S2 Table. NGS results of plasma ctDNA and tumor gDNA from 42 lymphoma patients

| Type | Subtype | Ann Arbor stage | tumor fraction | ctDNA |  |  | Tissue |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Gene | HGVSc | VAF | Gene | HGVSc | VAF |
| Tissue matched | FL \#1 | 3 | 95\% | KMT2D | c. $435 \mathrm{G}>\mathrm{A}$ | 2.6\% | KMT2D | c. $435 \mathrm{G}>\mathrm{A}$ | 8.0\% |
|  |  |  |  | TNFAIP3 | c.175_176del | 1.2\% | TNFAIP3 | c.175_176del | 0.9\% |
|  |  |  |  | SOCS1 | c. $348 \mathrm{C}>\mathrm{A}$ | 2.5\% | SOCS1 | c. $348 \mathrm{C}>\mathrm{A}$ | 7.5\% |
|  |  |  |  |  |  |  | SOCS1 | c. $125 \mathrm{G}>\mathrm{A}$ | 7.6\% |
|  |  |  |  |  |  |  | KMT2C | c. $4508-6 \mathrm{~T}>\mathrm{G}$ | 7.6\% |
|  |  |  |  |  |  |  | BTG1 | c.149-9C>A | 5.4\% |
|  |  |  |  |  |  |  | B2M | c. $2 \mathrm{~T}>\mathrm{C}$ | 3.8\% |
|  |  |  |  |  |  |  | B2M | c.22del | 3.4\% |
|  |  |  |  |  |  |  | NFKB2 | c. $694 \mathrm{C}>\mathrm{T}$ | 0.9\% |
|  | FL \#2 | 3 | 95\% | IRF8 | c. $64 \mathrm{~A}>\mathrm{T}$ | 0.6\% |  |  |  |
|  |  |  |  |  |  |  | CREBBP | c. $4391 \mathrm{~T}>\mathrm{A}$ | 37.2\% |
|  |  |  |  |  |  |  | CREBBP | c. $4369 \mathrm{~T}>\mathrm{G}$ | 36.2\% |
|  |  |  |  |  |  |  | BCL2 | c.157_158delinsTT | 33.3\% |
|  |  |  |  |  |  |  | FOXO1 | c. $71 \mathrm{C}>\mathrm{T}$ | 32.5\% |
|  |  |  |  |  |  |  | CREBBP | c.4447dup | 25.3\% |
|  |  |  |  |  |  |  | PIM1 | c. 225 del | 24.0\% |
|  |  |  |  |  |  |  | BCL2 | c. $163 \mathrm{C}>\mathrm{A}$ | 12.4\% |
|  |  |  |  |  |  |  | FOXO1 | c. $64 \mathrm{~T}>\mathrm{C}$ | 4.7\% |
|  |  |  |  |  |  |  | CREBBP | c.4390_4391delinsCA | 3.0\% |
|  |  |  |  |  |  |  | TCF3 | c.1094-6T>G | 2.8\% |
|  |  |  |  |  |  |  | CIITA | c. $902 \mathrm{C}>\mathrm{T}$ | 0.4\% |
|  | DLBCL \#1 | 4 | 60\% | TNFRSF14 | c.3G>A | 82.6\% | TNFRSF14 | c.3G>A | 68.0\% |
|  |  |  |  | ID3 | c. $211 \mathrm{C}>\mathrm{T}$ | 11.0\% | ID3 | c. $211 \mathrm{C}>\mathrm{T}$ | 29.0\% |
|  |  |  |  | NFKBIA | c. $802 \mathrm{C}>\mathrm{T}$ | 45.0\% | NFKBIA | c. $802 \mathrm{C}>\mathrm{T}$ | 38.7\% |
|  |  |  |  | TP53 | c. $857 \mathrm{~A}>\mathrm{G}$ | 67.0\% | TP53 | c. $857 \mathrm{~A}>\mathrm{G}$ | 64.2\% |
