SUPPLEMENTAL INFORMATION

Cell-of-origin classification using the Hans and Lymph2Cx algorithms in primary cutaneous large B-cell lymphomas

Virchows Archives

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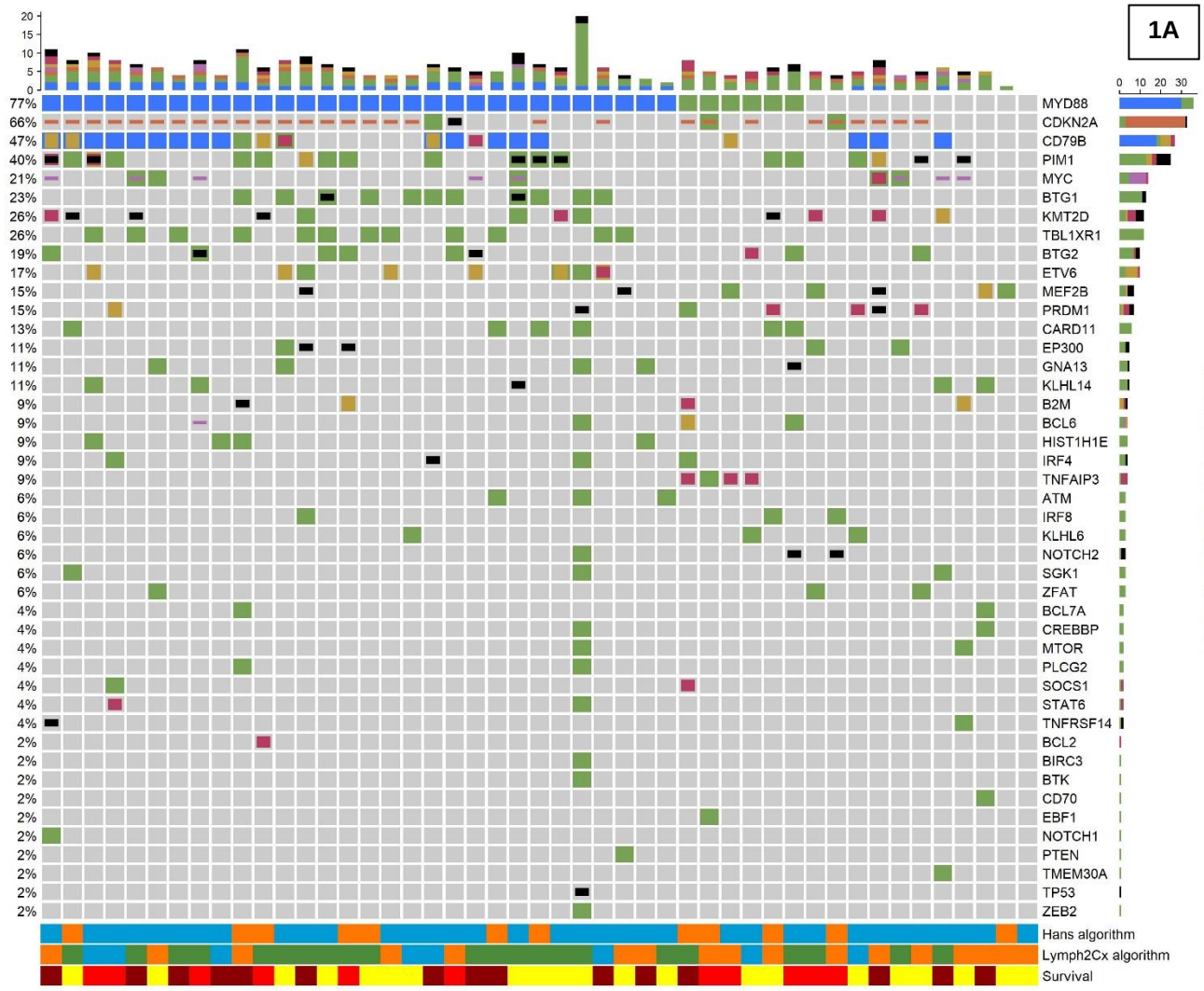
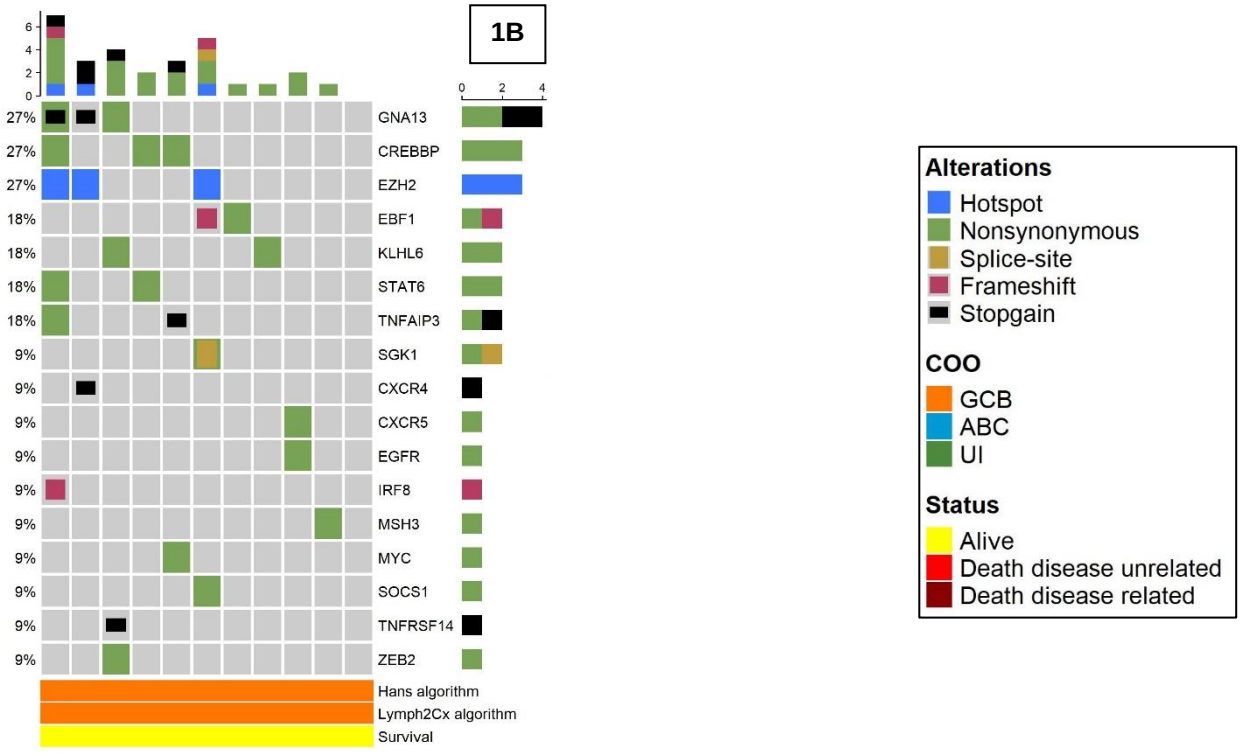

