

Supplementary Table 1

Patient	Sample Type	Subtype	Age	Sex	BM Blast Count	WBC Count (mm ³)	CNS Disease At Diagnosis	Cytogenetics	Initial Therapy Protocol	Time to Relapse (months)	Type of relapse	Status	Waanders et al. Patient
1	Diagnostic	DUX4	>18	M	90%	78	negative	46,XY, del(6)(q21q23), t(11;13)(p11.2; q12)	Dana Farber	9	hematologic	deceased	SJBALL 022609
1	Relapse1	B-Other			nd	82	n/a	nd					
3	Relapse1	DUX4	>18	M	90%	1.9	negative	nd	Dana Farber	15.37	hematologic	deceased	SJBALL 022611
4	Diagnostic	B-Other	>18	M	90%	10.5	positive	not assessable	Dana Farber	6.3	hematologic	deceased	SJBALL 022612
4	Relapse1				90%	3.8	n/a	nd					
6	Relapse1	B-Other	>18	M	90%	7.1	negative	46 XY t(2;3)(p23,q21)[9] 46 XY [11]	Dana Farber	33.97	hematologic	deceased	SJBALL 022614
7	Diagnostic	DUX4	<18	F	92%	52.1	negative	46, XX, del(9)(p22)[20/100%]		39.6	hematologic	deceased	SJERG 009
7	Relapse1				78%	nd	n/a	46,XX [8/63%]/46,XX, del(9)(p22) [3/27%]					
9	Diagnostic	B-Other	<18	M	96%	15.5	negative	46,XY [1/5%]/47,XY, del(9)(p13),+18 [19/95%]	Total XV	48.12	hematologic and CNS	alive	SJBALL 036
9	Relapse1				76%	nd	n/a	46,XY [7/35%]/47,XY, del(9)(p13),+18 [13/65%]					
10	Relapse1	B-Other	<18	F	84%	nd	negative	46,XX[3/15%]/46,X,t(X;2)(p11.4;p11.2)[17/85%]	Total XIII	94.8	hematologic	deceased	SJBALL 031
11	Diagnostic	KMT2A-AFF1	<18	M	100%	455	negative	46,XY [5/21%]/46,XY,t(4;11)(q21;q23)[9/37%]/47,XY,+X,t(4;11)(q21;q23)[10/42%]	Total Xiii	14.64	hematologic	deceased	SJMLL 039
11	Relapse1				78%		n/a	46,XY [16/64%]/45,idem,dic(17;18)(q10;q10) [2/8%]/46,XY,t(4;11)(q21;q23),i(7)(q10) [7/28%]					
12	Diagnostic	KMT2A-AFF1	<18	F	98%	299	negative	46,XX,t(4;11)(q21;q23)[22/100%]	Total XIII	5.88	hematologic	deceased	SJMLL 026
12	Relapse1				96%		n/a	46,XX [1/8%]/46,XX,t(4;11)(q21;q23) [11/92%]					
13	Diagnostic	ETV6-RUNX1	<18	F	98%	25.5	negative	45,X,-X [20/100%]/.nuc ish 12p13(TEL x2),2q22 (AML1 x 2)(TEL con AML1 x 1)	Total XV	7.80	hematologic	deceased	SJETV 010
13	Relapse1				nd		n/a	nd					
15	Diagnostic	KMT2A-AFF1	>18	F	96%	269	negative	46,XX,t(4;11)(q21;q23)[6]	Dana Farber	n/a - CR not achieved	n/a	deceased	n/a

Supplementary Table 1. Clinical Characteristics of B-ALL Patient Samples. Patient number, sample type (diagnosis / relapse status and relapse number), molecular subgroup, pediatric / adult category, sex, blast and white blood cell count (WBC), CNS stats where negative = CNS1 and n/a reflects data not available, propensity to generate CNS disease in xenografts on scale of -, +, ++, +++ from least to greatest, cytogenetics by fluorescence in situ hybridization, first line therapy, time to relapse (CR = complete response), type of relapse (hematologic versus CNS), vital status (alive or deceased).