|  |  |  |  | ID3 | c.166C>T | 4.1\% | ID3 | c. $166 \mathrm{C}>\mathrm{T}$ | 29.1\% |
|  |  |  |  | JAK3 | c. $1216 \mathrm{C}>\mathrm{T}$ | 0.1\% | JAK3 | c. $1216 \mathrm{C}>\mathrm{T}$ | 0.4\% |
|  |  |  |  | FAS | c. $848 \mathrm{~A}>\mathrm{G}$ | 41.6\% | FAS | c. $848 \mathrm{~A}>\mathrm{G}$ | 36.6\% |
|  |  |  |  | ID3 | c. $347 \mathrm{G}>\mathrm{A}$ | 16.7\% | ID3 | c. $347 \mathrm{G}>\mathrm{A}$ | 5.3\% |
|  |  |  |  | ID3 | c. $300+3 \mathrm{~A}>\mathrm{C}$ | 19.4\% | ID3 | c. $300+3 \mathrm{~A}>\mathrm{C}$ | 7.0\% |



|  |  |  |  |  |  |  | KMT2D | c. $10411 \mathrm{C}>\mathrm{T}$ | 0.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | NF1 | c. $6106 \mathrm{G}>\mathrm{A}$ | 0.5\% |
|  |  |  |  |  |  |  | CREBBP | c. $2446 \mathrm{C}>\mathrm{T}$ | 0.3\% |
|  |  |  |  |  |  |  | MTOR | c. $5902 \mathrm{C}>\mathrm{T}$ | 0.3\% |
|  | FL \#3 | 3 | 95\% | None |  |  | KLHL6 | c. $268 \mathrm{C}>\mathrm{T}$ | 23.4\% |
|  |  |  |  |  |  |  | CREBBP | c. $4463 \mathrm{C}>\mathrm{A}$ | 22.4\% |
|  |  |  |  |  |  |  | NCOR1 | c. $3592 \mathrm{G}>\mathrm{A}$ | 0.9\% |
|  |  |  |  |  |  |  | MTOR | c. $7240 \mathrm{G}>\mathrm{A}$ | 0.6\% |
|  |  |  |  |  |  |  | BIRC3 | c. $934 \mathrm{C}>\mathrm{T}$ | 0.7\% |
|  |  |  |  |  |  |  | KMT2D | c. $5398 \mathrm{G}>\mathrm{A}$ | 0.3\% |
|  |  |  |  |  |  |  | KMT2D | c. $3920 \mathrm{G}>\mathrm{A}$ | 0.8\% |
|  |  |  |  |  |  |  | STAT6 | c. $1072 \mathrm{G}>\mathrm{A}$ | 0.5\% |
|  |  |  |  |  |  |  | KLHL14 | c. $259 \mathrm{C}>\mathrm{A}$ | 25.6\% |
|  |  |  |  |  |  |  | JAK3 | c. 1787-7C> | 0.7\% |
|  |  |  |  |  |  |  | JAK3 | c. $1555 \mathrm{G}>\mathrm{A}$ | 0.7\% |
|  |  |  |  |  |  |  | ALK | c. $1462 \mathrm{G}>\mathrm{A}$ | 0.5\% |
|  |  |  |  |  |  |  | KLHL6 | c. $170 \mathrm{~T}>\mathrm{A}$ | 22.9\% |
|  |  |  |  |  |  |  | KLHL6 | c. $247 \mathrm{~T}>\mathrm{G}$ | 27.2\% |
|  | DLBCL \#2 | 2 | 95\% | SPEN | c.3984_3987del | 2.3\% | SPEN | c.3984_3987del | 0.6\% |
|  |  |  |  | NOTCH2 | c.7_8delinsTT | 4.4\% | NOTCH2 | c.7_8delinsTT | 0.2\% |
|  |  |  |  | BTG2 | c.136C>G | 1.4\% | BTG2 | c. $136 \mathrm{C}>\mathrm{G}$ | 15.8\% |
|  |  |  |  | BCL11B | c. $1591 \mathrm{G}>\mathrm{A}$ | 3.3\% | BCL11B | c. $1591 \mathrm{G}>\mathrm{A}$ | 18.3\% |
