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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 1: Descriptive Statistics for SCLC Cohort:** | | | | | | | |
| ***Feature*** | ***Number of patients in***  ***whole cohort*** | ***Sequenom patients*** | | | | | |
| **#22** | **#18** | **#12** | ***#16*** | ***#182*** | ***#162*** |
| ***Sex*** | Male (M) - 179  Female (F) - 243 | F | F | M | F | M | F |
| ***Race*** | Caucasian (C) - 251  African-American (AA) - 83  Not recorded (NR) - 88 | C | C | NR | C | C | C |
| ***Disease*** | Extensive (E) - 284  Limited (L) - 138 | E | L | L | L | E | E |
| ***Stage*** | 1, 2 - 16  3A - 36  3B - 21  4 - 273  Not recorded - 76 | 4 | 2 | 3B | 2 | 4 | 4 |
| ***Age*** | 66.2 ± 10.6 years  (mean ± std) | 60 | 76 | 67 | 71 | 51 | 56 |

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| --- | --- | --- | --- |
| **Table 2: Mutations in COSMIC cancer census genes in SCLC tumors and cell lines\*** | | | |
| ***Sample***  *(#)* | ***RET protein***  ***mutation*** | ***Other cancer gene mutations***  *(silent and intronic mutations removed)* | |
| ***Tumor*** | T278N | | N/A |
| ***Tumor*** | A664D | | N/A |
| ***Tumor***  *(S01453)* | R820L | | ALK (A1200V), CASC5 (N2061D), KIF5B (K256\*), KRAS (C185S), NFIB (N238S), NTRK3 (W243C), TP53 (E294\* and V173L), TRRAP (E2763V), TSHR (F366S), WT1 (H162L), ZNF521 (G954C and S616S) |
| ***Tumor***  *(631064)* | A1051T | | TP53 (Q317\*) |
| ***H1339*** | E428K | | N/A |
| ***H865*** | D714Y | | N/A |
| ***H1092*** | Y791N and A1105V | | BRIP1 (R261\*), CTNNB1 (D6G), JUN (E282\*), KDR (D392N), MKL1 (I88V), NTRK3 (D411N), RPN1 (T144A), SMARCA4 (G784E), WHSC1 (E683D), WWTR1 (R244G) |
| ***H1105*** | G828R | | CCND1 (P287L), CREBBP (Q443\*), EP300 (E1514K), EZR (P476S), MLL2 (A4324fs\*23 and A4324P), PDGFRA (S348Y), ROS1 (K1163M), SETD2 (K115\*), SFPQ (G414S), TP53 (R249S) |
| ***H2066*** | S853T | | ARNT (E9V), ATM (2118V), BRCA1 (E1629V), CBLB (H791Y), CLTCL1 (I194M), HIP1 (E574\*), HIST1T3B (T81N), HNF1A (Q463R), IL6ST (Q869H), JAK1 (L423V), KIF5B (S204R), LIFR (S1059G and E921K), MLL3 (P986A), MYH9 (Q1314H), NBN (I455M), NCOA1 (G662C), ROS1 (D2058Y), TET2 (P29L), TP53 (V157F), WRN (D511H) |
| ***H128*** | S904T | | ARID1A (G945fs\*23), DDX5 (Y535C), KDM6A (G708\*), MLL (I960M), MLL3 (L371M), MUTYH (E165\*), RB1 (K417E and R418fs\*2), TNFAIP3 (V377M) |
| ***H1688*** | P973T | | BCL11B (R687S), CBLB (P494A), CCND3 (E122G), DICER1 (L203W), FANCA (I1101M), KDR (D58G and D58Y), MLL3 (V4859L), MYH9 (M137I), NBN (F459L), PIK3CA (P377R), SDC4 (G64R), SETD2 (T182K and T685K), TP53 (Q192\*), ZNF521 (Q779H) |
| ***SW1271*** | None | | ACSL6 (K381N), ARID2 (D111 E112insD), ATRX (T2007I and T2007S), BRAF (S683N), BRCA1 (K1233I), BRIP1 (A745P), BUB1B (S384G), CAMTA1 (G798W), DDX10 (A185G), GNAS (S207\*), HIST1H3B (R18L), ITK (R111S), JAK3 (A1079D), LMO2 (C80F), MDS1 (I37F), MED12 (W379L and W379C), MYC (C342R), NBN (V270fs\*2 and E350G), NFKB2 (R191P), NRAS (Q61R), PMS2 (H88Y), PRF1 (A109S and V38L), RNF213 (M481I), ROS1 (D1391V), SLC45A3 (L57fs\*15), SMARCA4 (N774K), SOX2 (D92V), TP53 (C277F), WRN (M930I and G931V), ZNF521 (T690A) |
| ***H1048*** | None | | AFF3 (A602V), AKAP9 (K3184E and K3180E), ASXL1 (G200D), BCL3 (R401fs\*>46), BCOR (R850H), BUB1B (L866P), CASC5 (I1803fs\*5), CREBBP (S1680delS), ECT2L (V123I and E45K), FAM22D (R271W), KIF5B (S814fs\*2), MED12 (R1636H), MLL2 (P4358L and P2084fs\*30), MLL3 (R907\*, C963fs\*68, T361I and K2797R), MSN (A148T), NCKIPSD (P600T), NRAS (T20fs\*11), NUP214 (V228fs\*29), PDE4DIP (T706fs\*24), PIK3CA (K111R and H1047R), RAP1GDS1 (E438V), RB1 (R552\*), SETD2 (E282fs\*19), TP53 (R273C and P47fs\*76), TPR (Y683H), WRN (I239L) |
| *\*obtained from:* [*http://cancer.sanger.ac.uk*](http://cancer.sanger.ac.uk/cell_lines/cbrowse/all) *N/A = not available* | | | |