1A
77% MYD88
66% CDKN2A
47% CD79B
40% PIM1
21% MYC
23% BTG1
26% KMT2D
26% TBL1XR1
19% BTG2
17% ETV6
15% MEF2B
15% PRDM1
13% CARD11
11% EP300
11% GNA13
11% KLHL14
9% B2M
9% BCL6
9% HIST1H1E
9% IRF4
9% TNFAIP3
6% ATM
6% IRF8
6% KLHL6
6% NOTCH2
6% SGK1
6% ZFAT
4% BCL7A
4% CREBBP
4% MTOR
4% PLCG2
4% SOCS1
4% STAT6
4% TNFRSF14
2% BCL2
2% BIRC3
2% BTK
2% CD70
2% EBF1
2% NOTCH1
2% PTEN
2% TMEM30A
2% TP53
2% ZEB2
Hans algorithm
Lymph2Cx algorithm
Survival


1B
27% GNA13
27% CREBBP
27% EZH2
18% EBF1
18% KLHL6
18% STAT6
18% TNFAIP3
9% SGK1
9% CXCR4
9% CXCR5
9% EGFR
9% IRF8
9% MSH3
9% MYC
9% SOCS1
9% TNFRSF14
9% ZEB2
Hans algorithm
Lymph2Cx algorithm
Survival
Alterations
Hotspot
Nonsynonymous
Splice-site
Frameshift
Stopgain
COO
GCB
ABC
UI
Status
Alive
Death disease unrelated
Death disease related

Supplemental Figure 1. OncoPrints of the molecular alterations identified with the LYMFv1 targeted next-generation sequencing panel (52 B-cell lymphoma-relevant genes) and fluorescence *in situ* hybridization for *MYC* for 47 patients with PCDLBCL-LT (1A) and 11 patients with PCFCL-LC (1B). The majority of PCDLBCL-LT harbored a mutation in NFκB-related genes, i.e. *MYD88* (77%), *CD79B* (47%), and *PIM1* (40%). Other recurrent alterations were loss of *CDKN2A* (62%) or a rearrangement of *MYC* (17%). Cell-of-origin (COO) classification assigned the majority (75%) of PCDLBCL-LT to the non-GCB subtype with the Hans algorithm and mostly to UI (43%) or GCB (39%) with the Lymph2Cx algorithm. The cohort of PCFCL-LC demonstrated frequent mutations in *GNA13* (27%), *CREBBP* (27%), and *EZH2* (27%). All PCFCL-LC cases were classified as GCB by both Hans and Lymph2Cx. All PCFCL-LC patients were alive at last follow-up compared with only 45% of the PCDLBCL-LT patients; 32% of the PCDLBCL-LT patients died disease-related and 23% died disease-unrelated.

Abbreviations: COO, cell-of-origin; GCB, germinal center B-cell-like subtype; ABC, activated B-cell-like subtype; UI, unclassified/intermediate.