|  |  |  |  | LRP1B | c. $1045 \mathrm{G}>\mathrm{A}$ | 1.3\% | LRP1B | c. $1045 \mathrm{G}>\mathrm{A}$ | 19.2\% |
|  |  |  |  |  |  |  | NRAS | c. $182 \mathrm{~A}>\mathrm{G}$ | 23.5\% |
|  |  |  |  |  |  |  | MYC | c. $214 \mathrm{C}>\mathrm{T}$ | 20.6\% |
|  |  |  |  |  |  |  | GNA13 | c. $1094 \mathrm{C}>\mathrm{T}$ | 1.6\% |
|  |  |  |  |  |  |  | RB1 | c. $2297 \mathrm{C}>\mathrm{T}$ | 0.4\% |
|  | DLBCL \#3 | 2 | 20\% | KMT2D | c. $12310 \mathrm{C}>\mathrm{T}$ | 3.6\% | KMT2D | c. $12310 \mathrm{C}>\mathrm{T}$ | 85.2\% |
|  |  |  |  | MYD88 | c. $794 \mathrm{~T}>\mathrm{C}$ | 5.2\% | MYD88 | c. $794 \mathrm{~T}>\mathrm{C}$ | 49.9\% |
|  |  |  |  | CD79B | c. $589 \mathrm{~T}>\mathrm{C}$ | 8.3\% | CD79B | c. $589 \mathrm{~T}>\mathrm{C}$ | 91.1\% |
|  |  |  |  | ETV6 | c. $302 \mathrm{~A}>\mathrm{T}$ | 2.7\% | ETV6 | c. $302 \mathrm{~A}>\mathrm{T}$ | 39.9\% |
|  |  |  |  | SF3B1 | c. $2584 \mathrm{G}>\mathrm{A}$ | 1.3\% | SF3B1 | c. $2584 \mathrm{G}>\mathrm{A}$ | 43.8\% |
|  |  |  |  | HIST1H1E | c. $394 \mathrm{G}>\mathrm{A}$ | 1.9\% | HIST1HIE | c. $394 \mathrm{G}>\mathrm{A}$ | 48.1\% |
|  |  |  |  | PIM1 | c. $290 \mathrm{G}>\mathrm{A}$ | 2.4\% | PIM1 | c. $2900 \mathrm{G}>\mathrm{A}$ | 44.4\% |


|  |  |  |  | SF3B1 | c.2098A>G | 0.5\% |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | MGA | c. $6775 \mathrm{~A}>\mathrm{T}$ | 0.5\% |  |  |  |
|  |  |  |  | KIT | c. $1771 \mathrm{~T}>\mathrm{G}$ | 2.7\% |  |  |  |
|  |  |  |  | PAX5 | c.310C> | 3.2\% |  |  |  |
|  |  |  |  |  |  |  | BTG1 | c. $3 \mathrm{G}>\mathrm{A}$ | 22.0\% |
|  | FL \#4 | 4 | 95\% | IRF8 | c. $1247 \mathrm{C}>\mathrm{A}$ | 1.5\% | IRF8 | c. $1247 \mathrm{C}>\mathrm{A}$ | 22.5\% |
|  |  |  |  | KIT | c. $1588 \mathrm{G}>\mathrm{A}$ | 1.5\% | KIT | c. $1588 \mathrm{G}>\mathrm{A}$ | 22.7\% |
|  |  |  |  | CREBBP | c. $4444 \mathrm{~T}>\mathrm{C}$ | 2.0\% | CREBBP | c. $4444 \mathrm{~T}>\mathrm{C}$ | 27.4\% |
|  |  |  |  | FOXO1 | c. $630+9 \mathrm{~A}>\mathrm{G}$ | 3.7\% | FOXO1 | c. $630+9 \mathrm{~A}>\mathrm{G}$ | 23.1\% |
|  |  |  |  | BCL2 | c. $178 \mathrm{G}>\mathrm{A}$ | 2.2\% | BCL2 | c. $178 \mathrm{G}>\mathrm{A}$ | 24.0\% |
