

Supplementary Table 1. CLL sample information. The measurement of the mutational status of the expressed IgV_H genes and immunophenotyping for ZAP-70 was performed as previously described (Rassenti LZ, Huynh L, Toy TL, et al. N Engl J Med 2004; 351:893-901). FISH was performed using the conventional Vysis probes for the CLL panel. These FISH assays can detect the following chromosome anomalies (sets of probes): 11q- and 17p- (ATM at 11q23 and P53 at 17p13.1), 13q- and trisomy 12 (D13S319 at 13q14, LAMP1 at 13q34 and D12Z3 at centromere 12).

CLL Sample Information

Indolent	VH<98	ZAP<20	no chr abnormalities
Aggressive	VH≥98	ZAP>20	
Aggressive	VH≥98	ZAP>20	11qdel FISH

AGGRESSIVE CLL			N=25
ID	CRC ID	% VH	% ZAP
1	CLL1	100	70.1
2	CLL2	99.6	71.5
3	CLL3	100	86.8
4	CLL4	100	71.3
5	CLL5	100	75.2
82	CLL82	98.6	65.2
7	CLL7	100	78.1
8	CLL8	99.3	57
9	CLL9	99.3	50.1
10	CLL10	99.6	67.4
11	CLL11	99.3	74.4
12	CLL12	99.3	92.2
13	CLL13	100	67.7
14	CLL14	100	76.5
15	CLL15	100	77.7
16	CLL15	99.6	66.9
17	CLL17	100	84.3
18	CLL18	100	83.2
19	CLL19	100	70.1
20	CLL20	99.6	87.1
21	CLL21	100	91.1
22	CLL22	100	92.5
23	CLL23	100	80.9
24	CLL24	100	84.5
25	CLL25	100	92.7

Supplementary Table 1 continues.

INDOLENT CLL			N=23
ID	CRC ID	% VH	% ZAP
26	CLL26	92.9	0.6
27	CLL27	92.6	0.5
28	CLL28	92.9	0.1
29	CLL29	94.7	0.2
30	CLL30	91.8	7.1
31	CLL31	94.7	10.9
32	CLL32	91.8	1
33	CLL33	97.2	7.6
34	CLL34	90.2	9.2
35	CLL35	91	9.4
36	CLL36	92.2	8.3
37	CLL37	96.8	7
38	CLL38	92.2	6.7
39	CLL39	92.3	6.4
40	CLL40	89.8	9.3
41	CLL41	96.5	6.9
42	CLL42	96.1	9.3
43	CLL43	95.4	8.5
44	CLL44	92.7	7.3
45	CLL45	97.5	9.8
46	CLL46	93.9	7.3
47	CLL47	90.4	9.7
49	CLL49	95.2	9.8

Supplementary Table 1 continues.

AGGRESSIVE CLL with 11q del				N= 32
ID	CRC ID	% VH	% ZAP	FISH
50	CLL50	99.6	45.5	11q deletion
51	CLL51	100	5.9	11 deletion
52	CLL52	99.6	ND	11q deletion
53	CLL53	100	25.4	11q deletion
54	CLL54	ND	ND	11q deletion
55	CLL55	100	59.1	11q deletion
56	CLL56	99.6	36.2	in 61% cells
57	CLL57	100	31.7	in 11% cells
58	CLL58	100	20.7	in 83% cells
59	CLL59	ND	ND	in 81% cells
60	CLL60	100	47.8	in 10% cells
61	CLL61	99.3	23.6	11q deletion
62	CLL62	100	51.2	11q deletion
63	CLL63	98.9	37.8	11q deletion
64	CLL64	95.7	26.6	in 90% cells
65	CLL65	100	39.1	in 43% cells
66	CLL66	98	39.8	in 55% cells
67	CLL67	99.3	20.3	in 90% cells
68	CLL68	99.6	68.9	in 54% cells
69	CLL69	100	38.1	in 64% cells
70	CLL70	ND	26.7	in 93% cells
71	CLL71	100	34.7	in 14% cells
72	CLL72	100	23.3	in 24% cells
73	CLL73	ND	23.2	11q deletion
74	CLL74	100	14.3	11q deletion
75	CLL75	100	10.3	11q deletion
76	CLL76	98	3.7	11q deletion
77	CLL77	100	27.3	in 50% cells
78	CLL78	99.6	3.4	11q deletion
79	CLL79	100	16.5	11q deletion
80	CLL80	ND	0.6	in 96% cells
81	CLL81	98.9	22.1	11q deletion

Supplementary Table 2. Pairwise comparison microRNA expression in three types of B-CLL.

