

S5 Table. Mutation frequencies of most frequent 30 genes from ctDNA analysis compared with the two sources of database, The Cancer Genome Atlas (TCGA) and International Cancer Genome Consortium (ICGC)

Gene	This study (Targeted sequencing)	TCGA_DLBC (WES)	ICGC^{a)} (WGS)
<i>BCL2</i>	7/42 (16.67)	2/47 (4.26)	97/192 (50.52)
<i>IRF8</i>	8/42 (19.05)	5/47 (10.64)	52/192 (27.08)
<i>KMT2D</i>	6/42 (14.29)	13/47 (27.66)	69/192 (35.94)
<i>PIM1</i>	8/42 (19.05)	12/47 (25.53)	50/192 (24.04)
<i>TP53</i>	8/42 (19.05)	5/47 (10.64)	31/192 (16.15)
<i>DNMT3A</i>	7/42 (16.67)	1/47 (2.13)	27/192 (14.06)
<i>HIST1H1E</i>	7/42 (16.67)	12/47 (25.53)	34/192 (17.71)
<i>KLHL6</i>	7/42 (16.67)	8/47 (17.02)	44/192 (22.92)
<i>TET2</i>	7/42 (16.67)	5/47 (10.64)	47/192 (24.48)
<i>CREBBP</i>	5/42 (11.90)	6/47 (12.77)	72/192 (37.50)
<i>LRP1B</i>	6/42 (14.29)	10/47 (21.28)	132/192 (68.75)
<i>MYD88</i>	6/42 (14.29)	3/47 (6.38)	8/192 (4.17)
<i>SOCS1</i>	6/42 (14.29)	8/47 (17.02)	35/192 (18.23)
<i>BTG2</i>	5/42 (11.90)	17/47 (36.17)	52/192 (27.08)
<i>SPEN</i>	5/42 (11.90)	3/47 (6.38)	29/192 (15.10)
<i>TNFRSF14</i>	4/42 (9.52)	4/47 (8.51)	42/192 (21.88)
<i>B2M</i>	4/42 (9.52)	11/47 (23.40)	26/192 (13.54)
<i>BTG1</i>	4/42 (9.52)	10/47 (21.28)	31/192 (16.15)
<i>CD79B</i>	3/42 (7.14)	4/47 (8.51)	23/192 (11.98)
<i>NOTCH2</i>	4/42 (9.52)	3/47 (6.38)	38/192 (19.79)
<i>RHOA</i>	4/42 (9.52)	2/47 (4.26)	18/192 (9.38)
<i>SGK1</i>	4/42 (9.52)	6/47 (12.77)	46/192 (23.96)
<i>STAT3</i>	4/42 (9.52)	6/47 (12.77)	37/192 (19.27)
<i>ARID1A</i>	3/42 (7.14)	5/47 (10.64)	32/192 (16.67)
<i>ASXL3</i>	2/42 (4.76)	8/47 (17.02)	68/192 (35.42)
<i>CD58</i>	3/42 (7.14)	3/47 (6.38)	18/192 (9.38)
<i>DTX1</i>	3/42 (7.14)	4/47 (8.51)	62/192 (32.29)
<i>IKZF1</i>	3/42 (7.14)	0/47 (0.00)	38/192 (19.79)
<i>NFKBIA</i>	3/42 (7.14)	5/47 (10.64)	11/192 (5.73)
<i>TNFAIP3</i>	3/42 (7.14)	5/47 (10.64)	17/192 (8.85)

Values are presented as number (%). ctDNA, circulating tumor DNA; WES, whole exome sequencing; WGS, whole genome sequencing. ^{a)}Mutations from 126 donors in MALY_DE, 41 donors in NKTL_SG, 9 donors in DLBC-US out of 362 donors after excluding ones in complete remission disease status.