|  |  |  |  | KMT2D | c. $2264 \mathrm{G}>\mathrm{A}$ | 5.4\% |  |  |  |
|  |  |  |  |  |  |  | NCOR1 | c. $3501+1 \mathrm{G}>\mathrm{A}$ | 1.4\% |
|  |  |  |  |  |  |  | NF1 | c. $7870-1 \mathrm{G}>\mathrm{A}$ | 1.4\% |
|  |  |  |  |  |  |  | MTOR | c. $6527 \mathrm{G}>\mathrm{A}$ | 1.5\% |
|  |  |  |  |  |  |  | CREBBP | c. $2954 \mathrm{C}>\mathrm{T}$ | 1.7\% |
|  |  |  |  |  |  |  | NF1 | c. $8417 \mathrm{G}>\mathrm{T}$ | 1.7\% |
|  |  |  |  |  |  |  | NF1 | c. $8425 \mathrm{~A}>\mathrm{T}$ | 3.0\% |
|  |  |  |  |  |  |  | KMT2C | c. $12446 \mathrm{C}>\mathrm{T}$ | 1.0\% |
|  |  |  |  |  |  |  | SPEN | c. $8455 \mathrm{~T}>\mathrm{A}$ | 2.3\% |
|  |  |  |  |  |  |  | KMT2D | c. $8367-9 \mathrm{~T}>\mathrm{G}$ | 28.5\% |
|  |  |  |  |  |  |  | IKZF3 | c. $1019 \mathrm{G}>\mathrm{A}$ | 1.1\% |
|  |  |  |  |  |  |  | BCL2 | c. $386 \mathrm{G}>\mathrm{A}$ | 10.0\% |
|  |  |  |  |  |  |  | PLCG1 | c. 2668 A $>$ G | 2.3\% |
|  |  |  |  |  |  |  | EP300 | c. $6323 \mathrm{~A}>\mathrm{T}$ | 3.1\% |
|  |  |  |  |  |  |  | EBF1 | c. $134+8 \mathrm{C}>\mathrm{T}$ | 22.8\% |
|  | FL \#5 | 3 | 95\% | TET2 | c.3594_3594+7del | 23.5\% | TET2 | c. 3594_3594+7del | 0.8\% |
|  |  |  |  | IRF8 | c. $187 \mathrm{~T}>\mathrm{G}$ | 1.1\% | IRF8 | c. $187 \mathrm{~T}>\mathrm{G}$ | 23.4\% |
|  |  |  |  | BTK | c. $545 \mathrm{G}>\mathrm{A}$ | 1.8\% | BTK | c. $545 \mathrm{G}>\mathrm{A}$ | 26.3\% |
|  |  |  |  | IKZF3 | c. $643 \mathrm{~A}>\mathrm{C}$ | 3.0\% | IKZF3 | c. $643 \mathrm{~A}>\mathrm{C}$ | 20.3\% |
|  |  |  |  | CD70 | c. $143 \mathrm{~T}>\mathrm{A}$ | 2.6\% | CD70 | c. $143 \mathrm{~T}>\mathrm{A}$ | 38.8\% |
|  |  |  |  | CD70 | c. $140 \mathrm{~A}>\mathrm{G}$ | 2.3\% | CD70 | c. $140 \mathrm{~A}>\mathrm{G}$ | 39.0\% |
|  |  |  |  | CD70 | c. $97 \mathrm{~T}>\mathrm{C}$ | 2.2\% | CD70 | c. $97 \mathrm{~T}>\mathrm{C}$ | 41.1\% |
|  |  |  |  | EBF1 | c. $481 \mathrm{~T}>\mathrm{A}$ | 1.9\% | EBF1 | c. $481 \mathrm{~T}>$ A | 22.3\% |
|  |  |  |  | EBF1 | c.193T>A | 2.7\% | EBF1 | c.193T>A | 22.2\% |


|  |  |  |  | ARID5B | c. $1882 \mathrm{G}>\mathrm{A}$ | 2.2\% | ARID5B | c. $1882 \mathrm{G}>\mathrm{A}$ | 19.8\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | BCOR | c. $4780 \mathrm{G}>\mathrm{A}$ | 1.9\% | BCOR | c. $4780 \mathrm{G}>\mathrm{A}$ | 18.9\% |