MicroRNA	Chromosome Position	Aggressive (Chr11 Normal)	Indolent	p-value	Fold Change Aggressive Chr11 Normal / Indolent)
miR-515-1 5p	19q13.41	38	73	0.000052	0.53
miR-301	17q22	36	64	0.002149	0.56
miR-29b-1	7q32.3	1860	3322	0.003335	0.56
miR-452*	Xq28	49	27	0.000209	1.86

MicroRNA	Chromosome Position	Aggressive (Chr11 Deletion)	Aggressive (Chr11 Normal)	p-value	Fold Change (Aggressive Chr11 Deletion / Aggressive Chr11 Normal)
miR-378	5q33.1	59	30	0.000002	1.99
miR-515-1 5p	19q13.41	67	38	0.000013	1.77
miR-450-1	Xq26.3	108	59	0.000020	1.83
miR-424	Xq26.3	84	48	0.000052	1.75
miR-181b-1	1q31.3	234	466	0.001839	0.50
miR-21	17q23.1	1514	2928	0.001724	0.52
miR-103-2	20p13	2648	5099	0.001596	0.52
miR-128b	3p22.3	224	416	0.001434	0.54
miR-30d	8q24.22	2783	5420	0.001371	0.51
miR-93	7q22.1	555	950	0.00129	0.58
miR-181a-1	1q31.3	74	172	0.001141	0.43
miR-15b	3q26.1	268	561	0.000968	0.48
miR-106a	Xq26.2	745	1422	0.000924	0.52
miR-103-1	5q35.1	3184	6470	0.000881	0.49
miR-107	10q23.31	2331	4484	0.000764	0.52
miR-21	17q23.1	1824	3761	0.000764	0.49
miR-181d	19p13.12	91	194	0.000695	0.47
miR-138-2	16q13	114	229	0.000602	0.50
miR-130b	22q11.21	146	269	0.000596	0.54
miR-107	10q23.31	2802	5509	0.000328	0.51
miR-10a	17q21.32	34	100	0.000287	0.33
miR-30a	6q13	156	305	0.000255	0.51
miR-19b-1	13q31.3	128	245	0.000149	0.52
miR-367	4q25	135	276	0.00013	0.49
miR-181c	19p13.2	52	106	0.000106	0.49
miR-191	3p21.31	1920	4456	0.000102	0.43
miR-10b	2q31.1	30	88	0.000047	0.35
miR-146a	5q33.3	1458	4760	0.000033	0.31
miR-146b	10q24.32	1351	3865	0.000008	0.35
miR-95	4p16.1	74	148	0.000003	0.50
miR-452*	Xq28	23	49	p < 0.000001	0.47
miR-363	Xq26.2	50	158	p < 0.000001	0.32

Supplementary Table 2 continues.

MicroRNA	Chromosome Position	Aggressive (Chr11 Deletion)	Indolent	p-value	Fold Change (Aggressive Chr11 Deletion/Indolent)
miR-526b*	19q13.41	26	48	0.000003	0.54
miR-301	17q22	31	64	0.000004	0.49
miR-19b-1	13q31.3	128	267	0.000004	0.48
miR-30a	6q13	156	386	0.000008	0.41
miR-29c	1q32.2	2017	5695	0.000009	0.35
miR-363	Xq26.2	50	93	0.000042	0.54
miR-19b-2	Xq26.2	161	282	0.000112	0.57
miR-29b-2	1q32.2	1440	3305	0.000152	0.44
miR-19a	13q31.3	89	170	0.000163	0.52
miR-29b-2	1q32.2	2727	6267	0.000262	0.44
miR-138-2	16q13	114	228	0.000365	0.50
miR-29b-1	7q32.3	1569	3322	0.000379	0.47
miR-181c	19p13.2	52	111	0.000385	0.46
miR-215	1q41	180	351	0.000627	0.51
miR-106a	Xq26.2	745	1393	0.001389	0.53
miR-29a	7q32.3	2904	6014	0.001643	0.48
miR-30a	6q13	1137	2049	0.002204	0.56
miR-367	4q25	135	258	0.002244	0.52
miR-140	16q22.1	572	1194	0.00244	0.48
miR-107	10q23.31	2331	4287	0.002478	0.54
miR-30d	8q24.22	2783	5140	0.002953	0.54
miR-181a-1	1q31.3	74	176	0.002987	0.42