfs\*19  | Frameshift | 0.34 | Diploid |
| LCNEC-60 | RARA  | G430V  | Missense | 0.14 | Diploid |
| LCNEC-60 | ROS1  | V1979E  | Missense | 0.24 | Diploid |
| LCNEC-60 | STK11  | W308\*  | Nonsense | 0.28 | Diploid |
| LCNEC-60 | TNFAIP3  | S548F  | Missense | 0.29 | Diploid |
| LCNEC-60 | TP53  | X307\_splice  | Splice Site | 0.28 | Diploid |
| LCNEC-61 | ABL1  | V422I  | Missense | 0.51 | Diploid |
| LCNEC-61 | AMER1  | R591S  | Missense | 0.69 | Diploid |
| LCNEC-61 | AR  | R511T  | Missense | 0.35 | Diploid |
| LCNEC-61 | CCND2  | G213W  | Missense | 0.15 | Diploid |
| LCNEC-61 | CCND3  | L137Ffs\*10  | Frameshift | 0.27 | Diploid |
| LCNEC-61 | DNMT3A  | E240\*  | Nonsense | 0.61 | Diploid |
| LCNEC-61 | EPHB1  | G41V  | Missense | 0.23 | Diploid |
| LCNEC-61 | EPHB1  | G41W  | Missense | 0.23 | Diploid |
| LCNEC-61 | ERBB4  | R525S  | Missense | 0.38 | Diploid |
| LCNEC-61 | ERBB4  | V421L  | Missense | 0.2 | Diploid |
| LCNEC-61 | FAT1  | G1307E  | Missense | 0.18 | Diploid |
| LCNEC-61 | FAT1  | E3264Q  | Missense | 0.41 | Diploid |
| LCNEC-61 | FH  | X90\_splice  | Splice Site | 0.18 | Diploid |
| LCNEC-61 | GRIN2A  | H1419N  | Missense | 0.17 | Diploid |
| LCNEC-61 | GRIN2A  | N1144K  | Missense | 0.39 | Diploid |
| LCNEC-61 | IDH1  | V386L  | Missense | 0.41 | Diploid |
| LCNEC-61 | IGF1R  | E811\*  | Nonsense | 0.42 | Diploid |
| LCNEC-61 | KMT2C  | D3152Y  | Missense | 0.3 | Diploid |
| LCNEC-61 | MYCN  | N305K  | Missense | 0.23 | Diploid |
| LCNEC-61 | NOTCH4  | G1393V  | Missense | 0.31 | Diploid |
| LCNEC-61 | NTRK3  | E86\*  | Nonsense | 0.2 | Diploid |
| LCNEC-61 | PAK7  | K149N  | Missense | 0.29 | Diploid |
| LCNEC-61 | PALB2  | S417F  | Missense | 0.4 | Diploid |
| LCNEC-61 | PIK3CB  | G340R  | Missense | 0.26 | Diploid |
| LCNEC-61 | PPP2R1A  | R144L  | Missense | 0.37 | Diploid |
| LCNEC-61 | PTPRT  | P174H  | Missense | 0.16 | Diploid |
| LCNEC-61 | RAF1  | V21L  | Missense | 0.44 | Diploid |
| LCNEC-61 | RB1  | V375F  | Missense | 0.09 | Diploid |
| LCNEC-61 | STAG2  | V233E  | Missense | 0.45 | Diploid |
| LCNEC-61 | TP53  | E286A  | Missense | 0.65 | Diploid |
| LCNEC-62 | ATRX  | D1058Y  | Missense | 0.07 | Diploid |
| LCNEC-62 | ATRX  | E2226del  | Deletion | 0.3 | Diploid |
| LCNEC-62 | KDM6A  | Q635Yfs\*55  | Frameshift | 0.27 | Diploid |
| LCNEC-62 | KEAP1  | E219A  | Missense | 0.5 | Diploid |
| LCNEC-62 | KMT2D  | N5497\_P5498delinsT  | Deletion | 0.21 | NA |
| LCNEC-62 | RB1  | E843\*  | Nonsense | 0.31 | Diploid |
| LCNEC-62 | RB1  | X464\_splice  | Splice Site | 0.11 | Diploid |
| LCNEC-62 | STAG2  | L182F  | Missense | 0.1 | Diploid |
| LCNEC-62 | TP53  | A159P  | Missense | 0.38 | Diploid |
| LCNEC-63 | ARID2  | D248\*  | Frameshift | 0.49 | Diploid |
| LCNEC-63 | FLT4  | R801S  | Missense | 0.35 | Diploid |
| LCNEC-63 | NF1  | X420\_splice  | Splice Site | 0.58 | Diploid |
| LCNEC-63 | RB1  | Y529\*  | Nonsense | 0.33 | Diploid |
| LCNEC-63 | TP53  | X224\_splice  | Splice Site | 0.57 | Diploid |
| LCNEC-64 | ERBB2  | P1207A  | Missense | 0.09 | Diploid |
| LCNEC-64 | ERBB2  | R545\*  | Nonsense | 0.09 | Diploid |
| LCNEC-64 | FGFR1  | K223I  | Missense | 0.18 | Diploid |
| LCNEC-64 | IRS2  | S402L  | Missense | 0.15 | Diploid |