|  |  |  |  | STAT3 | c. $1709 \mathrm{~A}>\mathrm{C}$ | 0.7\% |  |  |  |
|  |  |  |  |  |  |  | KMT2D | c. $16504 \mathrm{~A}>\mathrm{T}$ | 13.6\% |
|  | DLBCL \#4 | 2 | 95\% | None |  |  | BTG2 | c. 105 del | 11.8\% |
|  |  |  |  |  |  |  | PIM1 | c. $114 \mathrm{C}>\mathrm{G}$ | 31.4\% |
|  |  |  |  |  |  |  | KLHL6 | c. $125 \mathrm{~T}>\mathrm{G}$ | 50.0\% |
|  |  |  |  |  |  |  | CREBBP | c. $4336 \mathrm{C}>\mathrm{T}$ | 30.1\% |
|  |  |  |  |  |  |  | CD79B | c. $589 \mathrm{~T}>\mathrm{G}$ | 37.0\% |
|  |  |  |  |  |  |  | MYD88 | c. $794 \mathrm{~T}>\mathrm{C}$ | 29.9\% |
|  |  |  |  |  |  |  | BTK | c. $1267 \mathrm{G}>\mathrm{A}$ | 18.9\% |
|  |  |  |  |  |  |  | BTG2 | c. $133 \mathrm{G}>\mathrm{A}$ | 58.7\% |
|  |  |  |  |  |  |  | MYD88 | c. $476 \mathrm{G}>\mathrm{C}$ | 31.4\% |
|  |  |  |  |  |  |  | PIM1 | c. $28 \mathrm{G}>\mathrm{C}$ | 33.2\% |
|  |  |  |  |  |  |  | PIM1 | c. $72 \mathrm{G}>\mathrm{C}$ | 39.7\% |
|  |  |  |  |  |  |  | PIM1 | c. $125 \mathrm{C}>\mathrm{T}$ | 31.3\% |
|  |  |  |  |  |  |  | PIM1 | c. $240+8 \mathrm{C}>\mathrm{T}$ | 33.7\% |
|  |  |  |  |  |  |  | PIM1 | c. $241 \mathrm{C}>\mathrm{T}$ | 36.0\% |
|  |  |  |  |  |  |  | PIM1 | c. $436 \mathrm{~A}>\mathrm{T}$ | 36.5\% |
|  |  |  |  |  |  |  | PIM1 | c. $607+5 \mathrm{G}>\mathrm{A}$ | 28.9\% |
|  |  |  |  |  |  |  | HIST1H1E | c. $191 \mathrm{~A}>\mathrm{G}$ | 31.4\% |
|  |  |  |  |  |  |  | HIST1HIE | c. $490 \mathrm{G}>\mathrm{A}$ | 33.0\% |
|  |  |  |  |  |  |  | CD70 | c. 163-10T>C | 50.9\% |
|  |  |  |  |  |  |  | KLHL6 | c.293+6_293+13del | 1.7\% |
|  | FL \#6 | 3 | 95\% | KMT2D | c. $3754 \mathrm{C}>\mathrm{T}$ | 26.1\% | KMT2D | c. $3754 \mathrm{C}>\mathrm{T}$ | 13.6\% |
|  |  |  |  | ARID1A | c.355_365del | 16.4\% | ARID1A | c.355_365del | 0.9\% |
|  |  |  |  | KMT2D | c.783del | 45.7\% | KMT2D | c.783del | 14.9\% |
|  |  |  |  | CREBBP | c. $4507 \mathrm{~T}>\mathrm{A}$ | 26.0\% | CREBBP | c. $4507 \mathrm{~T}>\mathrm{A}$ | 9.3\% |
|  |  |  |  | EZH2 | c. $2075 \mathrm{C}>\mathrm{T}$ | 24.9\% | EZH2 | c. $2075 \mathrm{C}>\mathrm{T}$ | 14.9\% |
|  |  |  |  | IKZF3 | c. $793 \mathrm{~A}>\mathrm{G}$ | 27.1\% | IKZF3 | c. $793 \mathrm{~A}>\mathrm{G}$ | 14.8\% |
|  |  |  |  | IKZF3 | c. $785 \mathrm{~A}>\mathrm{G}$ | 27.8\% | IKZF3 | c. $785 \mathrm{~A}>\mathrm{G}$ | 15.3\% |
|  |  |  |  | BCL2 | c. $585+8 \mathrm{C}>\mathrm{T}$ | 30.2\% | BCL2 | c. $585+8 \mathrm{C}>\mathrm{T}$ | 12.9\% |
|  |  |  |  | BCL2 | c. $140 \mathrm{G}>\mathrm{A}$ | 36.4\% | BCL2 | c. $140 \mathrm{G}>\mathrm{A}$ | 16.3\% |
|  |  |  |  | EBF1 | c. $20 \mathrm{G}>\mathrm{C}$ | 43.2\% |  |  |  |


|  |  |  |  | SOCS1 | c. $8 \mathrm{C}>\mathrm{T}$ | 39.6\% |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | NFKBIA | c. $636+1 \mathrm{G}>\mathrm{A}$ | 2.7\% |  |  |  |
|  |  |  |  | PIM1 | c. $83-4 \mathrm{C}>\mathrm{T}$ | 1.9\% |  |  |  |
|  |  |  |  |  |  |  | FOXO1 | c. $553 \mathrm{C}>\mathrm{T}$ | 15.3\% |
|  |  |  |  |  |  |  | TNFRSF14 | c. $36 \mathrm{G}>\mathrm{A}$ | 2.3\% |
|  | FL \#7 | 2 | 95\% | KMT2D | c.10369_10370del | 0.5\% | KMT2D | c.10369_10370del | 1.8\% |
|  |  |  |  | GNA13 | c. $784 \mathrm{~A}>\mathrm{C}$ | 0.6\% | GNA13 | c. $784 \mathrm{~A}>\mathrm{C}$ | 20.7\% |
|  |  |  |  |  |  |  | TNFRSF14 | c. $218 \mathrm{C}>\mathrm{A}$ | 38.7\% |
|  |  |  |  |  |  |  | MEF2B | c. $248 \mathrm{~A}>\mathrm{T}$ | 22.0\% |
|  |  |  |  |  |  |  | CD79A | c.534del | 20.1\% |
|  |  |  |  |  |  |  | GNA13 | c. $52 \mathrm{~T}>\mathrm{C}$ | 18.6\% |
|  |  |  |  |  |  |  | GNA13 | c. $614 \mathrm{G}>\mathrm{A}$ | 17.2\% |
|  | HL \#1 | 4 | 95\% | TP53 | c.395A>G | 6.0\% | TP53 | c. $395 \mathrm{~A}>\mathrm{G}$ | 4.0\% |
|  |  |  |  |  |  |  | NOTCH2 | c.7_8delinsTT | 0.2\% |
|  |  |  |  |  |  |  | NFKB2 | c. $2054 \mathrm{G}>\mathrm{A}$ | 0.6\% |
|  |  |  |  |  |  |  | KMT2C | c. $2459 \mathrm{C}>\mathrm{T}$ | 3.9\% |
|  | DLBCL \#5 | 4 | 20\% | RHOA | c. $50 \mathrm{G}>\mathrm{T}$ | 9.5\% | None |  |  |
|  |  |  |  | TET2 | c. $2749 \mathrm{C}>\mathrm{T}$ | 9.3\% |  |  |  |
|  |  |  |  | IDH2 | c. $516 \mathrm{G}>\mathrm{T}$ | 7.2\% |  |  |  |
|  |  |  |  | TET2 | c.1774dup | 6.5\% |  |  |  |
|  | DLBCL \#6 | 1 | 80\% | SPEN | c. $4020 \mathrm{G}>\mathrm{A}$ | 8.7\% | SPEN | c. $4020 \mathrm{G}>\mathrm{A}$ | 18.0\% |