| LCNEC-64 | KDR  | R73M  | Missense | 0.11 | Diploid |
| LCNEC-64 | KEAP1  | I519Nfs\*8  | Frameshift | 0.19 | Diploid |
| LCNEC-64 | MSH2  | R852del  | Deletion | 0.07 | Diploid |
| LCNEC-64 | PIK3CG  | L428I  | Missense | 0.11 | Diploid |
| LCNEC-64 | PTPRT  | A1263D  | Missense | 0.16 | Diploid |
| LCNEC-64 | RUNX1  | A307V  | Missense | 0.35 | Diploid |
| LCNEC-64 | STK11  | E165\*  | Nonsense | 0.14 | Diploid |
| LCNEC-64 | TP53  | R249M  | Missense | 0.2 | Diploid |

**Complete list of copy number alterations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sample ID** | **Gene** | **CNA** | **Fold change** |
| LCNEC-25 | JAK2 | AMP | 2.04 |
| LCNEC-25 | CDK4 | AMP | 3.36 |
| LCNEC-25 | CRKL | AMP | 2.29 |
| LCNEC-25 | FAM46C | AMP | 2.28 |
| LCNEC-27 | JAK2 | AMP | 6.57 |
| LCNEC-27 | PTPRD | AMP | 2.35 |
| LCNEC-28 | MSH2 | AMP | 6.54 |
| LCNEC-28 | MSH6 | AMP | 5.53 |
| LCNEC-28 | CCND1 | AMP | 4.48 |
| LCNEC-28 | MYCN | AMP | 8.45 |
| LCNEC-29 | TERT | AMP | 2.38 |
| LCNEC-30 | MYCN | DeepDel | -2.62 |
| LCNEC-31 | MYC | AMP | 3.60 |
| LCNEC-31 | NKX2-1 | AMP | 2.03 |
| LCNEC-32 | NKX2-1 | AMP | 4.14 |
| LCNEC-33 | CDKN2A | DeepDel | -4.02 |
| LCNEC-33 | CDKN2B | DeepDel | -3.88 |
| LCNEC-33 | IRS2 | AMP | 2.52 |
| LCNEC-37 | MYC | AMP | 6.26 |
| LCNEC-37 | SOX2 | AMP | 2.43 |
| LCNEC-37 | FGFR1 | AMP | 4.96 |
| LCNEC-38 | MYC | AMP | 3.07 |
| LCNEC-38 | NKX2-1 | AMP | 5.33 |
| LCNEC-38 | FLCN | AMP | 5.00 |
| LCNEC-38 | JUN | DeepDel | -2.53 |
| LCNEC-38 | MAP2K4 | AMP | 3.27 |
| LCNEC-39 | MYC | AMP | 3.01 |
| LCNEC-39 | MET | AMP | 2.81 |
| LCNEC-637 | PTEN | DeepDel | -2.20 |
| LCNEC-637 | CCNE1 | AMP | 5.30 |
| LCNEC-897 | NKX2-1 | AMP | 2.60 |
| LCNEC-462    | RB1 | Intragenic deletion |   |
| LCNEC-41 | CCNE1 | AMP | 2.13 |
| LCNEC-45 | SOX2 | AMP | 4.06 |
| LCNEC-45 | MYC | AMP | 2.71 |
| LCNEC-45 | RB1 | DeepDel | -2.74 |
| LCNEC-47 | PAX5 | DeepDel | -2.02 |
| LCNEC-47 | DNMT3B | AMP | 2.28 |
| LCNEC-48 | MYCL | AMP | 4.48 |
| LCNEC-48 | JUN | AMP | 2.50 |
| LCNEC-48 | FGFR4 | AMP | 2.29 |
| LCNEC-49 | NKX2-1 | AMP | 4.01 |
| LCNEC-50 | MYC | AMP | 2.41 |
| LCNEC-51 | FLT1 | AMP | 2.09 |
| LCNEC-51 | FLT3 | AMP | 3.84 |
| LCNEC-51 | IRS2 | AMP | 5.03 |
| LCNEC-51 | MPL | AMP | 2.81 |
| LCNEC-51 | MYCL | AMP | 11.63 |
| LCNEC-51 | NKX2-1 | AMP | 5.23 |
| LCNEC-51 | NOTCH1 | DeepDel | -2.02 |
| LCNEC-51 | SOX2 | AMP | 2.67 |
| LCNEC-51 | RB1 | Intragenic deletion |   |
| LCNEC-53 | KEAP1 | DeepDel | -2.45 |
| LCNEC-55 | NOTCH1 | DeepDel | -2.04 |
| LCNEC-55 | CDKN2C | AMP | 2.18 |
| LCNEC-56 | CCNE1 | AMP | 2.47 |
| LCNEC-56 | CDKN2B | DeepDel | -3.88 |
| LCNEC-56 | CDKN2AP16INK4A | DeepDel | -3.88 |
| LCNEC-57 | CCNE1 | AMP | 4.13 |
| LCNEC-57 | PIK3CB | AMP | 2.32 |
| LCNEC-57 | FOXL2 | AMP | 2.32 |
| LCNEC-57 | ATR | AMP | 2.32 |
| LCNEC-58 | CCND1 | AMP | 5.39 |
| LCNEC-58 | FGFR1 | AMP | 5.04 |
| LCNEC-58 | GATA3 | DeepDel | -2.31 |
| LCNEC-58 | NKX2-1 | AMP | 5.88 |
| LCNEC-58 | SOX2 | AMP | 3.34 |
| LCNEC-61 | CDKN2C | AMP | 2.20 |
| LCNEC-61 | JUN | AMP | 2.20 |
| LCNEC-61 | KDM5C | AMP | 2.34 |
| LCNEC-61 | MYCL | AMP | 3.81 |
| LCNEC-61 | NKX2-1 | AMP | 5.44 |
| LCNEC-61 | SOX2 | AMP | 2.93 |
| LCNEC-62 | MPL | AMP | 2.27 |
| LCNEC-62 | NKX2-1 | AMP | 3.38 |
| LCNEC-62 | TERT | AMP | 3.33 |