|  |  |  |  | B2M | c. $346+1 \mathrm{G}>\mathrm{T}$ | 8.9\% | B2M | c. $346+1 \mathrm{G}>\mathrm{T}$ | 24.2\% |
|  |  |  |  | IRF8 | c. $238 \mathrm{~A}>\mathrm{T}$ | 5.3\% | IRF8 | c. $238 \mathrm{~A}>\mathrm{T}$ | 17.9\% |
|  |  |  |  | RHOA | c. $346 \mathrm{G}>\mathrm{A}$ | 11.2\% | RHOA | c. $346 \mathrm{G}>\mathrm{A}$ | 14.0\% |
|  |  |  |  | ITPKB | c. $487 \mathrm{G}>\mathrm{A}$ | 6.2\% | ITPKB | c. $487 \mathrm{G}>\mathrm{A}$ | 12.3\% |
|  |  |  |  | SOCS1 | c. $197 \mathrm{G}>\mathrm{A}$ | 5.3\% | SOCS1 | c. $197 \mathrm{G}>\mathrm{A}$ | 14.6\% |
|  |  |  |  | KLHL6 | c. $1702 \mathrm{G}>\mathrm{A}$ | 16.3\% | KLHL6 | c. $1702 \mathrm{G}>\mathrm{A}$ | 38.4\% |
|  |  |  |  | HISTIHIE | c. $253 \mathrm{~A}>\mathrm{G}$ | 13.4\% | HIST1HIE | c. $253 \mathrm{~A}>\mathrm{G}$ | 31.4\% |
|  |  |  |  | CARD11 | c. $685-7 \mathrm{~A}>\mathrm{G}$ | 12.1\% | CARD11 | c. $685-7 \mathrm{~A}>\mathrm{G}$ | 20.2\% |
|  | HL \#2 | 2 | 90\% | BTG1 | c. $86 \mathrm{~A}>\mathrm{C}$ | 9.3\% | None |  |  |
|  |  |  |  | TNFAIP3 | c.1304dup | 7.7\% |  |  |  |
|  |  |  |  | STAT6 | c. $1260 \mathrm{C}>\mathrm{A}$ | 5.7\% |  |  |  |
|  | FL \#8 | 3 | 95\% | BCL2 | c. $175 \mathrm{C}>\mathrm{T}$ | 5.1\% | BCL2 | c. $175 \mathrm{C}>\mathrm{T}$ | 35.3\% |
|  |  |  |  | BCL2 | c. $140 \mathrm{G}>\mathrm{A}$ | 5.2\% |  |  |  |


|  | FL \#9 | 4 | 95\% | KMT2D | c. $10753 \mathrm{C}>\mathrm{T}$ | 29.1\% | KMT2D | c. $10753 \mathrm{C}>\mathrm{T}$ | 33.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | CREBBP | c. 4407 del | 6.1\% | CREBBP | c. 4407 del | 22.9\% |
|  |  |  |  | EZH2 | c. $1936 \mathrm{~T}>\mathrm{A}$ | 28.5\% | EZH2 | c. $1936 \mathrm{~T}>\mathrm{A}$ | 35.1\% |
|  |  |  |  | KMT2D | c. $15149 \mathrm{~T}>\mathrm{C}$ | 35.9\% | KMT2D | c. $15149 \mathrm{~T}>\mathrm{C}$ | 36.0\% |
|  |  |  |  | CREBBP | c. $4304 \mathrm{~A}>\mathrm{C}$ | 29.0\% | CREBBP | c. $4304 \mathrm{~A}>\mathrm{C}$ | 32.6\% |
|  |  |  |  | BCL2 | c. $25 \mathrm{~T}>\mathrm{A}$ | 29.3\% | BCL2 | c. $25 \mathrm{~T}>\mathrm{A}$ | 40.4\% |
|  |  |  |  | NOTCH2 | c. $710 \mathrm{G}>\mathrm{A}$ | 32.7\% | NOTCH2 | c. $710 \mathrm{G}>\mathrm{A}$ | 35.6\% |
|  |  |  |  |  |  |  | KMT2C | c. $1181 \mathrm{G}>\mathrm{A}$ | 6.1\% |
|  | ENKTL | 1 | 95\% | None |  |  | DDX3X | c. $1628 \mathrm{C}>\mathrm{G}$ | 51.6\% |
|  |  |  |  |  |  |  | KMT2D | c. $3532 \mathrm{C}>\mathrm{T}$ | 27.0\% |
|  |  |  |  |  |  |  | EP300 | c. $781 \mathrm{C}>\mathrm{G}$ | 14.2\% |
| ctDNA only | DLBCL \#7 | 1 | - | RB1 | c. $1049+8 \mathrm{~A}>\mathrm{G}$ | 57.5\% |  |  |  |
|  |  |  |  | NOTCH2 | c. $6065 \mathrm{G}>\mathrm{T}$ | 19.7\% |  |  |  |
|  |  |  |  | PIM1 | c. $83-5 \mathrm{C}>\mathrm{T}$ | 17.3\% |  |  |  |
|  |  |  |  | PIM1 | c. $82+8 \mathrm{C}>\mathrm{T}$ | 17.1\% |  |  |  |
|  |  |  |  | PIM1 | c. $544 \mathrm{C}>\mathrm{G}$ | 16.0\% |  |  |  |
|  |  |  |  | DTX1 | c. $90 \mathrm{G}>\mathrm{C}$ | 15.8\% |  |  |  |
|  |  |  |  | LRP1B | c. $5954 \mathrm{C}>\mathrm{T}$ | 14.6\% |  |  |  |
|  |  |  |  | KMT2C | c. $995 \mathrm{~A}>\mathrm{G}$ | 6.7\% |  |  |  |
|  | FL \#10 | 1 | - | None |  |  |  |  |  |
|  | MZL | 1 | - | KMT2C | c. $2741 \mathrm{G}>\mathrm{A}$ | 5.5\% |  |  |  |
|  |  |  |  | DIS3 | c. $2259 \mathrm{C}>\mathrm{A}$ | 0.2\% |  |  |  |
|  | FL \#11 | 1 | - | None |  |  |  |  |  |
|  | DLBCL \#8 | 4 | - | ASXL3 | c. $5204 \mathrm{G}>\mathrm{C}$ | 11.1\% |  |  |  |
|  |  |  |  | ASXL3 | c.5202del | 6.7\% |  |  |  |
|  |  |  |  | TET2 | c.290_291del | 6.0\% |  |  |  |
|  |  |  |  | B2M | c. $199 \mathrm{G}>\mathrm{T}$ | 5.7\% |  |  |  |
|  |  |  |  | B2M | c. $358 \mathrm{~T}>\mathrm{A}$ | 2.5\% |  |  |  |
|  |  |  |  | STAT3 | c. $2144 \mathrm{C}>\mathrm{T}$ | 0.9\% |  |  |  |
|  |  |  |  | CD58 | c. $-11 \_25 \mathrm{del}$ | 0.4\% |  |  |  |
|  |  |  |  | ASXL1 | c. $2197 \mathrm{C}>\mathrm{T}$ | 0.4\% |  |  |  |
|  | DLBCL \#9 | 1 | - | TNFRSF14 | c. $62 \mathrm{~T}>\mathrm{A}$ | 28.2\% |  |  |  |
|  |  |  |  | DDX3X | c. $1679 \mathrm{~T}>\mathrm{G}$ | 16.1\% |  |  |  |
|  |  |  |  | STAT3 | c. $1696 \mathrm{G}>\mathrm{A}$ | 13.7\% |  |  |  |








AITL, angioimmunoblastic T-cell lymphoma; ctDNA, circulating tumor DNA; DLBCL, diffuse large B cell lymphoma; ENKTL, extranodal NK/T cell lymphoma; FL, follicular lymphoma; HGVSc, Human Genome Variation Society nomenclature; HL, Hodgkin lymphoma; MZL, marginal zone lymphoma; NGS, next-generation sequencing; VAF, variant allele frequencies.

